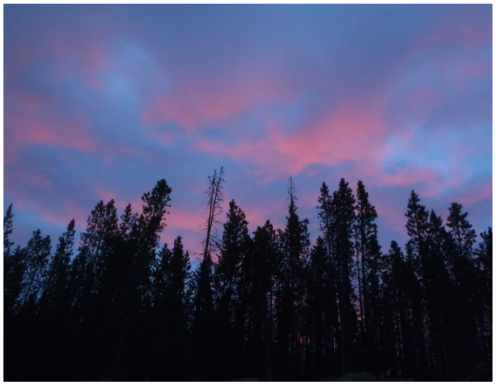
Appendix 5.1.2.3A
2012 Site Investigation Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT







2012 SITE INVESTIGATION REPORT

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Rev 0
September 23, 2013

Knight Piésold
CONSULTING
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ISO 14001 - EMS 550121
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NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
VA101-457/6-1

Rev	Description	Date	Approved
0	Issued as Final	September 23, 2013	KNS

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EXECUTIVE SUMMARY

The Blackwater Gold Project is a proposed gold mine located approximately 112 kilometres southwest of Vanderhoof in central British Columbia. The Blackwater Gold Project is being developed by New Gold Inc. (New Gold). Knight Piésold Ltd. (KPL) completed a site investigation program in 2012 to evaluate geotechnical and hydrogeological conditions to support planning for mine development layouts and to provide data for engineering and environmental studies relating to Tailings, Waste Rock, and Water Management Facilities and mine site infrastructure.

The 2012 site investigation programs included the following:

- Site reconnaissance surveys
- Thirteen geotechnical ODEX drillholes
- Thirty-four geotechnical Sonic drillholes
- Installation of eleven standpipe and three vibrating wire piezometers in selected drillholes
- In-situ hydraulic conductivity testing in bedrock
- Installation of 28 monitoring wells for water quality sampling
- Excavation of 159 test pits
- Completion of 15.6 km of seismic refraction lines, and
- Laboratory testing on 231 soil samples for engineering characterisation.

The surficial materials and bedrock at the Blackwater Gold project include the following material types:

- Glacial till
- High energy fluvial sands and gravels
- Low energy fluvial sands
- Lacustrine deposits
- Completely weathered bedrock, and
- Andesite bedrock.

This report presents the factual data from the 2012 site investigation program and initial classification of surficial material types. The 2013 site investigations have been completed and are presented in a separate factual report (KPL Ref: VA101-457/6-4). Data obtained from the 2012 and 2013 site investigations has been compiled and evaluated to develop a stand-alone geotechnical characterization report (KPL Ref: VA101-457/6-8).

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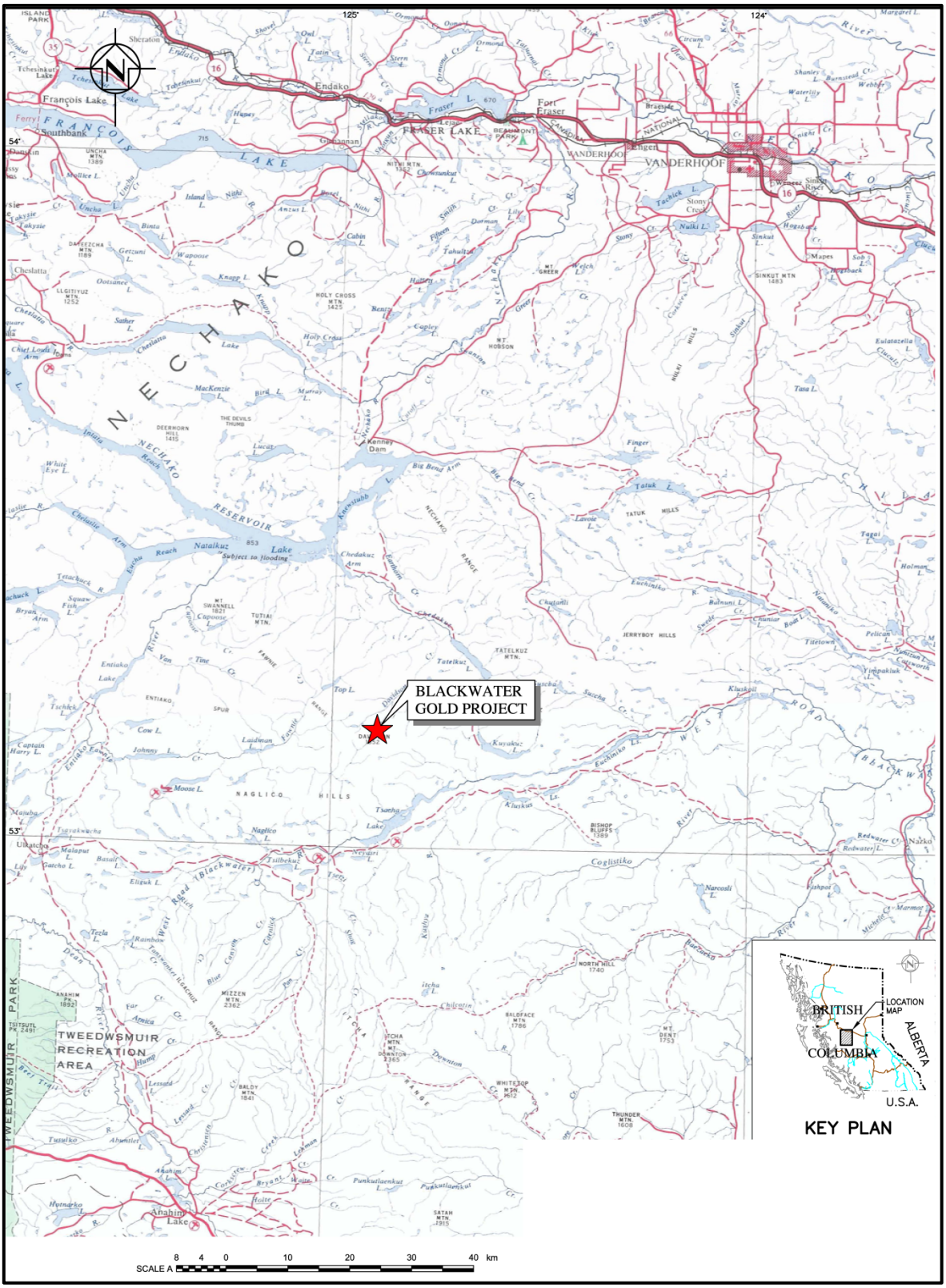
1 - INTRODUCTION

1.1 PROJECT DESCRIPTION

The Blackwater Gold Project (Blackwater) is a large gold-silver deposit located approximately 112 km southwest of Vanderhoof in central British Columbia, as shown on Figure 1.1. Knight Piésold Ltd. (KPL) was retained by New Gold Inc. (New Gold) to complete a series of geotechnical and hydrogeological site investigation programs to support the Blackwater mine development concept layouts and to provide data for the engineering studies for the proposed Tailings Storage Facility (TSF), Waste Rock Dumps, and mine site infrastructure.


BLACKWATER GOLD PROJECT
François Lake
Endako
FRASER LAKE
VANDERHOOF
Fort Fraser
Kenney Dam
Natalkuz Lake
Subject to flooding
NECHAKO RESERVOIR
NAGLICO HILLS
TWEEDSMUIR RECREATION AREA
TWEEDSMUIR PARK
Anahim Lake
Tatuk L.
Tatuk Hills
Jerryboy Hills
Tatelkuz Mtn.
Kluskoil
Kluskus
Coglistiko
Narcosli L.
Sinkut Mtn.
Mt. Hobson
Mt. Swannell
Mt. Dent
Mizzen Mtn.
Baldface Mtn.
Whitetop Mtn.
Thunder Mtn.
Holy Cross Mtn.
Deerhorn Hill
Nechako Range
Chilcotin Range
Itcha Mtn.
Ilgachuz Mtn.
Satah Mtn.
Nazko
Redwater
Blackwater (Nazko) Road
West Road
Chilanko River
Chilcotin River
Dean River
Atnarko River
Nechako River
Stuart River
Fraser River
Stellako River
Nechako Reach
Natalkuz Reach
Chedakuz Arm
Big Bend Arm
Chelaslie Arm
Francois Lake
Southbank
Sheraton
Ferry
Cheslatta
Cheslatta Lake
Chief Louis Arm
Entiako Lake
Tachick L.
Nulki L.
Stony Creek
Sinkut
Mapes
Eulatazella L.
Tasa L.
Finger L.
Tagai L.
Holman L.
Natalkuz L.
Pelican L.
Titetown
Cottonwood
Tsacha L.
Moose L.
Cow L.
Johnny L.
Captain Harry L.
Laidman
Entiako
Tsacha
Naglico
Tsilbekuz
Tsetsaut
Tezla L.
Rainbow
Anahim
Bryant
Punkutlaenkut
Holte
Tsusiko
Hotnarko
Akwilgate
Lessard
Blue Canyon
Far
Anahim Pk.
Tsitsutl Pk.
Bald Mtn.
Mt. Downton
Mt. Dent
North Hill
Bishop Bluffs
Fishpot
Marmot
Mitchell
Euchiniko
Bulmuni L.
Swede
Chunior
Boat L.
Pelican
Titetown
Cottonwood
Yinpakluk L.
Kuyakuz

1.2 PROJECT HISTORY

The Blackwater area was actively explored by Richfield Ventures Corp. (Richfield) starting in 2009. New Gold obtained Blackwater through the acquisition of Richfield in June 2011. KPL completed a preliminary geotechnical assessment desktop study for New Gold in support of a Preliminary Economic Assessment (PEA) (KPL Ref. VA11-00839) in June 2011. This was followed by an alternatives assessment for waste and water management for Blackwater in August 2011 (KPL Ref. VA101-457/3-2). These studies concluded that the most viable option for waste management was at 'Site D', located directly to the north of the deposit in the Davidson Creek watershed.

KPL was commissioned in 2012 to complete a geotechnical and hydrogeological site investigation program to support engineering studies for the tailings and water management systems and mine site infrastructure in the Davidson Creek watershed (previously known as the Site D option). No pre-existing geotechnical or hydrogeological information was available for this area prior to 2012. The proposed mine development concept from the PEA is shown on Figure 1.2.

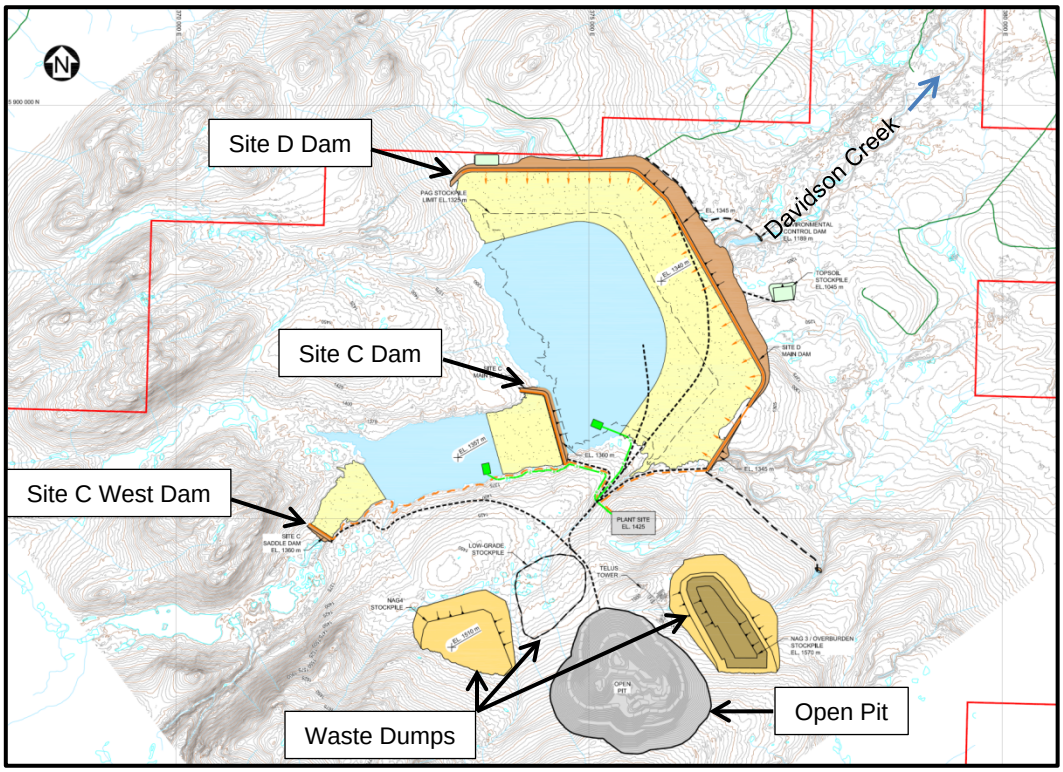


Figure 1.2 Mine Site PEA Design General Arrangement

A geotechnical and hydrogeological site investigation program was carried out from March to October, 2012. The site investigation program was implemented in two phases. The first phase investigated the geotechnical conditions of the entire site using an ODEX drill to allow the investigation and characterisation of the overburden and bedrock. A sonic drilling, test pit, and seismic program was implemented as part of a second data collection phase to investigate and confirm conclusions about site conditions developed during the Phase 1 program. The site

investigation programs included the installation of monitoring wells for the collection of baseline groundwater quality samples and for interpretation of the hydrogeology at the site.

1.3 SCOPE OF WORK

This report presents results of the 2012 site investigation program. The primary objectives of the 2012 program were to evaluate the geotechnical and hydrogeological conditions encountered at the proposed Tailings Storage Facility (TSF), Waste Rock facilities, and mine site infrastructure.

This report presents the factual data from the 2012 site investigation program and includes an initial classification of surficial material types. The 2013 site investigation results are presented in a separate factual report (KPL Ref: VA101-457/6-4). The 2012 and 2013 site investigations have been integrated to develop an overall interpretation of the site conditions and are presented in a stand-alone geotechnical characterisation report (KPL Ref: VA101-457/6-8).

Additional geologic investigation programs implemented in 2012 included; Terrain Hazard Mapping of surficial soils (RTSM), a New Gold condemnation drilling program, hydrometeorological baseline data collection, and an open pit geomechanical drilling program. These investigations are not included in this report and are presented in separate KPL reports.

2 - SITE CHARACTERISITICS

2.1 CLIMATE

The climate at the Blackwater property is sub-continental and characterised by warm summers and cold winters. The climate is influenced by cold arctic air and moisture-laden weather systems moving west along the Kitimat Range. The synthetic mean annual temperature for the site is 3°C, with minimum and maximum mean monthly temperatures of -4.7°C and 12°C occurring in January and July, respectively. The mean annual precipitation for the site is estimated to be 636 mm, with 53% falling as rain and 47% falling as snow.

2.2 PHYSIOGRAPHY

Blackwater is situated on the Nechako Plateau which is characterised by gently undulating northwest trending hills cut by small to medium sized drainages. The elevation of the Blackwater property ranges from just over 1,000 m in low-lying areas northeast of the proposed mine site to 1,800 m at the summit of Mt. Davidson on the southwest side of the property. The Blackwater deposit is located on the northern flanks of Mt. Davidson which is the highest peak in the Fawnie Range. The majority of the proposed TSF, waste dumps and mine site infrastructure lies within the Davidson Creek watershed. The Davidson Creek valley is incised locally and flows northeast from the site towards Chedakuz Creek downstream of Tatelkuz Lake. The footprint area of the proposed TSF lies within the upper reaches of the Davidson Creek catchment area. The terrain within the footprint area of the proposed TSF is generally gently inclined, except along the incised portions of Davidson Creek. The latter areas are between the site of the proposed 'Site C Main Dam' and the 'Site D Main Dam', where there are moderate to moderately steeply inclined slopes adjacent to the drainage.

2.3 GEOMORPHOLOGY AND SURFICIAL GEOLOGY

The Blackwater site is an area of gently undulating highlands dissected by valleys and other low-lying areas. It features broad valleys with gentle slopes that have been shaped during a series of glaciation periods. The surficial geology of the area is dominated by Quaternary glacial sediments, a product of the late Wisconsin Glaciation. Ice moved into the Blackwater Project area from the Coast Mountains during the late Wisconsin Glaciation. At the peak of this glaciation, the area was covered by the Cordilleran Ice Sheet which flowed towards the east-northeast. Evidence suggests that during the height of the Fraser Glaciation, the ice elevation exceeded 1,750 m, which is higher than the tallest peaks in the region. The mountain tops are typically rounded and bedrock exposure is rare and generally restricted to higher elevations. An extensive blanket of glacial debris covers the project area. More recent glaciation resulted in the removal of older glacial deposits or cover by younger glacially derived deposits. Glacial landforms such as drumlins, flutings, and crag and tail structures are abundant in the region and indicate that the ice advanced from the coastal mountains toward the northeast (Levson et al., 1995).

The regional 1:50,000-scale surficial geology map [NTS Sheet 93 F/2], published by the Geological Survey Branch of the Ministry of Energy, Mines and Petroleum Resources (Giles and Levson, 1995), indicates an extensive cover of glacial till and glaciofluvial sands and gravels across the Blackwater Project area. Massive, compact lodgement glacial tills were deposited at the base of the ice sheet. Ablation tills were also deposited locally as the ice sheet retreated. Sediments deposited during de-

glaciation of the area include glaciofluvial and glaciolacustrine sediments. Glaciofluvial sands and gravels are common in valley bottoms and along the valley flanks, occurring as kames, eskers and terraces. The surficial map indicates that the two forks of Davidson Creek are 'minor meltwater channels'. It is noted on the published 1:50,000-scale surficial geology map (Giles and Levson, 1995) that loose, sandy gravelly soils occur above the glacial till. These deposits were interpreted by Giles *et. al.* to be glaciogenic debris flow deposits that accumulated as the ice retreated. A series of esker ridges are located approximately 5 km east of the confluence of the tributary channels of Davidson Creek. The ridges trend towards the east-northeast and north. Holocene deposits in the area are comprised of organic swamp deposits in low-lying areas, colluvial veneers on steeper slopes, and fluvial sediments in the valley bottoms.

2.4 REGIONAL BEDROCK GEOLOGY

Blackwater is underlain by rocks of the Stikine Terrane within the Nechako Uplift. The Nechako Plateau is an area of moderate relief between the Skeena Arch and the Stikine and Cache Creek Terrane contact. Detailed geology can be found in the works of Diakow and Webster (1994), Diakow and Levson (1997), and Diakow *et. al.* (1997).

The regional geologic setting is illustrated on Figure 2.1. The southern Nechako Plateau near the Blackwater property is underlain by Late Triassic to Middle Jurassic island and continental arc assemblages and epicontinental sedimentary strata; the volcaniclastic Hazelton Group represents the Stikine Terrane. The Hazelton Group consists of a lower unit of felsic tuffs and sediments, named the Entiako Formation; and an upper unit of felsic to mafic volcanic flows and volcaniclastic and sedimentary rocks, termed the Naglico Formation. Rocks of the Stikine Terrane in the southern Nechako Plateau are overlain by post-accretion Upper Jurassic volcaniclastic, sedimentary, and mafic to felsic volcanic rocks of the Bowser Lake Group. The Hazelton and Bowser Lake groups in the area are collectively intruded by Late Cretaceous granitic to granodioritic plutons (e.g. Capoose batholith) exposed within the Nechako uplift.

Rocks of the Hazelton and Bowser Lake groups are overlain by Upper Cretaceous and Paleocene continental volcanic arc intermediate rocks and related sedimentary rocks of the Kasalka Group. The Kasalka Group is a rock unit that occurs locally south of the Natalkuz fault. Widespread Eocene volcanic arc-related extensional felsic rocks and minor sedimentary rocks of the Ootsa Lake Group overlie the older rocks and are themselves overlain on higher ridges by basalt and andesite of the Eocene Endako Group.

The Bowser Lake Group is poorly exposed in the southern Nechako Plateau, except within the Nechako uplift. The Nechako uplift is a structurally raised block bounded by the Natalkuz Fault to the north and the Blackwater fault to the south. Both faults juxtapose older rocks of the Stikine Terrane (e.g., Hazelton and Bowser Lake Groups) with younger Cretaceous and Eocene rocks of the Ootsa Lake and Endako groups. The Nechako uplift provides a direct window through younger cover into older rocks.

Bedrock in the west part of the TSF footprint also belongs to the Ootsa Lake Formation, but is comprised of rhyolites and felsic volcanic rocks. The bedrock in the southeast portion of the project area, including the footprint of the proposed Open Pit, is comprised of rhyolites and felsic volcanic rocks of the Entiako Formation, which belongs to the Middle Jurassic Hazelton Group. Bedrock to the west is basement rock from the Bowser Lake Group.

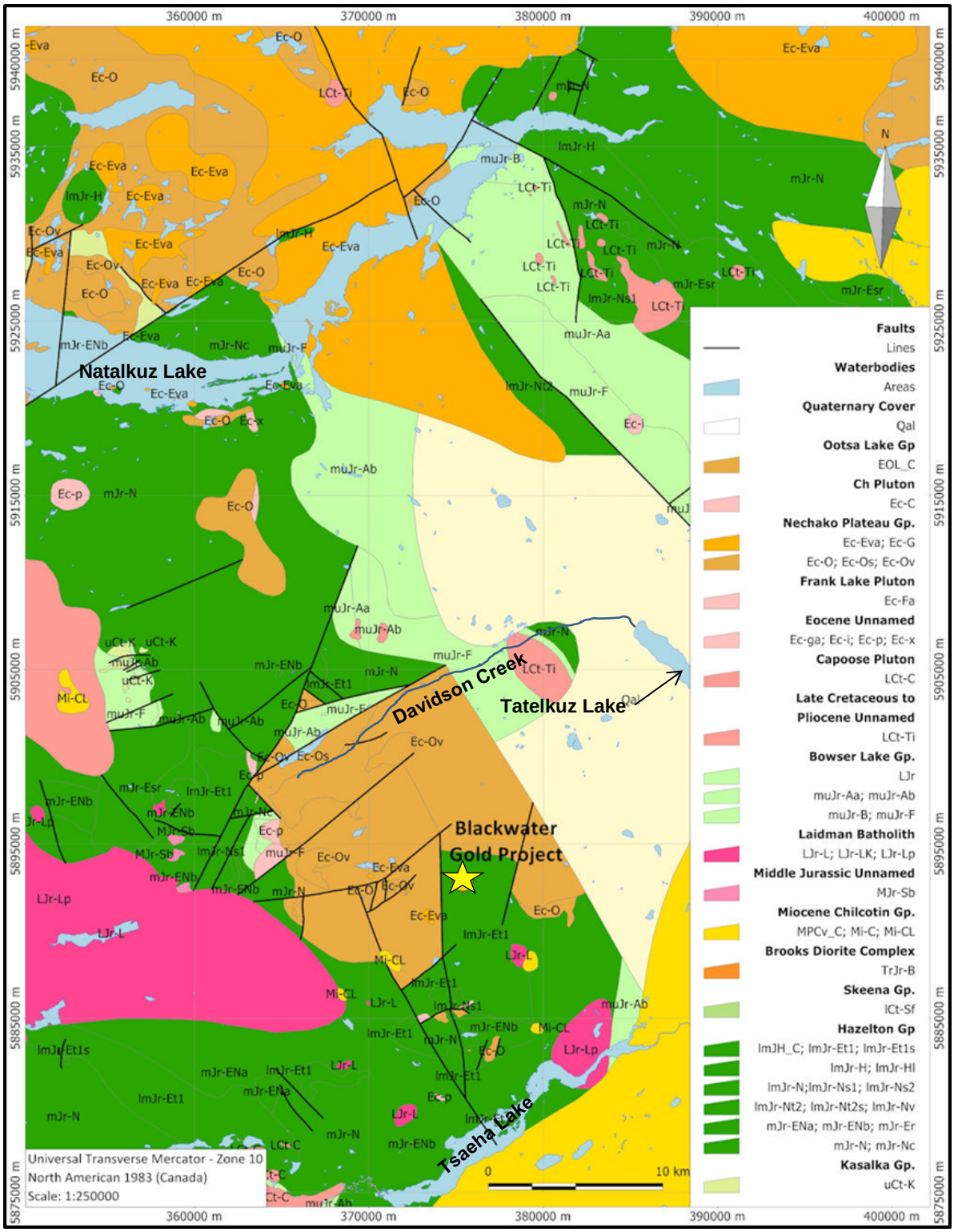


Figure 2.1 Regional Bedrock Geology

3 - 2012 SITE INVESTIGATION PROGRAM

3.1 GENERAL

The 2012 site investigation program evaluated the geotechnical and hydrogeological conditions for the proposed TSF, Waste Rock Dumps, and mine site infrastructure areas. Site investigations were conducted in two phases. The first phase included ODEX drilling of geotechnical drillholes and monitoring well installations from March to May, 2012, the second phase included test pits, seismic lines, and sonic drillholes conducted from June to October 2012. All drillholes and test pits were drilled and excavated under the supervision of KPL field personnel.

The 2012 site investigation program included:

- Excavating 159 test pits (TP12-01 to 159) to investigate the near surface material characteristics and foundation conditions.
- Drilling 13 geotechnical drillholes (GT12-01 to GT12-12 and GT12-28) utilising ODEX drilling and Standard Penetration Tests (SPTs) in the surficial material and the diamond drill coring (HQ3) in the bedrock (921 m total).
- Drilling of 34 geotechnical drillholes (GT12-13 to GT12-27 and GT12-29 to GT12-47) utilising sonic drilling techniques (2265 m total).
- Installing 11 standpipe piezometers and 3 vibrating wire piezometers in select geotechnical drillholes to investigate groundwater levels and to evaluate the rock mass permeability.
- Installing 28 monitoring wells (MW12-01 to MW12-13, DK/MW-05 and 06) to allow for long-term groundwater quality monitoring (774 m total).
- Laboratory testing samples of surficial materials and rock core to determine geotechnical material parameters for the different types of materials encountered.
- Rock strength laboratory testing on selected representative core samples to evaluate strength properties and to verify rock mass classification, and
- Conducting 15.6 km of seismic refraction surveys to develop profiles of subsurface bedrock and the saturated water table.

Drillhole and test pit locations were accessed via forestry roads and as-built trails. Locations were chosen as close as possible to planned drilling sites and test pits, while minimising the vegetation disturbance, avoiding the waterways, and winter caribou exclusion zones. Drillhole and test pit locations were adjusted as the program progressed and a greater understanding of site conditions was acquired.

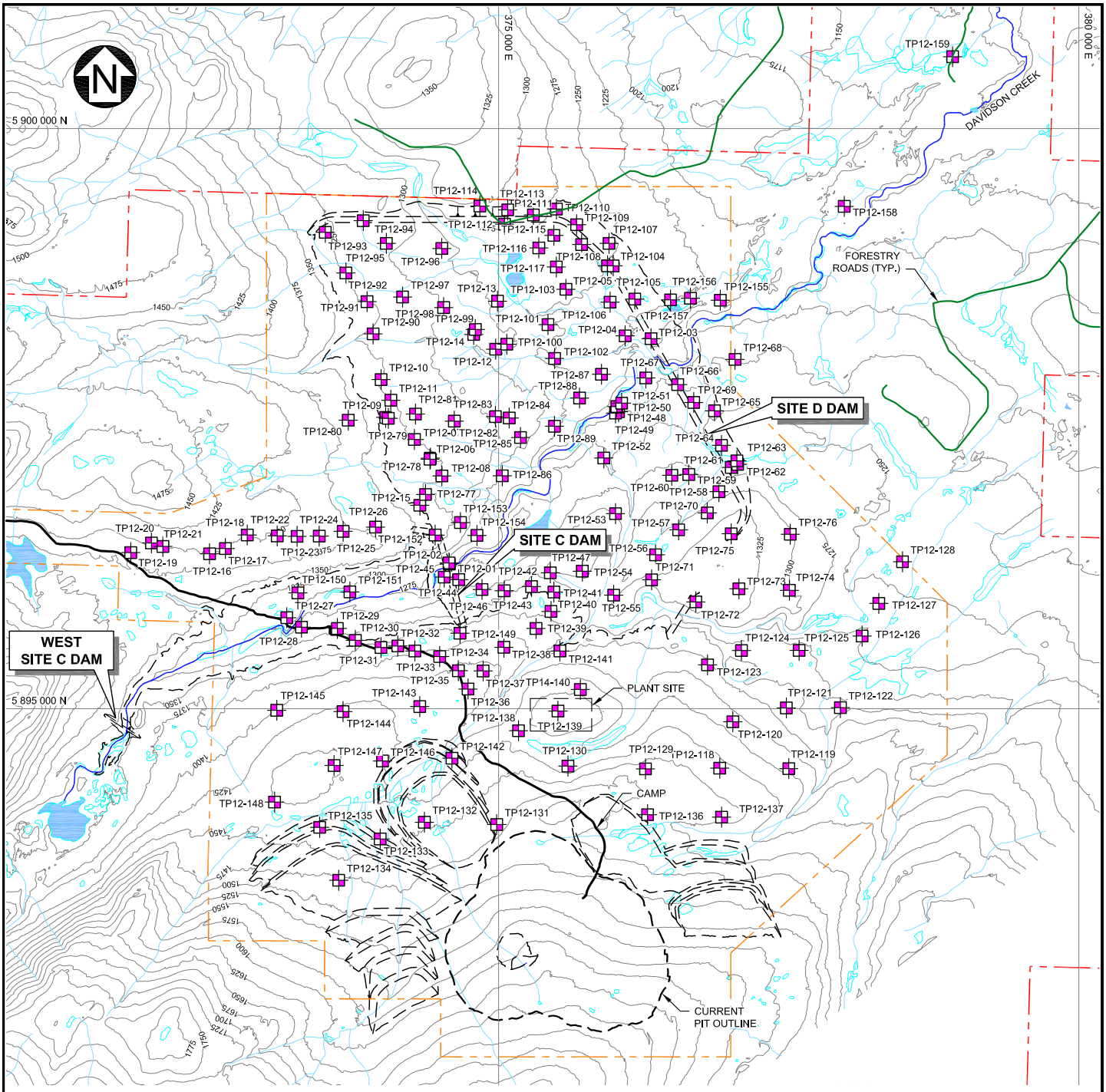
3.2 TEST PIT PROGRAM

A total of 159 test pits (TP12-01 to TP12-159) were excavated across the site during the 2012 site investigation program. The test pit program was carried out in order to assess surficial material foundation conditions and to determine the suitability of in-situ materials for potential borrow areas for construction material.

Test pits were excavated using a Komatsu PC360LC, supplied and operated by New Gold. Test pit depths ranged from 1.0 to 8.5 m and were terminated due to bedrock being encountered, test pit instability issues, or reaching the maximum depth of the excavator.

The test pit locations were accessed using constructed mine trails and care was taken to minimise environmental disturbance. Wherever possible, the surface organic material and vegetation was stripped and stockpiled separately prior to excavating the test pit. The exposed soils in the pit walls and spoil piles were logged for geotechnical characteristics and samples were collected for laboratory testing. All of the test pits were backfilled and the surface was re-contoured upon completion. The final activity at each site involved the replacement of the surface material and vegetation to recreate, as much as possible, the pre-investigation conditions.

Coordinates and elevations of all test pits were obtained from a hand held GPS (Garmin GPS Map60 GSx) using the UTM-NAD83 Zone 9 coordinate system, with an accuracy of three to seven metres depending on available satellites. A summary of the test pits is presented in Table A.1 and locations of the test pits are illustrated on Figure 3.1. Test pit logs are provided in Appendix A and test pit photographs are provided in Appendix F5.



LEGEND:

- TP12-03 — TEST PIT (159)
- EXISTING ROAD
- MYAB BOUNDARY
- NEW GOLD PROPERTY BOUNDARY

NOTES:

1. CONTOUR INTERVAL IS 25 METRES.
2. ALL MINE SITE FACILITIES ARE CONCEPTUAL ONLY AND ARE ONLY INTENDED TO SUPPORT SITE INVESTIGATIONS.
3. INVESTIGATIONS MAY BE ALTERED DEPENDING ON RESULTS OF PRECEDING PHASE.

SCALE A: 500 250 0 500 1000 1500 2000 2500 m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

2012 TEST PIT PLAN

Knight Piésold CONSULTING

P/A NO. VA101-457/6 | REF NO. 1

FIGURE 3.1 | REV 0

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3.3 DRILLING PROGRAM

The drilling program employed three different drilling methods:

- ODEX drilling was used for surficial material drilling while conducting SPTs
- Diamond drill coring was used once the bedrock was reached, and
- Sonic drilling collected continuous surficial material cores for collection of representative samples for laboratory testing and extracting detailed descriptions of the surficial material types.

The simplified general arrangement of the overall project site and 2012 site investigation drilling plan are illustrated on Figure 3.2 and drillhole details are summarised in Table B1.1. Coordinates of all drillholes were surveyed by Allnorth Consultants.

3.3.1 ODEX Drilling

Thirteen drillholes, GT12-01 to GT12-12 and GT12-28, were completed by Westech Drilling Corp. using a Mobile Drill B-54 drill rig using ODEX drilling in the surficial material and completely weathered bedrock. ODEX drilling is a rotary percussive drilling technique that quickly advances an eccentric drill bit and casing in soft materials. When competent bedrock is reached, casing is set and the drill rig is switched to diamond drill coring mode to advance into bedrock. Drill cuttings and SPT samples were logged according to the Canadian Foundation Engineering Manual and ASTM D2488-93 and selectively sampled. Drill water and the drill cuttings were diverted to sedimentation sumps.

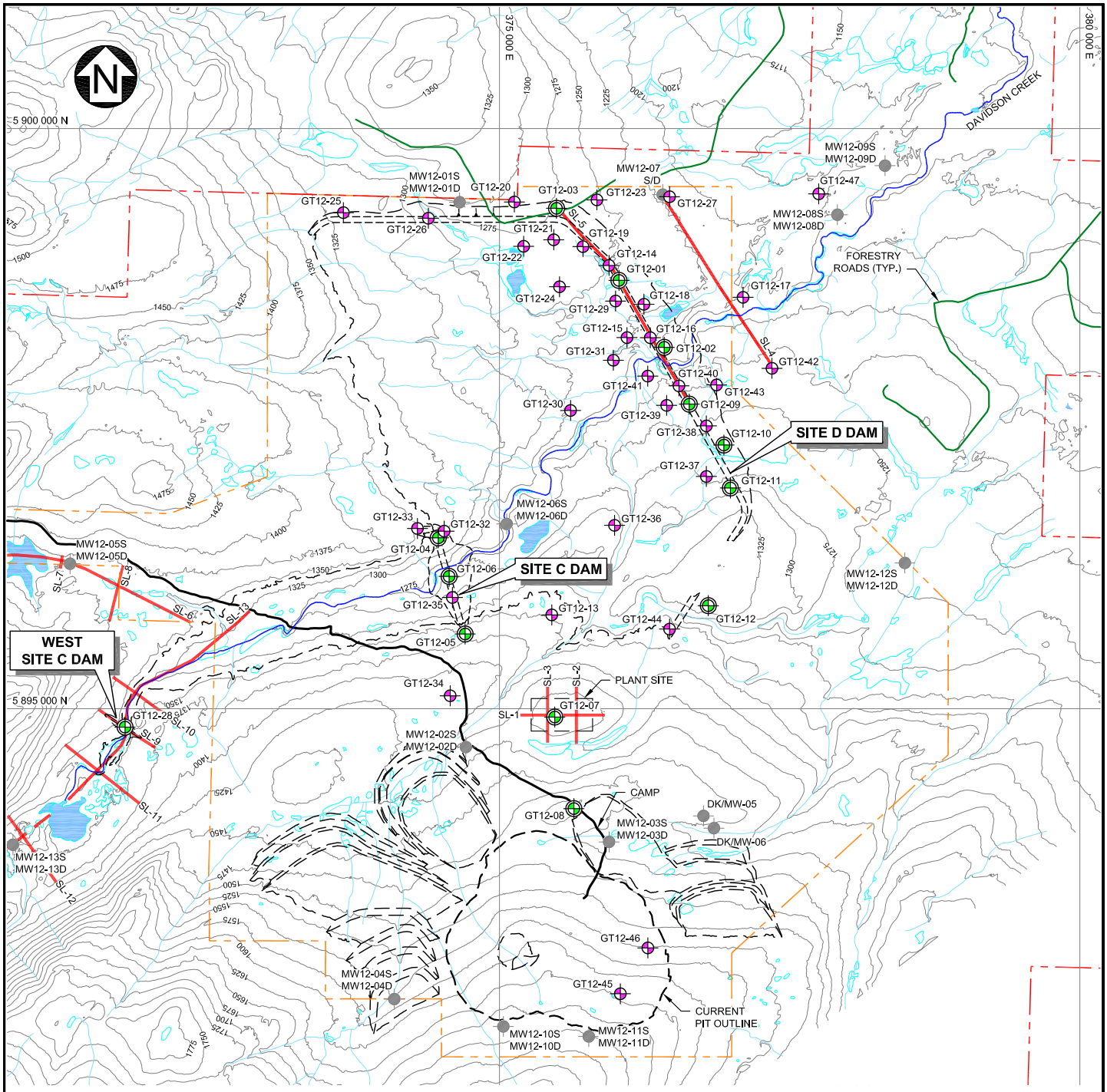
SPTs were conducted during the ODEX drilling at 1.5 m intervals for the first 15 m and then every 3 m thereafter, where ground conditions permitted. SPTs were completed to define the compactness/consistency of the soil and to collect samples for visual descriptions. The number of required blows delivered by a hydraulic hammer to advance the SPT split spoon sampler was recorded for every 150 mm increment until the sampler was driven a total of 450 mm, or effective refusal had been achieved. The SPT ‘N’ value was calculated as the number of blows required to advance the sampler from 150 to 450 mm. The following information was routinely recorded for each SPT sample; depth of test interval, blow counts for each 150 mm interval, SPT ‘N’ value, recovery length, and soil description.

ODEX drillhole logs are provided in Appendix B1 and SPT sample photographs are presented in Appendix F2.

3.3.2 Sonic Drilling

Thirty-four drillholes, GT12-13 to GT12-27 and GT12-29 to GT12-47, were completed by Major Drilling Environmental LLC using a Diedrich sonic drill rig. Sonic drilling is a rotary vibratory drilling technique that is used to effectively recover continuous surficial material (soil) cores. The drill bit and casing were advanced by vibration at variable frequencies (50 Hz to 150 Hz). Drillholes were completed to a minimum of three meters into weathered bedrock. Recovered surficial material cores were logged, photographed, and selectively sampled for laboratory testing. All sonic drillholes were grouted to surface upon completion.

Sonic drillhole logs are provided in Appendix B1, and core photographs are presented in Appendix F3.



LEGEND:

- GT12-01 — GEOTECHNICAL ODEX DRILLHOLE WITH PIEZOMETER (13)
- MW12-01 — MONITORING WELLS (28)
- GT12-14 — GEOTECHNICAL SONIC DRILLHOLE WITH NO INSTALLATION (16)
- EXISTING ROAD
- SEISMIC LINES (15.64 km)
- MYAB BOUNDARY
- NEW GOLD PROPERTY BOUNDARY

NOTES:

1. CONTOUR INTERVAL IS 25 METRES.
2. ALL MINE SITE FACILITIES ARE CONCEPTUAL ONLY AND BASED ON PEA LAYOUT AND ARE ONLY INTENDED TO SUPPORT SITE INVESTIGATIONS.

SCALE A: 500 250 0 500 1000 1500 2000 2500 m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

2012 DRILLHOLE PLAN

Knight Piésold CONSULTING

P/A NO. VA101-457/6 | REF NO. 1

FIGURE 3.2 | REV 0

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3.3.3 Diamond Drill Coring

When the thirteen ODEX drillholes, GT12-01 to GT12-12 and GT12-28, intercepted bedrock, Westech converted the Mobile Drill B-54 rig to diamond coring to recover bedrock cores. Bedrock was cored with a HQ3 diamond bit using a wireline standard barrel set-up and a five foot core barrel. This method allowed for recovery of continuous rock core samples as the drillhole was advanced. The criteria for termination of a drillhole in bedrock were two consecutive packer tests with a hydraulic conductivity of approximately $1x10^{-7}$ m/s or lower.

Detailed geotechnical logging of bedrock drill core was carried out in all geotechnical drillholes to characterise the rock mass. The following information was collected on a run by run basis:

- Core run interval
- Core recovery
- Rock Quality Designation (RQD)
- Lithological description
- Field estimated Unconfined Compressive Strength (UCS) of rock
- Number of discontinuities
- Discontinuity types
- Joint condition of discontinuities (i.e. roughness, aperture, alteration, infillings, etc.), and
- Infill materials on discontinuities.

The drillhole logs are provided in Appendix B1 and rock core photographs are presented in Appendix F4.

3.3.4 Rock Mass Classification

The Rock Mass Rating (RMR) classification system developed by Bieniawski (1989) was used to classify the rock mass. The RMR logging system is based on field determination of values for the following five key rock mass parameters:

- Intact rock hardness and UCS – The rock hardness and intact rock strength were estimated in the field and verified by laboratory UCS and PLT test results.
- RQD – The RQD value was determined for each core run by summing the lengths of all core pieces (only considering natural fractures in sound core) greater than 10 cm long and presenting this as a percentage of the drill run length.
- Joint spacing – An estimate of fracture spacing was determined by counting the number of natural fractures encountered per length of drill run.
- Joint condition – The joint condition is based on an evaluation of fracture persistence, roughness, infilling, aperture, and weathering, the rating system is shown in Table 3.1.
- Groundwater condition – A constant groundwater rating of 15, which corresponds to dry conditions, was used to calculate the RMR. This allows the RMR values to be consistent with the Geological Strength Index (GSI) classification scheme (Hoek et al, 1995).

Table 3.1 RMR Rating Fracture Conditions

Persistence	< 1 m	1 - 3m	3 - 10m	10 - 20 m	> 20m
RATING	6	4	2	1	0
Aperture	None	< 0.1 mm	0.1 - 1.0	1 - 5	5 - 10
RATING	6	5	4	1	0
Roughness	V Rough	Rough	SL Rough	Smooth	Slicks
RATING	6	5	3	1	0
Infilling	None	Hard Infilling		Soft Infilling	
		< 5 mm	> 5 mm	< 5mm	> 5 mm
RATING	6	4	3	2	0
Weathering	FRESH	SW	MW	HW	CW
RATING	6	5	3	1	0

The sum of the above ratings defines the rock mass quality as an RMR value. This value can range from <20 to 100 to allow the rock mass to be classified as follows:

- VERY GOOD rock – RMR: 81 to 100
- GOOD rock – RMR: 61 to 80
- FAIR rock – RMR: 41 to 60
- POOR rock – RMR: 21 to 40, and
- VERY POOR rock – RMR less than 20.

Drillhole RMR and RQD logs are provided in Appendix B2 and rock core photographs are presented in Appendix F4.

3.4 HYDRAULIC CONDUCTIVITY TESTS

Two testing methods were adopted to assess the hydraulic conductivity of the rock mass and surficial materials;

- Lugeon (single packer) permeability tests were conducted during rock coring, and
- Response tests were conducted in standpipe piezometers in the screened completion zone.

3.4.1 Lugeon Hydraulic Conductivity Testing

In-situ packer hydraulic conductivity testing was undertaken wherever possible to estimate the permeability of the encountered rock mass. Hydraulic testing was performed using the Inflatable Packers International (IPI) system of water-inflatable (hydraulic) packers or a pneumatic single packer system using nitrogen gas for inflation. Lugeon test methods were utilised in order to obtain a hydraulic conductivity estimate approximately every six meters. Forty Lugeon tests were conducted in drillholes GT12-01 to GT12-12 and GT12-28. The criteria for termination of a drillhole in bedrock was two consecutive packer tests with a hydraulic conductivity in the order of $1x10^{-7}$ m/s or lower.

The hydraulic conductivity testing results are summarised in Table C2.1 and individual testing sheets are provided in Appendix C2.

3.4.2 Response Tests (Hvorslev Method)

Falling head permeability tests were conducted in standpipe piezometers and monitoring wells to estimate the hydraulic conductivity around the screened completion zone. A positive hydraulic head is created by inserting a measured slug into the piezometer. The rate of water level return to the initial water level is used to calculate the hydraulic conductivity of the test section. The transducer was positioned at a depth of approximately 5 m below the initial water level in the well. The water level is accurately measured and automatically recorded every second by a transducer (In-Situ Level Troll® 700 or a Schlumberger Mini-Diver). The response test data was analyzed using Hvorslev methods. These methods are based on curve matching to a theoretical solution to estimate the hydraulic conductivity value.

Response test results are summarized in Table C3.1 and data sheets are provided in Appendix C3.

3.5 PIEZOMETER INSTALLATIONS

3.5.1 Standpipe Piezometer Installation

Standpipe piezometers were installed in 11 geotechnical drillholes (GT12-01, GT12-03, GT12-04, GT12-06, GT12-07, GT12-08, GT12-09, GT12-10, GT12-11, GT12-12 and GT12-28). Installation of the piezometers was completed by Westech under the direction and supervision of KPL field personnel. The piezometer completion zones were installed in areas of interest such as bedrock contacts and/or permeable zones identified during geotechnical logging and/or by the results of packer testing. The piezometers were constructed with 2-inch diameter, decontaminated, flush-threaded, Schedule 80 PVC riser pipes. The screened completion zone sections were installed using Schedule 80 PVC screens with No. 10 (0.010 inch) machine slots in either 3 m or 6 m completion intervals. The annular space around the screen was backfilled with 10/20 silica sand in the completion zones. The completion zone was sealed with hydrated bentonite pellets. A cement/grout mix was used to backfill the drillhole to surface above the top bentonite seal. Lockable monuments were installed to protect the PVC pipe at surface and to prevent tampering.

A summary of the geotechnical drillhole and piezometer information is provided in Table B1.1. Standpipe piezometer completion details are provided in Appendix C1.

3.5.2 Vibrating Wire Piezometer Installation

Seven Vibrating Wire (VW) piezometers were installed in three drillholes (GT12-01, GT12-02, and GT12-05) to continuously monitor and record in-situ pore water pressure and temperature. Single node standard vibrating wires (model VW2100 manufactured by RST Instruments Ltd.) were installed and data loggers were installed to record continuous data after installation. Installations were accomplished by attaching the vibrating wire piezometer transducer to 1-inch PVC riser pipe and lowering it to the target depth in the drillhole. The annular space in the vicinity of the vibrating wire piezometer sensor was backfilled with a bentonite grout mixture. Permanent data loggers were installed at the VW piezometer locations to measure the static groundwater table.

The VW piezometer completion details are summarized in Table C1.2 and presented along with the drillhole logs in Appendix C1.

3.6 MONITORING WELL INSTALLATION

Twenty eight Monitoring wells (MW12-01 to MW12-13, MW-05(ODK), and MW-06(ODK) were installed at specific locations for groundwater sampling as part of the environmental baseline water quality sampling program. Monitoring well drillholes were completed using the ODEX drill provided by Westech. Monitoring well sites were located up-gradient and down-gradient of proposed mine infrastructure to provide site wide spatial coverage as shown on Figure 3.3. Westech was contracted to complete the installation of the groundwater monitoring wells. A track mounted B-54 drill rig was used during the first phase of drilling and a track mounted Simco 2800 HD drill rig was used to complete the second phase of drilling.

Twenty-eight groundwater monitoring wells were installed at 15 locations. A deep well installation designated 'D' (deep) and 'S' (shallow) installation was completed at each location, with the exception of MW-05(ODK) and MW-06(ODK), to provide vertical representation of groundwater levels, hydraulic characteristics, and groundwater quality. When two or more distinctive aquifers were encountered, the deep well was installed in the lower aquifer and a shallow drillhole was completed for a monitoring well installation in the upper aquifer.

The surficial material was drilled using 15 cm outer diameter steel casing with an ODEX system. The drillhole was advanced in an open hole with a down-hole hammer bit (12 cm outer diameter). Drill cuttings were collected at surface and logged. Observations were noted while drilling on water return at the surface, and include input from the driller.

Monitoring wells were installed by Westech under KPL supervision. The general installation approach was as follows:

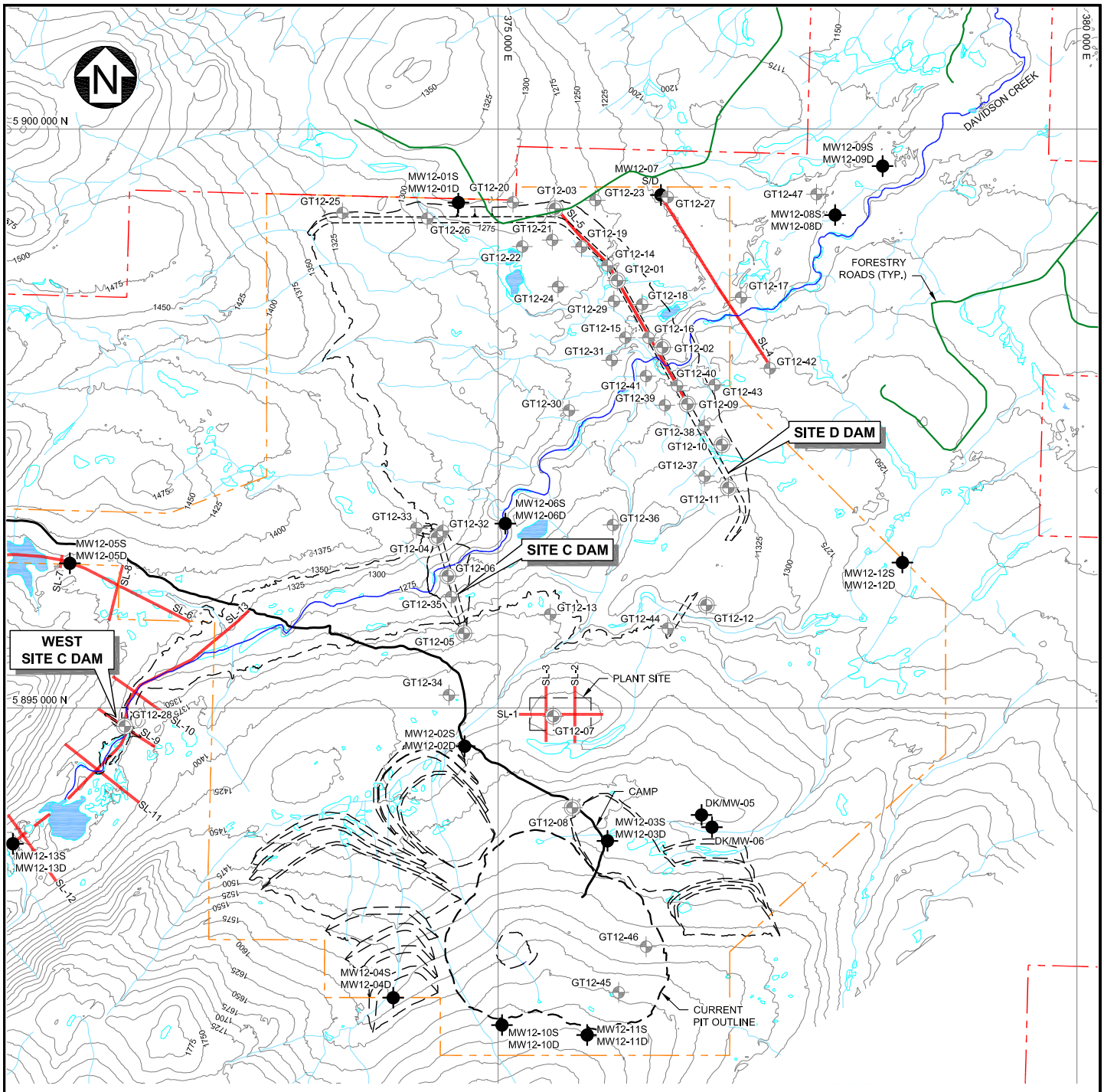
- Approximately 1 m of filter sand (10/20) placed on the bottom of the drillhole
- Two inch diameter machine slotted schedule 80 PVC screen (0.5 mm slot size, "20 slot") installed on top of the filter sand
- Two inch diameter sections of schedule 80 PVC installed to approximately 1 m above ground surface
- Filter sand (10/20) placed adjacent to and up to approximately 2 m above the screen to form the completion zone
- Completion zone sealed with at least 1 m of slow release coated bentonite pellets
- Backfilled with a grout mixture (115 kg grout to 375 L water) to ground surface, and
- Casing was removed and a lockable steel well monument was installed with a concrete surface protection directing surface flow away from the well.

A summary of the monitoring well installations is presented in Appendix C1 and locations of monitoring wells (MW) are shown on Figure 3.3. A stand-alone report of groundwater quality data collection is provided in the KPL Report Groundwater Quality Data Collection (KPL Ref. VA12-02061).

3.6.1 Monitoring Well Development

Monitoring Wells were developed to clean and remove drilling debris and fines from the well screen and filter zone surrounding the screen. A high-capacity Waterra inertial pumping system activated by a Waterra Power Pump-2 was used for development. HDPE Waterra tubing (outer diameter 2.54 cm (1 inch) was fitted with a surge block and foot valve. Starting at the bottom of the screen, the foot

valve and surge block were placed for pumping at successively shallower locations until the top of the screen was reached and the entire screened zone had been developed. The volume of water and sediment extracted, pH, temperature, and electrical conductivity were recorded during well development. Development continued at each interval until sediment free water was observed or until diminishing returns had been reached. The surge block was then removed (for less aggressive sediment removal) and the foot valve was placed at the top of the screen and pumping was resumed. Water volume, sediment quantity, pH, temperature, and electrical conductivity were again recorded at regular intervals until sediment free, parameter stable water was observed or until diminishing returns had been reached. The foot valve was lowered to the bottom of the well and operated manually to collect sediment that accumulated at the bottom of the well during development after sediment levels decreased and parameters had stabilised,.



NOTES:

1. CONTOUR INTERVAL IS 25 METRES.
2. ALL MINE SITE FACILITIES ARE CONCEPTUAL ONLY AND BASED ON PEA LAYOUT AND ARE ONLY INTENDED TO SUPPORT SITE INVESTIGATIONS.

LEGEND:

- GT12-01 — GEOTECHNICAL ODEX DRILLHOLE WITH PIEZOMETER (13)
- MW12-01 — MONITORING WELLS (28)
- GT12-14 — GEOTECHNICAL SONIC DRILLHOLE WITH NO INSTALLATION (16)
- EXISTING ROAD
- SEISMIC LINES (15.64 km)
- MYAB BOUNDARY
- NEW GOLD PROPERTY BOUNDARY

SCALE A: 500 250 0 500 1000 1500 2000 2500 m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

2012 MONITORING WELL PLAN

Knight Piésold CONSULTING

P/A NO. VA101-457/6 | REF NO. 1

FIGURE 3.3 | REV 0

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3.7 LABORATORY TEST WORK

Select samples from drillholes and test pits were collected for laboratory test work to characterize material types encountered at the site as part of the 2012 site investigation program. Specialized test work was conducted, on selected samples, to evaluate the performance of these materials for suitability in specific end uses.

Laboratory test work included the following:

- Particle Size Analysis (PSA) tests
- Atterberg limits tests
- Pinhole dispersion tests
- Compaction tests
- Specific gravity tests
- Density tests
- Flexible wall permeability tests
- Triaxial testing
- X-Ray Diffraction (XRD) analytical results
- Soil-Water Characteristic Curve (SWCC) tests, and
- Unconfined Compressive Strength (UCS) testing.

Index testing on the samples was carried out at the KPL laboratory in Denver, Colorado and AMEC's geotechnical soil laboratory in Prince George. XRD testing was carried out at The Mineral Lab Inc. in Denver. SWCC testing was carried out at MDH Engineered Solutions Corp. (SNC Lavalin) laboratory in Saskatchewan.

3.7.1 Surficial Materials Testing

Soil and completely weathered bedrock samples were selected to represent the range of materials encountered during the 2012 site investigation and these samples were sent to various labs for specific testing programs. A summary of the tests are provided below.

- PSA Tests – A total of 231 tests were completed to assess the grading characteristics of the materials. Screen and hydrometer particle size analyses were carried out on the samples, in accordance with ASTM D422 procedures. The hydrometer analysis was used to determine the silt and clay fractions.
- Atterberg Limits – A total of 125 tests were completed in accordance with the ASTM D854 test procedure.
- Pinhole Dispersions Test – Three pinhole dispersion tests were conducted on lacustrine silt in accordance with the ASTM D4647 test procedure.
- Compaction Test – Five standard proctor compaction tests were completed in accordance with the ASTM D698-07 test procedure.
- Specific Gravity Tests – Two specific gravity tests were carried out in accordance with the ASTM D4318 test procedure.
- Density Test – Twenty-eight density samples were tested in accordance with ASTM D4564 test procedure.
- Flexible Wall Permeability Tests – Fourteen flexible wall permeability tests were conducted in accordance with ASTM D5084-03 test procedures. The flexible wall permeability test specimens

are consolidated to expected in-situ effective stresses, and also back-pressured to induce saturation. Constant head and falling head methods were applied on different samples.

- Triaxial Testing – Four triaxial tests were completed in accordance with ASTM D-4767 test procedures.
- XRD – Five XRD tests were completed on selected samples, and
- SWCC – Two SWCC tests were conducted in accordance with ASTM D6836 test procedures.

All laboratory test results are provided in Appendix D1 and summarised in Table D.1.

3.7.2 Rock Testing

A total of five rock core samples of andesite bedrock were collected from the geotechnical drillholes for rock strength laboratory testing. Rock core samples were selected to represent the lithologies encountered and were submitted to the Geomechanics Laboratory of the University of British Columbia in Vancouver. The samples were tested using ASTM D2166 (UCS) and ASTM D-3148-02 (Young's Modulus) test methods. ISRM-1979 (2007) procedures were followed to perform the modulus determinations.

3.8 SEISMIC REFRACTION SURVEY

A seismic refraction and Multi-Channel Analysis of Surface Wave (MASW) investigation was carried out by Frontier Geosciences Inc. from August 23 to September 22, 2012. Thirteen seismic refraction lines were completed in the investigation. Three lines were surveyed at the proposed Plant Site, two lines completed at the TSF Site D Dam area, and eight lines at the Site C West Dam alignments. A total of 15.6 kilometres of detailed seismic refraction surveying was carried out in the investigation using 103 separate seismic spreads, as shown on Figure 3.2.

The MASW analysis of the 17 spreads of seismic data located at the Plant Site resulted in 47 shear velocity soundings. A Geometrics, Geode, 24 channel, signal enhancement seismograph and Oyo Geo Space, 10 Hz geophones were used. Geophone intervals along the multicored seismic cables were maintained at 5, 7.5, 10, and 15 m in order to ensure high resolution data on subsurface layering and effectively image deeper bedrock contacts. The results of the seismic refraction survey are presented in Appendix E. Seismic refraction results are interpreted in the geotechnical characterisation report (KPL Ref: VA101-457/6-8).

4 - INITIAL FINDINGS

4.1 GENERAL

The 2012 site investigation program resulted in the development of a large database of geological and geotechnical information from drillhole and test pit logging, hydraulic conductivity testing and laboratory testing. The materials encountered at Blackwater can be grouped into:

- Surficial material, and
- Bedrock.

The surficial material is generally thick within the Davidson Creek area averaging over 60 meters. Bedrock is deepest along the Davidson Creek valley bottom where it is encountered at up to 107 meters depth. A few drillholes and test pits located on the south and north sides of Davidson Creek valley encountered shallow bedrock between 0 to 11 m depth (Drillholes GT12-07, 08, 28 and test pits TP12-20, 21, 22, 23, 29, 58, 59, and 148).

4.2 SURFICIAL MATERIALS

The surficial material at the Blackwater site has been characterised using the following initial surficial material groupings:

- Glacial till
- High energy fluvial sands and gravels
- Low energy fluvial sand
- Lacustrine deposits, and
- Completely weathered bedrock.

Glacial till is the dominant surficial material found across the site and was occasionally interbedded with discontinuous sand and gravel lenses and lacustrine deposits.

4.2.1 Glacial Till Deposits

Glacial till is typically well-graded, very stiff to dense, sandy SILT to silty SAND with some gravel and trace sub-rounded to sub-angular cobbles and boulders. The majority of the SPT tests were driven to refusal resulting in high 'N' values of 20 to refusal (50+). Numerous cobbles were encountered in the glacial till, and the variable and high blow counts of SPT test are in part due to the presence of cobbles.

A total of 70 glacial till PSA samples were collected in drillholes and test pits for laboratory testing. Glacial till at the site is typically a well graded material with mean values of 22% gravel, 41% sand, 24% silt and 13% clay; a grading summary of glacial till samples is shown on Figure 4.1.

Laboratory testing of glacial till exhibited natural moisture contents of 1% to 14%. Glacial till samples were typically low plasticity materials with plasticity indices ranging between approximately 3 and 15 but were generally below 10, as shown on Figure 4.2. The specific gravity of glacial till ranged from 2.7 to 2.8. Compaction test work yielded a maximum dry density ranging between 2055 kg/m^3 and 2243 kg/m^3 with optimum moisture contents ranging from 5.9% to 9.8% respectively. In-situ density measurements on selected sonic core samples yielded a dry density of 1789 kg/m^3 to 2417 kg/m^3. Bulk densities ranged from 2061 kg/m^3 to 2622 kg/m^3. Triaxial strength testing (in-situ) indicated the glacial till has an average cohesion of 13 kPa and friction angle of 37°. Seismic refraction velocities

in the glacial till range from 1750 m/s to 2600 m/s. Flexi wall permeability results ranged from $3x10^{-7}$ m/s to $9x10^{-11}$ m/s with the constant head method and $3x10^{-6}$ m/s to $1x10^{-8}$ m/s with the falling head method. Clay content was between 8% and 24% in the glacial till which contributes to these low permabilities.

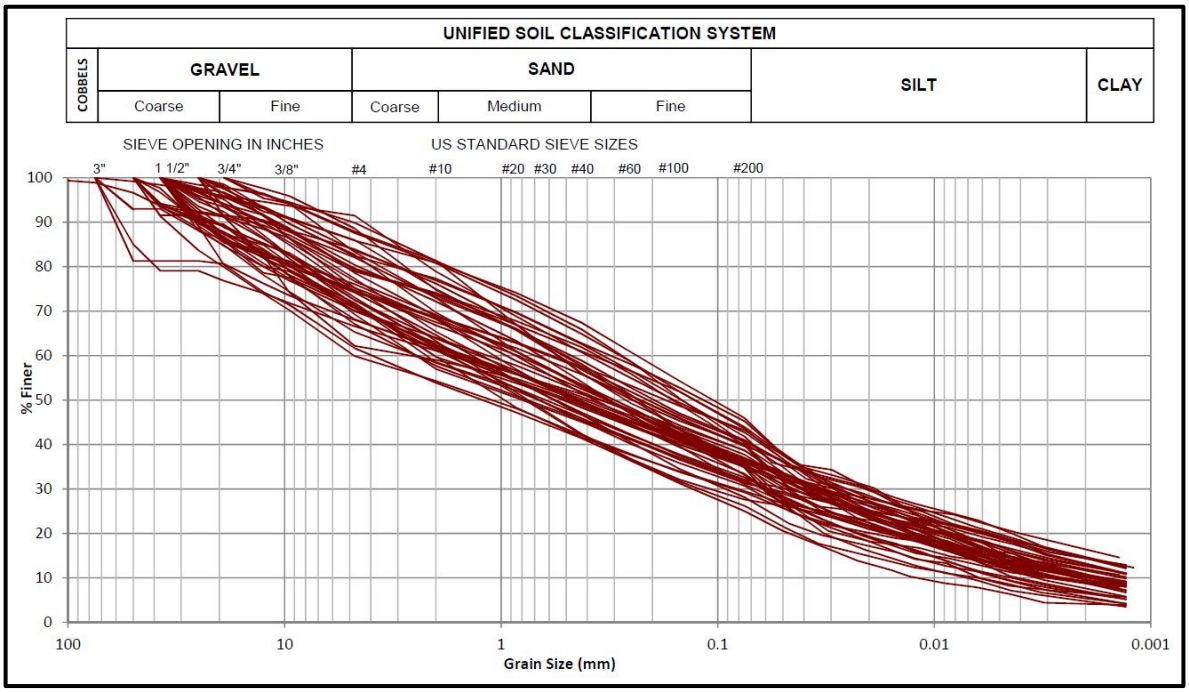

Figure 4.1 Glacial Till Grading Summary

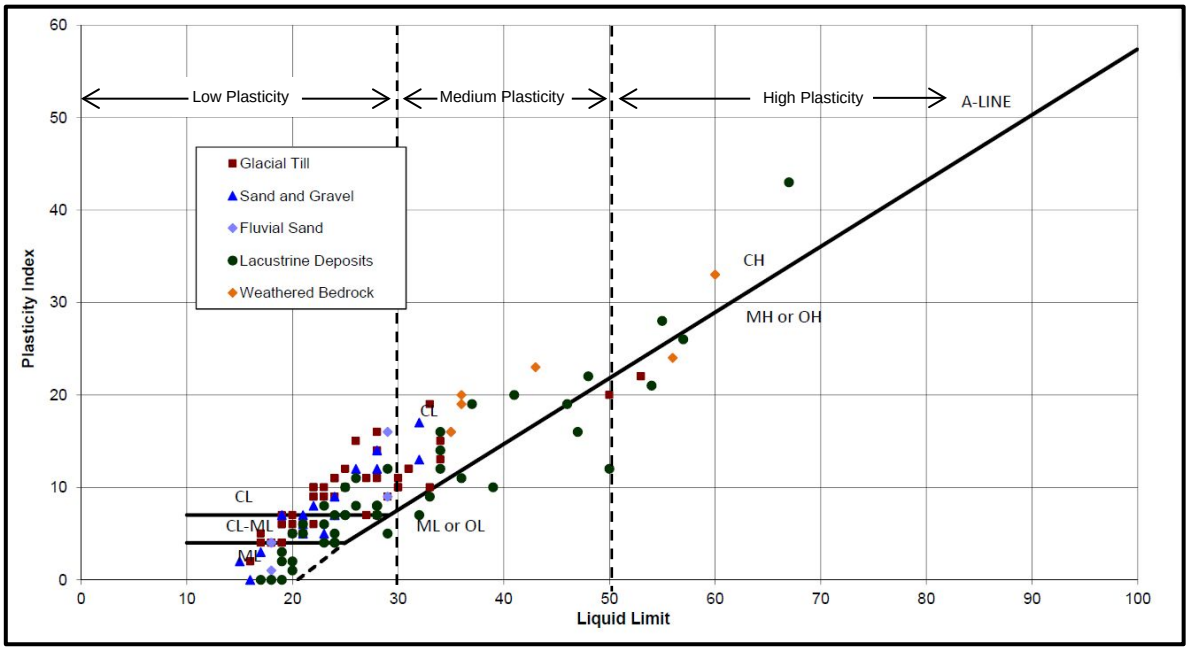

Figure 4.2 Liquid Limit versus Plasticity Index

4.2.2 Fluvial/Glaciofluvial Deposits – High Energy Sand and Gravel

The high energy fluvial/glaciofluvial deposits are typically well graded coarse grained sand and gravels with some fines. Thirty-four high energy sand and gravel PSA samples were collected from the drillholes and test pits. PSA results indicate well graded materials with mean values of 40% gravel, 38% sand, 15% silt and 7% clay. A PSA grading summary is shown on Figure 4.3. It should be noted that the fines fraction (silt and clay) for the majority of samples is above 15%. Only six samples of 34 samples tested were found to have less than 15% fines. Sand and gravel samples were typically low plasticity materials with plasticity indices ranging between non-plastic and 18 but were generally below 8, as shown on Figure 4.2. Seismic refraction velocities in surficial sand and gravel deposits range from 350 m/s to 1825 m/s.

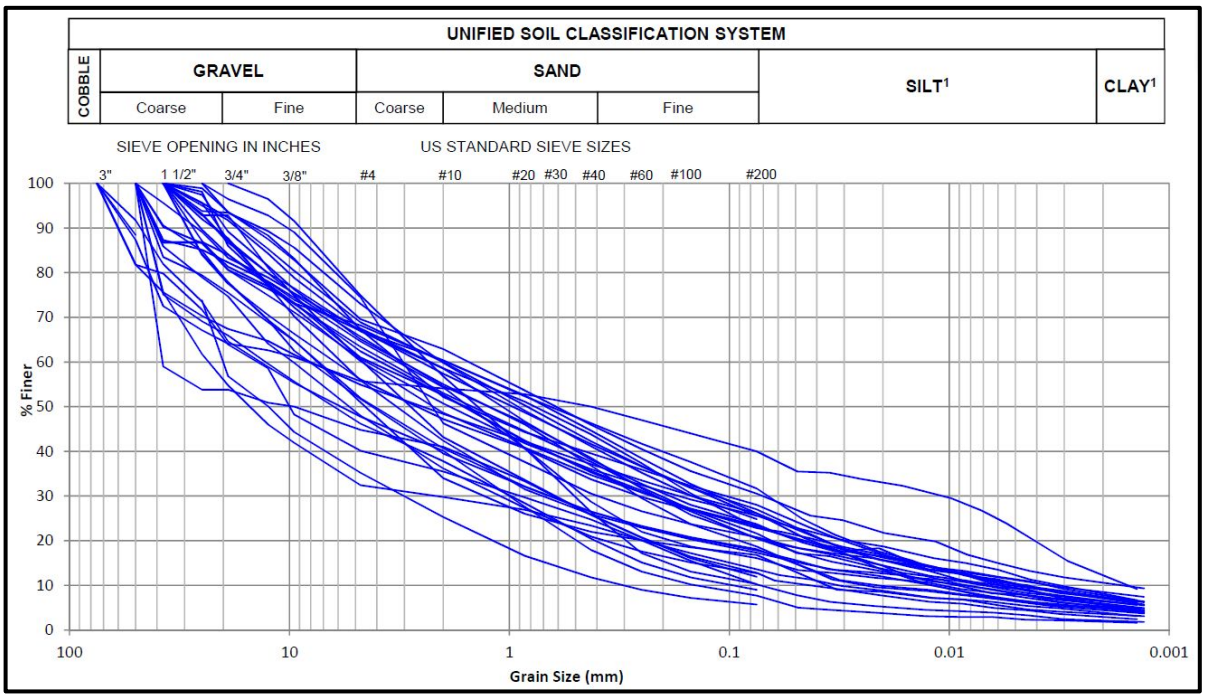

Figure 4.3 High Energy Sand and Gravel Grading Summary

4.2.3 Fluvial/Glaciofluvial Deposits – Low Energy Sands

The low energy fluvial/glaciofluvial deposits are typically sands with some silt and trace gravel. Fourteen PSA results encountered uniformly graded material with mean values of 4% gravel, 66% sand, 24% silt, and 8% clay, a PSA gradation summary of sand samples is shown on Figure 4.4. Only two samples have less than 15% fines. Sand samples were typically low plasticity materials with plasticity indices ranging between non-plastic and 16 but were generally below 9, as shown on Figure 4.2. Seismic refraction velocities in surficial sand and gravel deposits range from 350 m/s to 1825 m/s.

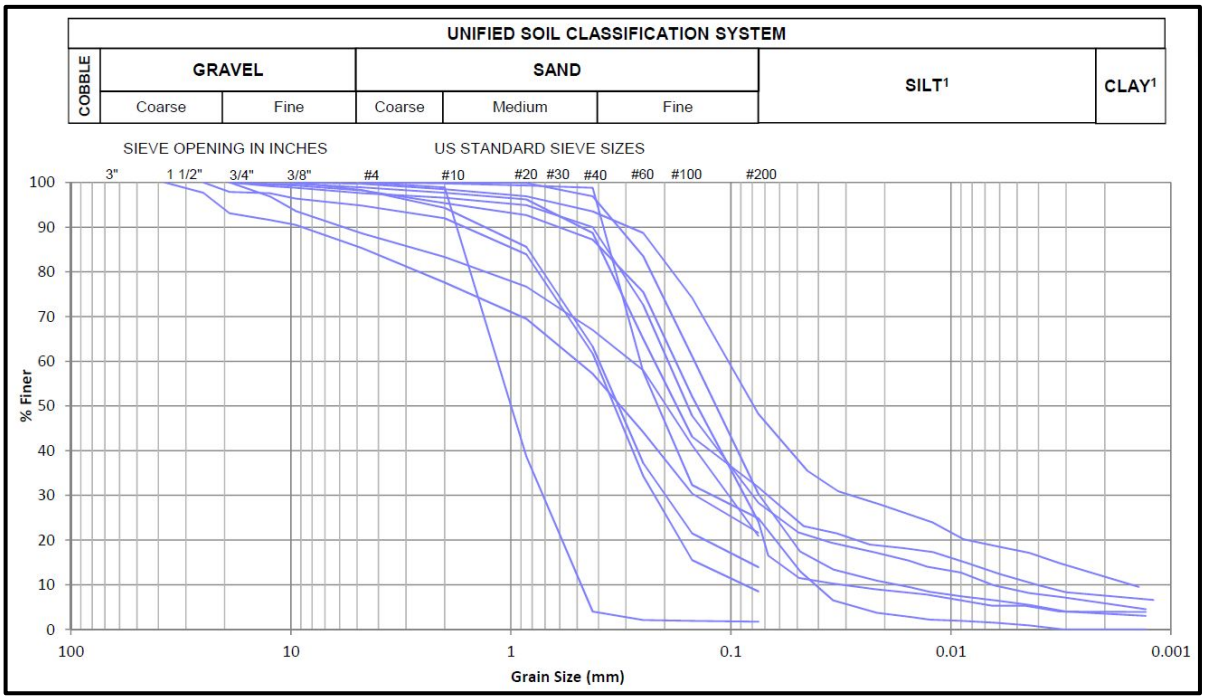

Figure 4.4 Fluvial Sand Grading Summary

4.2.4 Lacustrine Deposit

Fine-grained lacustrine deposits were identified during the site investigation programs. Index testing classified these materials as mostly sandy SILT to SILT. Fifty-five PSA results show a uniformly graded material with mean values of 4% gravel, 22% sand, 50% silt, and 24% clay, a PSA grading summary is shown on Figure 4.5. The clay fraction generally ranges between 5 and 30%. Lacustrine samples were typically medium to high plasticity materials with plasticity indices ranging from 1 to 43 but were typically below 10, as shown on Figure 4.2. The lacustrine deposits were found to be very dense, massive, and did not exhibit any fine laminated layers or weaker clayey laminations. Pinhole dispersion tests were used to evaluate undisturbed lacustrine samples for erodibility and found the samples to be slightly dispersive. Seismic refraction surveys were not able to differentiate the lacustrine deposits. XRD analytical results were conducted on these lacustrine deposits and the composition was approximately 46% smectite, 27% plagioclase feldspar, 10% quartz, and 10% k-feldspar for bulk samples and 90% smectite at the -2 µm fraction.

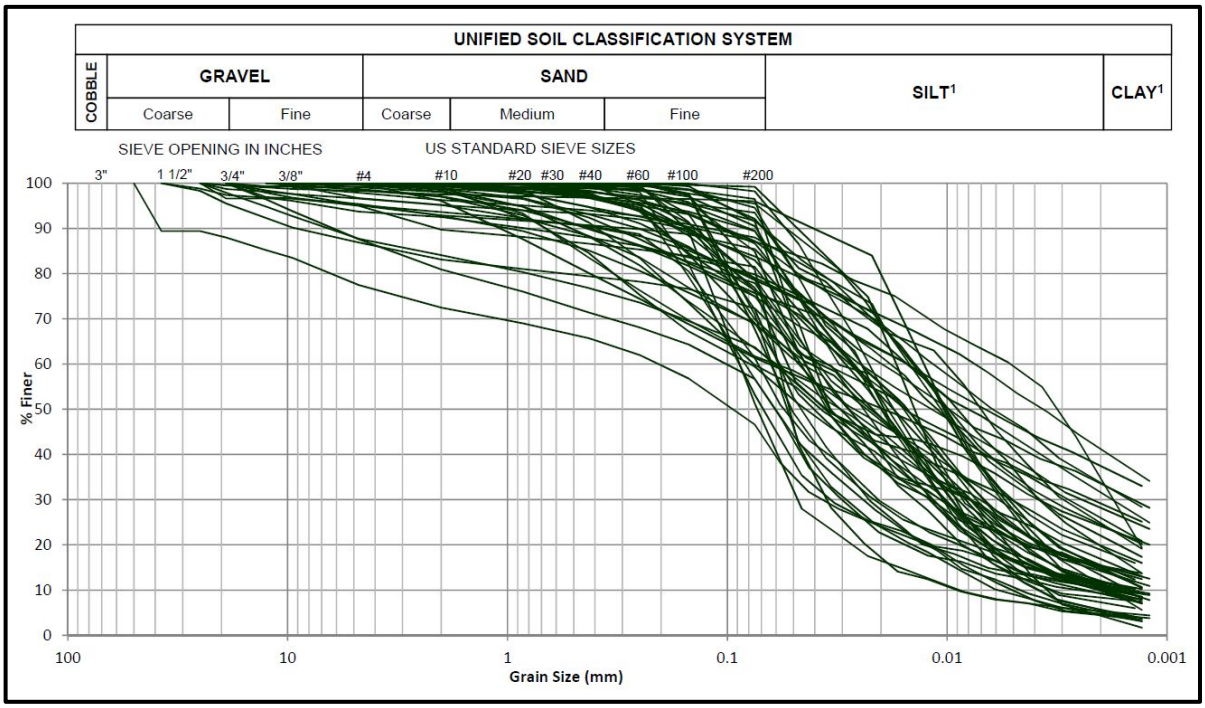

Figure 4.5 Lacustrine Deposit Grading Summary

4.2.5 Completely Weathered Bedrock

Completely weathered bedrock was encountered in the majority of drillholes with thicknesses ranging from a few metres to over 30 m, and averaging approximately 15 m. Ten PSA results of completely weathered bedrock found a variable material grading with mean values of 6% gravel, 45% sand, 29% silt and 20% clay, a PSA grading summary is shown on Figure 4.6. A wide range of grading of samples is observed which is indicative of the various states of decomposition of the weathered bedrock. The original bedrock texture or fabric is evident in the majority of samples, however the material behaves similar to a soil and is included as part of the surficial materials. Completely weathered bedrock samples were typically medium to high plasticity with plasticity indices ranging between 16 and 32 but were generally below 22, as shown on Figure 4.2. Seismic refraction velocities in the bedrock range from 3150 m/s to 5400 m/s. Variations in bedrock velocity may indicate the presence of increased zones of weathering.

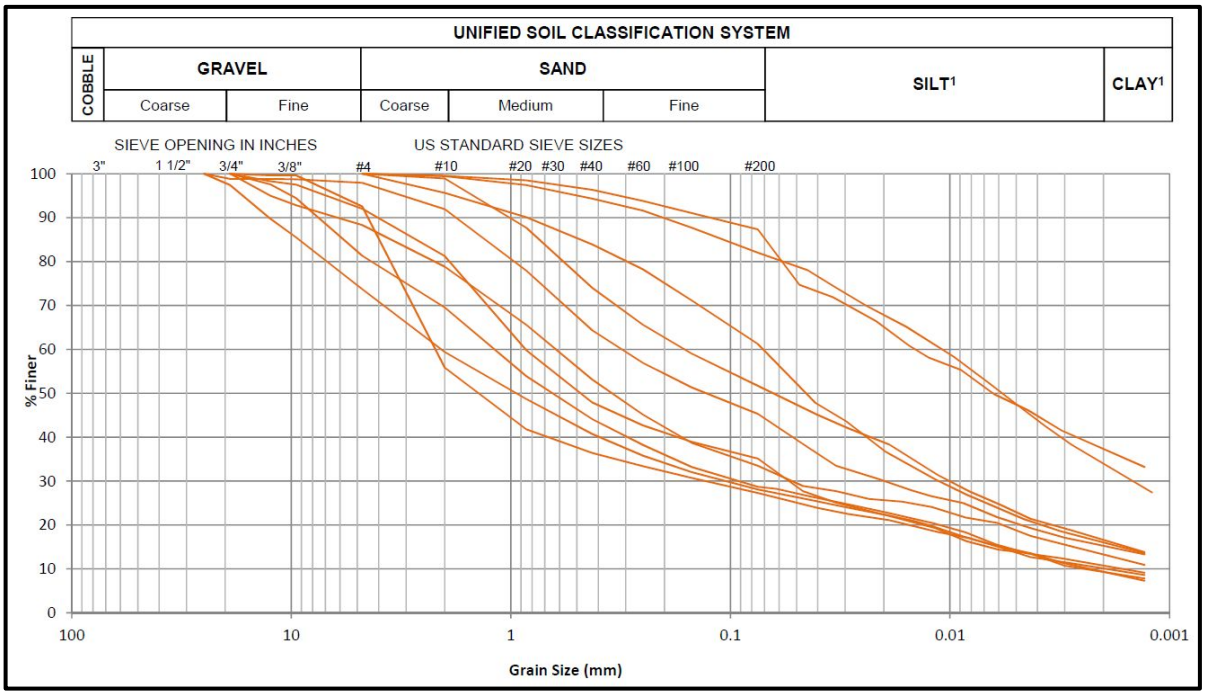

Figure 4.6 Completely Weathered Bedrock Particle Size Analysis

4.3 BEDROCK

Andesite from the Ootsa Lake Formation was encountered in the 13 diamond drill core drillholes (GT12-01 to GT12-12 and GT12-28). The andesite is a light grey to purple grey, fine grained porphyritic mafic volcanic rock. Carbonate veining and oxidation occurs frequently, with occasional pyrite crystallisations. Trace brown, gravelly clay infill was encountered in the shallow bedrock zone close to the surficial material contact.

Andesite was found to have the following properties:

- A RMR rating of 'FAIR' to 'GOOD' quality rock with a mean RMR value of 55
- A mean RQD value of 62%
- 'MEDIUM STRONG TO VERY STRONG' rock strength classification with UCS laboratory test results ranging from 37.7 to 193 MPa with a mean of 97 MPa. Field logging of UCS estimates ranged from 20 to 200 MPa with an average of 90 MPa
- Young's Modulus (a mean value from laboratory testing) of 42 GPa, and
- Poisson's Ratio (a mean value from laboratory testing) of 0.22.

Laboratory testing results of all rock strength test results are provided in Table 4.1 and detailed results are provided in Appendix D2.

Table 4.1 Rock Strength Testing Results

Sample ID	Depth		UCS	Young's Modulus	Poisson's Ratio	Lithology
	From (m)	To (m)	MPa	GPa		
GT12-03-S1	71.7	72.1	37.7	28.33	0.20	Andesite
GT12-07-S1	21.9	22.2	70.9	29.95	0.25	Andesite
GT12-07-S2	32.5	33.0	91.9	23.45	0.19	Andesite
GT12-08-S1	3.7	4.0	193.0	67.44	0.25	Andesite
GT12-08-S2	27.3	27.7	90.6	62.28	0.22	Andesite

Permeability testing of the rock mass found tight conditions with hydraulic conductivity ranging in the order of 10^{-6} to 10^{-8} m/s the majority of tests exhibited laminar flow and lugeon values were typically 0 to 5. The results are summarised on Figures 4.7 and 4.8.

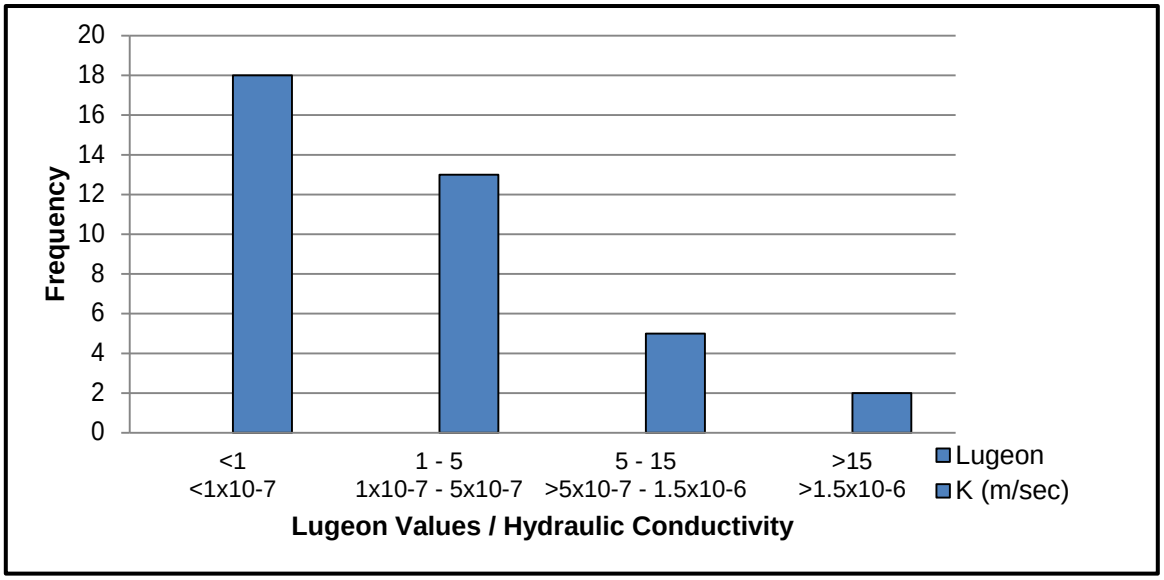

Figure 4.7 Lugeon Values and Hydraulic Conductivity versus Frequency

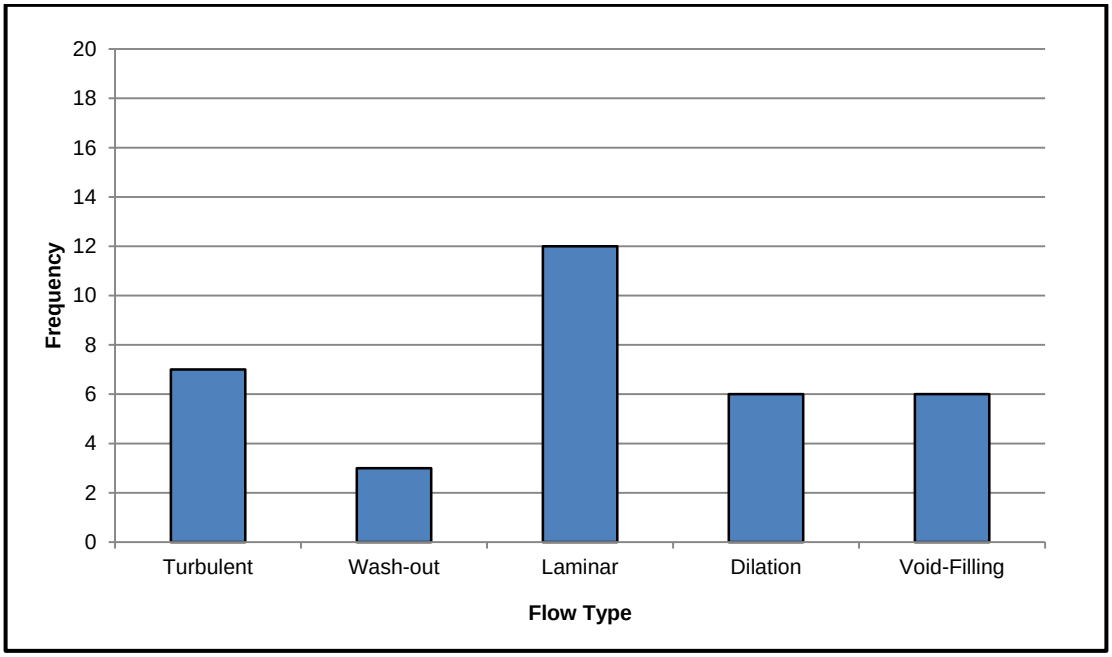

Figure 4.8 Hydraulic Conductivity Flow Type

5 - SUMMARY AND RECOMMENDATIONS

5.1 SUMMARY

A geotechnical site investigation program was carried out in 2012 and collected a significant amount of data to characterise the geology, hydrogeology and geotechnical conditions at the Blackwater site. The site investigation program consisted of the following:

- Site reconnaissance
- 13 geotechnical ODEX drillholes
- 34 geotechnical sonic drillholes
- Installation of 11 standpipe piezometers and three vibrating wire piezometers in selected drillholes
- In-situ hydraulic conductivity testing of the bedrock permeability
- Installation of 28 monitoring wells there were developed for water quality sample collection
- 159 test pits
- 15.6 km of seismic refraction lines used to develop 13 cross sections and profiles, and
- Laboratory testing of over 231 soil samples.

The surficial material and bedrock at Blackwater is primarily composed of the following deposits:

- Glacial till
- High energy sands and gravels
- Low energy fluvial sands
- Lacustrine deposits
- Completely weathered bedrock, and
- Andesite bedrock.

5.2 RECOMMENDATIONS

The 2012 site investigation program identified the following areas requiring further investigation:

- Geomorphological analyses and interpretation
- Evaluate presence of inferred faults
- Investigate the hydraulic conductivity of the completely weathered bedrock to see if there is a high permeability layer between the completely weathered soil and moderately weathered bedrock consisting of angular weathered blocks
- Investigate seepage pathways along Site C and Site D dams and cut-off trench depth
- Confirm surficial sand and gravel deposits mapped within the basin are not hydraulically connected to inter-till sand and gravel deposits
- Investigate thickness of permeable layers along Davidson Creek
- Investigate foundations for proposed Environmental Control Dam located downstream of Site D Main Dam
- Investigate foundation conditions at proposed waste rock dumps and at proposed the Low Grade Stockpile
- Investigate the foundation conditions and seepage controls at the Site C West Dam

- Investigate foundation conditions at the proposed Plant Site and other mine site infrastructure, and
- Identify borrow and aggregate sources and conduct suitability testing for use in construction.

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7 - CERTIFICATION

This report was prepared, reviewed and approved by the undersigned.

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APPENDIX A

TEST PIT LOGS

(Pages A-1 to A-162)

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TABLE A.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
TEST PIT SUMMARY

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Test Pit	Northing	Easting	Elevation	Total Depth	Date	Water Level	Geotechnical Conditions
	m	m	m	m		m	
TP12-001	5896247	374575	1264	3.7	27/06/2012	Not Encountered	0-0.9 silt and sand; 0.9-3.7 till
TP12-002	5896257	374572	1271	4.3	27/06/2012	2.3 slow seepage	0-2.3 silty gravel; 2.3- 4.28 silty gravel and sand
TP12-003	5898190	376313	1225	3.3	29/06/2012	2.7 slow seepage	0-2.65 sand and gravel; 2.65-3.75 till
TP12-004	5898214	376090	1227	5.7	29/06/2012	5.0 slow seepage	0-5.7 sand and gravel
TP12-005	5898818	375938	1249	6.5	29/06/2012	6.0 slow seepage	0-6.5 sand and gravel
TP12-006	5897160	374412	1326	5.3	01/07/2012	Not Encountered	0-1.5 sand and gravel; 1.5-5.3 till
TP12-007	5897321	374274	1325	6.0	01/07/2012	2.0 slow seepage	0-2 sand and gravel; 2-6 till
TP12-008	5897007	374511	1324	5.2	01/07/2012	2.0 slow seepage	0-2.35 sand and gravel; 2.35-5.16 till
TP12-009	5897511	374026	1334	4.7	01/07/2012	2.0 slow seepage	0-2.7 sand and gravel; 2.7-4.65 till
TP12-010	5897837	373987	1325	5.1	03/07/2012	Not Encountered	0-5.12 sand and silt
TP12-011	5897659	374071	1327	4.7	03/07/2012	2.0 slow seepage	0-4.6 sand and gravel; 4.6-4.7 till
TP12-012	5898099	374974	1281	4.2	03/07/2012	Not Encountered	0-4.15 sand
TP12-013	5898513	374990	1268	1.2	03/07/2012	Not Encountered	0-1.15 till
TP12-014	5898226	374785	1288	3.0	04/07/2012	Not Encountered	0-2 sand and gravel; 2-3 till
TP12-015	5896754	374321	1336	5.8	04/07/2012	Not Encountered	0-5.8 till
TP12-016	5896336	372509	1400	2.7	04/07/2012	Not Encountered	0-2.7 till
TP12-017	5896381	372645	1400	3.1	04/07/2012	Not Encountered	0-3.13 sand and gravel
TP12-018	5896498	372834	1400	3.2	04/07/2012	Not Encountered	0-3.15 sand and gravel
TP12-019	5896346	371830	1383	4.7	04/07/2012	Not Encountered	0-0.4 sand and gravel; 0.4-4.7 till
TP12-020	5896429	372008	1403	4.6	04/07/2012	Not Encountered	0-4.6 till; 4.6-4.7 bedrock
TP12-021	5896399	372107	1401	1.4	04/07/2012	1.4 slow seepage	0-1.35 sand and silt; 1.35-1.36 bedrock
TP12-022	5896490	373092	1397	3.5	04/07/2012	Not Encountered	0-1.1 sand and gravel; 1.1-1.85 decomposed bedrock; 1.85-3.45 bedrock
TP12-023	5896486	373263	1392	3.5	06/07/2012	Not Encountered	0-3.5 till; 3.5-3.6 bedrock
TP12-024	5896488	373454	1385	4.8	06/07/2012	4.0 slow seepage	0-4 silt; 4-4.8 gravel
TP12-025	5896529	373660	1378	4.8	06/07/2012	1.2 slow seepage	0-4.8 till
TP12-026	5896566	373939	1373	6.0	06/07/2012	Not Encountered	0-6 till
TP12-027	5895785	373174	1305	4.0	10/08/2012	2.0 slow seepage	0-2 sand and gravel; 2-4 clay
TP12-028	5895703	373301	1305	3.2	10/08/2012	1.0 fast seepage	0-1 clay; 1-3 silt; 3-3.2 decomposed bedrock
TP12-029	5895692	373610	1320	5.0	10/08/2012	Not Encountered	0-4 sand; 4-5 sand and gravel
TP12-030	5895590	373765	1337	4.5	10/08/2012	Not Encountered	0-0.5 sand; 0.5-4.5 sand and gravel
TP12-031	5895528	373986	1361	5.0	10/08/2012	Not Encountered	0-4 sand; 4-5 sand and gravel
TP12-032	5895541	374131	1360	5.0	10/08/2012	1.0 slow seepage	0-5 sand and gravel
TP12-033	5895498	374278	1370	5.0	10/08/2012	3.5 moderate seepage	0-1.5 sand; 1.5-5 sand and gravel
TP12-034	5895450	374492	1380	6.0	10/08/2012	3.0 moderate seepage	0-1 sand; 1-6 sand and gravel
TP12-035	5895328	374653	1407	6.5	10/08/2012	6.3 slow seepage	0-6.5 till
TP12-036	5895170	374736	1417	6.8	10/08/2012	6.3 slow seepage	0-6.75 till
TP12-037	5895326	374866	1405	6.0	10/08/2012	5.0 slow seepage	0-6 till
TP12-038	5895530	375045	1384	5.5	11/08/2012	Not Encountered	0-4 sand and gravel; 4-5.5 till
TP12-039	5895692	375322	1360	5.0	11/08/2012	3.5 moderate seepage	0-5 sand
TP12-040	5895839	375451	1343	6.0	11/08/2012	4.5 slow seepage	0-6 sand
TP12-041	5896006	375476	1340	6.0	11/08/2012	Not Encountered	0-0.5 silt and gravel; 0.5-6 gravel
TP12-042	5896053	375283	1333	5.0	11/08/2012	2.0 moderate seepage	0-5 sand
TP12-043	5896017	375048	1318	6.0	11/08/2012	Not Encountered	0-6 sand
TP12-044	5896113	374656	1284	4.8	11/08/2012	1.8 slow seepage	0-4.8 sand and gravel
TP12-045	5896135	374531	1276	6.0	11/08/2012	Not Encountered	0-1 sand; 1-6 gravel
TP12-046	5896028	374857	1302	4.5	11/08/2012	1.5 slow seepage	0-4.5 silt and gravel
TP12-047	5896172	375445	1315	5.0	11/08/2012	3.5 slow seepage	0-5 sand
TP12-048	5897560	376033	1224	5.8	12/08/2012	3.0 slow seepage	0-2 sand and gravel, 2-5.75 sand
TP12-049	5897549	376007	1223	5.0	12/08/2012	2.5 fast seepage	0-3 sand and silt; 3-5 sand
TP12-050	5897605	376018	1215	3.5	12/08/2012	3.5 moderate seepage	0-5 sand and gravel
TP12-051	5897634	376060	1219	5.0	12/08/2012	1.5 slow seepage	0-1 sand and silt; 1-1.5 gravel;1.5-5 sand and gravel
TP12-052	5897161	375906	1254	4.5	12/08/2012	Not Encountered	0-4.5 sand and gravel
TP12-053	5896682	376007	1301	5.0	12/08/2012	Not Encountered	0-0.4 silt; 0.4-5 sand and gravel
TP12-054	5896186	375721	1331	5.0	12/08/2012	Not Encountered	0.2- sand; 2-5 till
TP12-055	5895979	375991	1321	7.0	12/08/2012	6.0 slow seepage	0-7 sand and gravel
TP12-056	5896327	376352	1314	5.0	12/08/2012	Not Encountered	0-5 till
TP12-057	5896542	376551	1308	4.8	12/08/2012	2.5 moderate seepage	0-4.75 sand; 4.75-5 till
TP12-058	5896871	376898	1293	3.0	13/08/2012	Not Encountered	0-3 gravel and silt; 3-3.2 bedrock
TP12-059	5897019	376638	1281	4.0	13/08/2012	3.5 fast seepage	0-4 till; 4-4.2 bedrock
TP12-060	5897012	376492	1282	6.5	13/08/2012	3.5 moderate seepage	0-1.5 sand; 1.5-6.5 till
TP12-061	5897080	377004	1261	3.5	13/08/2012	2.5 fast seepage	0-3 sand; 3-3.5 sand and gravel
TP12-062	5897107	377060	1259	4.0	13/08/2012	4.0 fast seepage	0-1.5 silt ; 1.5-4 sand
TP12-063	5897137	377053	1257	5.0	13/08/2012	0.7 fast seepage	0-5 till
TP12-064	5897270	376926	1256	5.0	13/08/2012	Not Encountered	0-5 till
TP12-065	5897568	376860	1242	5.0	13/08/2012	1.5 moderate seepage	0-5 sand
TP12-066	5897794	376543	1222	3.3	13/08/2012	3.0 slow seepage	0-3.25 sand and gravel
TP12-067	5897851	376268	1216	4.5	13/08/2012	Not Encountered	0-4.5 sand
TP12-068	5898011	377037	1223	4.0	13/08/2012	0.3 moderate seepage	0-4 gravel and silt

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TEST PIT SUMMARY

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Test Pit	Northing	Easting	Elevation	Total Depth	Date	Water Level	Geotechnical Conditions
	m	m	m	m		m	
TP12-069	5897640	376681	1235	6.0	14/08/2012	3.5 moderate seepage	0-1 sand; 1-6 till
TP12-070	5896688	376798	1309	5.5	14/08/2012	1.0 slow seepage	0-5.5 till
TP12-071	5896111	376318	1327	5.0	14/08/2012	4.0 slow seepage	0-1 sand; 1-5 till
TP12-072	5895921	376699	1335	5.0	14/08/2012	2.0 slow seepage	0-5 sand
TP12-073	5896034	377070	1335	5.0	14/08/2012	Not Encountered	0-5 gravel and silt
TP12-074	5896021	377505	1302	5.0	14/08/2012	Not Encountered	0-5 sand and gravel
TP12-075	5896508	377004	1335	2.0	14/08/2012	Not Encountered	0-0.5 sand; 0.5-2 silt
TP12-076	5896504	377513	1304	5.0	14/08/2012	Not Encountered	0-5 till
TP12-077	5896847	374370	1327	5.5	15/08/2012	2.0 fast seepage	0-1.5 sand; 1.5-5.5 sand and gravel
TP12-078	5897151	374408	1326	6.5	15/08/2012	2.5 moderate seepage	0-5.5 sand; 5.5-6.5 till
TP12-079	5897503	374049	1332	6.0	15/08/2012	0.3 moderate seepage	0-6 sand and gravel
TP12-080	5897487	373704	1362	6.0	15/08/2012	0.3 slow seepage	0-1.5 sand; 1.5-6 till
TP12-081	5897540	374283	1316	6.5	15/08/2012	Not Encountered	0-1 sand; 1-6.5 gravel and silt
TP12-082	5897479	374618	1308	4.0	15/08/2012	0.3 moderate seepage	0-4 sand and gravel
TP12-083	5897518	374972	1296	1.0	15/08/2012	0.3 fast seepage	0-1.5 sand and silt
TP12-084	5897506	375091	1291	1.0	15/08/2012	0.6 fast seepage	0-1.5 silt
TP12-085	5897338	375188	1289	6.5	15/08/2012	Not Encountered	0-1 sand; 1-6.5 sand and gravel
TP12-086	5897008	375031	1271	7.5	15/08/2012	Not Encountered	0-2 sand; 2-7.5 sand and gravel
TP12-087	5897883	375886	1233	6.7	15/08/2012	Not Encountered	0-6 sand; 6-7.5 silt and sand
TP12-088	5897678	375697	1242	7.0	16/08/2012	Not Encountered	0-7 sand and silt
TP12-089	5897435	375481	1253	4.0	16/08/2012	0.7 moderate seepage	0-0.5 gravel and silt; 0.5-4 gravel
TP12-090	5898231	373918	1320	6.5	16/08/2012	2.0 slow seepage	0-1 sand; 1-6 sand and gravel; 6-6.5 gravel and silt
TP12-091	5898509	373866	1324	8.0	16/08/2012	0.7 slow seepage	0-0.5 sand; 0.5-8 till
TP12-092	5898756	373684	1325	5.5	16/08/2012	4.0 slow seepage	0-2.5 sand; 2.5-5.5 sand and gravel
TP12-093	5899106	373506	1331	6.5	16/08/2012	Not Encountered	0-1 sand; 1-6.5 gravel and silt
TP12-094	5899207	373833	1314	8.5	16/08/2012	Not Encountered	0-8.5 sand and gravel
TP12-095	5899011	374032	1305	7.0	16/08/2012	Not Encountered	0-7 sand and silt
TP12-096	5898967	374510	1283	8.0	16/08/2012	4.0 slow seepage	0-8 sand
TP12-097	5898549	374172	1310	7.0	17/08/2012	1.0 slow seepage	0-1 sand; 1-7 till
TP12-098	5898458	374526	1299	7.0	17/08/2012	1.0 slow seepage	0-7 till
TP12-099	5898269	374799	1285	7.0	17/08/2012	Not Encountered	0-6.5 sand; 6.5-7 silt
TP12-100	5898142	375070	1279	7.0	17/08/2012	3.5 slow seepage	0-1 sand; 1-7 till
TP12-101	5898311	375425	1256	7.0	17/08/2012	Not Encountered	0-1 sand; 1-6.5 gravel and silt
TP12-102	5898019	375482	1244	6.5	17/08/2012	1.2 slow seepage	0-2 sand and gravel; 2-6.5 sand
TP12-103	5898615	375580	1257	7.5	17/08/2012	5.0 slow seepage	0-5 sand; 5-7.5 sand and gravel
TP12-104	5898817	375987	1250	7.0	17/08/2012	Not Encountered	0-1 sand; 1-3 silt and sand; 3-7 gravel
TP12-105	5898531	376173	1233	7.0	17/08/2012	3.0 slow seepage	0-3 sand; 3-7 till
TP12-106	5898504	375960	1231	7.0	17/08/2012	1.5 slow seepage	0-7 sand
TP12-107	5899011	375951	1251	7.0	18/08/2012	Not Encountered	0-1 sand and gravel; 1-7 till
TP12-108	5899001	375715	1264	7.5	18/08/2012	Not Encountered	0-6 sand; 6-7.5 sand and gravel
TP12-109	5899172	375672	1266	6.0	18/08/2012	Not Encountered	0-6 gravel
TP12-110	5899307	375498	1271	7.0	18/08/2012	Not Encountered	0-5 gravel; 5-7 sand
TP12-111	5899256	375299	1279	8.0	18/08/2012	Not Encountered	0-1 sand and gravel; 1-8 sand
TP12-112	5899177	375050	1286	5.7	18/08/2012	Not Encountered	0-4.5 sand; 4.5-5.7 sand and gravel
TP12-113	5899300	375078	1295	7.0	18/08/2012	Not Encountered	0-4 silt and sand; 4-7 sand and gravel
TP12-114	5899333	374838	1296	6.5	18/08/2012	5.0 slow seepage	0-6.5 gravel and sand
TP12-115	5899080	375476	1269	8.0	18/08/2012	Not Encountered	0-8 sand
TP12-116	5898972	375346	1262	7.0	19/08/2012	Not Encountered	0-7 sand
TP12-117	5898808	375497	1268	7.0	19/08/2012	Not Encountered	0-7 sand and gravel
TP12-118	5894488	376905	1433	4.0	07/10/2012	1.5 slow seepage	0-0.6 sand; 0.6-4 till
TP12-119	5894484	377500	1394	4.5	07/10/2012	Not Encountered	0-1 sand; 1-4.5 till
TP12-120	5894888	377018	1386	5.0	07/10/2012	Not Encountered	0-1 sand; 1-5 silt
TP12-121	5895007	377479	1337	5.5	07/10/2012	Not Encountered	0-0.7 sand; 0.7-5.5 sand and gravel
TP12-122	5895010	377945	1309	5.0	07/10/2012	Not Encountered	0-1 sand; 1-5 sand and gravel
TP12-123	5895378	376800	1355	4.0	07/10/2012	2.0 slow seepage	0-4 till
TP12-124	5895502	377092	1317	3.5	07/10/2012	2.0 slow seepage	0-2 sand; 2-3.5 till
TP12-125	5895503	377589	1305	5.0	07/10/2012	Not Encountered	0-1 sand; 1-5 till
TP12-126	5895627	378132	1275	4.5	07/10/2012	Not Encountered	0-1.2 sand and silt; 1.2-4.5 sand
TP12-127	5895908	378276	1263	4.0	07/10/2012	Not Encountered	0-0.5 sand, 0.5-4 sand and silt
TP12-128	5896267	378480	1245	3.5	07/10/2012	3.0 moderate seepage	0-1.5 sand; 1.5-3.5 sand and gravel
TP12-129	5894482	376265	1463	3.0	08/10/2012	Not Encountered	0-0.5 sand; 0.5-3 till
TP12-130	5894506	375597	1412	3.0	08/10/2012	Not Encountered	0-3 sand and silt
TP12-131	5894002	374983	1469	3.5	08/10/2012	3.0 fast seepage	0-3.5 sand and gravel
TP12-132	5894022	374360	1446	3.0	08/10/2012	3.0 fast seepage	0-3 sand and gravel
TP12-133	5893878	373979	1442	3.5	08/10/2012	Not Encountered	0-1.2 sand; 1.2-3.5 till
TP12-134	5893522	373622	1478	3.0	08/10/2012	Not Encountered	0-1.3 sand; 1.3-3 till
TP12-135	5893978	373458	1439	4.5	08/10/2012	Not Encountered	0-1 sand; 1-4.5 till
TP12-136	5894087	376283	1469	5.0	08/10/2012	Not Encountered	0-0.8 sand; 0.8-5 till

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TEST PIT SUMMARY

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Test Pit	Northing m	Easting m	Elevation m	Total Depth m	Date	Water Level m	Geotechnical Conditions
TP12-137	5894066	376921	1456	5.0	08/10/2012	Not Encountered	0-5 till
TP12-138	5894811	375171	1419	5.0	08/10/2012	Not Encountered	0-1.4 sand; 1.4-5 till
TP12-139	5894980	375511	1441	4.0	08/10/2012	4.0 slow seepage	0-2.2 sand; 2.2-4 sand and silt
TP12-140	5895166	375704	1416	4.0	08/10/2012	Not Encountered	0-0.3 sand; 0.3-2.5 sand and silt;2.5-4 silt and sand
TP12-141	5895498	375528	1347	5.5	08/10/2012	Not Encountered	0-0.8 sand; 0.5-5.5 till
TP12-142	5894574	374598	1407	4.0	09/10/2012	2.5 slow seepage	0-3.5 sand; 3.5-4 till
TP12-143	5895019	374320	1415	4.0	09/10/2012	1.0 fast seepage	0-1.2 sand; 1.2-4 sand and gravel
TP12-144	5894976	373659	1431	4.0	09/10/2012	Not Encountered	0-1 sand; 1-4 till
TP12-145	5894987	373088	1401	4.5	09/10/2012	3.0 moderate seepage	0-3 sand; 3-4.5 till
TP12-146	5894550	373999	1430	4.5	09/10/2012	2.5 slow seepage	0-0.8 sand; 0.8-4.5 sand and silt
TP12-147	5894511	373582	1451	5.5	09/10/2012	Not Encountered	0-1.2 sand; 1.2-5.5 till
TP12-148	5894196	373069	1449	3.5	09/10/2012	Not Encountered	0-1.2 sand; 1.2-3.5 bedrock
TP12-149	5895651	374667	1357	5.0	09/10/2012	4.0 fast seepage	0-5 sand and gravel
TP12-150	5895999	373270	1312	3.0	09/10/2012	1.5 slow seepage	0-1.5 sand; 1.5-3 till
TP12-151	5896007	373718	1291	5.0	09/10/2012	4.0 moderate seepage	0-5 sand and silt
TP12-152	5896497	374453	1332	5.5	10/10/2012	5.0 moderate seepage	0-0.5 sand; 0.5-5.5 sand and gravel
TP12-153	5896605	374671	1317	4.5	10/10/2012	Not Encountered	0-1 sand; a-4.5 sand and gravel
TP12-154	5896494	374813	1278	5.5	10/10/2012	Not Encountered	0-5.5 sand
TP12-155	5898521	376910	1208	5.0	10/10/2012	Not Encountered	0-5 sand and gravel
TP12-156	5898538	376653	1221	5.0	10/10/2012	Not Encountered	0-5 sand and gravel
TP12-157	5898524	376481	1227	7.0	10/10/2012	Not Encountered	0-7 sand and gravel
TP12-158	5899330	377978	1167	1.5	10/10/2012	Not Encountered	0-1.5 sand and gavel
TP12-159	5900620	378912	1135	3.5	10/10/2012	Not Encountered	0-3.5 sand and gravel

M:\1\01\00457\06\A\Report\1 - NEW - 2012 TSF Geotechanical SI Report\Rev A\Tables\[Table A.1_Test Pit Summary.xlsx]Table A.1

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	19SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	25JUL'12	ISSUED WITH REPORT	ML	BB	KJB

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-001**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**27 Jun 12**
Location:	**TSF Site C Alignment**	Total Depth:	**3.7 m**	Date Completed:	**27 Jun 12**
Coordinates	**5,896,247 N , 374,575 E (UTM NAD 83)**	Elevation:	**1264 m**	Logged by:	**JS**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1264				**TOPSOIL** (0 to 0.24 m) SILT and SAND, uniformly graded, non plastic, brown, loose, dry; with roots	Stability: Good
1	1263				**SILT AND SAND** (0.24 to 0.91 m) SILT and SAND, some gravel, sub angular, gap graded, medium plasticity, brown, loose to compact, massive, moist	
2	1262				**GLACIAL TILL** (0.91 to 3.7 m) Gravelly SAND and SILT, rounded to subrounded, fine to coarse, low plasticity, grey, hard, massive, dry	Groundwater: Not Encountered
3	1261		BW01			
4	1260				End of Test Pit: 3.7 m	
5	1259					
6	1258					
7	1257					
8	1256					
9	1255					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-001

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.1**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-002**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**27 Jun 12**
Location:	**TSF Site C Alignment**	Total Depth:	**4.28 m**	Date Completed:	**27 Jun 12**
Coordinates	**5,896,257 N , 374,572 E (UTM NAD 83)**	Elevation:	**1271 m**	Logged by:	**JS**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.18 m) SILT and SAND, uniformly graded, non plastic, brown, loose, dry with roots	
1	1270				**SILTY GRAVEL** (0.18 to 2.3 m) Silty GRAVEL, sub angular to angular, fine to coarse, medium plasticity, brown, loose to compact, moist	
2	1269		BW04		▼	Groundwater: Slow inflow at 2.3 m
					SILTY GRAVEL AND SAND (2.3 to 4.28 m) Silty GRAVEL and SAND, subangular to subrounded, fine to coarse, low plasticity, grey, hard to very dense, massive, dry	
3	1268		BW03			
4	1267		BW02		End of Test Pit: 4.28 m	
5	1266					
6	1265					
7	1264					
8	1263					
9	1262					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-002

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.2**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-003**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**29 Jun 12**
Location:	**TSF Site D Alignment**	Total Depth:	**3.45 m**	Date Completed:	**29 Jun 12**
Coordinates	**5,898,190 N , 376,313 E (UTM NAD 83)**	Elevation:	**1225 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SILTY SAND AND GRAVEL** (0 to 2.65 m) Silty SAND and GRAVEL, some cobbles, fine to coarse grained, rounded to subrounded, brown, compact, massive, moist	Stability: Good
1	1224					
2	1223					Groundwater: Slow inflow at 2.65 m
3	1222				**GLACIAL TILL** (2.65 to 3.45 m) SILT with some gravel, subangular to subrounded, fine to coarse grained, high plasticity, various colour gravel, very stiff, massive, moist	very hard to dig
			S01		End of Test Pit: 3.45 m	
4	1221					
5	1220					
6	1219					
7	1218					
8	1217					
9	1216					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-003

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.3**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-004**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**29 Jun 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.7 m**	Date Completed:	**29 Jun 12**
Coordinates	**5,898,214 N , 376,090 E (UTM NAD 83)**	Elevation:	**1227 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SILTY SAND AND GRAVEL** (0 to 5.7 m) Silty SAND and GRAVEL, subrounded, fine to coarse grained, non-plastic, brown, compact, massive, moist	Stability: Good
1	1226					
2	1225					
3	1224					
4	1223					
5	1222				▼	Groundwater: Slow inflow at 5.00 m
6	1221				End of Test Pit: 5.7 m	
7	1220					
8	1219					
9	1218					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-004

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.4	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-005**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**29 Jun 12**
Location:	**TSF Site D Alignment**	Total Depth:	**6.5 m**	Date Completed:	**29 Jun 12**
Coordinates	**5,898,818 N , 375,938 E (UTM NAD 83)**	Elevation:	**1249 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1248				**SILTY SAND AND GRAVEL** (0 to 6.5 m) Silty SAND and GRAVEL, some cobbles and trace boulders, subrounded, fine to coarse grained, non plastic, yellowish brown, compact, massive, moist	Stability: Good
2	1247					
3	1246					
4	1245					
5	1244					
6	1243				▼	Groundwater: Slow inflow at 6.00 m
7	1242				End of Test Pit: 6.5 m	
8	1241					
9	1240					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-005

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.5**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-006**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**1 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.5 m**	Date Completed:	**1 Jul 12**
Coordinates	**5,897,160 N , 374,412 E (UTM NAD 83)**	Elevation:	**1326 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SILTY SAND AND GRAVEL** (0 to 1.5 m) Silty SAND and GRAVEL, trace cobbles and boulders, subrounded, fine to coarse grained, non plastic, brown, compact, wet	Stability: Moderate
1	1325					
					GLACIAL TILL (1.5 to 5.5 m) Sandy SILT with gravel, subangular, fine to coarse grained, medium plasticity, grey, stiff, massive, moist	Groundwater: Not Encountered
2	1324					
3	1323					
4	1322					
5	1321		S1		End of Test Pit: 5.5 m	
6	1320					
7	1319					
8	1318					
9	1317					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-006

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.6	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-007**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**1 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.2 m**	Date Completed:	**1 Jul 12**
Coordinates	**5,897,321 N , 374,274 E (UTM NAD 83)**	Elevation:	**1325 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1325				**TOPSOIL** (0 to 0.05 m) SILT and SAND, uniformly graded, non plastic, brown, loose, dry; with roots	Stability: Moderate
1	1324				**SILTY SAND AND GRAVEL** (0.05 to 2 m) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse grained, brown, compact, massive, moist to wet	
2	1323				▼ **GLACIAL TILL** (2 to 6.2 m) Sandy SILT, some gravel, subrounded, fine to coarse grained, medium plasticity, grey, stiff, massive, moist	Groundwater: Slow inflow at 2.00 m
3	1322					
4	1321					
5	1320					
6	1319		S1		End of Test Pit: 6.2 m	
7	1318					
8	1317					
9	1316					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-007

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.7	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-008**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**1 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.36 m**	Date Completed:	**1 Jul 12**
Coordinates	**5,897,007 N , 374,511 E (UTM NAD 83)**	Elevation:	**1324 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1323				**SILTY SAND AND GRAVEL** (0 to 2.35 m) Silty SAND and GRAVEL, trace cobbles, fine to coarse grained, subrounded, brown, compact, massive, moist to wet	Stability: Moderate
2	1322				▼	Groundwater: Slow inflow at 2.00 m
3	1321				**GLACIAL TILL** (2.35 to 5.36 m) Sandy SILT, some gravel, subrounded, fine to coarse grained, medium plasticity, grey, stiff, massive, moist	
4	1320					
5	1319		S1		End of Test Pit: 5.36 m	
6	1318					
7	1317					
8	1316					
9	1315					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-008

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.8	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-009**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**1 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.85 m**	Date Completed:	**1 Jul 12**
Coordinates	**5,897,511 N , 374,026 E (UTM NAD 83)**	Elevation:	**1334 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1334				**TOPSOIL** (0 to 0.1 m) SILT and SAND, uniformly graded, non plastic, brown, loose, dry; with roots	Stability: Moderate
1	1333				**SILTY SAND** (0.1 to 2.7 m) Silty SAND, subrounded, fine to coarse grained, yellow brown, compact, massive, moist to wet	
2	1332				▼	Groundwater: Slow inflow at 2.00 m
3	1331				**GLACIAL TILL** (2.7 to 4.85 m) Sandy SILT, some gravel, subrounded, fine to coarse grained, low to medium plasticity, brown, stiff, massive, moist	
4	1330					
			S1			
5	1329				End of Test Pit: 4.85 m	
6	1328					
7	1327					
8	1326					
9	1325					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-009

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.9**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-010**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**3 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.12 m**	Date Completed:	**3 Jul 12**
Coordinates	**5,897,837 N , 373,987 E (UTM NAD 83)**	Elevation:	**1325 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.05 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Poor
1	1324				**SILTY SAND** (0.05 to 5.12 m) Silty SAND, fine to coarse, some gravel, subrounded, fine, non plastic, dark brown and black, loose, massive, wet	
2	1323					
3	1322					
4	1321					
5	1320				End of Test Pit: 5.12 m	
6	1319					
7	1318					
8	1317					
9	1316					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-010

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.10**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-011**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**3 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.9 m**	Date Completed:	**3 Jul 12**
Coordinates	**5,897,659 N , 374,071 E (UTM NAD 83)**	Elevation:	**1327 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.15 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Poor
1	1326				**SAND AND GRAVEL** (0.15 to 4.6 m) SAND and GRAVEL some silt, subrounded, fine to coarse grained, non plastic, brown yellow, compact, massive, moist to wet	
2	1325				▼	Groundwater: Slow inflow at 2.00 m
3	1324					
4	1323					
5	1322		S1		**GLACIAL TILL** (4.6 to 4.9 m) Sandy SILT, some gravel, subrounded, fine to coarse, medium plasticity, brown, firm, massive, moist End of Test Pit: 4.9 m	
6	1321					
7	1320					
8	1319					
9	1318					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-011

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.11	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-012**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**3 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.15 m**	Date Completed:	**3 Jul 12**
Coordinates	**5,898,099 N , 374,974 E (UTM NAD 83)**	Elevation:	**1281 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1281				**SAND** (0 to 4.15 m) SAND some silt and gravel, subrounded, fine to coarse, brown, compact, massive, moist	Groundwater: Not Encountered Stability: Good
1	1280					
2	1279					
3	1278					
4	1277				End of Test Pit: 4.15 m	
5	1276					
6	1275					
7	1274					
8	1273					
9	1272					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-012

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.12	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-013**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**3 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**1.15 m**	Date Completed:	**3 Jul 12**
Coordinates	**5,898,513 N , 374,990 E (UTM NAD 83)**	Elevation:	**1268 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1268				**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1267				**GLACIAL TILL** (0.1 to 1.15 m) SAND and GRAVEL, some silt, fine to coarse grained, subrounded to rounded, brown yellow, compact, massive, moist	
2	1266				End of Test Pit: 1.15 m	
3	1265					
4	1264					
5	1263					
6	1262					
7	1261					
8	1260					
9	1259					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-013

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.13	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-014**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**3 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,898,226 N , 374,785 E (UTM NAD 83)**	Elevation:	**1288 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1288				**TOPSOIL** (0 to 0.05 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1287				**SILTY SAND AND GRAVEL** (0.05 to 2 m) Silty SAND and GRAVEL, trace cobbles, round to subrounded, fine to coarse, low plasticity, yellow brown, compact, massive, moist	
2	1286				**GLACIAL TILL** (2 to 3 m) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, grey, stiff, massive, moist	
3	1285				End of Test Pit: 3 m	
4	1284					
5	1283					
6	1282					
7	1281					
8	1280					
9	1279					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-014

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.14**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-015**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,754 N , 374,321 E (UTM NAD 83)**	Elevation:	**1336 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1336				**TOPSOIL** (0 to 0.11 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1335				**GLACIAL TILL** (0.11 to 6 m) SAND and SILT, some cobbles, subrounded, fine to coarse grained, medium plasticity, brown/grey, compact, stiff, massive, moist	
2	1334					
3	1333					
4	1332					
5	1331					
6	1330		S1		End of Test Pit: 6 m	
7	1329					
8	1328					
9	1327					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-015

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.15	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-016**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**2.7 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,336 N , 372,509 E (UTM NAD 83)**	Elevation:	**1400 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1400				**TOPSOIL** (0 to 0.18 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1399				**GLACIAL TILL** (0.18 to 2.7 m) Silty SAND and GRAVEL, subrounded, fine to coarse grained, medium plasticity, yellow brown, compact, massive, moist	
2	1398					
3	1397				End of Test Pit: 2.7 m	
4	1396					
5	1395					
6	1394					
7	1393					
8	1392					
9	1391					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-016

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.16**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-017	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	Komatsu PC360LC	Date Started:	4 Jul 12
Location:	Inside TSF Site C Area	Total Depth:	3.13 m	Date Completed:	4 Jul 12
Coordinates	5,896,381 N , 372,645 E (UTM NAD 83)	Elevation:	1400 m	Logged by:	AL/GV
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1400				**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1399				**SAND AND GRAVEL** (0.1 to 3.13 m) SAND and GRAVEL some silt and angular cobbles, subangular to subrounded, fine to coarse grained, yellow and brown, compact, massive, moist	
2	1398					
3	1397				End of Test Pit: 3.13 m	
4	1396					
5	1395					
6	1394					
7	1393					
8	1392					
9	1391					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-017

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-018**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**3.15 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,498 N , 372,834 E (UTM NAD 83)**	Elevation:	**1400 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1400				**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1399				**SAND AND GRAVEL** (0.1 to 3.15 m) SAND and GRAVEL, some silt, cobbles and boulders, subangular, fine to coarse, non plastic, yellow brown, compact, massive, moist	
2	1398					
3	1397				End of Test Pit: 3.15 m	
4	1396					
5	1395					
6	1394					
7	1393					
8	1392					
9	1391					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-018

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.18	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-019	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	Komatsu PC360LC	Date Started:	4 Jul 12
Location:	Inside TSF Site C Area	Total Depth:	4.7 m	Date Completed:	4 Jul 12
Coordinates	5,896,346 N , 371,830 E (UTM NAD 83)	Elevation:	1383 m	Logged by:	AL/GV
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1383				**TOPSOIL** (0 to 0.2 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1382				**SAND AND GRAVEL** (0.2 to 0.4 m) SAND and GRAVEL trace cobbles, rounded, fine to coarse, yellow, compact, massive, moist	
2	1381				**GLACIAL TILL** (0.4 to 4.7 m) Sandy SILT trace cobbles, subangular to subrounded, fine to coarse, low to medium plasticity, yellow brown, firm, massive, moist	
3	1380					
4	1379					
5	1378				End of Test Pit: 4.7 m	
6	1377					
7	1376					
8	1375					
9	1374					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-019

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.19	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-020**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**4.8 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,429 N , 372,008 E (UTM NAD 83)**	Elevation:	**1403 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1402				**GLACIAL TILL** (0 to 4.6 m) Silty SAND and GRAVEL, subrounded, fine to coarse grained, medium plasticity, yellow brown, dense, massive, moist	Groundwater: Not Encountered Stability: Good
2	1401					
			S1			
3	1400					
4	1399					
			S2		**BEDROCK** (4.6 to 4.8 m) ANDESITE, fine grained, massive, dark grey/green with orange rust, weak, moderately weathered, heavily jointed	
5	1398				End of Test Pit: 4.8 m	
6	1397					
7	1396					
8	1395					
9	1394					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-020

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.20**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-021**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**1.55 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,399 N , 372,107 E (UTM NAD 83)**	Elevation:	**1401 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1401				**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Poor
1	1400				**SILTY SAND** (0.1 to 1.35 m) Silty SAND, fine to medium grained, low plasticity, yellow brown, compact, massive, moist	Groundwater: Slow inflow at 1.35 m
			S1		**BEDROCK** (1.35 to 1.55 m) ANDESITE, dark grey/green with orange rust, fine grained, weak, moderately weathered, massive, heavily jointed	
2	1399				End of Test Pit: 1.55 m	
3	1398					
4	1397					
5	1396					
6	1395					
7	1394					
8	1393					
9	1392					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-021

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.21**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-022**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**4 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**3.45 m**	Date Completed:	**4 Jul 12**
Coordinates	**5,896,490 N , 373,092 E (UTM NAD 83)**	Elevation:	**1397 m**	Logged by:	**AL/GV**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1396				**SAND AND GRAVEL** (0.1 to 1.1 m) SAND and GRAVEL some silt, subrounded, fine to coarse grained, non plastic, brown yellow, compact, massive, moist	
2	1395				**DECOMPOSED BEDROCK** (1.1 to 1.85 m) ANDESITE, fine grained, massive, orange brown, weak, highly weathered, heavily jointed	
3	1394				**BEDROCK** (1.85 to 3.45 m) ANDESITE, fine grained, massive, dark grey/green with orange rust, weak, moderately weathered, heavily jointed	
4	1393				End of Test Pit: 3.45 m	
5	1392					
6	1391					
7	1390					
8	1389					
9	1388					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-022

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.22**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-023**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**6 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**3.6 m**	Date Completed:	**6 Jul 12**
Coordinates	**5,896,486 N , 373,263 E (UTM NAD 83)**	Elevation:	**1392 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.05 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1391				**GLACIAL TILL** (0.05 to 3.5 m) Gravelly SILT, some fine sand, subangular to rounded, fine to coarse gravel, medium plasticity, brown, firm, massive, moist	
2	1390					
			S1-3			
3	1389					
4	1388				**BEDROCK** (3.5 to 3.6 m) ANDESITE, fine grained, massive, dark grey/green with orange rust, weak, moderately weathered, heavily jointed	
					End of Test Pit: 3.6 m	
5	1387					
6	1386					
7	1385					
8	1384					
9	1383					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-023

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.23**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-024**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**6 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**4.8 m**	Date Completed:	**6 Jul 12**
Coordinates	**5,896,488 N , 373,454 E (UTM NAD 83)**	Elevation:	**1385 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.05 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Good
1	1384				**GRAVELLY SILT** (0.05 to 4 m) Gravelly SILT, some fine sand, subangular to rounded, fine to coarse gravel, medium plasticity, brown, firm, massive, moist	
2	1383					
3	1382					
4	1381				▼ **GRAVEL** (4 to 4.8 m) GRAVEL, some sand, coarse, rounded, well graded, non plastic, brown, loose, massive, wet	Groundwater: Slow inflow at 4.00 m
5	1380				End of Test Pit: 4.8 m	
6	1379					
7	1378					
8	1377					
9	1376					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-024

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.24**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-025**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**6 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**4.8 m**	Date Completed:	**6 Jul 12**
Coordinates	**5,896,529 N , 373,660 E (UTM NAD 83)**	Elevation:	**1378 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Good
1	1377				**GLACIAL TILL** (0.1 to 4.8 m) Gravelly SILT, some sand, fine, some gravel, subangular to rounded, fine to coarse, medium plasticity, brown, firm, massive, moist	Groundwater: Slow inflow at 1.2 m
2	1376					
3	1375					
4	1374					
5	1373				End of Test Pit: 4.8 m	
6	1372					
7	1371					
8	1370					
9	1369					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-025

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.25**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-026**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360LC**	Date Started:	**6 Jul 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**6 m**	Date Completed:	**6 Jul 12**
Coordinates	**5,896,566 N , 373,939 E (UTM NAD 83)**	Elevation:	**1373 m**	Logged by:	**AL**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1373				**TOPSOIL** (0 to 0.15 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Groundwater: Not Encountered Stability: Good
1	1372				**GLACIAL TILL** (0.15 to 6 m) Gravelly SILT, some sand, fine, some gravel, subangular to rounded, fine to coarse, medium plasticity, brown, firm, massive, moist	
2	1371					
3	1370					
4	1369					
5	1368					
6	1367				End of Test Pit: 6 m	
7	1366					
8	1365					
9	1364					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-026

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.26**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-027**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**4.2 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,785 N , 373,174 E (UTM NAD 83)**	Elevation:	**1305 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1305				**TOPSOIL** (0 to 0.5 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Good
1	1304				**SAND AND GRAVEL** (0.5 to 2 m) SAND and GRAVEL, rounded, fine to coarse, well graded, non plastic, grey, loose, massive, wet	
2	1303				**SLIT AND CLAY** (2 to 4.2 m) SILT AND CLAY, medium plasticity, blue/grey, firm, massive, moist	Groundwater: Slow inflow at 2.00 m
3	1302					
4	1301		S1		End of Test Pit: 4.2 m	
5	1300					
6	1299					
7	1298					
8	1297					
9	1296					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-027

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.27**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-028**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**3.2 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,703 N , 373,301 E (UTM NAD 83)**	Elevation:	**1305 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SLIT AND CLAY** (0 to 1 m) SILT and CLAY, medium plasticity, brown, firm, massive, moist	Stability: Good
1	1304				**SANDY GRAVELLY SILT** (1 to 3 m) Sandy gravelly SILT, trace cobbles, subangular to subrounded, fine to coarse, brown, firm, massive, moist.	Groundwater: Fast inflow at 1.00 m
2	1303					
3	1302		S1		**DECOMPOSED BEDROCK** (3 to 3.2 m) ANDESITE, fine grained, massive, orange brown, weak, completely weathered, heavily jointed	
4	1301				End of Test Pit: 3.2 m	
5	1300					
6	1299					
7	1298					
8	1297					
9	1296					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-028

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.28**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-029**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**5 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,692 N , 373,610 E (UTM NAD 83)**	Elevation:	**1320 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1320				**SAND** (0 to 4 m) SAND, some silt and gravel, trace cobbles, angular to subrounded, fine to coarse, compact, brown, moist, massive.	Groundwater: Not Encountered Stability: Good
1	1319					
2	1318					
3	1317					
4	1316				**GRAVELLY SAND** (4 to 5 m) Gravelly SAND, trace cobbles, subrounded, fine to coarse, well graded, brown, compact, massive, moist	
5	1315				End of Test Pit: 5 m	
6	1314					
7	1313					
8	1312					
9	1311					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-029

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.29**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-030	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	10 Aug 12
Location:	Inside TSF Site C Area	Total Depth:	4.5 m	Date Completed:	10 Aug 12
Coordinates	5,895,590 N , 373,765 E (UTM NAD 83)	Elevation:	1337 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 0.5 m) SAND, fine grained, uniformly graded, non plastic, brown/red, loose, massive, moist	Groundwater: Not Encountered Stability: Good
1	1336				**SAND AND GRAVEL** (0.5 to 4.5 m) SAND and GRAVEL, subrounded to rounded, fine to coarse, non plastic, brown to black, compact, massive, moist	
2	1335					
3	1334					
4	1333					
					End of Test Pit: 4.5 m	
5	1332					
6	1331					
7	1330					
8	1329					
9	1328					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-030

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.30	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-031**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**5 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,528 N , 373,986 E (UTM NAD 83)**	Elevation:	**1361 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 4 m) SAND, fine grained, uniformly graded, non plastic, brown/red, loose, massive, moist	Groundwater: Not Encountered Stability: Moderate
1	1360					
2	1359					
3	1358					
4	1357		S5		**GRAVELLY SAND** (4 to 5 m) Gravelly SAND, trace silt and clay, subrounded to rounded, fine to coarse, non plastic, brown to black, compact, massive, moist.	
5	1356				End of Test Pit: 5 m	
6	1355					
7	1354					
8	1353					
9	1352					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-031

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.31**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-032**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**5 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,541 N , 374,131 E (UTM NAD 83)**	Elevation:	**1360 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Moderate
1	1359				**GRAVELLY SAND** (1 to 5 m) Gravelly SAND, some silt, trace cobbles, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, wet	Groundwater: Slow inflow at 1.00 m
2	1358		S1			
3	1357					
4	1356					
5	1355				End of Test Pit: 5 m	
6	1354					
7	1353					
8	1352					
9	1351					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-032

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.32**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-033**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**5 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,498 N , 374,278 E (UTM NAD 83)**	Elevation:	**1370 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1.5 m) SAND, some gravel, subrounded, fine to coarse, well graded, non plastic, brown yellow, compact, massive, dry	Stability: Moderate
1	1369					
2	1368				**GRAVELLY SAND** (1.5 to 5 m) Gravelly SAND, some silt and cobbles, subrounded, fine to coarse, non plastic, brown, compact, massive, wet/saturated	
3	1367					
4	1366				▼	Groundwater: Moderate inflow at 3.50 m
5	1365				End of Test Pit: 5 m	
6	1364					
7	1363					
8	1362					
9	1361					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-033

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.33	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-034**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**6 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,450 N , 374,492 E (UTM NAD 83)**	Elevation:	**1380 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1380				**SAND** (0 to 1 m) SAND, fine, uniformly graded, non plastic, brown/red, loose, massive, moist	Stability: Moderate - Collapsing at 3.00 m
1	1379				**SANDY GRAVEL** (1 to 6 m) Sandy GRAVEL, some silt, trace cobbles, subrounded to subangular, fine to coarse, brown, compact, massive, wet	
2	1378					
3	1377				▼	Groundwater: Moderate inflow at 3.00 m
4	1376		S7			
5	1375					
6	1374				End of Test Pit: 6 m	
7	1373					
8	1372					
9	1371					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-034

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.34**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-035**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**6.5 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,328 N , 374,653 E (UTM NAD 83)**	Elevation:	**1407 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1407				**ORGANIC SILT AND SAND** (0 to 1 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Good
1	1406				**SILT AND SAND** (1 to 6.5 m) SILT AND SAND, some gravel and cobbles, subangular to subrounded, non plastic, brown, firm, dense, massive, moist	
2	1405					
3	1404					
4	1403					
5	1402					
6	1401				▼	Groundwater: Slow inflow at 6.25 m
7	1400				End of Test Pit: 6.5 m	
8	1399					
9	1398					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-035

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.35**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-036**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**6.75 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,170 N , 374,736 E (UTM NAD 83)**	Elevation:	**1417 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1416				**ORGANIC SILT AND SAND** (0 to 1.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Good
2	1415				**SILT AND SAND** (1.5 to 6.75 m) SILT and SAND, some gravel and cobbles, subangular to subrounded, fine to coarse, non plastic, brown, firm and compact, massive, moist	
3	1414					
4	1413					
5	1412					
6	1411				▼	Groundwater: Slow inflow at 6.25 m
7	1410				End of Test Pit: 6.75 m	
8	1409					
9	1408					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-036

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.36**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-037**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**10 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**6 m**	Date Completed:	**10 Aug 12**
Coordinates	**5,895,326 N , 374,866 E (UTM NAD 83)**	Elevation:	**1405 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1405				**ORGANIC SILT AND SAND** (0 to 1 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Good
1	1404				**SILT AND SAND** (1 to 6 m) SILT and SAND, some gravel and cobbles, subangular to subrounded, fine to coarse, non plastic, brown, firm and compact, massive, moist	
2	1403					
3	1402					
4	1401					
5	1400		S10		▼	Groundwater: Slow inflow at 5.00 m
6	1399				End of Test Pit: 6 m	
7	1398					
8	1397					
9	1396					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-037

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.37**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-038**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.5 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,895,530 N , 375,045 E (UTM NAD 83)**	Elevation:	**1384 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1384				**SAND** (0 to 0.5 m) SAND, fine, uniformly graded, non plastic, brown, loose, massive, moist	Groundwater: Not Encountered Stability: Good
					SAND AND GRAVEL (0.5 to 4 m) SAND and GRAVEL, subangular to angular, fine to coarse, well graded, brown, compact, moist, massive.	
1	1383					
2	1382					
3	1381					
4	1380				**GLACIAL TILL** (4 to 5.5 m) Silty SAND and GRAVEL, subangular, fine to coarse, black/grey, very dense, massive, moist	
5	1379		S1		End of Test Pit: 5.5 m	
6	1378					
7	1377					
8	1376					
9	1375					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-038

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.38**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-039**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,895,692 N , 375,322 E (UTM NAD 83)**	Elevation:	**1360 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.1 m) SILT and CLAY, low to medium plasticity, black and dark brown, soft, roots and organics	Stability: Poor
1	1359				**SAND** (0.1 to 1 m) SAND, fine, uniformly graded, non plastic, brown, loose, massive, moist	
					SAND (1 to 5 m) SAND, some gravel, subrounded to subangular, gap graded, non plastic, brown, loose, massive, moist	
2	1358					
3	1357				▼	Groundwater: Moderate inflow at 3.50 m
4	1356		S12			
5	1355				End of Test Pit: 5 m	
6	1354					
7	1353					
8	1352					
9	1351					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-039

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.39**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-040**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,895,839 N , 375,451 E (UTM NAD 83)**	Elevation:	**1343 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**ORGANIC SILT AND SAND** (0 to 1 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Good
1	1342				**SILTY SAND** (1 to 6 m) Silty SAND, some gravel, trace clay, subrounded to subangular, fine to course, low plasticity, brown, compact, massive, wet	
2	1341					
3	1340					
4	1339				▼	Groundwater: Slow inflow at 4.50 m
5	1338		S13			
6	1337				End of Test Pit: 6 m	
7	1336					
8	1335					
9	1334					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-040

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.40**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-041**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,896,006 N , 375,476 E (UTM NAD 83)**	Elevation:	**1340 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1340				**ORGANIC SILT AND GRAVEL** (0 to 0.5 m) ORGANIC SILT and GRAVEL, subangular to subrounded, fine to coarse, gap graded, non plastic, brown/red, soft and loose, massive, moist	Groundwater: Not Encountered Stability: Good
1	1339				**GRAVELLY SAND** (0.5 to 6 m) Gravelly SAND, trace silt, subrounded to subangular, fine to medium grained sand, low plasticity, brown, compact, massive, wet	
2	1338					
3	1337					
4	1336					
5	1335					
6	1334				End of Test Pit: 6 m	
7	1333					
8	1332					
9	1331					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-041

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.41**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-042**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,896,053 N , 375,283 E (UTM NAD 83)**	Elevation:	**1333 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**ORGANIC SILT AND GRAVEL** (0 to 0.1 m) ORGANIC SILT and GRAVEL, subangular to subrounded, fine to coarse, gap graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Moderate
1	1332				**ORGANIC SILT AND SAND** (0.1 to 0.5 m) ORGANIC SILT and SAND, fine to coarse, uniformly graded, non plastic, brown, firm and compact, massive, dry	
2	1331				**GRAVELLY SAND** (0.5 to 5 m) Gravelly SAND, trace silt, subrounded, fine to coarse, non plastic, brown, compact, massive, wet	Groundwater: Moderate inflow at 2.00 m
3	1330					
4	1329		S1			
5	1328				End of Test Pit: 5 m	
6	1327					
7	1326					
8	1325					
9	1324					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-042

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.42**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-043**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,896,017 N , 375,048 E (UTM NAD 83)**	Elevation:	**1318 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1318				**ORGANIC SILT AND GRAVEL** (0 to 0.1 m) ORGANIC SILT and GRAVEL, subangular to subrounded, fine to coarse, gap graded, non plastic, brown/red, soft and loose, massive, moist	Groundwater: Not Encountered Stability: Moderate
					ORGANIC SILT AND SAND (0.1 to 0.5 m) ORGANIC SILT and SAND, fine to coarse, uniformly graded, non plastic, brown, firm and compact, massive, dry	
1	1317				**GRAVELLY SAND** (0.5 to 6 m) Gravelly SAND, trace silt, subrounded, fine to coarse, non plastic, brown, compact to dense, massive, wet	
2	1316					
3	1315					
4	1314					
5	1313					
6	1312				End of Test Pit: 6 m	
7	1311					
8	1310					
9	1309					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-043

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.43	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	**TP12-044**	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	11 Aug 12
Location:	TSF Site C Alignment	Total Depth:	4.8 m	Date Completed:	11 Aug 12
Coordinates	5,896,113 N , 374,656 E (UTM NAD 83)	Elevation:	1284 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1284				**SANDY ORGANIC SILT AND GRAVEL** (0 to 1 m) Sandy ORGANIC SILT and GRAVEL, subangular to subrounded, fine to coarse, gap graded, non plastic, brown/red, soft and loose, massive, moist	Stability: Moderate
1	1283				**SAND AND GRAVEL** (1 to 4.8 m) SAND and GRAVEL, trace silt and boulders, subrounded, fine to coarse, non plastic, brown, compact, massive, wet	Groundwater: Slow inflow at 1.75 m
2	1282					
3	1281					
4	1280					
5	1279				End of Test Pit: 4.8 m	
6	1278					
7	1277					
8	1276					
9	1275					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-044

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.44	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-045**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**11 Aug 12**
Location:	**TSF Site C Alignment**	Total Depth:	**6 m**	Date Completed:	**11 Aug 12**
Coordinates	**5,896,135 N , 374,531 E (UTM NAD 83)**	Elevation:	**1276 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, fine, brown red, loose, moist, massive.	Groundwater: Not Encountered Stability: Moderate
1	1275				**SANDY GRAVEL** (1 to 6 m) Sandy GRAVEL, trace silt and clay, rounded to subrounded, fine to coarse, medium plasticity, brown, compact, massive, dry	
2	1274					
3	1273					
4	1272					
5	1271		S14			
6	1270				End of Test Pit: 6 m	
7	1269					
8	1268					
9	1267					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-045

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.45	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-046	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	11 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	4.5 m	Date Completed:	11 Aug 12
Coordinates	5,896,028 N , 374,857 E (UTM NAD 83)	Elevation:	1302 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1301				**PEAT** (0 to 1.5 m) PEAT, low plasticity, black, spongy, fibrous, wet	Stability: Poor
2	1300				**GRAVELLY SILT** (1.5 to 4.5 m) Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, grey/black, firm to stiff, massive, moist to wet (2 to m) red staining	Groundwater: Slow inflow at 1.50 m
3	1299					
4	1298					
5	1297				End of Test Pit: 4.5 m	
6	1296					
7	1295					
8	1294					
9	1293					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-046

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.46	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-047	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	11 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	5 m	Date Completed:	11 Aug 12
Coordinates	5,896,172 N , 375,445 E (UTM NAD 83)	Elevation:	1315 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**ORGANIC SILT AND SAND** (0 to 2 m) ORGANIC SILT and SAND, fine, non plastic, brown/red, soft and loose, massive, moist	Stability: Moderate
1	1314					
2	1313				**SAND** (2 to 3.5 m) SAND, some gravel, subrounded to subangular, fine to coarse, non plastic, brown, compact, massive, moist	
3	1312					Groundwater: Slow inflow at 3.5 m
4	1311				**GRAVELLY SAND** (3.5 to 5 m) Gravelly SAND, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, wet.	
5	1310				End of Test Pit: 5 m	
6	1309					
7	1308					
8	1307					
9	1306					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-047

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.47	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-048**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.75 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,897,560 N , 376,033 E (UTM NAD 83)**	Elevation:	**1224 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1223				**SAND AND GRAVEL** (0 to 2 m) SAND and GRAVEL, some large cobbles, subangular to subrounded, fine to coarse, brown, compact, massive, wet	Stability: Moderate
2	1222				**SAND** (2 to 3 m) SAND, fine, uniformly graded, non plastic, brown, dense, massive, moist to wet	
3	1221				**SILT** (3 to 5.75 m) SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, blue/grey, stiff, laminated, moist	Groundwater: Slow inflow at 3.00 m
4	1220					
5	1219		S15			
6	1218				End of Test Pit: 5.75 m	
7	1217					
8	1216					
9	1215					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-048

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.48	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-049**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,897,549 N , 376,007 E (UTM NAD 83)**	Elevation:	**1223 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**PEAT** (0 to 0.5 m) PEAT, low plasticity, black, spongy, fibrous, wet	Stability: Moderate
1	1222				**SILT AND SAND** (0.5 to 3 m) SILT and SAND, fine to coarse, uniformly graded, slightly plastic, brown, soft and loose, finely laminated, moist	
2	1221				▼	Groundwater: Fast inflow at 2.50
3	1220				**SAND** (3 to 4 m) SAND, some silt, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, wet	
4	1219		S16		**SILT** (4 to 5 m) SILT, trace clay, sand and gravel, subangular to subrounded, fine to coarse, low plasticity, stiff, massive, wet	
5	1218				End of Test Pit: 5 m	
6	1217					
7	1216					
8	1215					
9	1214					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-049

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.49**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-050**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,897,605 N , 376,018 E (UTM NAD 83)**	Elevation:	**1215 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND AND GRAVEL** (0 to 5 m) SAND and GRAVEL, some silt and cobbles, subangular, fine to coarse, non plastic, brown, compact, massive, wet	Stability: Poor
1	1214					
2	1213					
3	1212				▼	Groundwater: Moderate inflow at 3.50 m
4	1211					
5	1210				End of Test Pit: 5 m	
6	1209					
7	1208					
8	1207					
9	1206					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-050

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.50**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-051**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,897,634 N , 376,060 E (UTM NAD 83)**	Elevation:	**1219 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.02 m) SILT and SAND, uniformly graded, non plastic, brown, soft and loose, dry; with roots	Stability: Good
1	1218				**SILT AND SAND** (0.02 to 1 m) SILT and SAND, fine to coarse, uniformly graded, non plastic, brown, firm and compact, massive, dry	
					GRAVEL AND COBBLES (1 to 1.5 m) GRAVEL and COBBLES, some silt, subrounded, fine to coarse, non plastic, brown, compact, massive, dry	Groundwater: Slow inflow at 1.50 m
2	1217				**SAND AND GRAVEL** (1.5 to 5 m) SAND and GRAVEL, subrounded, fine to coarse, non plastic, brown, compact, massive, moist	
3	1216					
4	1215					
5	1214				End of Test Pit: 5 m	
6	1213					
7	1212					
8	1211					
9	1210					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-051

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.51**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-052	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	12 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	4.5 m	Date Completed:	12 Aug 12
Coordinates	5,897,161 N , 375,906 E (UTM NAD 83)	Elevation:	1254 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1254				**TOPSOIL** (0 to 0.2 m) SILT and SAND, fine to coarse, uniformly graded, non plastic, brown, soft and loose, dry; with roots	Groundwater: Not Encountered Stability: Good
1	1253				**SAND AND GRAVEL** (0.2 to 4.5 m) SAND and GRAVEL, some cobbles and trace silt, rounded to subrounded, fine to coarse, non plastic, brown, compact, massive dry	
2	1252					
3	1251					
4	1250					
4.5	1249.5				End of Test Pit: 4.5 m	
5	1249					
6	1248					
7	1247					
8	1246					
9	1245					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-052

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.52	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-053**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,896,682 N , 376,007 E (UTM NAD 83)**	Elevation:	**1301 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1301				**TOPSOIL** (0 to 0.1 m) SILT and SAND, fine to coarse, uniformly graded, non plastic, brown, soft and loose, dry; with roots	Groundwater: Not Encountered Stability: Good
1	1300				**SANDY SILT** (0.1 to 0.4 m) Sandy SILT, fine grained, gap graded, non plastic, brown, loose, dry	
2	1299				**SAND AND GRAVEL** (0.4 to 5 m) SAND and GRAVEL, trace silt, rounded to subrounded, fine to coarse, non plastic, brown, compact, dry	
3	1298					
4	1297					
5	1296				End of Test Pit: 5 m	
6	1295					
7	1294					
8	1293					
9	1292					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-053

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.53**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-054**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,896,186 N , 375,721 E (UTM NAD 83)**	Elevation:	**1331 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 2 m) SAND, fine, trace gravel, subrounded, fine to coarse, non plastic, light brown, loose, massive, dry	Groundwater: Not Encountered Stability: Good
1	1330					
2	1329				**GLACIAL TILL** (2 to 5 m) Silty SAND, some gravel, trace cobbles, subrounded, fine to coarse, non plastic, brown, dense, massive, moist	
3	1328					
4	1327					
5	1326				End of Test Pit: 5 m	
6	1325					
7	1324					
8	1323					
9	1322					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-054

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.54**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-055**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,895,979 N , 375,991 E (UTM NAD 83)**	Elevation:	**1321 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**ORGANIC SILT AND SAND** (0 to 1 m) ORGANIC SILT and SAND, fine, low plasticity, brown red, soft and loose, moist, massive.	Stability: Moderate
1	1320				**GRAVELLY SAND** (1 to 7 m) Gravelly SAND, trace cobbles, silt and clay, subrounded, fine to coarse, non plastic, brown, dense, massive, moist	
2	1319					
3	1318					
4	1317					
5	1316					
6	1315		S17		▼	Groundwater: Slow inflow at 6.00 m
7	1314				End of Test Pit: 7 m	
8	1313					
9	1312					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-055

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.55**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-056**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,896,327 N , 376,352 E (UTM NAD 83)**	Elevation:	**1314 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1314				**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown red, soft and loose, massive, moist	Stability: Good
1	1313				**GLACIAL TILL** (0.5 to 5 m) Sandy SILT, some gravel, subrounded to subangular, fine to coarse, non plastic, brown, stiff, massive, moist	
2	1312					
3	1311					
4	1310					
5	1309				End of Test Pit: 5 m	
6	1308					
7	1307					
8	1306					
9	1305					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-056

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.56**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-057**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**12 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5 m**	Date Completed:	**12 Aug 12**
Coordinates	**5,896,542 N , 376,551 E (UTM NAD 83)**	Elevation:	**1308 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**PEAT** (0 to 0.5 m) PEAT, some sand, fine, slightly plastic, black, spongy, fibrous, moist	Stability: Moderate
1	1307				**SILTY SAND** (0.5 to 4.75 m) Silty SAND, some gravel, trace clay, subrounded to subangular, fine to coarse, low plasticity, brown, firm to stiff, massive, moist	
2	1306					Groundwater: Moderate inflow at 2.50 m
3	1305					
4	1304		S18			
5	1303				**GLACIAL TILL** (4.75 to 5 m) Sandy SILT and GRAVEL, subrounded to subangular, fine to coarse, low plasticity, grey, stiff and dense, massive, moist End of Test Pit: 5 m	
6	1302					
7	1301					
8	1300					
9	1299					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-057

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.57**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-058**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**3.2 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,896,871 N , 376,898 E (UTM NAD 83)**	Elevation:	**1293 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**GRAVEL AND SILT** (0 to 3 m) GRAVEL and SILT, subrounded to subangular, fine to coarse, brown, firm and compact, massive, moist	Groundwater: Not Encountered Stability: Moderate
1	1292					
2	1291					
3	1290				**BEDROCK** (3 to 3.2 m) ANDESITE, fine grained with coarse crystals, massive, purple, strong, moderately weathered, heavily jointed	
4	1289				End of Test Pit: 3.2 m	
5	1288					
6	1287					
7	1286					
8	1285					
9	1284					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-058

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.58**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-059**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.2 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,019 N , 376,638 E (UTM NAD 83)**	Elevation:	**1281 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, black, soft and loose, massive, moist	Stability: Good
1	1280				**GLACIAL TILL** (0.5 to 4 m) Gravelly SILT, subrounded to subangular, fine to coarse, non plastic, brown, firm, massive, wet	
2	1279					
3	1278					Groundwater: Fast inflow at 3.50 m
4	1277				**BEDROCK** (4 to 4.2 m) ANDESITE, fine grained with coarse crystals, massive, purple, strong, moderately weathered, heavily jointed End of Test Pit: 4.2 m	
5	1276					
6	1275					
7	1274					
8	1273					
9	1272					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-059

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.59**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-060**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,012 N , 376,492 E (UTM NAD 83)**	Elevation:	**1282 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1.5 m) SAND, fine grained, uniformly graded, low plasticity, brown, compact, massive, moist	Stability: Good
1	1281					
					GLACIAL TILL (1.5 to 6.5 m) SILT, some sand and gravel, subrounded to subangular, fine to coarse, brown, firm, massive, moist to wet	Groundwater: Slow inflow at 1.50 m
2	1280					
3	1279					
					▼	Groundwater: Moderate inflow at 3.50 m
4	1278					
5	1277					
6	1276					
					End of Test Pit: 6.5 m	
7	1275					
8	1274					
9	1273					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-060

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.60**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-061	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	13 Aug 12
Location:	TSF Site D Alignment	Total Depth:	3.5 m	Date Completed:	13 Aug 12
Coordinates	5,897,080 N , 377,004 E (UTM NAD 83)	Elevation:	1261 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**PEAT** (0 to 1.5 m) PEAT, some sand, fine, low plasticity, black, spongy, fibrous, moist	Stability: Poor
1	1260					
2	1259				**SILT AND SAND** (1.5 to 3 m) SILT and SAND, some gravel, subrounded, fine to coarse, trace silt, non plastic, blue, firm, dense, massive, wet	Groundwater: Fast inflow at 2.50 m
			S19			
3	1258				**SAND AND GRAVEL** (3 to 3.5 m) SAND and GRAVEL, subrounded, fine to medium, well graded, brown, compact, massive, wet	
4	1257				End of Test Pit: 3.5 m	
5	1256					
6	1255					
7	1254					
8	1253					
9	1252					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-061

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.61	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-062**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**4 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,107 N , 377,060 E (UTM NAD 83)**	Elevation:	**1259 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1258				**SILT AND GRAVEL** (0 to 1.5 m) SILT and GRAVEL, some cobbles, rounded to subrounded, fine to coarse, non plastic, brown, firm and compact, massive, wet	Stability: Poor
2	1257				**SILTY SAND** (1.5 to 4 m) Silty SAND, some gravel, trace cobbles, trace clay, subrounded to subangular, fine to coarse, low plasticity, grey, massive, wet	
3	1256		S20			
4	1255				End of Test Pit: 4 m	Groundwater: Fast inflow at 4.00 m
5	1254					
6	1253					
7	1252					
8	1251					
9	1250					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-062

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.62**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-063	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	13 Aug 12
Location:	TSF Site D Alignment	Total Depth:	5 m	Date Completed:	13 Aug 12
Coordinates	5,897,137 N , 377,053 E (UTM NAD 83)	Elevation:	1257 m	Logged by:	APF
				Reviewed by:	JS/BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**PEAT** (0 to 0.5 m) PEAT, some sand, fine, low plasticity, black, spongy, fibrous, moist	Stability: Poor - collapsing from 0.50 m Groundwater: Fast inflow at 0.70 m
1	1256				**GLACIAL TILL** (0.5 to 5 m) Silty SAND and GRAVEL, trace cobbles, subrounded to subangular, fine to coarse low plasticity, grey, dense, massive, wet	
2	1255					
3	1254					
4	1253					
5	1252				End of Test Pit: 5 m	
6	1251					
7	1250					
8	1249					
9	1248					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-063

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.63	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-064**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**5 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,270 N , 376,926 E (UTM NAD 83)**	Elevation:	**1256 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**GLACIAL TILL** (0 to 5 m) Sandy silty GRAVEL, some cobbles, rounded to subrounded, fine to coarse, non plastic, very dense, grey, massive, moist	Groundwater: Not Encountered Stability: Good
1	1255					
2	1254					
3	1253					
4	1252					
5	1251				End of Test Pit: 5 m	
6	1250					
7	1249					
8	1248					
9	1247					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-064

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.64**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-065**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**5 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,568 N , 376,860 E (UTM NAD 83)**	Elevation:	**1242 m**	Logged by:	**APF**
				Reviewed by:	**JS/BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, fine to coarse, uniformly graded, non plastic, brown, loose, massive, moist	Stability: Good
1	1241				**SILTY SAND** (1 to 5 m) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown, firm, massive, moist to wet	Groundwater: Moderate inflow at 1.50 m
2	1240					
3	1239					
4	1238		S21			
5	1237				End of Test Pit: 5 m	
6	1236					
7	1235					
8	1234					
9	1233					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-065

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.65**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-066**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**3.25 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,794 N , 376,543 E (UTM NAD 83)**	Elevation:	**1222 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1221				**SAND AND GRAVEL** (0 to 3.25 m) SAND and GRAVEL, many cobbles, some boulders, rounded to subrounded, fine to coarse, well graded, brown, loose, massive, dry.	Stability: Poor
2	1220					
3	1219				▼	Groundwater: Slow inflow at 3.00 m
4	1218				End of Test Pit: 3.25 m	
5	1217					
6	1216					
7	1215					
8	1214					
9	1213					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-066

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.66**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-067**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.5 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,897,851 N , 376,268 E (UTM NAD 83)**	Elevation:	**1216 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1216				**SILTY SAND** (0 to 4.5 m) Silty SAND, many cobbles, some gravel and boulders, trace clay, rounded to subrounded, fine to coarse, brown, loose, massive, dry	Groundwater: Not Encountered Stability: Moderate
1	1215					
2	1214					
3	1213					
			S22			
4	1212					
					End of Test Pit: 4.5 m	
5	1211					
6	1210					
7	1209					
8	1208					
9	1207					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-067

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.67**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-068**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**13 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4 m**	Date Completed:	**13 Aug 12**
Coordinates	**5,898,011 N , 377,037 E (UTM NAD 83)**	Elevation:	**1223 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1223				**GRAVEL AND SILT** (0 to 4 m) GRAVEL and SILT, some cobbles, subrounded to subangular, fine to coarse, medium plasticity, brown, firm and compact, massive, wet	Groundwater: Moderate inflow at 0.25 m Stability: Poor - collapsing from 1.00 m
1	1222					
2	1221					
3	1220					
4	1219				End of Test Pit: 4 m	
5	1218					
6	1217					
7	1216					
8	1215					
9	1214					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-068

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.68	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-069**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**14 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**6 m**	Date Completed:	**14 Aug 12**
Coordinates	**5,897,640 N , 376,681 E (UTM NAD 83)**	Elevation:	**1235 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, fine, poorly graded, brown red, loose, massive, dry	Stability: Good
1	1234				**GLACIAL TILL** (1 to 6 m) Gravelly SILT and SAND, trace cobbles, subrounded to subangular, fine to coarse, grey, firm and compact, massive, wet	
2	1233					
3	1232				▼	Groundwater: Moderate inflow at 3.50 m
4	1231					
5	1230					
6	1229				End of Test Pit: 6 m	
7	1228					
8	1227					
9	1226					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-069

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.69**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	**TP12-070**	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	14 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	5.5 m	Date Completed:	14 Aug 12
Coordinates	5,896,688 N , 376,798 E (UTM NAD 83)	Elevation:	1309 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1308				**GLACIAL TILL** (0 to 5.5 m) Gravelly SILT, trace cobbles, rounded to subrounded, fine to coarse, non plastic, brown, firm to stiff, massive, moist ▼	Stability: Good Groundwater: Slow inflow at 1.00 m
2	1307					
3	1306					
4	1305					
5	1304					
					End of Test Pit: 5.5 m	
6	1303					
7	1302					
8	1301					
9	1300					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-070

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.70	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-071	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	14 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	5 m	Date Completed:	14 Aug 12
Coordinates	5,896,111 N , 376,318 E (UTM NAD 83)	Elevation:	1327 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
					SAND (0 to 1 m) SAND, fine, poorly graded, non plastic, brown, compact, massive, dry	Stability: Moderate
1	1326				**GLACIAL TILL** (1 to 5 m) Silty Gravelly SAND, trace cobbles, subrounded, fine to coarse, brown, compact, massive, moist	
2	1325					
3	1324					
4	1323				▼	Groundwater: Slow inflow at 4.00 m
5	1322				End of Test Pit: 5 m	
6	1321					
7	1320					
8	1319					
9	1318					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-071

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.71	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-072**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**14 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**5 m**	Date Completed:	**14 Aug 12**
Coordinates	**5,895,921 N , 376,699 E (UTM NAD 83)**	Elevation:	**1335 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SILTY SAND** (0 to 5 m) Silty SAND, some gravel, trace clay and cobbles, subrounded, fine to coarse, brown, compact to dense, massive, moist	Stability: Good
1	1334					
2	1333				▼	Groundwater: Slow inflow at 2.00 m
3	1332					
4	1331		S23			
5	1330				End of Test Pit: 5 m	
6	1329					
7	1328					
8	1327					
9	1326					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-072

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.72**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-073**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**14 Aug 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5 m**	Date Completed:	**14 Aug 12**
Coordinates	**5,896,034 N , 377,070 E (UTM NAD 83)**	Elevation:	**1335 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**PEAT** (0 to 0.1 m) PEAT, some sand, fine, slightly plastic, black, spongy, fibrous, moist	Groundwater: Not Encountered Stability: Moderate
1	1334				**GRAVEL AND SILT** (0.1 to 5 m) GRAVEL and SILT, some cobbles, subrounded to subangular, fine to coarse, medium plasticity, brown, firm and compact, massive, moist	
2	1333					
3	1332					
4	1331					
5	1330				End of Test Pit: 5 m	
6	1329					
7	1328					
8	1327					
9	1326					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-073

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.73**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-074	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	14 Aug 12
Location:	Geotechnical Characterization	Total Depth:	5 m	Date Completed:	14 Aug 12
Coordinates	5,896,021 N , 377,505 E (UTM NAD 83)	Elevation:	1302 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1302				**SILTY SANDY GRAVEL** (0 to 5 m) Silty Sandy GRAVEL, trace cobbles, surrounded, fine to coarse, non plastic, brown, compact, massive, wet	Groundwater: Not Encountered Stability: Moderate
1	1301					
2	1300					
3	1299					
4	1298					
5	1297				End of Test Pit: 5 m	
6	1296					
7	1295					
8	1294					
9	1293					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-074

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.74	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-075	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	14 Aug 12
Location:	TSF Site D Alignment	Total Depth:	2 m	Date Completed:	14 Aug 12
Coordinates	5,896,508 N , 377,004 E (UTM NAD 83)	Elevation:	1335 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 0.5 m) SAND, fine, poorly graded, non plastic, red brown, compact, massive, dry	Groundwater: Not Encountered Stability: Moderate
1	1334				**GRAVELLY SILT** (0.5 to 2 m) Gravelly SILT, trace cobbles, rounded to subrounded, non plastic, brown, firm, moist, massive.	
2	1333				End of Test Pit: 2 m	
3	1332					
4	1331					
5	1330					
6	1329					
7	1328					
8	1327					
9	1326					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-075

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.75	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-076	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	14 Aug 12
Location:	Geotechnical Characterization	Total Depth:	5 m	Date Completed:	14 Aug 12
Coordinates	5,896,504 N , 377,513 E (UTM NAD 83)	Elevation:	1304 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**GLACIAL TILL** (0 to 5 m) Gravelly SILT, trace cobbles, rounded to subrounded, non plastic, brown, firm, moist, massive.	Groundwater: Not Encountered Stability: Good
1	1303					
2	1302					
3	1301					
4	1300					
5	1299				End of Test Pit: 5 m	
6	1298					
7	1297					
8	1296					
9	1295					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-076

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.76	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-077**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,896,847 N , 374,370 E (UTM NAD 83)**	Elevation:	**1327 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1326				**SAND** (0 to 1.5 m) SAND, fine, non plastic, brown, compact, massive, dry	Stability: Moderate
2	1325				**SILTY GRAVELLY SAND** (1.5 to 5.5 m) ▼ Silty Gravelly SAND, trace clay and cobbles, subangular to subrounded, fine to coarse, low plasticity, brown, firm and compact, massive, moist	Groundwater: Fast inflow at 2.00 m
3	1324					
4	1323					
			S25			
5	1322				End of Test Pit: 5.5 m	
6	1321					
7	1320					
8	1319					
9	1318					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-077

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.77**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-078**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,151 N , 374,408 E (UTM NAD 83)**	Elevation:	**1326 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 5.5 m) SAND, fine, non plastic, brown, compact, massive, dry becoming moist	Stability: Good
1	1325					
2	1324				▼	Groundwater: Moderate inflow at 2.50 m
3	1323					
4	1322					
5	1321					
6	1320				**GLACIAL TILL** (5.5 to 6.5 m) SILT and GRAVEL, subrounded, fine to coarse, medium plasticity, brown, hard and dense, massive, wet	
7	1319				End of Test Pit: 6.5 m	
8	1318					
9	1317					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-078

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.78	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-079**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,503 N , 374,049 E (UTM NAD 83)**	Elevation:	**1332 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1331				**SILTY SAND AND GRAVEL** (0 to 6 m) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, medium plasticity, brown, loose, massive, wet	Groundwater: Moderate inflow at 0.25 m Stability: Moderate
2	1330					
3	1329					
4	1328					
5	1327					
6	1326				End of Test Pit: 6 m	
7	1325					
8	1324					
9	1323					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-079

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.79	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-080**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,487 N , 373,704 E (UTM NAD 83)**	Elevation:	**1362 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1.5 m) SAND, fine, non plastic, red brown, loose, massive, dry	Groundwater: Slow inflow at 0.25 Stability: Good
1	1361					
2	1360				**GLACIAL TILL** (1.5 to 6 m) SILT and GRAVEL, angular to subrounded, fine to coarse, low plasticity, brown, firm and compact, massive, moist	
3	1359					
4	1358					
5	1357					
6	1356				End of Test Pit: 6 m	
7	1355					
8	1354					
9	1353					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-080

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.80**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-081**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,540 N , 374,283 E (UTM NAD 83)**	Elevation:	**1316 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1316				**SAND** (0 to 1 m) SAND, some gravel, subrounded, fine, non plastic, brown, compact, massive, dry	Groundwater: Not Encountered Stability: Moderate
1	1315				**GRAVEL AND SILT** (1 to 6.5 m) GRAVEL and SILT, some sand, angular to subrounded, fine to coarse, low plasticity, brown, firm and compact, massive, moist	
2	1314					
3	1313					
4	1312					
5	1311					
6	1310					
6.5	1309.5				End of Test Pit: 6.5 m	
7	1309					
8	1308					
9	1307					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-081

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF NO. A
APPENDIX A.81 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-082**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,479 N , 374,618 E (UTM NAD 83)**	Elevation:	**1308 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1307				**SILTY SAND AND GRAVEL** (0 to 4 m) Silty SAND and GRAVEL, subrounded, fine to coarse, medium plasticity, brown, loose, massive, wet	Groundwater: Moderate inflow at 0.30 m Stability: Poor - collapsing from 1.00
2	1306					
3	1305					
4	1304				End of Test Pit: 4 m	
5	1303					
6	1302					
7	1301					
8	1300					
9	1299					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-082

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.82	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-083**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**1.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,518 N , 374,972 E (UTM NAD 83)**	Elevation:	**1296 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1296				**ORGANICS (SILT)** (0 to 0.25 m) ORGANIC SILT, some sand, trace gravel and clay, subangular to subrounded, fine to coarse, low plasticity, black brown, soft to firm, massive, wet	Groundwater: Fast inflow at 0.25 m Stability: Poor
1	1295				**SANDY GRAVELLY SILT** (0.25 to 1.5 m) Sandy Gravelly SILT, trace clay and cobbles, subangular to subrounded, fine to coarse, low plasticity, brown grey, firm to stiff, massive, wet	
2	1294				End of Test Pit: 1.5 m	
3	1293					
4	1292					
5	1291					
6	1290					
7	1289					
8	1288					
9	1287					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-083

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.83	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-084**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**1.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,506 N , 375,091 E (UTM NAD 83)**	Elevation:	**1291 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1291				**ORGANICS (SILT)** (0 to 0.2 m) ORGANIC SILT, some sand, trace gravel and clay, subangular to subrounded, fine to coarse, low plasticity, black brown, soft to firm, massive, wet	Stability: Poor Groundwater: Fast inflow at 0.60 m
1	1290				**SANDY GRAVELLY SILT** (0.2 to 1.5 m) Sandy Gravelly SILT, trace clay, many cobbles, subangular to subrounded, fine to coarse, low plasticity, light brown grey, firm to stiff, massive, wet	
2	1289				End of Test Pit: 1.5 m	
3	1288					
4	1287					
5	1286					
6	1285					
7	1284					
8	1283					
9	1282					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-084

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.84**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-085**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,338 N , 375,188 E (UTM NAD 83)**	Elevation:	**1289 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1289				**SAND** (0 to 1 m) SAND, some cobbles, subrounded, fine, non plastic, brown, compact, massive, dry	Groundwater: Not Encountered Stability: Moderate
1	1288				**SAND AND GRAVEL** (1 to 6.5 m) SAND and GRAVEL, some silt, trace clay and cobbles, subrounded, fine to coarse, medium plasticity, brown, compact, massive, dry	
2	1287					
3	1286					
4	1285					
5	1284					
			S27			
6	1283					
					End of Test Pit: 6.5 m	
7	1282					
8	1281					
9	1280					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-085

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.85	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-086**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,008 N , 375,031 E (UTM NAD 83)**	Elevation:	**1271 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1270				**SAND** (0 to 2 m) SAND, some cobbles, subrounded, fine, non plastic, brown, compact, massive, dry	Groundwater: Not Encountered Stability: Good
2	1269				**GRAVELLY SAND** (2 to 7.5 m) Gravelly SAND, some silt, trace cobbles, subrounded to subangular, fine to coarse, non plastic, brown, dense, massive, moist	
3	1268					
4	1267					
5	1266					
6	1265					
7	1264				End of Test Pit: 7.5 m	
8	1263					
9	1262					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-086

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.86**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-087**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**15 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7.5 m**	Date Completed:	**15 Aug 12**
Coordinates	**5,897,883 N , 375,886 E (UTM NAD 83)**	Elevation:	**1233 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1233				**SAND** (0 to 5 m) SAND, some silt and gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown, firm, massive, moist	Groundwater: Not Encountered Stability: Moderate
1	1232					
2	1231					
3	1230					
4	1229					
5	1228				**SILT** (5 to 6 m) SILT, trace clay, sand and gravel, subangular to subrounded, fine to coarse, low plasticity, brown, stiff, massive, moist	
6	1227		S28		**SANDY SILT** (6 to 7.5 m) Sandy SILT, some clay, some cobbles and boulders, subrounded, fine, low plasticity, brown, firm, massive, moist	
7	1226					
8	1225				End of Test Pit: 7.5 m	
9	1224					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-087

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.87	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-088**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,897,678 N , 375,697 E (UTM NAD 83)**	Elevation:	**1242 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1241				**SILT AND SAND** (0 to 7 m) SILT and SAND, trace clay, gravel and cobbles, subrounded, fine to coarse, medium plasticity, brown, compact to dense, massive, moist	Groundwater: Not Encountered Stability: Good
2	1240					
3	1239					
4	1238					
5	1237					
6	1236		S29			
7	1235				End of Test Pit: 7 m	
8	1234					
9	1233					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-088

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.88	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-089**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,897,435 N , 375,481 E (UTM NAD 83)**	Elevation:	**1253 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**GRAVEL AND SILT** (0 to 0.5 m) GRAVEL and SILT, some cobbles, subrounded to subangular, fine to coarse, low plasticity, brown grey, firm and compact, massive, wet	Stability: Poor Groundwater: Moderate inflow at 0.7 m
1	1252				**GRAVELLY SILTY SAND** (0.5 to 4 m) Gravelly Silty SAND, trace clay and cobbles, subrounded to subangular, fine to coarse, low plasticity, brown grey, firm and compact, massive, wet	
2	1251					
3	1250		S30			
4	1249				End of Test Pit: 4 m	
5	1248					
6	1247					
7	1246					
8	1245					
9	1244					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-089

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.89**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-090**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,898,231 N , 373,918 E (UTM NAD 83)**	Elevation:	**1320 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1320				**SAND** (0 to 1 m) SAND, fine, non plastic, red brown, compact, massive, dry	Stability: Poor - collapsing from 4.00 m
1	1319				**SAND AND GRAVEL** (1 to 6 m) SAND and GRAVEL, some silt, trace cobbles and clay, subangular to subrounded, fine to coarse, low plasticity, brown, compact, massive, moist	
2	1318				▼	Groundwater: Slow inflow at 2.00 m
3	1317					
4	1316					
5	1315					
			S31			
6	1314				**SILT AND GRAVEL** (6 to 6.5 m) SILT and GRAVEL, some sand, trace cobbles, subangular, fine to coarse, low plasticity, grey, dense, massive, moist	
6.5	1313.5				End of Test Pit: 6.5 m	
7	1313					
8	1312					
9	1311					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-090

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.90**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-091**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**8 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,898,509 N , 373,866 E (UTM NAD 83)**	Elevation:	**1324 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 0.5 m) SAND, fine, non plastic, brown, compact, massive, dry	Stability: Good Groundwater: Slow inflow at 0.70 m
1	1323				**GLACIAL TILL** (0.5 to 8 m) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, non plastic, brown, compact to dense, massive, moist	
2	1322					
3	1321					
4	1320					
5	1319					
6	1318					
7	1317					
8	1316				End of Test Pit: 8 m	
9	1315					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-091

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.91**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-092**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.5 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,898,756 N , 373,684 E (UTM NAD 83)**	Elevation:	**1325 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1324				**SAND** (0 to 2.5 m) SAND, some silt, trace gravel, subangular to subrounded, fine, non plastic, red brown, dense, massive, dry	Stability: Good
2	1323					
3	1322				**SAND AND GRAVEL** (2.5 to 5.5 m) SAND and GRAVEL, trace silt and clay, subangular, fine to coarse, non plastic, red brown, dense, massive, wet	
4	1321				▼	Groundwater: Slow inflow at 4.00 m
			S32			
5	1320				End of Test Pit: 5.5 m	
6	1319					
7	1318					
8	1317					
9	1316					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-092

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.92**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	**TP12-093**	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	16 Aug 12
Location:	TSF Site D Alignment	Total Depth:	6.5 m	Date Completed:	16 Aug 12
Coordinates	5,899,106 N , 373,506 E (UTM NAD 83)	Elevation:	1331 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, some silt, some gravel, subangular to subrounded, fine, non plastic, brown, dense, massive, dry	Groundwater: Not Encountered Stability: Good
1	1330				**SILTY GRAVEL** (1 to 6.5 m) Silty GRAVEL, trace sand, subangular to subrounded, fine to coarse, non plastic, brown, dense, massive, moist	
2	1329					
3	1328					
4	1327					
5	1326					
6	1325					
6.5	1324.5				End of Test Pit: 6.5 m	
7	1324					
8	1323					
9	1322					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-093

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.93	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-094	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	16 Aug 12
Location:	TSF Site D Alignment	Total Depth:	8.5 m	Date Completed:	16 Aug 12
Coordinates	5,899,207 N , 373,833 E (UTM NAD 83)	Elevation:	1314 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1314				**SILTY SAND AND GRAVEL** (0 to 8.5 m) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, non plastic, brown, dense, massive, moist	Groundwater: Not Encountered Stability: Good
1	1313					
2	1312					
3	1311					
4	1310					
5	1309					
6	1308					
7	1307					
8	1306					
8.5	1305.5				End of Test Pit: 8.5 m	
9	1305					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-094

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.94	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-095**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,899,011 N , 374,032 E (UTM NAD 83)**	Elevation:	**1305 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1304				**SILTY SAND** (0 to 5.5 m) Silty SAND, trace gravel, subangular to subrounded, fine to coarse sand and fine gravel, non plastic, brown, firm and compact, massive, moist to wet	Groundwater: Not Encountered Stability: Good
2	1303					
3	1302					
4	1301					
5	1300					
6	1299		S33		**SILT** (5.5 to 7 m) SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, brown, firm and compact, massive, moist to wet	
7	1298				End of Test Pit: 7 m	
8	1297					
9	1296					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-095

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.95**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-096**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**16 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**8 m**	Date Completed:	**16 Aug 12**
Coordinates	**5,898,967 N , 374,510 E (UTM NAD 83)**	Elevation:	**1283 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, fine, non plastic, brown, compact, massive, dry	Stability: Good
1	1282				**SILTY SAND** (1 to 8 m) Silty SAND, some gravel, trace clay, subrounded, fine to coarse, non plastic, brown, compact, massive, moist to wet	
2	1281					
3	1280					
4	1279				▼	Groundwater: Slow inflow at 4.00 m
5	1278					
6	1277					
7	1276		S34			
8	1275				End of Test Pit: 8 m	
9	1274					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-096

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.96**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-097**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,549 N , 374,172 E (UTM NAD 83)**	Elevation:	**1310 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1310				**SAND** (0 to 1 m) SAND, fine, non plastic, brown, compact, massive, moist	Stability: Good
1	1309				**GLACIAL TILL** (1 to 7 m) Gravelly SAND, some silt, subangular to subrounded, fine to coarse, low plasticity, brown, compact to dense, massive, moist	Groundwater: Slow inflow at 1.00 m
2	1308					
3	1307					
4	1306					
5	1305					
6	1304					
7	1303				End of Test Pit: 7 m	
8	1302					
9	1301					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-097

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.97**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-098**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,458 N , 374,526 E (UTM NAD 83)**	Elevation:	**1299 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1298				**GLACIAL TILL** (0 to 7 m) Sandy SILT and GRAVEL, trace cobbles, subrounded, fine to coarse, non plastic, brown, firm and compact, massive, moist	Stability: Good Groundwater: Slow inflow at 1.00 m
2	1297					
3	1296					
4	1295					
5	1294					
6	1293					
7	1292				End of Test Pit: 7 m	
8	1291					
9	1290					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-098

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.98**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-099**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,269 N , 374,799 E (UTM NAD 83)**	Elevation:	**1285 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1285				**SAND** (0 to 1 m) SAND, fine, non plastic, brown, compact, massive, moist	Groundwater: Not Encountered Stability: Good
1	1284				**SAND** (1 to 6 m) SAND, some silt, trace gravel, subangular to subrounded, fine to coarse sand and fine gravel, low plasticity, grey brown, dense, massive, moist	
2	1283					
3	1282					
4	1281					
5	1280					
6	1279		S35		**SILT** (6 to 7 m) SILT, some sand, trace clay, gravel, cobbles and boulders, subangular to subrounded, fine to coarse, low plasticity, grey brown, firm to stiff, massive, moist	
7	1278				End of Test Pit: 7 m	
8	1277					
9	1276					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-099

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.99**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-100**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,142 N , 375,070 E (UTM NAD 83)**	Elevation:	**1279 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
					SAND (0 to 1 m) SAND, fine, non plastic, red brown, compact, massive, dry	Stability: Good
1	1278				**GLACIAL TILL** (1 to 7 m) SILT and GRAVEL, some sand, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, brown, firm and compact, massive, moist	
2	1277					
3	1276				▼	Groundwater: Slow inflow at 3.50 m
4	1275					
5	1274					
6	1273					
7	1272				End of Test Pit: 7 m	
8	1271					
9	1270					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-100

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.100**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-101	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	17 Aug 12
Location:	Inside TSF Site D Area	Total Depth:	6.5 m	Date Completed:	17 Aug 12
Coordinates	5,898,311 N , 375,425 E (UTM NAD 83)	Elevation:	1256 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
					SAND (0 to 1 m) SAND, fine, non plastic, red brown, compact, massive, dry	Groundwater: Not Encountered Stability: Good
1	1255				**GRAVEL AND SILT** (1 to 6.5 m) GRAVEL and SILT, some sand, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, grey brown, firm and compact, massive, moist	
2	1254					
3	1253					
4	1252					
5	1251					
6	1250					
					End of Test Pit: 6.5 m	
7	1249					
8	1248					
9	1247					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-101

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.101	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-102**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**6.5 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,019 N , 375,482 E (UTM NAD 83)**	Elevation:	**1244 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1244				**ORGANIC SILT AND SAND** (0 to 1 m) ORGANIC SILT and SAND, fine, non plastic, brown red, soft and loose, massive, moist	Stability: Poor - collapsing from 2.20 m
1	1243				**SAND AND GRAVEL** (1 to 2 m) SAND and GRAVEL, subrounded, fine to coarse, low plasticity, brown, dense, massive, wet	Groundwater: Slow inflow at 1.20 m
2	1242				**SILTY SAND** (2 to 6.5 m) Silty SAND, some clay, trace gravel, subrounded, fine to coarse, subrounded, fine, low plasticity, brown, dense, massive, wet	
3	1241					
4	1240					
5	1239					
			S36			
6	1238				End of Test Pit: 6.5 m	
7	1237					
8	1236					
9	1235					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-102

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.102	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-103**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7.5 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,615 N , 375,580 E (UTM NAD 83)**	Elevation:	**1257 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1257				**ORGANIC SILT AND SAND** (0 to 2 m) ORGANIC SILT and SAND, fine, non plastic, brown red, soft and loose, massive, dry	Stability: Good
1	1256					
2	1255				**SAND** (2 to 5 m) SAND, some silt and clay, fine to coarse, low plasticity, brown, compact, moist, massive.	
3	1254					
4	1253					
5	1252				▼ **SAND AND GRAVEL** (5 to 7.5 m) SAND and GRAVEL, trace silt and clay, subangular to subrounded, fine to coarse, low plasticity, brown, compact, massive, wet	Groundwater: Slow inflow at 5.00 m
6	1251					
			S37			
7	1250				End of Test Pit: 7.5 m	
8	1249					
9	1248					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-103

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.103**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-104**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,817 N , 375,987 E (UTM NAD 83)**	Elevation:	**1250 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1250				**SAND** (0 to 1 m) SAND, some gravel, subrounded, loose, moist, massive.	Stability: Moderate
1	1249				**SILT AND SAND** (1 to 3 m) SILT and SAND, some gravel, subangular to subrounded, non plastic, brown, firm and compact, massive, moist	
2	1248					
3	1247				**GRAVEL** (3 to 7 m) GRAVEL, some silt, trace cobbles, subrounded to subangular, fine to coarse, non plastic, brown, compact, massive, wet	
4	1246					
5	1245					
6	1244					Groundwater: Not Encountered
7	1243				End of Test Pit: 7 m	
8	1242					
9	1241					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-104

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.104**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-105**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,531 N , 376,173 E (UTM NAD 83)**	Elevation:	**1233 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1233				**SAND** (0 to 3 m) SAND, some gravel, subrounded, fine, non plastic, grey brown, compact, massive, moist	Stability: Good
1	1232					
2	1231					
3	1230				▼ **GLACIAL TILL** (3 to 7 m) SILT and GRAVEL, some sand, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, grey, firm and compact, massive, moist	Groundwater: Slow inflow at 3.00 m
4	1229					
5	1228					
6	1227					
7	1226				End of Test Pit: 7 m	
8	1225					
9	1224					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-105

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.105**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-106**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**17 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**17 Aug 12**
Coordinates	**5,898,504 N , 375,960 E (UTM NAD 83)**	Elevation:	**1231 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 0.5 m) SAND, fine, non plastic, red brown, compact, massive, dry	Stability: Moderate
1	1230				**SILT AND SAND** (0.5 to 7 m) SILT and SAND, trace clay and gravel, rounded to subrounded, fine to coarse, brown, compact and firm, massive, moist.	
2	1229					Groundwater: Slow inflow at 1.50 m
3	1228					
4	1227					
5	1226					
6	1225		S38			
7	1224				End of Test Pit: 7 m	
8	1223					
9	1222					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-106

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.106	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-107	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	CAT 320	Date Started:	18 Aug 12
Location:	TSF Site D Alignment	Total Depth:	7 m	Date Completed:	18 Aug 12
Coordinates	5,899,011 N , 375,951 E (UTM NAD 83)	Elevation:	1251 m	Logged by:	APF
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1251				**SAND AND GRAVEL** (0 to 1 m) SAND and GRAVEL, subrounded to angular, fine to coarse, non plastic, light brown, loose, massive, moist	Groundwater: Not Encountered Stability: Good
1	1250				**GLACIAL TILL** (1 to 7 m) SILT and GRAVEL, some sand, trace cobbles, subrounded to rounded, fine to coarse, non plastic, brown, firm and compact, massive, moist	
2	1249					
3	1248					
4	1247					
5	1246					
6	1245					
7	1244				End of Test Pit: 7 m	
8	1243					
9	1242					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-107

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.107	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-108**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7.5 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,001 N , 375,715 E (UTM NAD 83)**	Elevation:	**1264 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1263				**SAND** (0 to 6 m) SAND, some gravel, subrounded, fine to coarse, non plastic, brown, loose, massive, moist	Groundwater: Not Encountered Stability: Good
2	1262					
3	1261					
4	1260					
5	1259					
6	1258				**SAND AND GRAVEL** (6 to 7.5 m) SAND and GRAVEL, some cobbles, trace silt and clay, subrounded to subangular, fine to coarse, non plastic, brown, compact, massive, wet	
			S39			
7	1257				End of Test Pit: 7.5 m	
8	1256					
9	1255					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-108

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.108**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-109**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**6 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,172 N , 375,672 E (UTM NAD 83)**	Elevation:	**1266 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1266				**GRAVEL** (0 to 6 m) GRAVEL, some cobbles, trace silt, subrounded to subangular, fine to coarse, non plastic, red brown, compact, massive, wet	Groundwater: Not Encountered Stability: Good
1	1265					
2	1264					
3	1263					
4	1262					
5	1261					
6	1260				End of Test Pit: 6 m	
7	1259					
8	1258					
9	1257					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-109

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.109**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-110**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,307 N , 375,498 E (UTM NAD 83)**	Elevation:	**1271 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1270				**GRAVEL** (0 to 5 m) GRAVEL, some cobbles, trace silt, subrounded to subangular, fine to coarse, non plastic, red brown, compact, massive, wet	Groundwater: Not Encountered Stability: Good
2	1269					
3	1268					
4	1267					
5	1266				**SILTY SAND** (5 to 7 m) Silty SAND, fine, non plastic, red brown, compact, massive, moist	
6	1265					
7	1264				End of Test Pit: 7 m	
8	1263					
9	1262					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-110

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.110	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-111**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**8 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,256 N , 375,299 E (UTM NAD 83)**	Elevation:	**1279 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND AND GRAVEL** (0 to 1 m) SAND and GRAVEL, subrounded to subangular, fine to coarse, non plastic, light brown, firm and compact, massive, moist	Groundwater: Not Encountered Stability: Good
1	1278				**GRAVELLY SAND** (1 to 8 m) Gravelly SAND, subrounded, fine to coarse, non plastic, brown, compact, massive, moist	
2	1277					
3	1276					
4	1275					
5	1274					
6	1273					
7	1272		S40			
8	1271				End of Test Pit: 8 m	
9	1270					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-111

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.111	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-112**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**5.7 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,177 N , 375,050 E (UTM NAD 83)**	Elevation:	**1286 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**SAND** (0 to 1 m) SAND, fine, non plastic, light brown, compact, massive, dry	Groundwater: Not Encountered Stability: Good
1	1285				**SAND** (1 to 4.5 m) SAND, some silt, some gravel, subrounded, fine to coarse, brown, compact, massive, moist	
2	1284					
3	1283					
4	1282					
5	1281				**SAND AND GRAVEL** (4.5 to 5.7 m) SAND and GRAVEL, some silt, subrounded, fine to coarse, non plastic, black grey, compact, massive, wet	
6	1280				End of Test Pit: 5.7 m	
7	1279					
8	1278					
9	1277					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-112

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.112	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-113**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,300 N , 375,078 E (UTM NAD 83)**	Elevation:	**1295 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1295				**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown red, soft and loose, massive, moist	Groundwater: Not Encountered Stability: Moderate
					SILT AND SAND (0.5 to 4 m) SILT and SAND, trace gravel, subangular to subrounded, fine to coarse, non plastic, light brown, firm and compact, massive, moist	
4	1291				**SAND AND GRAVEL** (4 to 7 m) SAND and GRAVEL, some silt, subrounded, fine to coarse, non plastic, black grey, compact, massive, wet	
7	1288				End of Test Pit: 7 m	

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-113

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.113	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-114**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**TSF Site D Alignment**	Total Depth:	**6.5 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,333 N , 374,838 E (UTM NAD 83)**	Elevation:	**1296 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1296				**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown red, soft and loose, massive, moist	Stability: Good
1	1295				**SILTY GRAVELLY SAND** (0.5 to 6.5 m) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, moist	
2	1294					
3	1293					
4	1292					
5	1291				▼	Groundwater: Slow inflow at 5.00 m
			S41			
6	1290				End of Test Pit: 6.5 m	
7	1289					
8	1288					
9	1287					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-114

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.114**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-115**	Page	1 of 1
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**18 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**8 m**	Date Completed:	**18 Aug 12**
Coordinates	**5,899,080 N , 375,476 E (UTM NAD 83)**	Elevation:	**1269 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1269				**SAND** (0 to 8 m) SAND, trace gravel, subrounded, fine, non plastic, brown, compact, massive, moist	Groundwater: Not Encountered Stability: Good
1	1268					
2	1267					
3	1266					
4	1265					
5	1264					
6	1263					
7	1262					
8	1261				End of Test Pit: 8 m	
9	1260					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-115

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF NO. A
APPENDIX A.115 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-116**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**19 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**19 Aug 12**
Coordinates	**5,898,972 N , 375,346 E (UTM NAD 83)**	Elevation:	**1262 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1262				**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, fine, uniformly graded, non plastic, brown red, soft and loose, massive, moist	Groundwater: Not Encountered Stability: Good
1	1261				**SAND** (0.5 to 7 m) SAND, some silt, trace gravel, subangular, fine, non plastic, brown grey, compact, massive, moist	
2	1260					
3	1259					
4	1258					
5	1257					
6	1256					
7	1255				End of Test Pit: 7 m	
8	1254					
9	1253					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-116

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.116**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-117**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**CAT 320**	Date Started:	**19 Aug 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**7 m**	Date Completed:	**19 Aug 12**
Coordinates	**5,898,808 N , 375,497 E (UTM NAD 83)**	Elevation:	**1268 m**	Logged by:	**APF**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1268				**ORGANIC SILT AND SAND** (0 to 0.5 m) ORGANIC SILT and SAND, some gravel, subangular, fine, non plastic, brown red, soft and loose, massive, moist	Groundwater: Not Encountered Stability: Good
1	1267				**SAND AND GRAVEL** (0.5 to 7 m) SAND and GRAVEL, trace silt and clay, subangular to subrounded, fine to coarse, low plasticity, brown, compact, massive, moist	
2	1266					
3	1265					
4	1264					
5	1263					
6	1262		S42			
7	1261				End of Test Pit: 7 m	
8	1260					
9	1259					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-117

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.117**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-118**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,894,488 N , 376,905 E (UTM NAD 83)**	Elevation:	**1433 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1433				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown to black, soft, organic material and roots	Stability: Poor
					SAND (0.1 to 0.6 m) SAND, some silt and gravel, sub-angular, fine to coarse, red brown, loose to compact, massive, moist, trace roots	
1	1432				**GLACIAL TILL** (0.6 to 4.2 m) Silty SAND and GRAVEL, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, grey brown, compact, massive, moist	Groundwater: Slow inflow at 1.50 m
2	1431					
3	1430					
4	1429		S1		End of Test Pit: 4.2 m	
5	1428					
6	1427					
7	1426					
8	1425					
9	1424					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-118

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.118**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-119**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.7 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,894,484 N , 377,500 E (UTM NAD 83)**	Elevation:	**1394 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1394				**SILTY SAND** (0 to 1 m) Silty SAND, some gravel and sand, subrounded, fine to coarse, low plasticity, red brown, loose to compact, massive, moist	Groundwater: Not Encountered Stability: Moderate
1	1393				**GLACIAL TILL** (1 to 4.7 m) Gravelly SILT, some sand, subangular to subrounded, fine to coarse, medium plasticity, dark grey, firm to stiff, massive, moist	
2	1392					
3	1391					
4	1390					
			S1			
5	1389				End of Test Pit: 4.7 m	
6	1388					
7	1387					
8	1386					
9	1385					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-119

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.119	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-120**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,894,888 N , 377,018 E (UTM NAD 83)**	Elevation:	**1386 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1386				**TOPSOIL** (0 to 0.1 m) TOPSOIL, brown, soft, organic material and roots	Groundwater: Not Encountered Stability: Moderate
					SAND (0.1 to 1 m) SAND, subrounded, fine to medium, red brown, loose to compact, massive, moist, some roots	
1	1385				**GRAVELLY SILT** (1 to 5.2 m) Gravelly SILT, trace cobbles, subrounded to rounded, fine to coarse, medium plasticity, blue grey, very stiff to hard, massive, moist	
2	1384					
3	1383					
4	1382					
5	1381		S1		End of Test Pit: 5.2 m	Difficult to excavate - glacial till
6	1380					
7	1379					
8	1378					
9	1377					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-120

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.120**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-121**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.7 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,007 N , 377,479 E (UTM NAD 83)**	Elevation:	**1337 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1337				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.2 to 0.7 m) SAND, subrounded, fine to medium, red brown, compact, massive, moist, trace roots	
1	1336				**GRAVELLY SAND** (0.7 to 5 m) Gravelly SAND, subangular to subrounded, fine to coarse, grey brown, compact, massive, moist	
2	1335					
3	1334					
4	1333					
5	1332					Esker deposit
					SILTY SAND (5 to 5.7 m) Silty SAND, some clay and gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, grey brown, compact, massive, moist	
			S1		End of Test Pit: 5.7 m	
6	1331					
7	1330					
8	1329					
9	1328					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-121

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.121**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-122**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,010 N , 377,945 E (UTM NAD 83)**	Elevation:	**1309 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1309				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND (0.1 to 1 m) SAND, subrounded, fine to medium, red yellow and brown, compact, massive, moist, some roots	
1	1308				**COBBLERY GRAVEL** (1 to 5.2 m) Cobblery GRAVEL, some sand, trace clay and silt, subrounded and some platy, fine to coarse, grey, compact, massive, moist	
2	1307					
3	1306					
4	1305					
5	1304		S1		End of Test Pit: 5.2 m	Esker deposit
6	1303					
7	1302					
8	1301					
9	1300					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-122

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.122**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-123**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,378 N , 376,800 E (UTM NAD 83)**	Elevation:	**1355 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.05 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Moderate
1	1354				**SANDY SILT** (0.05 to 4 m) Sandy SILT, some gravel, trace cobbles, subrounded, fine to coarse, high plasticity, light brown, very stiff, massive, moist	
2	1353				▼	Groundwater: Slow inflow at 2.00 m
3	1352					
4	1351				**SANDY GRAVEL** (4 to 4.2 m) Sandy GRAVEL, some silt and clay, subrounded, fine to coarse, low plasticity, light brown, very stiff, massive, moist	
5	1350				End of Test Pit: 4.2 m	
6	1349					
7	1348					
8	1347					
9	1346					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-123

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.123**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-124**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.7 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,502 N , 377,092 E (UTM NAD 83)**	Elevation:	**1317 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Good
1	1316				**SILTY SAND** (0.1 to 2 m) Silty SAND, some gravel, subangular to subrounded, fine to coarse, medium plasticity, brown, compact, massive, moist	
2	1315				▼	Groundwater: Slow inflow at 2.00 m
					GLACIAL TILL (2 to 3.7 m) Sandy SILT, some gravel, subangular, fine to coarse, high plasticity, dark brown, hard, massive, moist	
3	1314					
			S1			Difficult to excavate - glacial till
					End of Test Pit: 3.7 m	
4	1313					
5	1312					
6	1311					
7	1310					
8	1309					
9	1308					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-124

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.124**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-125**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,503 N , 377,589 E (UTM NAD 83)**	Elevation:	**1305 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1305				**TOPSOIL** (0 to 0.2 m) TOPSOIL, brown, soft, a lot of roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.2 to 1 m) SAND, some gravel, trace cobbles, subrounded, fine to coarse, red brown and yellow, loose, massive, moist	
1	1304				**SILTY SAND** (1 to 5.2 m) Silty SAND, some gravel, subrounded, fine to coarse, medium plasticity, red brown, compact, massive, moist	
2	1303					
3	1302					
4	1301					
5	1300		S1			Reworked
					End of Test Pit: 5.2 m	
6	1299					
7	1298					
8	1297					
9	1296					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-125

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.125**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-126**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.7 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,627 N , 378,132 E (UTM NAD 83)**	Elevation:	**1275 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1275				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SILTY SAND (0.1 to 1.2 m) Silty SAND, subrounded, fine to medium, medium plasticity, red yellow, loose to compact, massive, moist	
1	1274				**SAND** (1.2 to 4.5 m) SAND, some gravel, subrounded, fine to coarse, medium brown, compact, stratified, moist	Esker deposit, easy to excavate
2	1273					
3	1272					
4	1271					
			S1		**SAND AND GRAVEL** (4.5 to 4.7 m) SAND and GRAVEL, trace clay and silt, subrounded, fine to coarse, non plastic, medium brown, compact, massive, moist.	
5	1270				End of Test Pit: 4.7 m	
6	1269					
7	1268					
8	1267					
9	1266					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-126

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.126**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-127**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.2 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,895,908 N , 378,276 E (UTM NAD 83)**	Elevation:	**1263 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1263				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.1 to 0.5 m) SAND, trace gravel, angular to subangular, sand is fine to coarse, gravel is fine, red brown, loose, massive, moist	Esker deposit
1	1262				**SILTY SAND** (0.5 to 4 m) Silty SAND, some gravel, subangular, fine to coarse, high plasticity, light brown, loose to compact, massive, moist	
2	1261					
3	1260					
4	1259		S1		**SANDY GRAVEL** (4 to 4.2 m) Sandy GRAVEL, some silt, trace clay, angular to subangular, fine to coarse, high plasticity, light brown, loose to compact, massive, moist	
5	1258				End of Test Pit: 4.2 m	
6	1257					
7	1256					
8	1255					
9	1254					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-127

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.127**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-128**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**7 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.5 m**	Date Completed:	**7 Oct 12**
Coordinates	**5,896,267 N , 378,480 E (UTM NAD 83)**	Elevation:	**1245 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1245				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Poor - collapsing from 4.00 m
1	1244				**SILTY SAND** (0.1 to 1.5 m) Silty SAND, subrounded, fine to medium, medium plasticity, grey, compact, massive, moist	
2	1243				**SAND AND GRAVEL** (1.5 to 3.5 m) SAND and GRAVEL, subrounded, fine to coarse, grey, loose to compact, massive, moist	
3	1242				▼	Groundwater: Moderate inflow at 3.00 m
					End of Test Pit: 3.5 m	
4	1241					
5	1240					
6	1239					
7	1238					
8	1237					
9	1236					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-128

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.128**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-129**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,482 N , 376,265 E (UTM NAD 83)**	Elevation:	**1463 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1463				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
1	1462				**SAND** (0.1 to 0.5 m) SAND some gravel, subangular, fine to coarse, yellow and brown, loose to compact, stratified, moist	
2	1461				**GLACIAL TILL** (0.5 to 3 m) Gravelly SILT, some sand, subangular, fine to coarse gravel, high plasticity, grey, very stiff, massive, moist	
3	1460				End of Test Pit: 3 m	Difficult to excavate - glacial till
4	1459					
5	1458					
6	1457					
7	1456					
8	1455					
9	1454					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-129

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.129**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-130**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Plant Site**	Total Depth:	**3.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,506 N , 375,597 E (UTM NAD 83)**	Elevation:	**1412 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1412				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Poor
					SILTY SAND (0.1 to 3 m) Silty SAND, some gravel, trace cobbles and boulders, subangular to subrounded, fine to coarse, non plastic, light brown, compact, massive, moist to dry	
1	1411					
2	1410					
3	1409		S1		**SILTY GRAVELLY SAND** (3 to 3.2 m) Silty Gravelly SAND, trace clay and cobbles, subangular to subrounded, fine to coarse, low plasticity, light brown, compact, massive, moist to dry	Difficult to excavate - boulders
4	1408				End of Test Pit: 3.2 m	
5	1407					
6	1406					
7	1405					
8	1404					
9	1403					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-130

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.130**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-131	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	Komatsu PC360Lc	Date Started:	8 Oct 12
Location:	Geotechnical Characterization	Total Depth:	3.5 m	Date Completed:	8 Oct 12
Coordinates	5,894,002 N , 374,983 E (UTM NAD 83)	Elevation:	1469 m	Logged by:	AL
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.4 m) TOPSOIL, black to light brown, soft, roots and organic material	Stability: Poor - collapsing from 3.00 m
1	1468				**SAND AND GRAVEL** (0.4 to 3.5 m) SAND and GRAVEL, some silt, angular to subrounded, fine to coarse, low plasticity, dark grey and brown, compact, massive, wet	
2	1467					
3	1466				▼	Groundwater: Fast inflow at 3.00 m
4	1465				End of Test Pit: 3.5 m	
5	1464					
6	1463					
7	1462					
8	1461					
9	1460					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-131

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.131	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-132**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,022 N , 374,360 E (UTM NAD 83)**	Elevation:	**1446 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.3 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Poor
1	1445				**SAND AND GRAVEL** (0.3 to 3 m) SAND and GRAVEL, some silt, subangular, fine to coarse, low plasticity, dark grey, loose to compact, massive, wet	
2	1444					
3	1443				▼ End of Test Pit: 3 m	Groundwater: Fast inflow at 3.00 m
4	1442					
5	1441					
6	1440					
7	1439					
8	1438					
9	1437					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-132

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.132**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-133**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.7 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,893,878 N , 373,979 E (UTM NAD 83)**	Elevation:	**1442 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1442				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.2 to 1.2 m) SAND, some gravel and cobbles, subangular to subrounded, fine to coarse, non plastic, red brown, loose, stratified, moist to dry, some roots	
1	1441				**GLACIAL TILL** (1.2 to 3.5 m) Sandy SILT, trace gravel, subangular, fine to coarse sand, fine gravel, medium plasticity, light brown, very stiff, friable, moist to dry	
2	1440					Difficult to excavate - glacial till
3	1439					
			S1		**GLACIAL TILL** (3.5 to 3.7 m) Sandy Gravelly SILT, some clay, subangular, fine to coarse, low plasticity, light brown, very stiff, massive, friable, moist to dry	
4	1438				End of Test Pit: 3.7 m	
5	1437					
6	1436					
7	1435					
8	1434					
9	1433					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-133

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.133	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-134**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,893,522 N , 373,622 E (UTM NAD 83)**	Elevation:	**1478 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1478				**TOPSOIL** (0 to 0.25 m) Top soil, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
1	1477				**SAND** (0.25 to 1.3 m) SAND, some gravel, subangular, fine to coarse sand, fine gravel, red brown, loose, massive, moist, roots	
2	1476				**GLACIAL TILL** (1.3 to 3.2 m) Sandy SILT, some gravel, subangular, fine to coarse, medium plasticity, brown, very stiff, massive, moist	
3	1475		S1		End of Test Pit: 3.2 m	Difficult to excavate - glacial till
4	1474					
5	1473					
6	1472					
7	1471					
8	1470					
9	1469					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-134

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.134**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-135**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.7 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,893,978 N , 373,458 E (UTM NAD 83)**	Elevation:	**1439 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.2 to 1 m) SAND, some gravel and silt, subangular, fine to coarse, low plasticity, red brown, massive, compact, moist, some roots	
1	1438				**GLACIAL TILL** (1 to 4.5 m) Gravelly SILT, some sand, subangular to subrounded, fine to coarse, medium plasticity, blue grey, hard, massive, moist	
2	1437					
3	1436					
4	1435					
			S1		**GLACIAL TILL** (4.5 to 4.7 m) Sandy Gravelly SILT, some clay, subangular to subrounded, fine to coarse, low plasticity, blue grey, hard, massive, moist	Difficult to excavate - glacial till
5	1434				End of Test Pit: 4.7 m	
6	1433					
7	1432					
8	1431					
9	1430					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-135

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.135**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-136**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,087 N , 376,283 E (UTM NAD 83)**	Elevation:	**1469 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1469				**TOPSOIL** (0 to 0.15 m) TOPSOIL, black and grey, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND (0.15 to 0.8 m) SAND, subangular, fine to coarse, non plastic, red yellow, loose, stratified, moist to dry, some roots	
1	1468				**GLACIAL TILL** (0.8 to 5 m) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, high plasticity brown, very stiff, massive, moist	
2	1467					
3	1466					
4	1465					
5	1464		S1		**GRAVELLY SAND** (5 to 5.2 m) Gravelly SAND, some silt, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown, very dense, massive, moist	Difficult to excavate - glacial till
					End of Test Pit: 5.2 m	
6	1463					
7	1462					
8	1461					
9	1460					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-136

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.136**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-137**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,066 N , 376,921 E (UTM NAD 83)**	Elevation:	**1456 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1456				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown to black, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
1	1455				**GLACIAL TILL** (0.2 to 5.2 m) Sandy SILT, some gravel, trace cobbles, subangular to subrounded, fine to coarse, high plasticity, brown, very stiff, massive, moist	
2	1454					
3	1453					
4	1452					
5	1451		S1		End of Test Pit: 5.2 m	Difficult to excavate - glacial till
6	1450					
7	1449					
8	1448					
9	1447					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-137

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.137**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-138**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Plant Site**	Total Depth:	**5.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,811 N , 375,171 E (UTM NAD 83)**	Elevation:	**1419 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1419				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND (0.1 to 1.4 m) SAND, trace gravel, subangular, fine to coarse sand, fine gravel, red yellow, loose, massive, moist to dry, some roots	
1	1418					
					SILTY SAND (1.4 to 5 m) Silty SAND, some gravel, trace cobbles, subangular to subrounded, fine to coarse, medium plasticity, dark brown, compact to dense, massive, moist	
2	1417					
3	1416					
4	1415					
5	1414		S1		**SAND AND GRAVEL** (5 to 5.2 m) SAND and GRAVEL, trace silt and clay, subangular to subrounded, fine to coarse, non plastic, dark brown, compact to dense, massive, moist	
					End of Test Pit: 5.2 m	
6	1413					
7	1412					
8	1411					
9	1410					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-138

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.138	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-139**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Plant Site**	Total Depth:	**4.2 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,894,980 N , 375,511 E (UTM NAD 83)**	Elevation:	**1441 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
1	1440				**GRAVELLY SAND** (0 to 2.2 m) Gravelly SAND, trace clay and silt, subangular, fine to coarse sand, fine gravel, non plastic, brown, loose to compact, massive, moist	Stability: Moderate
2	1439		S1			
3	1438				**SILTY GRAVELLY SAND** (2.2 to 4.2 m) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, dark brown, compact to dense, massive, moist	
4	1437		S2		▼ End of Test Pit: 4.2 m	Groundwater: Slow inflow at 4.00 m
5	1436					
6	1435					
7	1434					
8	1433					
9	1432					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-139

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.139	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-140	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	Komatsu PC360Lc	Date Started:	8 Oct 12
Location:	Plant Site	Total Depth:	4 m	Date Completed:	8 Oct 12
Coordinates	5,895,166 N , 375,704 E (UTM NAD 83)	Elevation:	1416 m	Logged by:	AL
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1416				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND (0.1 to 0.3 m) SAND, trace gravel, subangular, fine to coarse sand, fine gravel, yellow, loose, moist to dry, some roots	
1	1415				**SILTY SAND** (0.3 to 2.5 m) Silty SAND, subrounded, fine to coarse, medium plasticity, light brown, compact, massive, moist	
2	1414					
3	1413				**SANDY SILT** (2.5 to 4 m) Sandy SILT with some gravel, fine to coarse sand and some gravel, subangular, medium plasticity, brown grey, very stiff, massive, moist	
4	1412				End of Test Pit: 4 m	
5	1411					
6	1410					
7	1409					
8	1408					
9	1407					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-140

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.140	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-141**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**8 Oct 12**
Location:	**Plant Site**	Total Depth:	**5.7 m**	Date Completed:	**8 Oct 12**
Coordinates	**5,895,498 N , 375,528 E (UTM NAD 83)**	Elevation:	**1347 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
					SAND (0 to 0.8 m) SAND, subrounded, fine to medium, light brown, loose, massive, moist	Groundwater: Not Encountered Stability: Moderate
1	1346				**GLACIAL TILL** (0.8 to 5.7 m) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, dark brown, very stiff, massive, moist	
2	1345					
3	1344					
4	1343					
5	1342		S1			
6	1341				End of Test Pit: 5.7 m	
7	1340					
8	1339					
9	1338					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-141

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.141**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-142**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.2 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,574 N , 374,598 E (UTM NAD 83)**	Elevation:	**1407 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1407				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Moderate
1	1406				**SILTY SAND** (0.2 to 3.5 m) Silty SAND, some gravel, subangular, fine to coarse, medium plasticity, brown, loose to compact, stratified, wet	
2	1405				▼	Groundwater: Slow inflow at 2.50 m
3	1404					
4	1403		S1		**GLACIAL TILL** (3.5 to 4.2 m) Sandy Gravelly SILT, some clay, subangular, fine to coarse, low plasticity, blue grey, hard, massive, moist	Difficult to excavate - glacial till
					End of Test Pit: 4.2 m	
5	1402					
6	1401					
7	1400					
8	1399					
9	1398					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-142

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.142**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-143**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,895,019 N , 374,320 E (UTM NAD 83)**	Elevation:	**1415 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1415				**TOPSOIL** (0 to 0.2 m) TOPSOIL, black and brown, soft, roots and organic material	Stability: Poor - collapsing from 1.00 m Groundwater: Fast inflow at 1.00 m
1	1414				**SAND** (0.2 to 1.2 m) SAND, some silt, subangular to subrounded, fine to coarse, low plasticity, yellow brown, loose, massive, moist to wet, some roots	
2	1413				**SILTY SAND AND GRAVEL** (1.2 to 4 m) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low plasticity, dark grey, loose to compact, massive, wet	
3	1412					
4	1411				End of Test Pit: 4 m	
5	1410					
6	1409					
7	1408					
8	1407					
9	1406					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-143

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.143	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-144**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.2 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,976 N , 373,659 E (UTM NAD 83)**	Elevation:	**1431 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1431				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.2 to 1 m) SAND, some gravel, subangular to subrounded, fine to coarse, light brown, loose, massive, moist to dry, some roots	
1	1430				**GLACIAL TILL** (1 to 4.2 m) Sandy Gravelly SILT, some clay, subangular, fine to coarse, high plasticity, brown, very stiff to hard, massive, moist	
2	1429					
3	1428					
4	1427		S1		End of Test Pit: 4.2 m	Difficult to excavate - glacial till
5	1426					
6	1425					
7	1424					
8	1423					
9	1422					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-144

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.144**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-145**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.5 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,987 N , 373,088 E (UTM NAD 83)**	Elevation:	**1401 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1401				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Poor
					SILTY SAND (0.1 to 3 m) Silty SAND, some gravel and cobbles, trace boulders, subrounded, fine to coarse, low plasticity, grey and brown, compact, stratified, wet	
1	1400					
2	1399					
3	1398				▼	Groundwater: Moderate inflow at 3.00 m
					GLACIAL TILL (3 to 4.5 m) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, dark brown, firm to stiff, massive, moist	
4	1397					Difficult to excavate - glacial till
					End of Test Pit: 4.5 m	
5	1396					
6	1395					
7	1394					
8	1393					
9	1392					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-145

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.145**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-146**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**4.7 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,550 N , 373,999 E (UTM NAD 83)**	Elevation:	**1430 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1430				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Moderate
					SAND (0.1 to 0.8 m) SAND, some gravel and cobbles, subrounded, fine to coarse, red yellow, loose, massive, moist to dry, some roots	
1	1429				**SILTY SAND** (0.8 to 4.5 m) Silty SAND, some gravel, trace cobbles, subangular to subrounded, fine to coarse, medium plasticity, dark brown, dense, massive, moist	
2	1428				▼	Groundwater: Slow inflow at 2.50 m
3	1427					
4	1426					Difficult to excavate - glacial till
			S1		**GLACIAL TILL** (4.5 to 4.7 m) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, medium plasticity, dark brown, stiff, massive, moist	
5	1425				End of Test Pit: 4.7 m	
6	1424					
7	1423					
8	1422					
9	1421					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-146

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.146**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-147**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.7 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,511 N , 373,582 E (UTM NAD 83)**	Elevation:	**1451 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1451				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.1 to 1.2 m) SAND, some gravel, trace cobbles, subrounded, fine to coarse, red brown, loose to compact, massive, moist to dry, some roots	
1	1450				**GLACIAL TILL** (1.2 to 5.5 m) Gravelly SILT, some sand, many cobbles, angular to subrounded, fine to coarse, medium plasticity, brown, very stiff, massive, moist	
2	1449					
3	1448					
4	1447					
5	1446					
			S1		**GLACIAL TILL** (5.5 to 5.7 m) Silty Gravelly SAND, some clay, angular to subrounded, fine to coarse, medium plasticity, brown, dense, massive, moist.	Difficult to excavate - glacial till
6	1445				End of Test Pit: 5.7 m	
7	1444					
8	1443					
9	1442					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-147

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.147**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-148**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.5 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,894,196 N , 373,069 E (UTM NAD 83)**	Elevation:	**1449 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
1	1448				**SAND** (0.1 to 1.2 m) SAND with some gravel, fine to coarse sand and some gravel, a few cobbles, subrounded, rusty brown, some roots, loose to compact, moist	
2	1447				**BEDROCK** (1.2 to 3.5 m) BEDROCK, black, fine-grained, weak, moderately to highly weathered, no structure, heavily fractured	
3	1446					
					End of Test Pit: 3.5 m	
4	1445					
5	1444					
6	1443					
7	1442					
8	1441					
9	1440					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-148

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.148**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	BLACKWATER GOLD PROJECT	**Test Pit No.:**	TP12-149	Page	1 of 1
Contractor:	New Gold Inc.	Equipment Used:	Komatsu PC360Lc	Date Started:	9 Oct 12
Location:	TSF Site C Alignment	Total Depth:	5 m	Date Completed:	9 Oct 12
Coordinates	5,895,651 N , 374,667 E (UTM NAD 83)	Elevation:	1357 m	Logged by:	AL
				Reviewed by:	BOC

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0					**TOPSOIL** (0 to 0.5 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Poor - collapsing from 3.50 m
1	1356				**SILTY SAND AND GRAVEL** (0.5 to 5 m) Silty SAND and GRAVEL, subangular to rounded, fine to coarse, low plasticity, brown, loose to compact, massive, wet	
2	1355					
3	1354					
4	1353				▼	Groundwater: Fast inflow at 4.00 m
5	1352				End of Test Pit: 5 m	
6	1351					
7	1350					
8	1349					
9	1348					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-149

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.149	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-150**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**3.2 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,895,999 N , 373,270 E (UTM NAD 83)**	Elevation:	**1312 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1312				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Moderate
					SAND (0.1 to 1.5 m) SAND, trace gravel, subrounded, fine to coarse sand, fine gravel, medium brown, loose, massive, moist	
1	1311					Groundwater: Slow inflow at 1.5
					GLACIAL TILL (1.5 to 3 m) Gravelly SILT, some sand, angular to subangular, fine to coarse, high plasticity, blue grey, hard, massive, moist	
2	1310					
3	1309		Prctr		**GLACIAL TILL** (3 to 3.2 m) Silty Gravelly SAND, trace clay, angular to subangular, fine to coarse, low plasticity, blue grey, very dense, massive, moist	Difficult to excavate - glacial till
					End of Test Pit: 3.2 m	
4	1308					
5	1307					
6	1306					
7	1305					
8	1304					
9	1303					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-150

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.150**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-151**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**9 Oct 12**
Location:	**Inside TSF Site C Area**	Total Depth:	**5.2 m**	Date Completed:	**9 Oct 12**
Coordinates	**5,896,007 N , 373,718 E (UTM NAD 83)**	Elevation:	**1291 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1291				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Poor
					SILTY SAND (0.2 to 5 m) Silty SAND, some gravel, subrounded, fine to medium sand, fine gravel, medium plasticity, brown, compact, massive, moist	
1	1290					
2	1289					
3	1288					
4	1287				▼	Groundwater: Moderate inflow at 4.00 m
5	1286		S1		**SILT** (5 to 5.2 m) SILT, trace clay, sand and gravel, subrounded, fine to medium sand and fine gravel, medium plasticity, brown, stiff, massive, moist	
					End of Test Pit: 5.2 m	
6	1285					
7	1284					
8	1283					
9	1282					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-151

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.151**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-152**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**TSF Site C Alignment**	Total Depth:	**5.7 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,896,497 N , 374,453 E (UTM NAD 83)**	Elevation:	**1332 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1332				**TOPSOIL** (0 to 0.2 m) TOPSOIL, dark brown, soft, roots and organic material	Stability: Moderate
					SAND (0.2 to 0.5 m) SAND, some gravel, subrounded, fine to coarse sand, red brown, loose, massive, moist to dry, some roots	
1	1331				**SAND AND GRAVEL** (0.5 to 5.7 m) SAND and GRAVEL, trace silt and clay, subangular to subrounded, fine to coarse, medium plasticity, brown, loose to compact, massive, moist	
2	1330					
3	1329					
4	1328					
5	1327				▼	Groundwater: Moderate inflow at 5.00 m
			S1			
6	1326				End of Test Pit: 5.7 m	
7	1325					
8	1324					
9	1323					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-152

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.152**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-153**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**4.7 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,896,605 N , 374,671 E (UTM NAD 83)**	Elevation:	**1317 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1317				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND (0.1 to 1 m) SAND, some gravel and cobbles, subrounded, fine to coarse, yellow brown, loose, massive, moist to dry, some roots	
1	1316				**SAND AND GRAVEL** (1 to 4.7 m) SAND and GRAVEL, some cobbles, trace boulders, subrounded, fine to coarse, dark brown, compact, massive, moist	
2	1315					
3	1314					
4	1313					
			S1			
					End of Test Pit: 4.7 m	
5	1312					
6	1311					
7	1310					
8	1309					
9	1308					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-153

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX A.153	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-154**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Inside TSF Site D Area**	Total Depth:	**5.7 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,896,494 N , 374,813 E (UTM NAD 83)**	Elevation:	**1278 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1278				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND (0.1 to 5.7 m) SAND, some silt, subrounded, fine to medium, low plasticity, medium brown, compact, massive, moist	
1	1277					
2	1276					
3	1275					
4	1274					
5	1273					
			S1			
6	1272				End of Test Pit: 5.7 m	
7	1271					
8	1270					
9	1269					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-154

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.154**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-155**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5.2 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,898,521 N , 376,910 E (UTM NAD 83)**	Elevation:	**1208 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1208				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
1	1207				**SAND AND GRAVEL** (0.1 to 1.2 m) SAND and GRAVEL, some cobbles and boulders, subrounded, fine to coarse, light brown, compact, massive, moist to dry	
2	1206				**SAND AND GRAVEL** (1.2 to 5.2 m) SAND and GRAVEL, trace silt and clay, subrounded to rounded, fine to coarse, brown, compact, massive, moist	
3	1205					
4	1204					
5	1203		S1		End of Test Pit: 5.2 m	probable Esker deposit
6	1202					
7	1201					
8	1200					
9	1199					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-155

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.155**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-156**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**5 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,898,538 N , 376,653 E (UTM NAD 83)**	Elevation:	**1221 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1221				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Moderate
					SAND AND GRAVEL (0.1 to 5 m) SAND and GRAVEL, trace silt and cobbles, subangular to rounded, fine to coarse, medium plasticity, brown, compact, massive, moist	
1	1220					
2	1219					
3	1218					
4	1217					
5	1216				End of Test Pit: 5 m	vertical stable sidewall
6	1215					
7	1214					
8	1213					
9	1212					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-156

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.156**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-157**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**TSF Site D Alignment**	Total Depth:	**7.2 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,898,524 N , 376,481 E (UTM NAD 83)**	Elevation:	**1227 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1227				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Poor
					SAND AND GRAVEL (0.1 to 7.2 m) SAND and GRAVEL, trace silt and cobbles, subangular to rounded, fine to coarse, medium plasticity, brown, compact, massive, moist	
1	1226					
2	1225					
3	1224					
4	1223					
5	1222					
6	1221					
7	1220		S1		End of Test Pit: 7.2 m	
8	1219					
9	1218					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-157

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.157**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-158**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**1.7 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,899,330 N , 377,978 E (UTM NAD 83)**	Elevation:	**1167 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1167				**TOPSOIL** (0 to 0.05 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND AND GRAVEL (0.05 to 1.7 m) SAND and GRAVEL, trace silt, subrounded to rounded, fine to coarse, non plastic, light brown, compact, massive, dry	
1	1166		S1			
					End of Test Pit: 1.7 m	
2	1165					
3	1164					
4	1163					
5	1162					
6	1161					
7	1160					
8	1159					
9	1158					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-158

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.158**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	**Test Pit No.:**	**TP12-159**	**Page**	**1 of 1**
Contractor:	**New Gold Inc.**	Equipment Used:	**Komatsu PC360Lc**	Date Started:	**10 Oct 12**
Location:	**Geotechnical Characterization**	Total Depth:	**3.7 m**	Date Completed:	**10 Oct 12**
Coordinates	**5,900,620 N , 378,912 E (UTM NAD 83)**	Elevation:	**1135 m**	Logged by:	**AL**
				Reviewed by:	**BOC**

DEPTH - (m)	ELEVATION - (m)	SAMPLES	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION	COMMENTS
0	1135				**TOPSOIL** (0 to 0.1 m) TOPSOIL, dark brown, soft, roots and organic material	Groundwater: Not Encountered Stability: Good
					SAND AND GRAVEL (0.1 to 3.7 m) SAND and GRAVEL, some cobbles, subrounded to rounded, fine to coarse, non plastic, light brown, compact, massive, dry	
1	1134					
2	1133					
3	1132					
			S1			
4	1131				End of Test Pit: 3.7 m	
5	1130					
6	1129					
7	1128					
8	1127					
9	1126					

GENERAL REMARKS:

Rev 1 - updated elevation using Ldair data

NEW GOLD INC.
BLACKWATER GOLD PROJECT
TEST PIT LOG FOR TP12-159

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF NO.
101-457/6	A
APPENDIX **A.159**	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TESTPIT LOGS.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, TEST PIT LOG METRIC, SEPT 19.GDT, 19 Sep 13

APPENDIX B

DRILLHOLE LOGS

Appendix B1	Geotechnical Drillhole Logs
Appendix B2	Geotechnical RMR and RQD Sheets
Appendix B3	Downhole Recovery RQD and RMR

APPENDIX B1

GEOTECHNICAL DRILLHOLE LOGS

(Pages B1-1 to B1-197)

Knight Piésold CONSULTING

TABLE B1.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
GEOTECHNICAL DRILLHOLE SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Coordinates[1]		Elevation	Drilling Company	Drilling Technique	Drillhole Size	Total Depth	Depth to Bedrock	In-Situ Testing		In-Situ Installations	Water Level
	Northing	Easting							Packer Tests Depth m	Permeability m/sec	Standpipe (SP) Vibrating Wires (VW)	
	m	m	m				m	m				m
GT12-01	5,898,690	376,021	1,245	Westech	Odex	4"	88.3	61.3	75.9 - 82.2 82.0 - 88.3	no take 9 x10^{-09}	SP 66.90 - 73.15 m VW 23.6 m	23.47 130.0
GT12-02	5,898,110	376,420	1,218	Westech	Odex	4"	106.5	86.3	94.2 - 100.5 100.3 - 106.6	1 x10^{-7} 6 x10^{-9}	VW 13m, 36m, and 95m	-74.0 106.0 221.0
GT12-03	5,899,320	375,495	1,272	Westech	Odex	4"	74.4	53.3	62.0 - 68.3 68.1 - 74.4	8 x10^{-9} 4 x10^{-7}	SP 53.34 - 58.82 m	27.55
GT12-04	5,896,470	374,474	1,331	Westech	Odex	4"	91.6	72.5	79.2 - 85.5 85.3 - 91.6	1 x10^{-8} 2 x10^{-7}	SP 66.44 - 74.06 m	54.93
GT12-05	5,895,650	374,706	1,363	Westech	Odex	4"	120.1	79.2	89.4 - 95.7 95.5 - 101.8 101.6 - 107.9 107.7 - 114.0 113.8 - 120.1	2 x10^{-7} 4 x10^{-9} 9 x10^{-7} 5 x10^{-8} 1 x10^{-5}	VW 11m, 28m, and 80m	damanged -2.0 113.0
GT12-06	5,896,100	374,569	1,281	Westech	Odex	4"	67.1	42.7	54.7 - 61.0 60.8 - 67.1	6 x10^{-9} 1 x10^{-8}	SP 45.72 - 51.81 m	31.23
GT12-07	5,894,940	375,495	1,444	Westech	Odex	4"	36.4	5.8	17.9 - 24.2 24.0 - 30.3 30.1 - 36.4	8 x10^{-8} 3 x10^{-8} 1 x10^{-7}	SP 13.72 - 19.81 m	6.85
GT12-08	5,894,150	375,620	1,507	Westech	Odex	4"	30.4	1.5	8.8 - 15.1 14.9 - 21.2 21.0 - 25.8 25.6 - 30.3	8 x10^{-9} 1 x10^{-7} 1 x10^{-9} 1 x10^{-7}	SP 6.1 - 12.2 m	4.64
GT12-09	5,897,640	376,624	1,239	Westech	Odex	4"	125.0	81.1	112.6 - 118.9 118.7 - 125.0	2 x10^{-9} 1 x10^{-8}	SP 105.0 - 111.28 m	32.26
GT12-10	5,897,280	376,926	1,258	Westech	Odex	4"	45.7	24.4	33.3 - 39.6 39.4 - 45.7	1 x10^{-8} 4 x10^{-7}	SP 26.64 - 32.92 m	17.58
GT12-11	5,896,980	377,036	1,282	Westech	Odex	4"	68.6	2.5	7.4 - 13.7 13.5 - 19.8 19.6 - 25.9 25.7 - 32.0 31.8 - 38.1 37.9 - 44.2 44.0 - 50.3 50.1 - 56.4 56.2 - 62.5 62.3 - 68.6	4 x10^{-7} 8 x10^{-7} 7 x10^{-7} 4 x10^{-6} 3 x10^{-7} 1 x10^{-6} 3 x10^{-6} 1 x10^{-6} 4 x10^{-7} 7 x10^{-8}	SP 10.67 - 15.54 m	12.48
GT12-12	5,895,900	376,780	1,335	Westech	Odex	4"	39.6	22.3	27.2 - 33.5 33.3 - 39.6	6 x10^{-8} 2 x10^{-8}	SP 18.29 - 24.38 m	Dry Well
GT12-13	5,895,836	375,442	1,355	Major	Sonic	4"	67.1	65.5				
GT12-14	5,898,820	375,942	1,250	Major	Sonic	4"	59.5	57.9				
GT12-15	5,898,200	376,098	1,227	Major	Sonic	4"	97.5	94.1				24.78
GT12-16	5,898,200	376,299	1,225	Major	Sonic	4"	99.1	96.4				25.65
GT12-17	5,898,550	377,098	1,200	Major	Sonic	4"	112.8	107.0				24.75
GT12-18	5,898,490	376,248	1,233	Major	Sonic	4"	80.8	79.3				
GT12-19	5,898,979	375,719	1,275	Major	Sonic	4"	73.2	68.8				51.47
GT12-20	5,899,369	375,131	1,307	Major	Sonic	4"	48.8	45.7				24.00
GT12-21	5,899,040	375,467	1,279	Major	Sonic	4"	82.3	79.3				20.00
GT12-22	5,898,980	375,211	1,260	Major	Sonic	4"	64.0	61.0				15.24
GT12-23	5,899,383	375,837	1,265	Major	Sonic	4"	61.0	-				
GT12-24	5,898,638	375,518	1,271	Major	Sonic	4"	59.2	53.3				
GT12-25	5,899,280	373,655	1,319	Major	Sonic	4"	57.9	54.9				
GT12-26	5,899,220	374,387	1,276	Major	Sonic	4"	21.3	18.6				
GT12-27	5,899,417	376,457	1,234	Major	Sonic	4"	82.3	44.2				
GT12-28	5,894,842	371,772	1,349	Westech	Odex	4"	27.7	11.6	14.9 - 21.6 21.6 - 27.7	3 x10^{-8} 8 x10^{-8}	SP 10.97 - 14.8 m	2.97
GT12-29	5,898,510	376,004	1,235	Major	Sonic	4"	48.8	42.7				
GT12-30	5,897,570	375,613	1,248	Major	Sonic	4"	51.8	45.7				
GT12-31	5,898,002	375,982	1,243	Major	Sonic	4"	57.9	45.7				

Knight Piésold CONSULTING

TABLE B1.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
GEOTECHNICAL DRILLHOLE SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Coordinates[1]		Elevation	Drilling Company	Drilling Technique	Drillhole Size	Total Depth	Depth to Bedrock	In-Situ Testing		In-Situ Installations	Water Level
	Northing	Easting							Packer Tests Depth m	Permeability m/sec	Standpipe (SP) Vibrating Wires (VW)	
	m	m	m				m	m				m
GT12-32	5,896,543	374,526	1,340	Major	Sonic	4"	76.2	73.2				
GT12-33	5,896,540	374,294	1,358	Major	Sonic	4"	48.8	42.8				
GT12-34	5,895,110	374,575	1,419	Major	Sonic	4"	82.3	76.2				
GT12-35	5,895,961	374,587	1,320	Major	Sonic	4"	54.9	41.4				
GT12-36	5,896,574	375,981	1,324	Major	Sonic	4"	109.7	84.2				
GT12-37	5,897,010	376,489	1,294	Major	Sonic	4"	65.5	60.9				
GT12-38	5,897,441	376,778	1,261	Major	Sonic	4"	57.9	48.8				
GT12-39	5,897,626	376,433	1,256	Major	Sonic	4"	91.4	85.3				
GT12-40	5,897,788	376,559	1,234	Major	Sonic	4"	102.1	80.8				
GT12-41	5,897,873	376,274	1,226	Major	Sonic	4"	89.9	86.5				
GT12-42	5,897,933	377,347	1,243	Major	Sonic	4"	25.9	18.6				12.80
GT12-43	5,897,790	376,875	1,239	Major	Sonic	4"	65.5	63.6				24.25
GT12-44	5,895,630	376,474	1,340	Major	Sonic	4"	25.9	21.2				7.07
GT12-45	5,892,526	376,041	1,621	Major	Sonic	4"	96.0	94.5				25.38
GT12-46	5,892,950	376,286	1,550	Major	Sonic	4"	65.5	62.5				24.37
GT12-47	5,899,441	377,756	1,188	Major	Sonic	4"	93.0	87.2				24.16

Notes:

1. Coordinates presented in UTM Zone 9 NAD 83.
2. Drillhole coordinates refer to as built locations and were surveyed by Allnorth Consultants.

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	11SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	26JUL'13	ISSUED WITH REPORT	JS	BB	KJB

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-01**	PAGE	**1 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**7 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**88.29 m**	Date Completed:	**14 Mar 12**
Coordinates:	**5,898,690 N , 376,021 E (UTM NAD 83)**	Elevation:	**1245 m**	Date Well Installed:	**14 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
			SILTY SAND (0 to 13.41) Silty SAND, some gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, yellowish brown, compact to very dense, massive, moist to wet.									5-inch diamter odex drilling	
	1												
	2			67		SPT1	10/17/26	43					
	3			112		SPT2	35/52/50+	100+					
	4												
1240	5			102		SPT3	20/50+	100+				Water return	
	6												
	7			77		SPT4	48/45/50+	100+					
												Water return	
	8			90		SPT5	35/50/49	99					
	9												
	10			90		SPT6	50/45/47	92					
1235	11			132		SPT7	50/50+	100+					
	12												
	13			109		SPT8	27/52/50+	100+					
			(12.8) BOULDER from 12.80m to 13.41m. Cuttings are pink, hard with sharp edges.										
	14			59		SPT9	37/50+	100+					
												Water return	
			SANDY SILT (13.41 to 25.6) Sandy SILT, some gravel, subangular to subrounded, fine to coarse grained, low to medium plasticity, brown, stiff to very stiff, massive, moist to dry. Gravel fragments are mostly pink & greenish-grey andesite.										
1230	15			66		SPT10	50+	100+					
	16												
	17			86		SPT11	73/65/50+	100+					
			(14.33) BOULDER from 14.33m to 14.63m.										
	18			72		SPT12	47/50+	100+					
	19												
1225	20			97		SPT13	37/50+	100+					
	21												
	22			83		SPT14	31/50+	100+					
	23			93		SPT15	34/50+	100+					
	24												
				113		SPT16	38/55/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed one vibrating wire piezometer at 26 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-01

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.1	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-01**	PAGE	**2 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**7 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**88.29 m**	Date Completed:	**14 Mar 12**
Coordinates:	**5,898,690 N , 376,021 E (UTM NAD 83)**	Elevation:	**1245 m**	Date Well Installed:	**14 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY SAND** (25.6 to 28.9) Silty SAND, some gravel, subangular to subrounded, fine to coarse, medium plasticity, brown, compact to dense, massive, wet.	89		SPT17	33/50+/50+	100+			Water return (until approximately 33.5m)	
	27											
	28			105		SPT18	19/34/65	99				
	29		**SANDY SILT** (28.9 to 57.3) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, green to brown, firm to stiff, massive, trace quartz, moist.	82		SPT19	35/60/51	100+			4-inch diameter odex drilling	
1215	30			101		SPT20	40/50+	100+			Start Drilling with Water	
	31											
	32			144		SPT21	50/50+	100+				
	33											
	34			98		SPT22	40/61/67	100+				
1210	35			157		SPT23	67	100+				
	36											
	37			144		SPT24	50+	100+				
	38			125		SPT25	79	100+				
	39			92		SPT26	50+	100+				
1205	40											
	41			148		SPT27	50+	100+				
	42			98		SPT28	50+	100+				
	43											
	44											
1200	45			136		SPT29	43/50+/50+	100+				
	46											
	47											
	48			107		SPT30	22/42/67	100+				
	49											

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed one vibrating wire piezometer at 26 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-01

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.1	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-01**	PAGE	**3 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**7 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**88.29 m**	Date Completed:	**14 Mar 12**
Coordinates:	**5,898,690 N , 376,021 E (UTM NAD 83)**	Elevation:	**1245 m**	Date Well Installed:	**14 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	51		**SANDY SILT** (28.9 to 57.3) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, green to brown, firm to stiff, massive, trace quartz, moist.	116		SPT31	50/40/61	100+				
	52											
	53											
	54			113		SPT32	33/50+	100+				
1190	55											
	56											
	57										Stop Drilling with Water	
	58		**COMPLETELY WEATHERED ANDESITE** (57.3 to 61.26) Gravelly SAND, some silt, subangular to subrounded, fine to coarse, medium plasticity, yellowish brown, very dense, massive, signs of oxidation, moist.	92		SPT33	25/50+	100+				
	59											
1185	60											
	61											
	62		**NO RECOVERY** (61.26 to 65.38) No Recovery (Casing Advanced)								Weathered Bedrock	
	63											
	64											
1180	65											
	66		**HIGHLY WEATHERED ANDESITE** (65.38 to 71.55) ANDESITE, fine grained, porphyritic, dark reddish brown to reddish grey, weak to medium strong, no structure, highly weathered, joints very closely spaced, iron oxide staining (<2mm) and trace brown gravelly clay infill.	103				***13***	33	R2	Start Coring (HQ3)	
	67			93				***0***	31	R2		
	68			93				***50***	42	R2		
	69			94				***24***	34	R2		
1175	70										Fault	
	71			64				***13***	33	R2		
	72			88				***32***	41	R2	Start Drilling with Polymer	
	73											
	74			98				***74***	47	R2		

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed one vibrating wire piezometer at 26 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-01

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.1	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-01**	PAGE	**4 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**7 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**88.29 m**	Date Completed:	**14 Mar 12**
Coordinates:	**5,898,690 N , 376,021 E (UTM NAD 83)**	Elevation:	**1245 m**	Date Well Installed:	**14 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	76		**MODERATELY WEATHERED ANDESITE** (71.55 to 88.29) ANDESITE, fine grained, porphyritic, dark grey to reddish brown, weak to strong, no structure, slightly to moderately weathered, joints close to partly open, dipping 60° to 70° with planar surfaces, iron oxide staining and soft calcite infill (<2mm), random calcite veins and granular calcite inclusions.	99				***99***	58	R2		Competent Bedrock	
	77			93				***79***	52	R2			
	78			102				***83***	54	R2			
	79												
1165	80			100				***93***	62	R2			
	81			100				***82***	62	R2			
	82												
	83			87				***87***	59	R2			
	84			86				***34***	45	R2			
1160	85												
	86			86				***21***	40	R2			
	87			100				***89***	63	R2			
	88												
	89		End of Drillhole: 88.29 m									Stop Drilling with Polymer	
1155	90												
	91												
	92												
	93												
	94												
1150	95												
	96												
	97												
	98												
	99												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed one vibrating wire piezometer at 26 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-01

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.1	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	PAGE	**1 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**14 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Completed:	**18 Mar 12**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Date Well Installed:	**18 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
			GRAVELLY SAND (0 to 12.19) Gravelly SAND, some silt, subangular to rounded, fine to coarse, non plastic to low plasticity, yellowish brown to grey, loose to compact, massive, moist to dry.	49		SPT1	7/14/13	27				5-inch diameter odex drilling	
				87		SPT2	25/44/43	87					
1213	5			69		SPT3	56/50+	100+					
				79		SPT4	42/50+	100+					
				92		SPT5	45/67	67					
				89		SPT6	30/50+	100+					
1208	10			125		SPT7	50+	100+					
			SANDY SILT (12.19 to 34.44) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, yellowish brown, stiff to very stiff, massive, moist to dry.	95		SPT8	16/25/50	75					
				56		SPT9	36/50+	100+					
1203	15			107		SPT10	17/24/33	57					
				102		SPT11	61/50+	100+					
1198	20			108		SPT12	42/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, 36 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.2	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	PAGE	**2 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**14 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Completed:	**18 Mar 12**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Date Well Installed:	**18 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY SILT** (12.19 to 34.44) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, yellowish brown, stiff to very stiff, massive, moist to dry.	154		SPT13	41/50+	100+				4-inch diameter odex drilling	
	27												
	28												
	29			148		SPT14	32/50+	100+					
1188	30												
	31												
	32			164		SPT15	36/50+	100+					
	33												
	34												
1183	35		**SILTY SAND AND GRAVEL** (34.44 to 43.58) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low plasticity, yellowish brown to greenish grey, compact, massive, wet to moist.	66		SPT16	50+	100+				Water return (until approximately 46.6m) lots of water >5 gpm	
	36												
	37												
	38			75		SPT17	44/50+	100+					
	39												
1178	40												
	41			89		SPT18	32/67	67					
	42												
	43												
	44		**SAND AND SILT** (43.58 to 46.63) Gravelly SAND and SILT, angular to rounded, fine to coarse, low plasticity, whitish grey, dense/firm, massive, white clayey decomposed rock inclusion, moist.	89		SPT19	28/32/45	77					
1173	45												
	46												
	47		**GRAVEL AND SILT** (46.63 to 52.73) GRAVEL and SILT, trace sand, subangular to angular, fine to coarse, low plasticity, yellowish brown, compact, massive, oxidized, moist to wet.	90		SPT20	28/38/50+	88				Water return lots of water >2 gpm Start Drilling with Water	
	48												
	49			79		SPT21	60/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, 36 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.2	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	PAGE	**3 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**14 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Completed:	**18 Mar 12**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Date Well Installed:	**18 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	51		**GRAVEL AND SILT** (46.63 to 52.73) GRAVEL and SILT, trace sand, subangular to angular, fine to coarse, low plasticity, yellowish brown, compact, massive, oxidized, moist to wet.										
	52												
	53		**GRAVELLY SILT** (52.73 to 71.01) Gravelly SILT, trace sand, angular to rounded, fine to coarse, low to medium plasticity, light whitish/yellowish grey to yellowish brown/orange, stiff to very stiff, massive, oxidized, moist.	100		SPT22	26/44/54	98					
	54												
1163	55												
	56			129		SPT23	21/44/50+	94					
	57												
	58												
	59			66		SPT24	50+/50+	100+					
1158	60												
	61												
	62			95		SPT25	27/50+	100+					
	63												
	64												
1153	65			79		SPT26	50+	100+					
	66												
	67												
	68			89		SPT27	17/17/23	40					
	69												
1148	70												
	71		**SANDY SILT** (71.01 to 83.21) Sandy SILT, some gravel, trace clay, subangular to subrounded, fine to coarse, low to medium plasticity, rusty brown to orangey brown, stiff to hard, massive, signs of oxidation, moist to saturated.	142		SPT28	50+	100+					
	72												
	73												
	74			110		SPT29	50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, 36 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.2	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	PAGE	**4 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**14 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Completed:	**18 Mar 12**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Date Well Installed:	**18 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	76		**SANDY SILT** (71.01 to 83.21) Sandy SILT, some gravel, trace clay, subangular to subrounded, fine to coarse, low to medium plasticity, rusty brown to orangey brown, stiff to hard, massive, signs of oxidation, moist to saturated.										
	77			142		SPT30	50+	100+					
	78												
	79												
1138	80			66		SPT31	50+	100+					
	81												
	82												
	83												
			COMPLETELY WEATHERED BEDROCK (83.21 to 89.31) Silty GRAVEL and SAND, subangular to subrounded, fine to coarse, low plasticity, dark rusty colour, compact to very dense, possible decomposed rock, slightly moist.	52		SPT32	50+	100+					
1133	85												
	86												
	87												Weathered Bedrock
	88												
	89												
			NO RECOVERY (89.31 to 89.97) No Recovery (Advancing of Casing)	62				***0***	37	R5			Start Coring (HQ3)
1128	90		**HIGHLY WEATHERED ANDESITE** (89.97 to 98.9) ANDESITE, fine grained, porphyritic, dark grey/black to reddish grey, weak to very strong, iron oxide staining (<2mm) and trace brown clay infill.										Stop Drilling with Water
	91			89				***36***	36	R0			Start Drilling with Polymer
	92			100				***10***	34	R0			
	93			104				***47***	55	R5			
	94												
1123	95			96				***26***	49	R4			
	96												
	97			100				***33***	46	R4			
	98			96				***22***	46	R4			
	99												
				98				***49***	50	R5			Competent

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, 36 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.2	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	PAGE	**5 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**14 Mar 12**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Completed:	**18 Mar 12**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Date Well Installed:	**18 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	101		**MODERATELY WEATHERED ANDESITE** (98.9 to 106.52) ANDESITE, fine-grained, porphyritic, dark grey to reddish brown, strong to very strong, moderately weathered, joint surfaces are slightly rough and planar, joints dip 0° - 80° in places and are partly open, iron oxide staining and calcite infill <2mm.	98				***58***	52	R3		Bedrock	
	102												
	103			99				***60***	56	R3			
	104												
1113	105			101				***73***	60	R3			
	106			100				***39***	45	R3			
	107		End of Drillhole: 106.52 m									Stop Drilling with Polymer	
	108												
1108	110												
	111												
	112												
	113												
	114												
1103	115												
	116												
	117												
	118												
	119												
1098	120												
	121												
	122												
	123												
	124												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.2	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-03**	PAGE	**1 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**18 Mar 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**74.37 m**	Date Completed:	**21 Mar 12**
Coordinates:	**5,899,320 N , 375,495 E (UTM NAD 83)**	Elevation:	**1272 m**	Date Well Installed:	**21 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND** (0 to 10.67) Silty SAND, some gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, compact, massive, moist. (Fluvial Deposit)									5 inch diameter odex drilling	
	2			61		SPT1	37/50+/50+	100+					
	3			82		SPT2	18/26/29	55				Water return	
1267	5			98		SPT3	15/23/28	51					
	6			85		SPT4	18/30/37	67					
	8			77		SPT5	10/17/43	60					
	9			105		SPT6	50+	100+					
1262	10												
	11		**SILT** (10.67 to 11.58) SILT, low to medium plasticity, brown, firm, moist. (Lacustrine deposit)	108		SPT7	16/37/20	57					
	12			83		SPT8	8/40/50+	100+				Water return	
	13		**SILTY SAND AND GRAVEL** (11.58 to 16.76) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low to medium plasticity, brown, loose to compact, massive, moist. (Fluvial Deposit)										
	14			80		SPT9	11/35/53	88					
1257	15			92		SPT10	6/9/16	25					
	17		**SILT** (16.76 to 18.29) SILT, trace gravel, rounded, fine to coarse, low to medium plasticity, brown/yellow, stiff, massive, dry. (Glacial Till)										
	18			74		SPT11	12/52/50+	100+					
	19		**GRAVELLY SILT** (18.29 to 27.43) Gravelly SILT, trace sand, cobbles and boulders, subangular to rounded, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist. (Glacial Till)										
1252	20												
	21			59		SPT12	12/51/50+	100+					
	24			102		SPT13	37/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-03

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.3	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-03**	PAGE	**2 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**18 Mar 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**74.37 m**	Date Completed:	**21 Mar 12**
Coordinates:	**5,899,320 N , 375,495 E (UTM NAD 83)**	Elevation:	**1272 m**	Date Well Installed:	**21 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26												
	27												
	28		**SILT** (27.43 to 33.53) SILT, some gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, hard, massive, friable, dry to moist. (Lacustrine Deposit)	134		SPT14	28/43	43				Starting Drilling with Water	▼
	29												
1242	30												
	31			118		SPT15	21/36/38	74				4 inch diameter odex drilling	
	32												
	33												
	34		**SANDY SILT AND GRAVEL** (33.53 to 42.21) Sandy SILT and GRAVEL, angular to subrounded, fine to coarse, low plasticity, dark brown with some orange and grey, firm to hard, massive, trace oxidation, friable, moist to dry. (Glacial Till)	72		SPT16	20/41/50+	100+					
1237	35												
	36			89		SPT17	31/50+	100+					
	37												
	38												
	39			59		SPT18	10/35/36	71					
1232	40											Stop Drilling with Water	
	41												
	42												
	43		**SILTY SAND AND GRAVEL** (42.21 to 52) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, moist to wet. (Fluvial Deposit)	79		SPT19	22/50/34	84					
	44												
1227	45			102		SPT20	14/23/48	71					
	46												
	47												
	48												
	49			85		SPT21	15/27/39	66					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-03

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.3	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-03**	PAGE	**3 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**18 Mar 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**74.37 m**	Date Completed:	**21 Mar 12**
Coordinates:	**5,899,320 N , 375,495 E (UTM NAD 83)**	Elevation:	**1272 m**	Date Well Installed:	**21 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal/ Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	51												
	52			92	☒	SPT22	21/41/45	86			●		
	53		**COMPLETELY WEATHERED BEDROCK** (52 to 53.34) SAND, some silt, trace gravel, subangular, fine to coarse, low plasticity, dark brown, compact, massive, moist. (Decomposed Bedrock)									Weathered Bedrock	
	54												
1217	55		**NO RECOVERY** (53.34 to 56.39) No Recovery (Advancing of Casing)										
	56												
	57		**HIGHLY WEATHERED ANDESITE** (56.39 to 60.66) ANDESITE, fine-grained, porphyritic, dark reddish brown to reddish grey, weak to moderately strong, highly weathered, joints dip at 30° - 60°, joints are open and closely spaced, iron oxide staining (<2mm) and trace brown sandy clay infill, some calcite grains, veins and inclusions.	119				*0*	28	R2	●	Start Coring (HQ3)	
	58			88				*0*	28	R2	●		
	59												
1212	60			83				*0*	28	R2	●		
	61		**MODERATELY WEATHERED ANDESITE** (60.66 to 74.37) ANDESITE, fine-grained, porphyritic, green grey, very strong, moderately weathered, joints closely spaced, slightly rough and planar surfaces, partly open, iron oxide staining, calcite infill and inclusions.	96				*41*	45	R2	●		
	62												
	63			98				*51*	47	R2	●		
	64												
				100				*16*	35	R2	●		
1207	65												
	66			100				*7*	29	R2	●		
	67											Competent Bedrock	
	68			97				*73*	59	R5	●		
	69												
				78				*27*	42	R5	●		
1202	70												
	71			102				*74*	57	R5	●		
	72												
				98				*98*	65	R5	●		
	73												
	74			102				*64*	63	R5	●		
			End of Drillhole: 74.37 m										

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-03

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.3** | REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-04**	PAGE	**1 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**91.59 m**	Date Completed:	**28 Mar 12**
Coordinates:	**5,896,470 N , 374,474 E (UTM NAD 83)**	Elevation:	**1331 m**	Date Well Installed:	**28 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SILT** (0 to 9.14) Gravelly SILT, subangular to subrounded, fine to coarse, gap graded, low to medium plasticity, brown, stiff, massive, friable, wet to moist. (Fluvial Deposit)									5 inch diameter odex drilling	
	2			89		SPT1	24/38/35	73					
	3			75		SPT2	13/35/50	85					
	4												
1326	5			136		SPT3	36/50+	100+					
	6			121		SPT4	28/50+	100+					
	7												
	8			121		SPT5	31/51/50+	51					
	9			138		SPT6	50+	100+					
1321	10		**GRAVEL AND SAND** (9.14 to 16.76) GRAVEL and SAND, some silt, angular to subrounded, fine to coarse, low plasticity, brown, dense to very dense, massive, moist. (Fluvial Deposit)										
	11			72		SPT7	15/50+	100+					
	12			89		SPT8	50+	100+					
	13												
	14			118		SPT9	44/50+	100+					
1316	15			75		SPT10	31/50+	100+				heaving sand	
	16												
	17		**SILT** (16.76 to 21.38) SILT, some sand, trace gravel, subrounded to subangular, fine, gap graded, low to medium plasticity, brown, very stiff to hard, massive, moist. (Lacustrine Deposit)										
	18												
	19			138		SPT11	48/50+	100+					
1311	20												
	21												
	22		**SANDY SILT** (21.38 to 27.43) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown to orange-brown, very stiff, massive, saturated to dry. (Glacial Till)	115		SPT12	50+	100+					
	23												
	24			114		SPT13	44/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-04

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.4	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-04**	PAGE	**2 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**91.59 m**	Date Completed:	**28 Mar 12**
Coordinates:	**5,896,470 N , 374,474 E (UTM NAD 83)**	Elevation:	**1331 m**	Date Well Installed:	**28 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	26												
	27												
	28		**SILTY SAND** (27.43 to 30.48) Silty SAND, subangular to subrounded, fine to coarse, non plastic, cohesive, brown, dense to very dense, laminated with some silt layers, dry to moist. (Glacial-Fluvial Deposit)	80		SPT14	8/33/54	87			●		
1301	29												
	30												
	31		**SILT AND SAND** (30.48 to 35.97) SILT and SAND, trace gravel, rounded to subrounded, fine to medium, uniformly graded, non plastic, light brown to brown, laminated, compact to dense, stiff to very stiff silt, some lamination, wet. (Glacial-Fluvial Deposit)	110		SPT15	8/24/38	62			●		
	32												
	33												
	34			80		SPT16	15/39/39	78			●		
1296	35												
	36		**SAND AND GRAVEL** (35.97 to 54.25) SAND and GRAVEL, some silt, angular to subangular, fine to coarse, non plastic to low plasticity, brown (gravel fragments are multicoloured), very dense, massive, moist to wet. (Glacial Till)	79		SPT17	30/33/50+	33			●	Start Drilling with Water	
	37												
	38												
	39			79		SPT18	50+	100+			●		
1291	40											5 inch diameter odex drilling	
	41												
	42			79		SPT19	50+	100+			●		
	43												
	44												
1286	45			105		SPT20	49/50+	100+			●		
	46												
	47												
	48			79		SPT21	50+	100+			●		
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-04

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**

APPENDIX **B1.4** | REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-04**	PAGE	**3 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**91.59 m**	Date Completed:	**28 Mar 12**
Coordinates:	**5,896,470 N , 374,474 E (UTM NAD 83)**	Elevation:	**1331 m**	Date Well Installed:	**28 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	51		**SAND AND GRAVEL** (35.97 to 54.25) SAND and GRAVEL, some silt, angular to subangular, fine to coarse, non plastic to low plasticity, brown (gravel fragments are multicoloured), very dense, massive, moist to wet. (Glacial Till)	118		SPT22	50+	100+					
	52												
	53												
	54												
1276	55		**SILT** (54.25 to 71.01) SILT, some clay and sand, trace gravel, angular to subrounded, fine, non plastic to medium plasticity, brown with multicoloured gravel fragments, very stiff to hard, massive, moist to wet. (Glacial Till)	150		SPT23	22/43/50+	43					
	56												
	57			147		SPT24	49/50+	100+					
	58												
	59												
1271	60			134		SPT25	50/50+	100+					
	61												
	62												
	63			359		SPT26	20/50+	100+					
	64												
1266	65												
	66												
	67			113		SPT27	24/17/27	44				Stop Drilling with Water	
	68												
	69												
1261	70			172		SPT28	19/50+	100+				Water return	
	71		**SAND AND GRAVEL** (71.01 to 74.06) SAND and GRAVEL, some silt, angular to subangular, fine to medium grained, non plastic, very dense, brown, massive, wet. (Glacial-Fluvial Deposit)										
	72												
	73			148		SPT29	50+	100+				Zone of Lost Circulation (for 0.3m) Water return Weathered	
	74							*42*	56	R6			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-04

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.4	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-04**	PAGE	**4 of 4**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**91.59 m**	Date Completed:	**28 Mar 12**
Coordinates:	**5,896,470 N , 374,474 E (UTM NAD 83)**	Elevation:	**1331 m**	Date Well Installed:	**28 Mar 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	76		**SLIGHTLY WEATHERED ANDESITE** (74.06 to 91.59) ANDESITE, fine-grained, porphyritic, purple, very strong, slightly weathered, joints closely spaced, slightly rough and planar surfaces, joints partly open, iron oxide staining, trace small (<5mm dia.) calcite inclusions and calcite veins.	100 92				*43*	56	R6	Bedrock Start Coring (HQ3) Competent Bedrock	
	77			104				*73*	61	R5		
	78											
	79			102				*68*	54	R5		
1251	80		**RUBBLE ZONE** (80.01) 80.01 to 80.92 m : Heavily fractured rubblized with reddish clay infill.	104				*26*	40	R4		
	81											
	82			98				*49*	52	R6		
	83			101				*75*	57	R5		
	84											
1246	85			100 90				*100* *13*	67 48	R5 R5		
	86			98				*51*	55	R5		
	87											
	88			102				*58*	57	R5		
	89			104				*93*	73	R5		
1241	90											
	91			99				*76*	68	R5		
	92		End of Drillhole: 91.59 m									
	93											
	94											
1236	95											
	96											
	97											
	98											
	99											

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-04

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.4	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	PAGE	**1 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**28 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Completed:	**4 Feb 12**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Date Well Installed:	**4 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**NO RECOVERY** (0 to 1.37) No Recovery									5 inch diameter odex drilling	
	2		**GRAVELLY SILT** (1.37 to 2.9) Gravelly SILT, some sand, angular to rounded, fine to coarse, gap graded, low to medium plasticity, brown, firm, massive, moist (Fluvial Deposit)	59		SPT1	10/15/14	29					
	3			34		SPT2	7/8/8	16					
	4		**NO RECOVERY** (2.9 to 4.42) No recovery. Sloppy wet sand/silt/gravel.	56		SPT3	9/39/50+	39					
1358	5		**SAND AND GRAVEL** (4.42 to 21.3) SAND and GRAVEL, some silt, trace cobbles, angular to rounded, fine to coarse, non plastic to medium plasticity, yellowish brown to dark grey, loose to compact, massive, moist to wet. (Fluvial Deposit)	48		SPT4	9/51/50+	51					
	6			59		SPT5	8/22/29	51					
	7			112		SPT6	7/20/19	39					
	8			62		SPT7	8/13/21	34					
1353	9			82		SPT8	7/21/30	51				Water return	
	10			38		SPT9	9/15/10	25					
	11			43		SPT10	10/17/26	43					
	12			89		SPT11	17/21/24	45					
	13			75		SPT12	5/9/31	40				Heaving Sands - No SPT	
1348	14												
	15												
	16												
	17												
	18												
	19												
1343	20												
	21												
	22		**GRAVELLY SAND** (21.3 to 32.92) Gravelly SAND, trace cobbles and silt, angular to subrounded, fine to coarse, non plastic, brown, massive, moist. Note: Heaving sands at 21.30 m prevented SPT. (Fluvial Deposit)										
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.5	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	PAGE	**2 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**28 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Completed:	**4 Feb 12**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Date Well Installed:	**4 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	26		**GRAVELLY SAND** (21.3 to 32.92) Gravelly SAND, trace cobbles and silt, angular to subrounded, fine to coarse, non plastic, brown, massive, moist. Note: Heaving sands at 21.30 m prevented SPT. (Fluvial Deposit)	36		SPT13	8/50/42	92				Artesian Zone (approximately 3 gal / min)	
	27												
	28												
	29			102		SPT14	24/50+	100+				4 inch diameter odex drilling	
1333	30												
	31												
	32												
	33		**SILT AND SAND** (32.92 to 40.54) Gravelly SILT and SAND, angular to subrounded, fine to coarse, non plastic to medium plasticity, brown, stiff to hard, compact to very dense, massive, moist. (Glacial Till)	79		SPT15	37/61/50+	61					
	34												
1328	35												
	36			90		SPT16	29/67/50+	67				Start Drilling with Water	
	37												
	38												
	39			100		SPT17	26/52/51	100+					
1323	40												
	41		**SILTY SAND** (40.54 to 51.21) Silty SAND, some gravel and clay, angular to rounded, fine to coarse, low to medium plasticity, brown, dense to very dense, massive, moist to wet. (Lacustrine Deposit)										
	42			127		SPT18	16/27/36	63				Swelling Soil	
	43												
	44												
1318	45			122		SPT19	6/13/28	41				Swelling Soil	
	46												
	47												
	48			83		SPT20	45/50+	100+					
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.5	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	PAGE	**3 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**28 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Completed:	**4 Feb 12**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Date Well Installed:	**4 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	51												
	52		**SANDY SILT** (51.21 to 63.39) Sandy SILT, some gravel, subangular to rounded, fine to coarse, non-plastic to low plasticity, brown with purple gravel fragments, stiff, massive, moist. (Glacial Till)	125		SPT21	48/50+	100+					
	53												
	54			105		SPT22	39/50+	100+					
1308	55												
	56												
	57			62		SPT23	23/39/63	100+					
	58												
	59												
1303	60			112		SPT24	17/30/36	66					
	61												
	62												
	63		**SILT AND CLAY** (63.39 to 66.4) SILT and CLAY, trace sand and gravel, angular to subangular, fine to coarse, medium to low plasticity, brown, firm to stiff, laminated, saturated. (Lacustrine Deposit)	112		SPT25	16/23/32	55					
	64												
1298	65												
	66												
	67		**SILT AND GRAVEL** (66.4 to 69.8) SILT and GRAVEL, some sand, angular to rounded, fine to coarse grained, non plastic to medium plasticity, brown with black and orange gravel fragments, stiff to hard, dense to very dense, massive, friable, moist to saturated. (Glacio-Fluvial Deposit)	46		SPT26	50+	100+					
	68												
	69			71		SPT27	43/50+	100+				4 inch diameter tri-cone drilling Start Drilling using Polymer Start Coring (HQ3)	
1293	70		**COMPLETELY WEATHERED BEDROCK** (69.8 to 78.94) Clayey Gravelly SILT, trace sand, angular, fine to coarse, medium plasticity, orange with orange and black gravel fragments, very stiff to hard, massive, saturated. (Decomposed/Completely Weathered Bedrock)										
	71												
	72												
	73			157		SPT28	50+	100+					
	74												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **B1.5**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	PAGE	**4 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**28 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Completed:	**4 Feb 12**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Date Well Installed:	**4 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (69.8 to 78.94) Clayey Gravelly SILT, trace sand, angular, fine to coarse, medium plasticity, orange with orange and black gravel fragments, very stiff to hard, massive, saturated. (Decomposed/Completely Weathered Bedrock)	134		SPT29	39/50+	100+				
	77											
	78											
	79		**MODERATELY WEATHERED ANDESITE** (78.94 to 97.23) ANDESITE, fine-grained, porphyritic, dark grey to reddish brown, medium strong to strong, moderately weathered, joints closely spaced, joints dip at 10°-45° and ~ 30°-70° are partly open to wide with a rubble zone at 80.47 to 81.00 m, joint surfaces slightly rough and planar to undulating, iron oxide staining, low plasticity clay and calcite infill >5mm.	67				*28*	42	R3	Weathered Bedrock	
1283	80											
	81			95				*0*	29	R0		
	82											
	83			100				*55*	41	R2		
	84			97				*66*	43	R2		
1278	85											
	86			98				*94*	53	R2		
	87			100				*65*	49	R2		
	88											
	89			95				*70*	52	R2		
1273	90											
	91			95				*72*	49	R2		
	92			100				*55*	44	R2		
	93											
	94			99				*85*	59	R2		
1268	95			100				*79*	57	R2		
	96											
	97			102				*59*	49	R4		
	98			100				*84*	60	R5		
	99			101				*45*	52	R5		

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.5	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	PAGE	**5 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**28 Mar 12**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Completed:	**4 Feb 12**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Date Well Installed:	**4 Feb 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
			SLIGHTLY WEATHERED ANDESITE (97.23 to 120.09) ANDESITE, fine-grained, porphyritic, dark grey to reddish brown, strong to very strong, slightly weathered, joints are close to very closely spaced, dipping ~30°-70° and are partly open to tight with slightly rough and planar surfaces, iron oxide staining and calcite infill <2mm.										
	101			103				***50***	57	R5			
	102			98				***64***	51	R4			
	103												
	104			102				***55***	54	R5			
1258	105			102				***85***	66	R5			
	106												
	107			98				***76***	66	R5		Competent Bedrock	
	108												
	109			96				***96***	70	R3			
1253	110			101				***79***	62	R3			
	111												
	112			101				***81***	59	R3			
	113			100				***64***	56	R3			
	114												
1248	115			96				***74***	63	R3			
	116			101				***43***	56	R2			
	117												
	118			102				***83***	68	R3			
	119			100				***100***	89	R3			
1243	120		End of Drillhole: 120.09 m										
	121												
	122												
	123												
	124												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.5	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-06**	PAGE	**1 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Feb 12**
Location:	**Site C Embankment**	Total Depth:	**67.05 m**	Date Completed:	**4 Apr 12**
Coordinates:	**5,896,100 N , 374,569 E (UTM NAD 83)**	Elevation:	**1281 m**	Date Well Installed:	**4 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	1		**SAND AND GRAVEL** (0 to 4.72) SAND and GRAVEL, subrounded to subangular, fine to coarse, well graded, non plastic, grey and brown, loose to compact, massive, dry to moist. (Fluvial Deposit)								5 inch odex drilling	
	2			33		SPT1	9/10/10	20				
	3			66		SPT2	8/15/31	46			Water return	
	4											
1276	5		**SILTY SAND** (4.72 to 7.77) Silty SAND, some clay, fine, low plasticity, brown, compact, varved, moist. (Lacustrine Deposit)	72		SPT3	8/24/26	50			Start Drilling with Water	
	6											
	7			102		SPT4	9/16/26	42				
	8		**SILTY SAND AND GRAVEL** (7.77 to 24.54) Silty SAND and GRAVEL, some clay, angular to subrounded, fine to coarse, non plastic to low plasticity, brown to dark brown with multicoloured gravel fragments, compact to dense, varved, moist to saturated. (Glacial Till)	70		SPT5	22/46/50+	46				
	9											
1271	10			62		SPT6	24/50+	100+				
	11			89		SPT7	46/50+	100+				
	12											
	13			57		SPT8	34/47/67	100+				
	14			98		SPT9	19/31/50+	31				
1266	15											
	16			89		SPT10	32/44/46	90				
	17											
	18											
	19			113		SPT11	14/30/39	69				
1261	20											
	21											
	22			79		SPT12	35/37/44	81				
	23											
	24											
				113		SPT13	12/24/31	55				

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-06

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.6	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-06**	PAGE	**2 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Feb 12**
Location:	**Site C Embankment**	Total Depth:	**67.05 m**	Date Completed:	**4 Apr 12**
Coordinates:	**5,896,100 N , 374,569 E (UTM NAD 83)**	Elevation:	**1281 m**	Date Well Installed:	**4 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (24.54 to 28.19) SILT, some clay, trace sand, fine, uniformly graded, low to medium plasticity, brown and orange, stiff to very stiff, stratified, fissured, friable, dry. (Lacustrine Deposit)										
	27												
	28			115		SPT14	12/25/36	61					
	29		**SILTY SAND** (28.19 to 35.96) Silty SAND, some clay, fine to coarse, non plastic, brown to orange-grey, very dense, massive, moist. (Lacustrine Deposit)										
1251	30												
	31			157		SPT15	50+	100+					
	32												
	33			140		SPT16	38/50+	100+					
	34												
1246	35												
	36		**COMPLETELY WEATHERED BEDROCK** (35.96 to 42.06) Gravelly SILT, angular, fine, low plasticity, dark brown with white/yellow gravel fragments, very stiff, massive, elongated calcite crystals, moist. (Decomposed/Completely Weathered Bedrock)	112		SPT17	61	100+				
	37												
	38												
	39			72		SPT18	50+	100+					
1241	40												
	41												
	42			79		SPT19	50+	100+					
	43		**NO RECOVERY** (42.06 to 42.67) No Recovery (Advancing of Casing)									Start Coring (HQ3) Weathered Bedrock	
	44		**HIGHLY WEATHERED ANDESITE** (42.67 to 53.11) ANDESITE, fine-grained, porphyritic, burgundy brown, medium strong to strong, highly weathered with numerous rubble zones, cross cutting joints, close to very closely spaced, dipping 30°-90° and are partly open with slightly rough and planar surfaces, surface staining of joints, iron oxide staining (<2mm) and trace brown clay infill.	97				***0***	37	R2			
1236	45			98				***69***	48	R2			
	46			93				***14***	39	R2			
	47												
	48			86				***0***	36	R2			
	49			87				***7***	36	R2			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-06

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.6	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-06**	PAGE	**3 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Feb 12**
Location:	**Site C Embankment**	Total Depth:	**67.05 m**	Date Completed:	**4 Apr 12**
Coordinates:	**5,896,100 N , 374,569 E (UTM NAD 83)**	Elevation:	**1281 m**	Date Well Installed:	**4 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	51			99				*0*	42	R2			
	52			93				*15*	45	R5		Competent Bedrock	
	53		**MODERATELY WEATHERED ANDESITE** (53.11 to 67.05) ANDESITE, fine-grained, porphyritic, dark grey to reddish brown, strong to very strong, moderately weathered and highly fractured with numerous broken and rubble zones, joints close slightly rough and planar surfaces and are partly open, iron oxide staining and calcite infill <2mm.										
	54			101				*80*	59	R5			
1226	55			96				*62*	61	R5			
	56												
	57			100				*81*	61	R5			
	58												
	59			102				*51*	56	R5		4 inch odex drilling	
1221	60			101				*61*	57	R5			
	61												
	62			102				*95*	69	R5			
	63			97				*81*	67	R5			
	64												
1216	65			93				*30*	46	R5			
	66			92				*14*	44	R4			
	67		End of Drillhole: 67.05 m										
	68												
	69												
1211	70												
	71												
	72												
	73												
	74												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-06

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.6	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-07**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Jul 12**
Location:	**Plant Site, Option 1**	Total Depth:	**36.42 m**	Date Completed:	**4 Aug 12**
Coordinates:	**5,894,940 N , 375,495 E (UTM NAD 83)**	Elevation:	**1444 m**	Date Well Installed:	**4 Aug 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES
	1	**SAND AND GRAVEL** (0 to 5.79) Silty SAND and GRAVEL, subangular to rounded, fine to coarse, brown to light grey with multicoloured gravel fragments, loose to compact, stratified, slightly friable, dry to wet. (Fluvial Deposit)	75		SPT1	16/16/18	34			5 inch odex drilling
	2									
	3		85		SPT2	10/19/16	35			
	4		46		SPT3	4/15/25	40			Water return
1439	5									
	6	**NO RECOVERY** (5.79 to 8.53) No Recovery (Advancing of Casing).	151		SPT4	50+	100+			Dry Weathered Bedrock
	7									
	8									
	9	**MODERATELY WEATHERED ANDESITE** (8.53 to 19.66) ANDESITE, fine-grained, porphyritic, reddish grey, medium strong to strong, moderately weathered, close to very close joints are open to partly open and dipping at ~30°-70°, joint surfaces are rough to slightly rough and planar to undulating, iron oxide staining, gravel infill.	46				*0*	36	R4	Start Coring (HQ3)
1434	10		98				*35*	41	R4	
	11		100				*42*	42	R4	
	12									
	13		100				*87*	58	R4	
	14		100				*87*	59	R4	
1429	15									
	16		100				*68*	54	R4	
	17		100				*83*	57	R4	
	18									
	19		98				*74*	52	R4	
1424	20	**SLIGHTLY WEATHERED ANDESITE** (19.66 to 36.42) ANDESITE, fine-grained, porphyritic, greenish grey to burgundy, medium strong to strong, slightly weathered, very close to close joints are open to partly open and dip at ~45°-60°, joint surfaces are slightly rough and plan to undulating, iron oxide staining, gravelly infill, random calcite veins and grains.	100				*63*	53	R4	
	21									
	22		104				*93*	63	R4	Competent Bedrock
	23		96				*81*	56	R4	
	24									

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

WELL DETAILS

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-07

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.7	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-07**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Jul 12**
Location:	**Plant Site, Option 1**	Total Depth:	**36.42 m**	Date Completed:	**4 Aug 12**
Coordinates:	**5,894,940 N , 375,495 E (UTM NAD 83)**	Elevation:	**1444 m**	Date Well Installed:	**4 Aug 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	26		**SLIGHTLY WEATHERED ANDESITE** (19.66 to 36.42) ANDESITE, fine-grained, porphyritic, greenish grey to burgundy, medium strong to strong, slightly weathered, very close to close joints are open to partly open and dip at ~45°-60°, joint surfaces are slightly rough and plan to undulating, iron oxide staining, gravelly infill, random calcite veins and grains.	97				***70***	56	R4		
	27			99				***54***	49	R4		
	28			98				***73***	58	R4		
	29			100				***94***	64	R4		
1414	30											
	31			110				***73***	59	R5		
	32			96				***94***	69	R5		
	33											
	34			103				***92***	64	R5		
1409	35											
	36			100				***93***	65	R5		
	37		End of Drillhole: 36.42 m									
	38											
	39											
1404	40											
	41											
	42											
	43											
	44											
1399	45											
	46											
	47											
	48											
	49											

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-07

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.7	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-08**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Sep 12**
Location:	**TELUS Tower / Primary Crusher**	Total Depth:	**30.36 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,894,150 N , 375,620 E (UTM NAD 83)**	Elevation:	**1507 m**	Date Well Installed:	**4 Oct 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES
	1		**SAND AND GRAVEL** (0 to 2.59) SAND and GRAVEL, subrounded, fine to coarse, non plastic, brown, compact, damp. (Fluvial Deposit)								5 inch odex drilling
	2										Weathered Bedrock
	3		**SLIGHTLY WEATHERED ANDESITE** (2.59 to 30.36)	95				***56***	62	R4	Start Coring (HQ3)
	4		ANDESITE, fine-grained, porphyritic, reddish grey, moderately strong, slightly weathered to fresh, close to very close joints dipping at ~20°-80° and are partly open to wide, joint surfaces are smooth to slightly rough and planar, iron oxide staining, calcite veining.	100				***100***	78	R4	
1502	5			102				***96***	70	R4	
	6			100				***79***	66	R4	
	7			102				***82***	65	R4	
	8			100				***89***	63	R4	
	9			100				***80***	61	R4	
1497	10			100				***100***	70	R4	
	11			98				***70***	61	R4	
	12			100				***58***	44	R3	
	13			100				***12***	37	R2	
	14			100				***89***	65	R4	Competent Bedrock
1492	15			98				***74***	63	R4	
	16			100				***89***	66	R4	
	17			101				***100***	69	R4	
	18										
	19										
1487	20										
	21										
	22										
	23										
	24										

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

WELL DETAILS

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. The groundwater was approximately 5.7 m below grade on April 16, 2012 (6 days after completion)

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-08

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **B1.8**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-08**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**4 Sep 12**
Location:	**TELUS Tower / Primary Crusher**	Total Depth:	**30.36 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,894,150 N , 375,620 E (UTM NAD 83)**	Elevation:	**1507 m**	Date Well Installed:	**4 Oct 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SLIGHTLY WEATHERED ANDESITE** (2.59 to 30.36) ANDESITE, fine-grained, porphyritic, reddish grey, moderately strong, slightly weathered to fresh, close to very close joints dipping at ~20°-80° and are partly open to wide, joint surfaces are smooth to slightly rough and planar, iron oxide staining, calcite veining.	102				***95***	73	R4			
	27			100				***100***	67	R4			
	28			100				***100***	66	R4			
	29			96				***81***	63	R4			
1477	30												
	31		End of Drillhole: 30.36 m										
	32												
	33												
	34												
1472	35												
	36												
	37												
	38												
	39												
1467	40												
	41												
	42												
	43												
	44												
1462	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. The groundwater was approximately 5.7 m below grade on April 16, 2012 (6 days after completion)

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-08

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **B1.8**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	PAGE	**1 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**16 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Completed:	**23 Apr 12**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	**23 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
			SILTY SAND AND GRAVEL (0 to 10.36) Silty SAND and GRAVEL, trace clay, angular to subrounded, fine to coarse, non plastic to low plasticity, brown, compact, massive, saturated to dry. (Fluvial Deposit)	87		SPT1	33/51/43	94				5 inch diameter odex drilling	
				51		SPT2	23/49/50	99					
				72		SPT3	24/50+	100+					
1234				92		SPT4	65+	100+					
				127		SPT5	9/11/19	30					
				91		SPT6	48/50+	100+					
1229			**SILT AND SAND** (10.36 to 13.41) SILT and SAND, some gravel, trace clay, subrounded to subangular, fine to coarse, medium plasticity, grey, loose to dense, soft to hard, massive, friable, moist to dry. (Glacio-fluvial Deposit)	100		SPT7	48/50+	100+				Start Drilling with Water	
				138		SPT8	26/50+	100+					
			GRAVELLY SILT AND SAND (13.41 to 40.54) Gravelly SILT and SAND, subangular to subrounded, fine to coarse, non plastic to medium plasticity, grey and brown with multicoloured gravel fragments, very stiff to hard, dense to very dense, massive, friable in places, moist to saturated. (Glacial TIII)	125		SPT9	25/51/48	99					
1224				197		SPT10	51/50+	100+					
				87		SPT11	29/50+	100+				Loose clean gravel, air lost downhole (until 17.98m)	
1219				109		SPT12	26/50+	100+					
				177		SPT13	50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.9	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	PAGE	**2 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**16 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Completed:	**23 Apr 12**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	**23 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	26		**GRAVELLY SILT AND SAND** (13.41 to 40.54) Gravelly SILT and SAND, subangular to subrounded, fine to coarse, non plastic to medium plasticity, grey and brown with multicoloured gravel fragments, very stiff to hard, dense to very dense, massive, friable in places, moist to saturated. (Glacial TIII)										
	27			157		SPT14	50+	100+					
	28												
	29												
1209	30			150		SPT15	60+	100+					
	31												
	32												
	33			138		SPT16	75/50+	100+					
	34												
1204	35												
	36												
	37			93		SPT17	15/38/50+	88					
	38												
	39												
1199	40			61		SPT18	17/43/39	82					
	41		**SAND** (40.54 to 45.11) SAND, trace gravel and silt, subangular, fine to coarse, uniformly graded, non plastic to low plasticity, grey, compact, massive, moist. (Glacio-fluvial Deposit)										
	42			59		SPT19	7/31/13	44				Heaving sands	
	43												
	44												
1194	45		**SILTY CLAY AND SAND** (45.11 to 49.68) Silty CLAY and SAND, fine grained, low to medium plasticity, grey/brown, dense, stiff to hard, varved, friable, moist to dry. (Lacustrine Deposit)	104		SPT20	6/24/50+	74					
	46												
	47												
	48			131		SPT21	11/34/58	92					
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.9	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	PAGE	**3 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**16 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Completed:	**23 Apr 12**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	**23 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	51		**SAND AND GRAVEL** (49.68 to 57.3) SAND and GRAVEL, some silt, subangular to subrounded, fine to coarse, non plastic to medium plasticity, brown and grey with multicoloured gravel fragments, very dense, massive, moist. (Glacio-fluvial Deposit)	79		SPT22	25/74	74					
	52												
	53												
	54			91		SPT23	70/50+	100+				Water return - approximately 1L/s	
1184	55												
	56												
	57												
	58		**SAND AND GRAVEL** (57.3 to 60.35) SAND and GRAVEL, some clay and silt, subangular to subrounded, fine to coarse, low plasticity, grey white, compact, moist. (Volcanic Ash)	74		SPT24	72/50+	100+					
	59												
1179	60												
	61		**COMPLETELY WEATHERED BEDROCK** (60.35 to 81.07) Gravelly SAND and SILT, angular to subrounded, fine to coarse, non plastic to medium plasticity, orange-brown to white-grey, compact to dense, stiff to hard, stratified, moist. (Decomposed/Completely Weathered Bedrock)	84		SPT25	36/42/30	72					
	62												
	63												
	64			90		SPT26	90/50+	100+					
1174	65												
	66												
	67			118		SPT27	51/50+	100+					
	68												
	69												
	70			118		SPT28	100+	100+					
1169	71												
	72												
	73			112		SPT29	64/50+	100+					
	74												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.9	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	PAGE	**4 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**16 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Completed:	**23 Apr 12**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	**23 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (60.35 to 81.07) Gravelly SAND and SILT, angular to subrounded, fine to coarse, non plastic to medium plasticity, orange-brown to white-grey, compact to dense, stiff to hard, stratified, moist. (Decomposed/Completely Weathered Bedrock)	109		SPT30	41/50+	100+					
	77												
	78												
	79			164		SPT31	85+	100+					
1159	80												
	81		**NO RECOVERY** (81.07 to 83.21) No Recovery (Advancing of Casing)									Weathered Bedrock	
	82												
	83		**HIGHLY WEATHERED ANDESITE** (83.21 to 114.29) ANDESITE, fine-grained, porphyritic, red and purple, medium strong to very strong, highly weathered, joints are close, open and dipping at 20°-45°, slightly rough and undulating joint surfaces, white calcite infill, iron oxide staining, some sub-vertical calcite and gypsum veins, very fractured and vuggy in places.	21				*0*	34	R4		Start Coring (HQ3)
	84			31				*0*	35	R5			
1154	85			55				*0*	36	R5			
	86			18				*0*	28	R3			
	87			41				*0*	31	R4			
	88			96				*31*	47	R5			
	89			45				*7*	41	R5			
1149	90			96				*14*	38	R4			
	91			118				*26*	44	R5			
	92			8				*0*	28	R0			
	93			89				*0*	31	R4			
	94			17				*0*	28	R0			
				56				*0*	31	R4			
1144	95			55				*0*	34	R5			
	96			22				*0*	28	R0			
				64				*0*	31	R4			
	97			121				*29*	47	R5			
	98			104				*0*	45	R5			
	99			101				*0*	31	R4			
				46				*0*	31	R4			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.9	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	PAGE	**5 of 5**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**16 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Completed:	**23 Apr 12**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	**23 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES
			HIGHLY WEATHERED ANDESITE (83.21 to 114.29) ANDESITE, fine-grained, porphyritic, red and purple, medium strong to very strong, highly weathered, joints are close, open and dipping at 20°-45°, slightly rough and undulating joint surfaces, white calcite infill, iron oxide staining, some sub-vertical calcite and gypsum veins, very fractured and vuggy in places.								
	101			73				*0*	28	R3	
	102			68				*0*	28	R3	
	103			73				*31*	50	R5	
	104			55				*0*	39	R5	
				96				*0*	42	R5	
1134	105			114				*13*	44	R5	
	106			94				*43*	47	R4	
	107			97				*58*	45	R0	
	108			105				*93*	56	R4	
	109			98				*89*	55	R4	
1129	110			102				*86*	48	R2	
	111										
	112			102				*85*	54	R3	
	113										
	114			100				*92*	59	R3	
			SLIGHTLY WEATHERED ANDESITE (114.29 to 124.96) ANDESITE, fine-grained, porphyritic, greenish grey with burgundy, weak to strong, slightly weathered, close joints dipping at ~0°-45° are open with rough, planar surfaces, white calcite and gypsum infill, sub-vertical calcite/gypsum veins.								
1124	115			100				*83*	54	R2	
	116			100				*96*	63	R2	
	117										
	118			97				*79*	58	R2	
	119			98				*98*	59	R3	
1119	120										
	121			101				*100*	68	R3	Competent Bedrock
	122			102				*97*	65	R3	
	123										
	124			102				*100*	68	R3	

End of Drillhole: 124.96 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.9 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-10**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**45.72 m**	Date Completed:	**24 Apr 12**
Coordinates:	**5,897,280 N , 376,926 E (UTM NAD 83)**	Elevation:	**1258 m**	Date Well Installed:	**24 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
			SILT (0 to 2.44) SILT, some gravel and sand, angular to subrounded, fine to coarse, low to medium plasticity, brown with blue-grey gravel fragments, soft to firm, massive, friable, dry to moist. (Fluvial Deposit)	54		SPT1	21/55+	100+				5 inch odex drilling	
				39		SPT2	24/72/58	100+					
			SAND AND GRAVEL (2.44 to 3.96) SAND and GRAVEL, some silt, subrounded, fine to coarse, cohesive, non plastic to low plasticity, purple and brown, dense, massive, dry to moist. (Fluvial Deposit)	100		SPT3	24/39/35	74					
1253	5			139		SPT4	30/40/50+	90					
			SILT AND GRAVEL (3.96 to 22.25) SILT and GRAVEL, some sand, angular to subrounded, fine to coarse, non plastic to medium plasticity, brown and grey with multicoloured gravel fragments, stiff to hard, massive, slightly friable, dry to moist. (Glacial Till)	115		SPT5	16/28/54	82					
				114		SPT6	14/50+	100+					
1248	10			92		SPT7	100+	100+					
				95		SPT8	21/64/33	97					
				115		SPT9	12/35/53	88					
				128		SPT10	75+	100+					
1243	15												
				126		SPT11	45/65+	100+					
1238	20												
				177		SPT12	100+	100+					
			COMPLETELY WEATHERED ANDESITE (22.25 to 24.38) Silty SAND and GRAVEL, angular to subangular, fine to coarse, cohesive to non-cohesive, non plastic to low plasticity, brown, grey, green and orange, dense,	167		SPT13	50/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-10

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.10	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-10**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**23 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**45.72 m**	Date Completed:	**24 Apr 12**
Coordinates:	**5,897,280 N , 376,926 E (UTM NAD 83)**	Elevation:	**1258 m**	Date Well Installed:	**24 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal/ Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES
	26		massive, friable, dry to moist. (Decomposed/Completely Weathered Bedrock)								Weathered Bedrock
	27		**NO RECOVERY** (24.38 to 26.97) No Recovery (Advancing of Casing).	109				*0*	38	R4	
	28		**SLIGHTLY WEATHERED ANDESITE** (26.97 to 45.72) ANDESITE, fine-grained, porphyritic, grey to dark burgundy, medium strong to strong, slightly weathered, close joints dipping at ~30°-70° are partly open with slightly rough, planar joint surfaces, iron oxide staining, calcite infill.	93				*33*	45	R5	Start Coring (HQ3)
1228	30			96				*57*	47	R5	
	31			100				*74*	54	R2	
	33			102				*100*	82	R3	
	34			103				*100*	67	R3	
1223	35										
	36			93				*93*	70	R3	
	37			102				*100*	70	R3	
	39			100				*100*	71	R3	Water colour change to burgundy
1218	40			96				*96*	73	R3	Competent Bedrock
	42			102				*100*	71	R3	
	43			96				*85*	64	R3	
1213	45			102				*93*	66	R3	
	46		End of Drillhole: 45.72 m								

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

WELL DETAILS

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-10

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.10	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-11**	PAGE	**1 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**24 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**68.58 m**	Date Completed:	**26 Apr 12**
Coordinates:	**5,896,980 N , 377,036 E (UTM NAD 83)**	Elevation:	**1282 m**	Date Well Installed:	**26 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

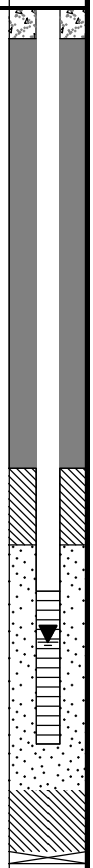
ELEVATION (m)	DEPTH (m)	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS
	1	**NO RECOVERY** (0 to 0.91) No Recovery	36		SPT1	4/5/5	10		
	2	**GRAVELLY SILT** (0.91 to 2.44) Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown with purple and green gravel fragments, soft to very soft, massive, moist to saturated. (Lacustrine Deposit)	131		SPT2	50+	100+		
	3								
	4	**NO RECOVERY** (2.44 to 4.11) No Recovery (Advancing of Casing).	105				*26*	45	R5
1277	5	**MODERATELY WEATHERED ANDESITE** (4.11 to 13.7) ANDESITE, fine-grained, porphyritic, purple grey, strong to very strong, moderately weathered, joints dipping at ~20°, iron oxide staining and trace brown clay infill, trace brown veinlet.	95				*78*	59	R5
	6								
	7		101				*100*	61	R5
	8		100				*83*	62	R5
	9								
1272	10		100				*94*	65	R5
	11		97				*65*	56	R5
	12								
	13		106				*100*	69	R5
	14	**SLIGHTLY WEATHERED ANDESITE** (13.7 to 68.58) ANDESITE, fine-grained, porphyritic, reddish grey to purple grey, strong to very strong, slightly weathered, close to wide joints are tight to partly open and dip at ~30°-70°, joint surfaces are rough and planar or stepped, some iron oxide staining, calcite infill, some calcite veins.	97				*95*	70	R3
1267	15								
	16		100				*96*	70	R3
	17		103				*98*	71	R3
	18								
	19		96				*92*	67	R3
1262	20		102				*100*	71	R3
	21								
	22		98				*92*	71	R3
	23		102				*79*	59	R3
	24								

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

DRILLHOLE NOTES

- 5 inch diameter odex drilling
- Weathered Bedrock
- Start Coring (HQ3)
- Competent Bedrock
- Start Zone of Lost Circulation

WELL DETAILS



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-11

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.11	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-11**	PAGE	**2 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**24 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**68.58 m**	Date Completed:	**26 Apr 12**
Coordinates:	**5,896,980 N , 377,036 E (UTM NAD 83)**	Elevation:	**1282 m**	Date Well Installed:	**26 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
			SLIGHTLY WEATHERED ANDESITE (13.7 to 68.58) ANDESITE, fine-grained, porphyritic, reddish grey to purple grey, strong to very strong, slightly weathered, close to wide joints are tight to partly open and dip at ~30°-70°, joint surfaces are rough and planar or stepped, some iron oxide staining, calcite infill, some calcite veins.	102				***93***	62	R3		
	26			98				***79***	52	R2		
	27											
	28			102				***95***	67	R3	End Zone of Lost Circulation	
	29											
1252	30			101				***93***	67	R3	Zone of Lost Circulation	
	31			100				***100***	70	R3		
	32											
	33			100				***82***	64	R3		
	34			98				***96***	69	R3		
1247	35											
	36			100				***100***	65	R3		
	37			98				***98***	70	R3		
	38											
	39			102				***100***	73	R5		
1242	40			100				***91***	63	R5		
	41											
	42			100				***79***	57	R5		
	43			100				***100***	70	R5		
	44											
1237	45			98				***86***	59	R5		
	46			102				***97***	62	R4		
	47											
	48			101				***50***	47	R4		
	49			96				***87***	56	R4		

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-11

Knight Piésold CONSULTING

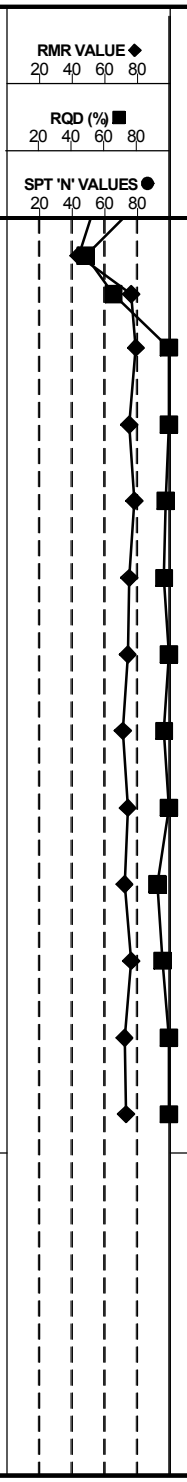
PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.11	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-11**	PAGE	**3 of 3**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**24 Apr 12**
Location:	**Site D Embankment**	Total Depth:	**68.58 m**	Date Completed:	**26 Apr 12**
Coordinates:	**5,896,980 N , 377,036 E (UTM NAD 83)**	Elevation:	**1282 m**	Date Well Installed:	**26 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	51		**SLIGHTLY WEATHERED ANDESITE** (13.7 to 68.58) ANDESITE, fine-grained, porphyritic, reddish grey to purple grey, strong to very strong, slightly weathered, close to wide joints are tight to partly open and dip at ~30°-70°, joint surfaces are rough and planar or stepped, some iron oxide staining, calcite infill, some calcite veins.	104				***49***	44	R2		
	52			98				***66***	76	R5		
	53			100				***100***	79	R5		
	54			104				***100***	75	R5		
1227	55			100				***98***	78	R5		
	56											
	57			97				***97***	75	R3		
	58											
	59			101				***100***	74	R3		
1222	60			97				***97***	71	R3		
	61											
	62			102				***100***	74	R3		
	63			102				***93***	72	R3		
	64											
1217	65			96				***96***	76	R3		
	66			100				***100***	72	R3		
	67											
	68			100				***100***	73	R3		
	69		End of Drillhole: 68.58 m									
1212	70											
	71											
	72											
	73											
	74											



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-11

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.11	1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-12**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**26 Apr 12**
Location:	**Site D Embankment, South Abutment**	Total Depth:	**39.62 m**	Date Completed:	**27 Apr 12**
Coordinates:	**5,895,900 N , 376,780 E (UTM NAD 83)**	Elevation:	**1335 m**	Date Well Installed:	**27 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES
	1	**SILT** (0 to 1.52) SILT, trace gravel, subangular to subrounded, fine to coarse, gap graded, medium plasticity, brown, hard, massive, friable, dry to moist. (Lacustrine Deposit)	49		SPT1	13/20/36	56			5 inch diameter odex drilling
	2									
	3	**SILT, SAND AND GRAVEL** (1.52 to 3.05) SILT, SAND and GRAVEL, trace boulder, subrounded (angular boulder), fine to coarse, low plasticity, brown, hard, dense, massive, friable, dry. (Fluvial Deposit)	115		SPT2	28/41/48	89			
	4		71		SPT3	7/10/19	29			
1330	5	**GRAVELLY SAND** (3.05 to 5.49) Gravelly SAND, trace silt and boulder, angular to subrounded, fine to coarse, well graded, non plastic to low plasticity, brown, compact, massive, dry to moist. (Fluvial Deposit)	87		SPT4	40/101/50+	100+			
	6									
	7		130		SPT5	33/60+	100+			
	8	**SILTY SAND AND GRAVEL** (5.49 to 16.15) Silty SAND and GRAVEL, trace clay, angular to subrounded, fine to coarse, non cohesive, non plastic to medium plasticity, brown with multicolored gravel fragments, dense to very dense, massive but with some stratification, moist to dry. (Fluvial Deposit)	118		SPT6	60+	100+			
	9									
1325	10		125		SPT7	38/62/79	100+			
	11									
	12		103		SPT8	21/38/42	80			
	13		109		SPT9	50/50+	100+			
	14									
1320	15		115		SPT10	12/26/42	68			
	16	**SAND** (16.15 to 19.2) SAND, some gravel and clay, subrounded, fine, non plastic to high plasticity, brown, compact to dense, laminated, saturated to dry. (Fluvial Deposit)								
	17									
	18		89		SPT11	18/42/36	78			
	19									
1315	20	**COMPLETELY WEATHERED BEDROCK** (19.2 to 22.25) SAND and GRAVEL, trace silt, angular to rounded, fine to coarse, non plastic, brown to grey, very dense, stratified, dry. (Completely Weathered/Decomposed Bedrock)								
	21		97		SPT12	18/63/42	100+			
	22									
	23	**NO RECOVERY** (22.25 to 24.08) No Recovery (Advancing of Casing).								Weathered Bedrock
	24		108				*0*	39	R4	Start Coring

RMR VALUE ◆ 20 40 60 80 — RQD (%) ■ 20 40 60 80 — SPT 'N' VALUES ● 20 40 60 80

WELL DETAILS

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Well is dry.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-12

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.12 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-12**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**26 Apr 12**
Location:	**Site D Embankment, South Abutment**	Total Depth:	**39.62 m**	Date Completed:	**27 Apr 12**
Coordinates:	**5,895,900 N , 376,780 E (UTM NAD 83)**	Elevation:	**1335 m**	Date Well Installed:	**27 Apr 12**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SLIGHTLY WEATHERED ANDESITE** (24.08 to 39.62) ANDESITE, fine-grained, porphyritic, reddish grey to white speckled grey, moderately strong, slightly to moderately weathered, close joints are open to partly open and dip ~30°-90°, joint surfaces are rough and planar, some iron oxide staining, trace calcite infill.	100				***82***	57	R4		(HQ3)	
	27			104				***99***	66	R4			
	28			98				***73***	52	R4			
	29			102				***91***	63	R4			
1305	30												
	31			102				***81***	52	R4			
	32			102				***77***	45	R4			
	33												
	34			100				***83***	49	R2			
1300	35												
	36			102				***80***	51	R2		Competent Bedrock	
	37			100				***100***	72	R3			
	38												
	39			102				***98***	68	R3			
1295	40		End of Drillhole: 39.62 m										
	41												
	42												
	43												
	44												
1290	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Well is dry.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-12

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.12	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-13**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Sep 12**
Location:	**Inside Site D TSF**	Total Depth:	**67.05 m**	Date Completed:	**16 Sep 12**
Coordinates:	**5,895,836 N , 375,442 E (UTM NAD 83)**	Elevation:	**1355 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**NO RECOVERY** (0 to 1.5) No Recovery	0					
	2		**SILTY SAND AND GRAVEL** (1.5 to 6.1) Silty SAND and GRAVEL, trace organic matter, subangular to subrounded, fine to coarse, low plasticity, brown/grey with some orange, compact to very dense, stratified, moist.	100 100 100					
1350	5			100 100 100 100					
	6		**GRAVEL** (6.1 to 16.95) GRAVEL, some silt and sand, trace clay, subangular and subrounded, fine to coarse, non plastic, light brown, dense to very dense, massive, moist.	100 100					
1345	10			100		01	Gravel:67.6% Sand:18.8% Silt:10% Clay:3.5% Moisture Content:8% Plastic Limit:12 Liquid Limit:19		
	12			100 100 100					
1340	15			100 100					
	16			100					
	17		**CLAYEY SILT** (16.95 to 18.3) Clayey SILT, low to medium plasticity, dark brown with grey striation, stiff to very stiff, massive, moist.	100		02	Gravel:0.2% Sand:36.3% Silt:49% Clay:14.2% Moisture Content:14.4% Plastic Limit:15 Liquid Limit:23		
1335	20		**SILTY SAND AND GRAVEL** (18.3 to 21) Silty SAND and GRAVEL, trace clay and cobbles, subrounded,well graded, non-plastic, greyish brown, very dense, massive, moist/dry.	100 100 100 100 100 100					
	22		**CLAYEY SILT** (21 to 33.53) Clayey SILT, some sand and gravel, trace cobbles, subrounded, gap graded, non-plastic to medium plasticity, greyish brown, hard, massive, moist/dry.	20					
	24			100 100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-13

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.13	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-13**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Sep 12**
Location:	**Inside Site D TSF**	Total Depth:	**67.05 m**	Date Completed:	**16 Sep 12**
Coordinates:	**5,895,836 N , 375,442 E (UTM NAD 83)**	Elevation:	**1355 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**CLAYEY SILT** (21 to 33.53) Clayey SILT, some sand and gravel, trace cobbles, subrounded, gap graded, non-plastic to medium plasticity, greyish brown, hard, massive, moist/dry.	100					
	27			100					
	28			100 100 100 100 100					
	29			100					
1325	30			100					
	31			100					
	32			100					
	33			100					
	34		**SILTY SAND** (33.53 to 36.18) Silty SAND, fine to coarse, non plastic, greyish light brown, dense to very dense, massive, moist.	100					
1320	35								
	36		**GRAVELLY SAND** (36.18 to 51.83) Gravelly SAND, some clay and silt, many cobbles and boulders, subrounded, fine to coarse, non plastic, greyish light brown and dark grey, very dense, massive, dry. Note 39.2 m to EOH: Oxidized stains in recovered overburden.	100					
	37			100					
	38								
	39			100					
1315	40			100					
	41			100					
	42			100					
	43			100					
	44			100 100 100					
1310	45			100		03	Gravel:30% Sand:34.7% Silt:23% Clay:12.7% Moisture Content:9.1% Plastic Limit:14 Liquid Limit:28		
	46			90					
	47								
	48			100					
	49			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-13

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.13	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-13**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Sep 12**
Location:	**Inside Site D TSF**	Total Depth:	**67.05 m**	Date Completed:	**16 Sep 12**
Coordinates:	**5,895,836 N , 375,442 E (UTM NAD 83)**	Elevation:	**1355 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51			100					
	52		**SILTY GRAVELLY SAND** (51.83 to 52.43) Silty Gravelly SAND, subangualr to subrounded, fine to coarse, greyish brown with some light brown, dense to very dense, massive, moist.	100					
	53			100					
	54		**SILT AND GRAVEL** (52.43 to 54.88) SILT and GRAVEL, some sand, trace cobbles, subrounded, fine to coarse, low plasticity, grey brown red mottled white grey, very stiff to hard, massive, moist.	100		04	Gravel:14.4% Sand:49.1% Silt:37% Clay:0% Moisture Content:10.8% Plastic Limit:13 Liquid Limit:29		
1300	55								
	56		**SILT AND SAND** (54.88 to 59.8) SILT and SAND, trace sand and gravel, angular to subrounded, low to medium plasticity, greyish brown with light brown striation, very stiff to hard, massive, moist.	100					
	57			100					
	58			100					
	59								
1295	60		**COMPLETELY WEATHERED BEDROCK** (59.8 to 65.52) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100					
	61								
	62								
	63			100					
	64								
1290	65								
	66		**MODERATELY WEATHERED BEDROCK** (65.52 to 67.05) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Clayey Sandy SILT, light reddish brown to greyish brown, mottled orange and white, trace pyrite.	60					
	67		End of Drillhole: 67.05 m						
	68								
	69								
1285	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-13

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.13	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-14**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**59.46 m**	Date Completed:	**11 Jul 12**
Coordinates:	**5,898,820 N , 375,942 E (UTM NAD 83)**	Elevation:	**1250 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1–4		**SANDY SILT** (0 to 4.06) Sandy SILT, some gravel, trace cobbles, subangular to subrounded, fine to coarse, high to medium plasticity, dark brown and grey, friable, firm to stiff, stratified, dry to moist.	97					
1245	5		**GRAVELLY SAND** (4.06 to 5.25) Gravelly SAND, subangular to subrounded, fine to coarse, light grey, loose, massive, dry.	98					
	6–8		**SANDY SILT** (5.25 to 6.1) Sandy SILT, some gravel, trace cobbles, subangular to subrounded, fine to coarse, high to medium plasticity, dark brown and grey, friable, firm to stiff, stratified, dry to moist.	99					
	9		**SANDY SILT** (6.1 to 6.72) Sandy SILT, subrounded, fine, medium to low plasticity, dark brown, soft, massive, moist.						
1240	10–11		**SAND** (6.72 to 7.93) SAND, fine, uniformly graded, light brown and grey, loose, massive, moist to dry.	98					
	12–14		**SILT** (7.93 to 21.36) SILT, some sand and gravel, subangular to subrounded, fine to coarse, medium plasticity, dark brown, firm to stiff, massive, moist. Note: Tension crack due to sonic vibration observed	99					
1235	15–17			99					
	18–19			100					
1230	20–21								
	22–23		**SAND** (21.36 to 28.86) SAND, trace silt, subrounded, fine to medium, low plasticity, brown and dark grey, loose, massive, moist.	100					
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-14

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.14	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-14**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**59.46 m**	Date Completed:	**11 Jul 12**
Coordinates:	**5,898,820 N , 375,942 E (UTM NAD 83)**	Elevation:	**1250 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SAND** (21.36 to 28.86) SAND, trace silt, subrounded, fine to medium, low plasticity, brown and dark grey, loose, massive, moist.	97					
	27								
	28			99					
	29		**SILT** (28.86 to 49.19) SILT, some clay, sand and gravel, subangular to subrounded, fine to coarse, gap graded, medium plasticity, brown and grey, firm to very stiff, massive, moist.						
1220	30			99					
	31								
	32			99					
	33								
	34			100					
1215	35								
	36					01	Gravel:18.5% Sand:31.2% Silt:34% Clay:16.7% Moisture Content:12.5% Plastic Limit:14 Liquid Limit:33		
	37			99					
	38								
	39								
1210	40			97					
	41								
	42								
	43			100					
	44								
1205	45					02	Gravel:6.3% Sand:13.9% Silt:61% Clay:19.2% Moisture Content:19.4% Plastic Limit:20 Liquid Limit:34		
	46			100					
	47								
	48								
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-14

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.14	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-14**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**59.46 m**	Date Completed:	**11 Jul 12**
Coordinates:	**5,898,820 N , 375,942 E (UTM NAD 83)**	Elevation:	**1250 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**COMPLETELY WEATHERED BEDROCK** (49.19 to 57.93) Completely Weathered Bedrock, recovered as: Silty SAND, some gravel, angular, fine to coarse, non plastic, burgundy purple and greenish grey, very dense, massive, moist to dry.	98		03	Gravel:18.7% Sand:52.6% Silt:18% Clay:10.9% Moisture Content:12.2% Plastic Limit:17 Liquid Limit:36		
	52								
	53			100					
	54								
1195	55								
	56			83					
	57								
	58		**MODERATELY WEATHERED BEDROCK** (57.93 to 59.46) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, some gravel, angular to subangular, fine to coarse, non plastic, light reddish brown to greyish brown, very dense, massive, dry.						
	59			50					
1190	60		End of Drillhole: 59.46 m						
	61								
	62								
	63								
	64								
1185	65								
	66								
	67								
	68								
	69								
1180	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-14

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.14	REV. 1

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-15**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**97.54 m**	Date Completed:	**15 Jul 12**
Coordinates:	**5,898,200 N , 376,098 E (UTM NAD 83)**	Elevation:	**1227 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILT AND GRAVEL** (0 to 10.35) SILT and GRAVEL, some clay, trace sand, angular to subrounded, fine to coarse, low to medium plasticity, brown, firm and compact, stratified, moist.	99					
	2								
	3								
	4			99					
1222	5					01	Gravel:44.3% Sand:5.9% Silt:38% Clay:11.8% Moisture Content:14.9% Plastic Limit:19 Liquid Limit:32		
	6								
	7								
	8			100					
	9								
1217	10								
	11		**SAND AND GRAVEL** (10.35 to 23.23) SAND and GRAVEL, some silt, trace clay, subrounded, fine to coarse, non plastic to low plasticity, light brown, compact to dense, stratified, moist. Note: Banded Silty GRAVEL layers between 0.2 and 0.4m thick throughout starta.	97					
	12					02	Gravel:55.2% Sand:32% Silt:10% Clay:2.8% Plastic Limit:13 Liquid Limit:15		
	13								
	14			98					
1212	15								
	16								
	17			99					
	18					03	Gravel:52.2% Sand:40.1% Silt:5.7% Clay:2%		
	19								
1207	20			97					
	21								
	22								
	23			98					
	24								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-15

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.15	REV. 1

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-15**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**97.54 m**	Date Completed:	**15 Jul 12**
Coordinates:	**5,898,200 N , 376,098 E (UTM NAD 83)**	Elevation:	**1227 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY GRAVELLY SAND** (23.23 to 31.63) Silty Gravelly SAND, some clay, subangular, fine to coarse, low plasticity, white/yellow/light grey/brown, dense to very dense, massive, moist.	99		06	Gravel:0%		
	27					04	Gravel:20.7% Sand:47.3% Silt:21% Clay:11.1%		
	28					05	Plastic Limit:16 Liquid Limit:27 Gravel:0%		
	29			99					
1197	30								
	31								
	32		**GRAVELLY SAND** (31.63 to 34.68) Gravelly SAND, some silt, trace clay, subangular, fine to coarse, non plastic to low plasticity, light grey and brown, dense to very dense, massive, moist.	100		07	Gravel:32.5% Sand:43.8% Silt:16% Clay:7.6% Plastic Limit:16 Liquid Limit:28		
	33								
	34								
1192	35		**SANDY SILT** (34.68 to 51.2) Sandy SILT, some clay, trace gravel, angular to subrounded, fine to coarse, non plastic to low plasticity silt, brown and grey, very stiff to hard, massive, moist.	87					
	36								
	37					09	Gravel:0% Sand:23.8% Silt:64% Clay:12.7% Moisture Content:22%		
	38			99			Plastic Limit:21 Liquid Limit:28		
	39					08			
1187	40								
	41			98					
	42								
	43								
	44			99					
1182	45								
	46								
	47			99					
	48								
	49								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-15

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.15	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-15**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**97.54 m**	Date Completed:	**15 Jul 12**
Coordinates:	**5,898,200 N , 376,098 E (UTM NAD 83)**	Elevation:	**1227 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51			100					
	52		**SILTY SAND** (51.2 to 62.1) Silty SAND, some clay, trace gravel, angular to subrounded, fine to coarse, non plastic to low plasticity silt, brown and grey, dense to very dense, massive, moist.			10	Gravel:3.1% Sand:58% Silt:26% Clay:12.8% Moisture Content:20% Plastic Limit:20 Liquid Limit:29		
	53			100		11	Gravel:16.6% Sand:52.7% Silt:22% Clay:8.8% Moisture Content:14% Plastic Limit:21 Liquid Limit:28		
	54					12			
1172	55								
	56			99					
	57								
	58								
	59			100					
1167	60								
	61								
	62					13			
	63		**SILTY GRAVELLY SAND** (62.1 to 69) Silty Gravelly SAND, trace clay, angular to subrounded, fine to coarse, low to medium, rusty brown, dense to very dense, massive, moist.	98		14	Gravel:29.7% Sand:40.9% Silt:19% Clay:10.5% Moisture Content:26% Plastic Limit:20 Liquid Limit:30		
	64								
1162	65			102					
	66								
	67					15	Gravel:12.3% Sand:64.3% Silt:15% Clay:8.1%		
	68					16			
	69			100		17	Gravel:10.1% Sand:50% Silt:27% Clay:12.7% Moisture Content:14% Plastic Limit:21 Liquid Limit:34		
1157	70		**CLAYEY SANDY SILT** (69 to 79.25) Clayey Sandy SILT, trace gravel, subangular, fine to coarse, low to medium plasticity, black/white/light grey/yellow/light brown, very stiff to hard, stratified, moist.			18			
	71			100					
	72								
	73								
	74			100					

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-15

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.15	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-15**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Jul 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**97.54 m**	Date Completed:	**15 Jul 12**
Coordinates:	**5,898,200 N , 376,098 E (UTM NAD 83)**	Elevation:	**1227 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**CLAYEY SANDY SILT** (69 to 79.25) Clayey Sandy SILT, trace gravel, subangular, fine to coarse, low to medium plasticity, black/white/light grey/yellow/light brown, very stiff to hard, stratified, moist.			19	Gravel:0.4% Sand:21.7% Silt:53% Clay:25.1% Moisture Content:27% Plastic Limit:31 Liquid Limit:47		
	77					20			
	78			100					
	79					21			
1147	80		**COMPLETELY WEATHERED BEDROCK** (79.25 to 94.49) Completely Weathered Bedrock, recovered as: Silty Gravelly SAND, trace clay, angular, fine to coarse, non plastic to low plasticity, rusty white/purple/burgundy/yellow, dense to very dense, massive, moist.	100		22	Gravel:2% Sand:52.6% Silt:30% Clay:15%		
	81								
	82								
	83			100		23			
	84								
1142	85								
	86			100		24	Gravel:26.3% Sand:45.6% Silt:14% Clay:14% Moisture Content:0% Plastic Limit:16 Liquid Limit:36		
	87					25			
	88								
	89			100					
1137	90								
	91					26	Gravel:8% Sand:56.9% Silt:26% Clay:9%		
	92								
	93			100		27			
	94					28			
1132	95		**MODERATELY WEATHERED BEDROCK** (94.49 to 97.54) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.	97					
	96								
	97								
	98		End of Drillhole: 97.54 m						
	99								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-15

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.15	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-16**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**16 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**99.1 m**	Date Completed:	**19 Jul 12**
Coordinates:	**5,898,200 N , 376,299 E (UTM NAD 83)**	Elevation:	**1225 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1–2		**SILTY GRAVELLY SAND** (0 to 3.05) Silty Gravelly SAND, trace clay, some cobbles and boulders, subangular to rounded, fine to coarse, low plasticity, brown and light grey, compact, stratified, moist.	100		01, 02		
	3–5		**SAND AND GRAVEL** (3.05 to 11) SAND AND GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, low plasticity, dark grey/brown, dense, stratified, moist.	100		03		
1220	5–7			100		04		
	7–8					05		
	8–10			100		06		
1215	10–11							
	11–12		**SANDY SILT** (11 to 12.19) Sandy SILT, some gravel, angular to subangular, fine to coarse, low to medium plasticity, grey, firm, massive, dry to moist.	100		07		
	12–13							
	13–15		**SANDY SILT** (12.19 to 22.27) Sandy SILT, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, light brown, firm, friable, massive, moist to dry.	100		08		
1210	15–17			100				
	17–18					09		
	18–19			100		10		
1205	19–20							
	20–22			100				
	22–23		**SILTY SAND AND GRAVEL** (22.27 to 24.08) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low plasticity, yellow brown, compact, massive, wet.	100		11, 12		
	23–24							

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-16

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.16	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-16**	PAGE	**2 of 4**	
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**	Date Started:	**16 Jul 12**	
Location:	**Site D Embankment**		Total Depth:	**99.1 m**	Date Completed:	**19 Jul 12**	
Coordinates:	**5,898,200 N , 376,299 E (UTM NAD 83)**		Elevation:	**1225 m**	Date Well Installed:		
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/EQ**	
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**	

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (24.08 to 54.29) SILT, some clay and sand, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown, stiff to very stiff, massive, moist to dry.	100		13		▼
	27							
	28		42.0 m: Colour change to red brown/grey	100				
	29							
1195	30					14		
	31			100		15		
	32							
	33							
	34			100				
1190	35							
	36					16		
	37			100				
	38							
	39					17		
1185	40			100				
	41							
	42					18		
	43							
	44			100		19		
						20		
1180	45							
	46							
	47			100				
	48							
	49					21		

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-16

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.16	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-16**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**16 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**99.1 m**	Date Completed:	**19 Jul 12**
Coordinates:	**5,898,200 N , 376,299 E (UTM NAD 83)**	Elevation:	**1225 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**SILT** (24.08 to 54.29) SILT, some clay and sand, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown, stiff to very stiff, massive, moist to dry.	100		22		
	52					23		
	53		42.0 m: Colour change to red brown/grey	100				
	54					24		
1170	55		**SILTY GRAVELLY SAND** (54.29 to 77.7) Silty Gravelly SAND, some clay, subangular to subrounded, fine to coarse, grey to rusty brown, dense to very dense, massive, moist.					
	56			100		25		
	57							
	58							
	59			100		26		
1165	60							
	61							
	62			100		27		
	63							
	64					28		
1160	65			100		29		
	66							
	67					30		
	68					31		
	69			100				
1155	70					32		
	71			100				
	72							
	73					33		
	74			100		34		

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-16

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.16	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-16**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**16 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**99.1 m**	Date Completed:	**19 Jul 12**
Coordinates:	**5,898,200 N , 376,299 E (UTM NAD 83)**	Elevation:	**1225 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	76		**SILTY GRAVELLY SAND** (54.29 to 77.7) Silty Gravelly SAND, some clay, subangular to subrounded, fine to coarse, grey to rusty brown, dense to very dense, massive, moist.					
	77							
	78		**SILT** (77.7 to 84.34) SILT, trace sand and gravel, subangular to subrounded, fine, gap graded, medium to high plasticity, rusty brown, firm to very stiff, massive, wet to moist.	100		35		
	79							
1145	80					36		
	81			100				
	82							
	83							
	84			100				
			GRAVELLY SAND (84.34 to 96.42) Gravelly SAND with some silt, trace clay, subrounded, fine to coarse, medium to high plasticity, dark brown, dense, massive, moist.					
1140	85					37		
	86							
	87			100				
	88					38		
	89							
1135	90			100		39		
	91							
	92							
	93			100				
	94					40		
1130	95					41		
	96			100				
	97		**MODERATELY WEATHERED BEDROCK** (96.42 to 99.1) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.					
	98			91				
	99							
			End of Drillhole: 99.1 m					

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-16

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.16	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-17**	PAGE	**1 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Jul 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**112.78 m**	Date Completed:	**24 Jul 12**
Coordinates:	**5,898,550 N , 377,098 E (UTM NAD 83)**	Elevation:	**1200 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SAND** (0 to 1.52) Gravelly SAND, some silt and clay, angular to rounded, fine to coarse, brown and grey, compact to dense, massive, moist to dry.	98		01	Gravel:32.9% Sand:41.6% Silt:26% Clay:0%		
	2					02			
	3		**SILT** (1.52 to 23) SILT, some sand, trace clay and gravel, subangular to subrounded, fine to coarse, low plasticity, brown, stiff to hard, friable, moist.	98					
	4								
1195	5			100		03	Gravel:0% Sand:10.6% Silt:84% Clay:5.3% Moisture Content:23.1% Plastic Limit:24 Liquid Limit:29		
	6								
	7								
	8			100		04			
	9								
1190	10					05			
	11			100					
	12								
	13								
	14			100		06			
1185	15								
	16					07			
	17			100					
	18								
	19								
1180	20			100		08			
	21								
	22					09			
	23			100					
	24		**SILTY SAND AND GRAVEL** (23 to 24.3) Silty SAND and GRAVEL, fine to coarse sand and gravel, subangular to subrounded, low to medium plasticity, brown, loose, stratified.						

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-17

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-17**	PAGE	**2 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Jul 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**112.78 m**	Date Completed:	**24 Jul 12**
Coordinates:	**5,898,550 N , 377,098 E (UTM NAD 83)**	Elevation:	**1200 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
			moist.				Gravel:1.3% Sand:23.8% Silt:64%		
	26		**SANDY SILT** (24.3 to 33.53) Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff to hard, massive moist.	100		10	Clay:11.5% Moisture Content:12.6% Plastic Limit:20 Liquid Limit:24		
	27								
	28								
	29			100		11			
1170	30								
	31								
	32			100					
	33					12			
	34		**SAND AND GRAVEL** (33.53 to 42.82) SAND and GRAVEL, some silt, trace clay, some cobbles, angular to rounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, moist.			13			
1165	35			100					
	36								
	37					14	Gravel:37.6% Sand:41.9% Silt:15% Clay:5.6% Moisture Content:8% Plastic Limit:16 Liquid Limit:21		
	38			100					
	39								
1160	40								
	41			100		15			
	42								
	43		**SANDY SILT** (42.82 to 54.87) Sandy SILT, some gravel, subangular to rounded, fine to coarse, low plasticity, rusty brown, very stiff to hard, massive, moist.						
	44			100		16			
1155	45								
	46								
	47			94					
	48					17			
	49								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-17

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-17**	PAGE	**3 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Jul 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**112.78 m**	Date Completed:	**24 Jul 12**
Coordinates:	**5,898,550 N , 377,098 E (UTM NAD 83)**	Elevation:	**1200 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SANDY SILT** (42.82 to 54.87) Sandy SILT, some gravel, subangular to rounded, fine to coarse, low plasticity, rusty brown, very stiff to hard, massive, moist.	100		18			
	52								
	53			89					
	54					19			
1145	55		**SILTY SAND** (54.87 to 73.45) Silty SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, grey/brown, dense to very dense, massive, moist.	100					
	56								
	57					20			
	58			100					
	59								
1140	60					21			
	61								
	62			100					
	63					22	Gravel:3.2% Sand:46.9% Silt:33% Clay:17.1% Moisture Content:13% Plastic Limit:20 Liquid Limit:29		
	64								
1135	65			100					
	66					23			
	67								
	68			100		24			
	69								
1130	70								
	71			100					
	72								
	73					25			
	74		**SAND** (73.45 to 74.4) SAND, trace clay and silt, fine to coarse, poorly	100		26	Gravel:0% Sand:98.3% Silt:1.7% Clay:0%		

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-17

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-17**	PAGE	**4 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Jul 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**112.78 m**	Date Completed:	**24 Jul 12**
Coordinates:	**5,898,550 N , 377,098 E (UTM NAD 83)**	Elevation:	**1200 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
			graded, grey/brown, dense to very dense, massive, moist.			27			
	76		**CLAYEY SILT** (74.4 to 76.2) Clayey SILT, some sand, fine to coarse, medium to high plasticity, grey becoming rusty brown, very stiff to hard, massive, moist.	100		28			
	77								
	78		**COMPLETELY WEATHERED BEDROCK** (76.2 to 106.68) Completely Weathered Bedrock, recovered as: Clayey SILT, some sand, fine to coarse, low to medium plasticity, rusty brown mottled grey green, very stiff to hard, massive, moist.						
	79								
1120	80			100		29	Gravel:0% Sand:12.8% Silt:55% Clay:32.7% Moisture Content:28% Plastic Limit:33 Liquid Limit:54		
	81								
	82								
	83			100		30			
	84								
1115	85								
	86			100		31			
	87								
	88								
	89			100					
1110	90								
	91					32			
	92			100					
	93								
	94					33	Gravel:0% Sand:10.5% Silt:68% Clay:21.1% Moisture Content:31.9% Plastic Limit:38 Liquid Limit:50		
1105	95								
	96			100		34			
	97								
	98								
	99			100		35			

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-17

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-17**	PAGE	**5 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Jul 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**112.78 m**	Date Completed:	**24 Jul 12**
Coordinates:	**5,898,550 N , 377,098 E (UTM NAD 83)**	Elevation:	**1200 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	101		**COMPLETELY WEATHERED BEDROCK** (76.2 to 106.68) Completely Weathered Bedrock, recovered as: Clayey SILT, some sand, fine to coarse, low to medium plasticity, rusty brown mottled grey green, very stiff to hard, massive, moist.						
	102			100					
	103					36			
	104								
1095	105			100		37	Gravel:1.7% Sand:69% Silt:17% Clay:12.2% Moisture Content:15.4% Plastic Limit:31 Liquid Limit:53		
	106								
	107		**COMPLETELY WEATHERED BEDROCK** (106.68 to 112.77) Completely Weathered Bedrock, recovered as: Clayey SILT, some sand, fine to coarse, non plastic to low plasticity, rusty brown mottled grey green, very stiff to hard, massive, moist.			38			
	108			100					
	109								
1090	110								
	111			100					
	112								
	113		End of Drillhole: 112.78 m						
	114								
1085	115								
	116								
	117								
	118								
	119								
1080	120								
	121								
	122								
	123								
	124								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-17

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.17	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-18**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**80.77 m**	Date Completed:	**6 Aug 12**
Coordinates:	**5,898,490 N , 376,248 E (UTM NAD 83)**	Elevation:	**1233 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1–12		**SILTY GRAVELLY SAND** (0 to 12.19) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown and grey, dense to very dense, stratified sandy layer, moist to dry.	100 58 100 100		01 02 03		
1228	5							
1223	10							
	12–21		**SILTY SAND** (12.19 to 21.34) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown and yellow, compact, stratified, moist to wet.	100 100 100 62 61		04 05 06		
1218	15							
1213	20							
	22–24		**CLAYEY SILT** (21.34 to 35.13) Clayey SILT, some sand, fine to medium, low plasticity, brown and dark grey, compact, massive, moist to wet. Note: Interbedded Sandy SILT layers throughout.	98		07		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-18

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.18	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-18**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**80.77 m**	Date Completed:	**6 Aug 12**
Coordinates:	**5,898,490 N , 376,248 E (UTM NAD 83)**	Elevation:	**1233 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**CLAYEY SILT** (21.34 to 35.13) Clayey SILT, some sand, fine to medium, low plasticity, brown and dark grey, compact, massive, moist to wet.	100		08		
	27							
	28		Note: Interbedded Sandy SILT layers throughout.			09		
	29			100				
1203	30							
	31							
	32			100				
	33					10		
	34			99				
1198	35		**GRAVELLY SAND** (35.13 to 37) Gravelly SAND, some clay and silt, subangular to subrounded, fine to coarse, low to medium plasticity, yellowish brown to grey, dense, stratified, moist. (Reworked Weathered Bedrock)	100		11		
	36							
	37			99				
	38		**CLAYEY SILT** (37 to 49.32) Clayey SILT, trace sand, fine to coarse, low to medium plasticity, yellowish brown to grey, stiff, stratified, moist.					
	39			100		12		
1193	40							
	41		47.5 to 48.5 m: Interbedded clasts of Reworked Weathered Bedrock	100				
	42					13		
	43							
	44			100				
1188	45					14		
	46							
	47			100				
	48							
	49					15		
				100				

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-18

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.18	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-18**	PAGE	**3 of 4**	
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**	Date Started:	**24 Jul 12**	
Location:	**Site D Embankment**		Total Depth:	**80.77 m**	Date Completed:	**6 Aug 12**	
Coordinates:	**5,898,490 N , 376,248 E (UTM NAD 83)**		Elevation:	**1233 m**	Date Well Installed:		
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**	
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**	

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**SILTY SAND** (49.32 to 54.5) Silty SAND, some gravel, subangular to subrounded, fine to coarse, medium plasticity, brown and grey, compact, very stiff, massive, moist. Note: Oxidation evident on gravel fragments.	100		16		
	52							
	53			100		17		
	54							
1178	55		**COMPLETELY WEATHERED BEDROCK** (54.5 to 79.25) Completely Weathered Bedrock, recovered as: Clayey SILT, some sand, trace gravel, angular to subrounded, fine to coarse, non plastic to low plasticity, brown/grey/purple/burgundy, hard, massive, moist.					
	56			100				
	57					18		
	58							
	59			100				
1173	60					19		
	61							
	62			100				
	63							
	64							
1168	65			81				
	66							
	67							
	68			100				
	69			100		20		
1163	70							
	71							
	72			100		21		
	73							
	74			100				

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-18

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.18	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-18**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Jul 12**
Location:	**Site D Embankment**	Total Depth:	**80.77 m**	Date Completed:	**6 Aug 12**
Coordinates:	**5,898,490 N , 376,248 E (UTM NAD 83)**	Elevation:	**1233 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (54.5 to 79.25) Completely Weathered Bedrock, recovered as: Clayey SILT, some sand, trace gravel, angular to subrounded, fine to coarse, non plastic to low plasticity, brown/grey/purple/burgundy, hard, massive, moist.					
	77			99				
	78							
	79			100				
1153	80		**HIGHLY WEATHERED BEDROCK** (79.25 to 80.77) Highly Weathered Bedrock, recovered as: Sandy SILT, some gravel, fine to coarse, non plastic, greyish purple, massive, moist to wet.	98				
	81		End of Drillhole: 80.77 m					
	82							
	83							
	84							
1148	85							
	86							
	87							
	88							
	89							
1143	90							
	91							
	92							
	93							
	94							
1138	95							
	96							
	97							
	98							
	99							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-18

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.18	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-19**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**7 Aug 12**
Location:	**Site D Embankment**	Total Depth:	**73.15 m**	Date Completed:	**8 Aug 12**
Coordinates:	**5,898,979 N , 375,719 E (UTM NAD 83)**	Elevation:	**1275 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1–9		**SILTY SAND** (0 to 9.14) Silty SAND, some gravel, subangular to rounded, non-plastic, brown to grey, loose to compact, massive, friable, moist.	85 95 95 95 98 98 99		01 02		
1265	10–12		**GRAVELLY SAND** (9.14 to 12.19) Gravelly SAND, some silt, trace clay, angular to subrounded, fine to coarse, low plasticity, brown to brown-grey, dense to very dense, friable, stratified, moist to dry.	84		03		
1260	13–17		**SANDY SILT** (12.19 to 16.89) Sandy SILT, some gravel, fine to coarse sand and fine gravel, subangular to subrounded, low to high plasticity, brown, stiff to very stiff, stratified, moist.	97 97 100		04 05		
1255	17–21		**SAND** (16.89 to 21.34) SAND, some silt, trace gravel, subangular, fine to coarse, low plasticity, compact, brown, massive, moist.	100 100				
	22–24		**SILT** (21.34 to 27.43) SILT, trace clay, sand and gravel, subangular, fine grained, medium plasticity, brown, firm to stiff, massive, moist.	100		06		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-19

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.19	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-19**		PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**		Date Started:	**7 Aug 12**
Location:	**Site D Embankment**		Total Depth:	**73.15 m**		Date Completed:	**8 Aug 12**
Coordinates:	**5,898,979 N , 375,719 E (UTM NAD 83)**		Elevation:	**1275 m**		Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**		Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**		Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (21.34 to 27.43) SILT, trace clay, sand and gravel, subangular, fine grained, medium plasticity, brown, firm to stiff, massive, moist.	100				
	27							
	28		**SILTY GRAVELLY SAND** (27.43 to 36.58) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to medium, low plasticity, brown, compact, massive, moist.	98				
1245	30							
	31			100		07		
	32							
	33							
	34			100				
1240	35							
	36			100				
	37		**SILTY SAND** (36.58 to 50.57) Silty SAND, some gravel, subangular to subrounded, fine to coarse, low to medium plasticity, dark brown/rust, stiff to very stiff, massive, moist.	94		08		
	38							
	39							
1235	40							
	41			100		09		
	42							
	43							
	44			97				
1230	45							
	46							
	47			100				
	48							
	49			88				

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-19

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.19	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-19**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**7 Aug 12**
Location:	**Site D Embankment**	Total Depth:	**73.15 m**	Date Completed:	**8 Aug 12**
Coordinates:	**5,898,979 N , 375,719 E (UTM NAD 83)**	Elevation:	**1275 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**SANDY SILT** (50.57 to 51.7) Sandy SILT, trace clay and gravel, subangular to subrounded, fine to coarse, low plasticity, brown and yellow, very stiff, stratified, moist.	89		10		
	52			100				
	53		**SILT** (51.7 to 57.91) SILT, some sand and gravel, subangular to subrounded, fine to coarse, low to medium plasticity, dark brown/rust, stiff to very stiff, massive, friable, moist.					
	54			100		11		
1220	55							
	56			100				
	57							
	58		**COMPLETELY WEATHERED BEDROCK** (57.91 to 67.06) Completely Weathered Bedrock, recovered as: Silty SAND and GRAVEL, angular, fine to coarse, non plastic to low plasticity, brown to dark grey/rust, very dense, massive, moist. Note: Gravel is mostly decomposed BEDROCK.	100				
	59							
1215	60					12		
	61							
	62			100				
	63					13		
	64							
1210	65			100				
	66							
	67		**MODERATELY WEATHERED BEDROCK** (67.06 to 73.15) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown. Note: Some intact cobble sized bedrock.	100				
	68							
	69			100				
1205	70							
	71			26				
	72							
	73							
	74		End of Drillhole: 73.15 m					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-19

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.19	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-20**	PAGE	**1 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Aug 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**48.77 m**	Date Completed:	**12 Aug 12**
Coordinates:	**5,899,369 N , 375,131 E (UTM NAD 83)**	Elevation:	**1307 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1–3		**SILT** (0 to 3.05) SILT, some sand and gravel, subangular to rounded, fine, low plasticity, brown, very stiff, massive, friable, moist.	94		01		
1302	4–6		**SANDY GRAVEL** (3.05 to 12.19) Sandy GRAVEL, trace clay and silt, subangular to subrounded, fine to coarse, non-plastic, brown, compact, massive, moist to dry.	100		02		
	7–9			100				
1297	10–12			100		03		
	13–15		**SANDY SILT** (12.19 to 18.29) Sandy SILT, trace clay and gravel, subangular to subrounded, fine to coarse, non-plastic, brown, firm to stiff, massive, moist to dry.	87				
1292	16–18			100				
	19–21		**SILTY GRAVELLY SAND** (18.29 to 32.23) Silty Gravelly SAND, subangular to subrounded, fine to coarse, low plasticity, light brown to brown, compact to very dense, massive, moist.	100		04		
1287	22–24			95		05		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-20

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.20	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-20**	PAGE	**2 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Aug 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**48.77 m**	Date Completed:	**12 Aug 12**
Coordinates:	**5,899,369 N , 375,131 E (UTM NAD 83)**	Elevation:	**1307 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY GRAVELLY SAND** (18.29 to 32.23) Silty Gravelly SAND, subangular to subrounded, fine to coarse, low plasticity, light brown to brown, compact to very dense, massive, moist.	107		06		
	27							
	28			100				
	29							
1277	30							
	31			100				
	32							
	33		**SILT** (32.23 to 36.58) SILT, some sand and gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown and rusty, stiff, massive, friable, moist.	99				
	34							
1272	35			100				
	36					07		
	37		**COMPLETELY WEATHERED BEDROCK** (36.58 to 48.77) Completely Weathered Bedrock, recovered as: GRAVEL, some sand and silt, angular, fine to coarse, low plasticity, rusty brown, dense to very dense, massive, moist.	100				
	38							
	39							
1267	40			100				
	41							
	42			100				
	43			26				
	44							
1262	45							
	46			25				
	47							
	48							
	49		End of Drillhole: 48.77 m					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-20

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.20	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-21**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**82.3 m**	Date Completed:	**14 Aug 12**
Coordinates:	**5,899,040 N , 375,467 E (UTM NAD 83)**	Elevation:	**1279 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	0–13		**SILT** (0 to 13.19) SILT, some sand, trace clay and gravel, subangular to subrounded, fine to coarse, low plasticity, brown and light grey, compact to very dense, massive, moist to dry.	100 97 100 94 100		01 02 03 04		
	13–22.34		**SILT AND SAND** (13.19 to 22.34) SILT and SAND, trace clay and gravel , subangular to subrounded, fine to coarse, well graced, non plastic to low plasticity, brown grey, very stiff to hard, dense to very dense, massive, moist to dry.	69 100		05		▼
	22–24			100		06		
1274	5							
1269	10							
1264	15							
1259	20							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-21

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.21	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-21**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**82.3 m**	Date Completed:	**14 Aug 12**
Coordinates:	**5,899,040 N , 375,467 E (UTM NAD 83)**	Elevation:	**1279 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (22.34 to 30.68) SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, well graded to gap graded, low to medium plasticity, brown, stiff to hard, massive, friable, moist (Till).	100				
	27					07		
	28			100				
	29							
1249	30							
	31		**SILTY SAND** (30.68 to 48.13) Silty SAND, some clay mand gravel, subangular to rounded, fine to coarse, low plasticity, brown, dense to very dense, massive, moist.	100				
	32							
	33					08		
	34			100				
1244	35							
	36					09		
	37			100				
	38							
	39			100				
1239	40							
	41							
	42					10		
	43			100				
	44							
1234	45							
	46			100				
	47							
	48					11		
	49							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-21

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.21	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-21**	PAGE	**3 of 4**	
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**	Date Started:	**12 Aug 12**	
Location:	**Inside Site D TSF Area**		Total Depth:	**82.3 m**	Date Completed:	**14 Aug 12**	
Coordinates:	**5,899,040 N , 375,467 E (UTM NAD 83)**		Elevation:	**1279 m**	Date Well Installed:		
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**	
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**	

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**SANDY SILT** (48.13 to 67.06) Sandy SILT, some clay, fine grained, low plasticity, light brown, stiff to hard, massive, moist (Till).	79		12		
	52							
	53			100				
	54							
1224	55							
	56			94		13		
	57							
	58							
	59			100		14		
1219	60							
	61			100				
	62							
	63							
	64							
1214	65			100				
	66							
	67							
	68		**COMPLETELY WEATHERED BEDROCK** (67.06 to 81.5) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100		16		
	69							
1209	70							
	71			100				
	72							
	73							
	74			89				

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-21

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.21	REV. 1

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File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-21**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**82.3 m**	Date Completed:	**14 Aug 12**
Coordinates:	**5,899,040 N , 375,467 E (UTM NAD 83)**	Elevation:	**1279 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (67.06 to 81.5) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.					
	77							
	78			71				
	79							
1199	80							
	81			100				
	82		**MODERATELY WEATHERED BEDROCK** (81.5 to 82.3) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.					
	83		End of Drillhole: 82.3 m					
	84							
1194	85							
	86							
	87							
	88							
	89							
1189	90							
	91							
	92							
	93							
	94							
1184	95							
	96							
	97							
	98							
	99							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-21

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1

APPENDIX B1.21 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-22**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**64.01 m**	Date Completed:	**16 Aug 12**
Coordinates:	**5,898,980 N , 375,211 E (UTM NAD 83)**	Elevation:	**1260 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1–4		**SILTY GRAVELLY SAND** (0 to 4.57) Silty Gravelly SAND, some clay, subangular to subrounded, fine to coarse, low plasticity, brown, dense to very dense, massive, moist (Till).	52 100		01	Gravel:25.5% Sand:33.8% Silt:27% Clay:14.1% Moisture Content:5% Plastic Limit:16 Liquid Limit:22		
1255	5–7		**SAND** (4.57 to 7.1) SAND, some silt and gravel, subrounded, fine to coarse sand, fine gravel, brown and grey, compact to dense, massive, moist to dry. Note: 6.1 to 7.1 m: Boulder	100 99					
1250	8–12		**SILT** (7.1 to 33.53) SILT, some clay, trace sand and gravel, trace boulders and cobbles, subangular to subrounded, fine to coarse, brown, low plasticity, very stiff to hard, friable, wet to moist (Till).	100 100		02	Gravel:0% Sand:8.5% Silt:81% Clay:10.8% Moisture Content:9% Plastic Limit:19 Liquid Limit:20		
1245	13–16			100 100		03 04	Gravel:4.9% Sand:9.6% Silt:72% Clay:13.4% Moisture Content:16% Plastic Limit:19 Liquid Limit:24		▼
1240	17–24			100 100 100		05			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-22

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.22 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-22**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**64.01 m**	Date Completed:	**16 Aug 12**
Coordinates:	**5,898,980 N , 375,211 E (UTM NAD 83)**	Elevation:	**1260 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (7.1 to 33.53) SILT, some clay, trace sand and gravel, trace boulders and cobbles, subangular to subrounded, fine to coarse, brown, low plasticity, very stiff to hard, friable, wet to moist (Till).	100		06			
	27								
	28								
	29			49					
1230	30								
	31								
	32			83					
	33								
	34		**SILTY SAND** (33.53 to 43.5) Silty SAND, some gravel, trace clay, subrounded, fine to coarse, low plasticity, brown, dense to very dense, stratified, moist to wet.			07	Gravel:20.4% Sand:50.8% Silt:20% Clay:8.8% Moisture Content:4% Plastic Limit:13 Liquid Limit:24		
1225	35			100					
	36								
	37								
	38			100					
	39					08	Gravel:1.1% Sand:67.1% Silt:25% Clay:7.3% Moisture Content:13%		
1220	40								
	41			100					
	42								
	43			100					
	44		**GRAVELLY SAND** (43.5 to 48.8) Gravelly SAND, trace silt and clay, subangular to subrounded, fine to coarse, non plastic, brown grey, dense to very dense, massive, moist.	100		09	Gravel:33.7% Sand:56% Silt:10% Clay:0%		
1215	45								
	46								
	47			100					
	48								
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-22

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.22	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-22**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**14 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**64.01 m**	Date Completed:	**16 Aug 12**
Coordinates:	**5,898,980 N , 375,211 E (UTM NAD 83)**	Elevation:	**1260 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILT AND SAND** (48.8 to 57.58) SILT and SAND, trace clay and gravel, subrounded, fine to coarse sand, fine gravel, low plasticity, brown, dense to very dense, stratified, moist to wet.	100		10	Gravel:0% Sand:48.7% Silt:46% Clay:5.2% Moisture Content:19% Plastic Limit:22 Liquid Limit:18		
	52			100					
	53								
	54			71					
1205	55			100					
	56			100					
	57								
	58		**COMPLETELY WEATHERED BEDROCK** (57.58 to 60.96) Completely Weathered Bedrock, recovered as: Silty SAND, trace clay and gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, rusty brown to white, very dense, massive, moist.	99		11	Gravel:11.7% Sand:54.8% Silt:21% Clay:12.8% Moisture Content:10% Plastic Limit:19 Liquid Limit:35		
	59			85					
1200	60					12			
	61		**MODERATELY WEATHERED BEDROCK** (60.96 to 64.01) Moderately Weathered Bedrock, recovered as: GRAVEL AND COBBLES, angular to subangular, fine to coarse, grey brown, very dense, massive, dry.						
	62			49					
	63								
	64		End of Drillhole: 64.01 m						
1195	65								
	66								
	67								
	68								
	69								
1190	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-22

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.22	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-23**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**60.96 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,899,383 N , 375,837 E (UTM NAD 83)**	Elevation:	**1265 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY GRAVELLY SAND** (0 to 8.62) Silty gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low to medium plasticity, dark brown, dense, massive, moist.	100		01		
	2							
	3							
	4			100		02		
1260	5							
	6					03		
	7			100				
	8							
	9		**BOULDER** (8.62 to 10.66) BOULDER	100				
1255	10			100				
	11		**SAND AND GRAVEL** (10.66 to 12.5) SAND and GRAVEL, trace clay and silt, subangular to subrounded, fine to coarse, non plastic, brown grey, compact to dense, massive, moist.	100				
	12			100		04		
	13		**SILTY SAND** (12.5 to 30.48) Silty SAND, some clay and gravel, subangular to subrounded, fine to coarse, low plasticity, light brown/grey to brown, dense to very dense, massive, friable, wet to moist.	100		05		
1250	15							
	16			100				
	17					06		
	18							
	19			79				
1245	20							
	21							
	22			100				
	23							
	24					07		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-23

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.23 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-23**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**60.96 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,899,383 N , 375,837 E (UTM NAD 83)**	Elevation:	**1265 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY SAND** (12.5 to 30.48) Silty SAND, some clay and gravel, subangular to subrounded, fine to coarse, low plasticity, light brown/grey to brown, dense to very dense, massive, friable, wet to moist.	100				
	27							
	28							
	29			100				
1235	30							
	31		**SILT** (30.48 to 37.98) SILT, trace sand and gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, firm to stiff, massive, moist.	100				
	32							
	33					08		
	34							
1230	35			100		09		
	36							
	37			100				
	38							
	39		**COMPLETELY WEATHERED BEDROCK** (37.98 to 57.91) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100		10		
1225	40							
	41			100				
	42							
	43							
	44			100				
1220	45							
	46							
	47			100				
	48							
	49							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-23

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.23	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-23**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**60.96 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,899,383 N , 375,837 E (UTM NAD 83)**	Elevation:	**1265 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**EQ**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**COMPLETELY WEATHERED BEDROCK** (37.98 to 57.91) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100				
	52							
	53							
	54							
1210	55							
	56							
	57							
	58		**MODERATELY WEATHERED BEDROCK** (57.91 to 60.96) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.					
1205	59							
	60							
	61		End of Drillhole: 60.96 m					
	62							
	63							
	64							
1200	65							
	66							
	67							
	68							
	69							
1195	70							
	71							
	72							
	73							
	74							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-23

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.23	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-24**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**59.19 m**	Date Completed:	**21 Aug 12**
Coordinates:	**5,898,638 N , 375,518 E (UTM NAD 83)**	Elevation:	**1271 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 6.1) Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown and grey, stiff to very stiff, massive, moist to wet.	100					
	2								
	3								
	4			100					
1266	5								
	6								
			BOULDER (6.1 to 6.4) BOULDER, light grey, pulverized to fine-grained particles.	100					
	7			100					
	8		**SAND AND GRAVEL** (6.4 to 19.81) SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown, dense to very dense, massive, dry to moist.	100					
	9								
1261	10			100					
	11			100					
	12								
	13			100					
	14								
1256	15								
	16			100		BS1	Gravel:35.4% Sand:41.3% Silt:18% Clay:5.7% Moisture Content:9% Plastic Limit:17 Liquid Limit:24		
	17								
	18			100					
	19			100					
1251	20		**SANDY SILT** (19.81 to 25.91) Sandy SILT, trace clay and gravel, subangular to subrounded, fine to coarse, low plasticity, brown to dark brown, stiff to very stiff, massive, moist.	100					
	21								
	22			100					
	23					BS2	Gravel:0% Sand:21.1% Silt:75% Clay:3.9% Moisture Content:22% Plastic Limit:15 Liquid Limit:21		
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-24

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.24	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-24**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**59.19 m**	Date Completed:	**21 Aug 12**
Coordinates:	**5,898,638 N , 375,518 E (UTM NAD 83)**	Elevation:	**1271 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**BOULDER** (25.91 to 26.41) BOULDER	100					
	27		**SAND AND GRAVEL** (26.41 to 33.53) SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, dense to very dense, massive, moist to wet.						
	28			100					
	29								
1241	30								
	31								
	32			100		BS3	Gravel:36.6% Sand:41.8% Silt:17% Clay:5% Moisture Content:10.9% Plastic Limit:18 Liquid Limit:23		
	33								
	34		**SILT** (33.53 to 42.67) SILT and SAND, some clay and gravel, subangular to subrounded, fine to coarse, low plasticity, red/brown to grey, very stiff to hard, dense to very dense, massive, moist (Till).	100					
1236	35								
	36			100					
	37					BS4	Gravel:1.5% Sand:39.2% Silt:49% Clay:10.1% Moisture Content:17% Plastic Limit:17 Liquid Limit:19		
	38								
	39			100					
1231	40								
	41			100					
	42								
	43		**SILTY SAND** (42.67 to 54.1) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, red/brown to grey, very stiff to hard, massive, moist (Till).						
	44			100		BS5	Gravel:16.7% Sand:42.2% Silt:27% Clay:14% Moisture Content:13.8% Plastic Limit:20 Liquid Limit:27		
1226	45								
	46								
	47			100					
	48								
	49								
				100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-24

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.24	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-24**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**20 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**59.19 m**	Date Completed:	**21 Aug 12**
Coordinates:	**5,898,638 N , 375,518 E (UTM NAD 83)**	Elevation:	**1271 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILTY SAND** (42.67 to 54.1) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, red/brown to grey, very stiff to hard, massive, moist (Till).	100					
	52								
	53			100					
	54								
1216	55		**COMPLETELY WEATHERED BEDROCK** (54.1 to 59.19) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, grey, hard, massive, dry.	100					
	56								
	57								
	58								
	59								
1211	60		End of Drillhole: 59.19 m						
	61								
	62								
	63								
	64								
1206	65								
	66								
	67								
	68								
	69								
1201	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-24

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.24	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-25**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**21 Aug 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**57.91 m**	Date Completed:	**23 Aug 12**
Coordinates:	**5,899,280 N , 373,655 E (UTM NAD 83)**	Elevation:	**1319 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND** (0 to 13.82) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, dark brown to grey, compact to very dense, stratified, moist.	100				
	2			100				
	3			100				
	4							
1314	5			100				
	6			100				
	7			100				
	8			100		BS1		
	9							
1309	10			100				
	11			100				
	12							
	13			100				
	14		**BOULDER** (13.82 to 14.32) BOULDER, diameter approx. 0.5 m, pulverized to light grey silty and gravelly particles.	100				
1304	15			100		BS2		
	16		**SILT AND GRAVEL** (14.32 to 16.16) SILT and GRAVEL, some sand, angular to rounded, fine to coarse, low to medium plasticity, grey to light brown, firm, loose to compact, stratified, moist.	100				
	17			100				
	18		**BOULDER** (16.16 to 16.96) BOULDER, diameter approx. 0.8 m, pulverized to light grey silty and gravelly particles.	100				
	19			100				
1299	20		**SILTY GRAVELLY SAND** (16.96 to 25.91) Silty Gravelly SAND, trace clay, subrounded to subangular, fine to coarse, low plasticity, brown to light brown, compact to dense, massive, moist.	100				
	21			100				
	22			100		BS3		
	23			100				
	24							

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-25

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.25	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-25**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**21 Aug 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**57.91 m**	Date Completed:	**23 Aug 12**
Coordinates:	**5,899,280 N , 373,655 E (UTM NAD 83)**	Elevation:	**1319 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (25.91 to 39.62) SILT, some gravel, trace clay and sand, angular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, dry to wet.	100				
	27			100				
	28			100				
	29							
1289	30			100		BS4		
	31							
	32			100				
	33							
	34			100				
1284	35			100				
	36							
	37			100				
	38							
	39			100				
1279	40		**NO RECOVERY** (39.62 to 41.15)	0				
	41		**SILTY SAND** (41.15 to 48.77) Silty SAND, some gravel, trace clay and cobbles, subangular to subrounded, fine to coarse, low plasticity, brown and grey, dense, stratified, moist.	100				
	42			100		BS6		
	43			100		BS5		
	44							
1274	45			100				
	46			100		BS7		
	47			100				
	48			100				
	49							

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-25

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.25	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-25**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**21 Aug 12**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**57.91 m**	Date Completed:	**23 Aug 12**
Coordinates:	**5,899,280 N , 373,655 E (UTM NAD 83)**	Elevation:	**1319 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.		DRILLHOLE NOTES	WELL DETAILS
	51		**SAND AND GRAVEL** (48.77 to 57.91) SAND and GRAVEL, trace cobbles, angular, fine to coarse, well graded, light grey, dense, massive, moist.	100					
	52								
	53								
	54			100					
1264	55								
	56			100					
	57								
	58		End of Drillhole: 57.91 m						
	59								
1259	60								
	61								
	62								
	63								
	64								
1254	65								
	66								
	67								
	68								
	69								
1249	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-25

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.25	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	BLACKWATER GOLD PROJECT	Drill Hole No.	**GT12-26**	PAGE	1 of 1
Contractor:	Major Drilling Environmental LLC.	Sample Type:	Overburden Core	Date Started:	23 Aug 12
Location:	Site D Embankment, North Abutment	Total Depth:	21.33 m	Date Completed:	24 Aug 12
Coordinates:	5,899,220 N , 374,387 E (UTM NAD 83)	Elevation:	1276 m	Date Well Installed:	
Drilling Method:	Sonic (rotary-vibratory) Drilling	Azimuth, Dip:	0°,-90°	Supervised by:	APF
Drilling Rig:	Diedrich 80K Sonic Track Rig	Hole size:	152.4mm (6")	Reviewed by:	BOC

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 1.52) Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown and grey, firm, massive, organic, moist to wet.	100					
	2		**SILTY SAND** (1.52 to 9.14) Silty SAND, some gravel, trace clay, subangular, fine to coarse, low plasticity, brown to grey, dense to very dense, massive, moist to wet.	100					
1271	5			30					
	8			100		BS1	Gravel:12.1% Sand:47.6% Silt:31% Clay:8.9% Moisture Content:10% Plastic Limit:15 Liquid Limit:20		
	9		**NO RECOVERY** (9.14 to 10.67)						
1266	10			100					
	11		**CLAYEY SILT** (10.67 to 11.16) Clayey SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, light grey, stiff, massive, moist.	100 100 100					
	13		**BOULDER** (11.16 to 11.56) BOULDER, diameter approx. 0.4m, light grey, pulverized to silty and sandy particles.	100					
1261	15		**SILT AND SAND** (11.16 to 15.24) SILT and SAND, some gravel, subrounded, fine to coarse, low to medium plasticity, brown, firm to hard/compact to dense, moist to saturated.						
	17		**MODERATELY WEATHERED BEDROCK** (15.24 to 21.33) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.	100		BS2			
1256	20			100					
	21		End of Drillhole: 21.33 m						
	22								
	23								
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-26

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.26	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-27**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**82.3 m**	Date Completed:	**25 Aug 12**
Coordinates:	**5,899,417 N , 376,457 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILT AND SAND** (0 to 6.1) SILT and SAND, some gravel, trace clay, angular to rounded, fine to coarse, low plasticity, brown, very stiff to hard, dense to very dense, massive, moist.	100					
	2								
	3			100					
	4								
1229	5			100		BS1	Gravel:14.1% Sand:40% Silt:39% Clay:7.3% Moisture Content:8% Plastic Limit:14 Liquid Limit:18		
	6								
	7		**SILTY GRAVELLY SAND** (6.1 to 16.76) Silty Gravelly SAND, trace clay, angular to rounded, fine to coarse, low plasticity, brown, dense to very dense, massive, moist.	100					
	8			100					
	9								
1224	10			100					
	11			100					
	12								
	13			100					
	14								
1219	15			100		BS2	Gravel:28.8% Sand:45% Silt:22% Clay:4.5% Moisture Content:7% Plastic Limit:15 Liquid Limit:20		
	16			100					
	17		**BOULDER** (16.76 to 18.29) BOULDER	100					
	18								
	19		**SANDY GRAVEL** (18.29 to 33.53) Sandy GRAVEL, some silt, trace clay, many cobbles and boulders, angular to subrounded, fine to coarse, low plasticity, brown to grey, dense to very dense, massive, moist to wet.	100 100					
1214	20			100					
	21			100					
	22			100					
	23			100					
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-27

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.27 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-27**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**82.3 m**	Date Completed:	**25 Aug 12**
Coordinates:	**5,899,417 N , 376,457 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY GRAVEL** (18.29 to 33.53) Sandy GRAVEL, some silt, trace clay, many cobbles and boulders, angular to subrounded, fine to coarse, low plasticity, brown to grey, dense to very dense, massive, moist to wet.	100					
	27			100		BS3	Gravel:59.9% Sand:29.9% Silt:8.2% Clay:2.1% Moisture Content:10% Liquid Limit:16		
	28			100					
	29					BS4			
1204	30			100					
	31			100					
	32			100					
	33			100					
	34		**NO RECOVERY** (33.53 to 36.58)						
1199	35			0					
	36								
	37		**SAND AND GRAVEL** (36.58 to 43.25) SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown to grey, dense to very dense, massive, moist to saturated.	100					
	38			100					
	39			100					
1194	40			100					
	41								
	42								
	43								
	44		**NO RECOVERY** (43.25 to 44.22) Approx. 1m no recovery, washed away by drilling	100					
1189	45		**SILT AND GRAVEL** (44.22 to 51.82) SILT and GRAVEL, subangular to subrounded, gap graded, low to medium plasticity, greyish brown, firm to stiff, moist.	100		BS5	Gravel:48.1% Sand:34.1% Silt:12% Clay:5.4% Moisture Content:9% Plastic Limit:16 Liquid Limit:28		
	46								
	47								
	48								
	49					BS6			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-27

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.27	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-27**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**82.3 m**	Date Completed:	**25 Aug 12**
Coordinates:	**5,899,417 N , 376,457 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51								
	52		**SILT** (51.82 to 57.91) SILT, trace clay, sand and gravel, subangular to subrounded, fine to coarse, low to medium plasticity, greyish brown, very stiff to hard, massive, moist, odor present.	100					
1179	55								
	57								
	58		**SILT AND CLAY** (57.91 to 67.05) SILT and CLAY, trace sand, fine to coarse, low to medium plasticity, greyish brown, very stiff to hard, massive, moist.						
1174	60								
	64								
1169	65								
	67		**SANDY GRAVELLY SILT** (67.05 to 75.65) Sandy Gravelly SILT, subrounded, fine to coarse, low plasticity, brown, very stiff to hard, massive, moist.						
1164	70								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-27

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1

APPENDIX B1.27 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-27**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**82.3 m**	Date Completed:	**25 Aug 12**
Coordinates:	**5,899,417 N , 376,457 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**MODERATELY WEATHERED BEDROCK** (75.65 to 82.3) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, light reddish brown to greyish brown.						
	77								
	78								
	79								
1154	80								
	81								
	82								
	83		End of Drillhole: 82.3 m						
	84								
1149	85								
	86								
	87								
	88								
	89								
1144	90								
	91								
	92								
	93								
	94								
1139	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-27

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.27	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-28**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**25 Aug 12**
Location:	**West Saddle Dam**	Total Depth:	**27.74 m**	Date Completed:	**26 Aug 12**
Coordinates:	**5,894,842 N , 371,772 E (UTM NAD 83)**	Elevation:	**1349 m**	Date Well Installed:	
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**JS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS
	1	**GRAVEL** (0 to 5.18) GRAVEL, some sand and clay, trace silt, angular, fine to coarse, non-plastic, brown, dense, massive, moist to wet	100		SPT1	31/26/22	48		
	2								
	3								
	4				SPT2	15/50+	100+		
1344	5								
	6	**SAND AND GRAVEL** (5.18 to 6.71) SAND and GRAVEL, subrounded, fine, non plastic, brown, very dense, stratified, moist to wet.	100		SPT3	11/50+	100+		
	7		100		SPT4	10/12/17	29		
	8	**SAND** (6.71 to 7.62) SAND some clay, silt and gravel, angular, fine to coarse uniformly graded, non-plastic, brown to grey, very dense, massive, wet. (Alluvium)	37		SPT5	10/37/55	92		
	9								
1339	10	**SAND** (7.62 to 10.06) SAND, some gravel, angular, fine to coarse, non-plastic, brown grey, dense to very dense, stratified, wet (Alluvium).	100						
	11								
	12	**GRAVEL** (10.06 to 11.58) GRAVEL, trace silt and sand, angular to subrounded, fine to coarse, non plastic, brown grey, dense to very dense, massive, wet.	84		SPT6	30/50/50+	100+		
	13								
	14		80				***14***	47	
1334	15	**NO RECOVERY** (11.58 to 13.41) No Recovery (Advancing of Casing).	95				***14***	51	
	16	**SLIGHTLY WEATHERED FELSIC TUFF** (13.41 to 21.75) FELSIC LAPILLI TUFF, fine grained, porphyritic, grey green, medium strong to strong, slightly weathered, clast supported matrix becoming thinly flow banded, lose joints are open to partly open and dip ~30°-90°, joint surfaces are planar, trace calcite infill, trace pyrite.	89				***7***	43	
	17								
	18		98				***21***	55	
	19								
1329	20		100				***14***	46	
	21		100				***7***	44	
	22	**FAULT ZONE** (21.75 to 24.5) Healed FAULT or structure, crumbly to massive with patchy dark pyrite in gouge (0.5%)	96				***29***	56	
	23								
	24		100				***25***	53	

RMR VALUE ◆ 20 40 60 80 | RQD (%) ■ 20 40 60 80 | SPT 'N' VALUES ● 20 40 60 80

DRILLHOLE NOTES

WELL DETAILS

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-28

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.28 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-28**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Date Started:	**25 Aug 12**
Location:	**West Saddle Dam**	Total Depth:	**27.74 m**	Date Completed:	**26 Aug 12**
Coordinates:	**5,894,842 N , 371,772 E (UTM NAD 83)**	Elevation:	**1349 m**	Date Well Installed:	
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**JS**
Drilling Rig:	**Mobile B-54**	Hole size:	**96mm (HQ3)**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SLIGHTLY WEATHERED FELSIC TUFF** (24.5 to 26.45) FELSIC TUFF, fine to medium grained, porphyritic, grey green, medium strong to strong, slightly weathered, laminated to massive, lose joints are open to partly open and dip ~30°-90°, joint surfaces are planar, trace calcite infill, trace pyrite.	97				***12***	46				
	27			100				***20***	56				
	28		**DYKE** (26.45 to 27.35) DIORITE DYKE, fine to medium grained, porphyritic, light grey, weak to medium strong, moderately weathered, massive, planar to rough, tight to open, trace calcite infilling, trace pyrite.										
	29												
1319	30												
	31		**SLIGHTLY WEATHERED FELSIC TUFF** (27.35 to 27.74) FELSIC TUFF, fine to medium grained, porphyritic, grey green, medium strong to strong, slightly weathered, laminated to massive, joint surfaces are planar, trace calcite and clay infill.										
	32												
	33												
	34		End of Drillhole: 27.74 m										
1314	35												
	36												
	37												
	38												
	39												
1309	40												
	41												
	42												
	43												
	44												
1304	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-28

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.28	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-29**	PAGE	**1 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**48.76 m**	Date Completed:	**27 Aug 12**
Coordinates:	**5,898,510 N , 376,004 E (UTM NAD 83)**	Elevation:	**1235 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1–4		**SANDY SILT** (0 to 4.57) Sandy SILT, some gravel, angular, fine to coarse, non plastic, brown, stiff to very stiff, massive, moist to dry.	100 100 100					
1230	5–12		**SILTY SAND** (4.57 to 12.19) Silty SAND, trace clay, fine to coarse, non plastic, brown, compact to dense, massive, moist to saturated.	100 100 100 100		BS1	Gravel:0% Sand:69.7% Silt:27% Clay:3.4% Moisture Content:15.6% Plastic Limit:0 Liquid Limit:0		
1225	10								
	12–24		**SANDY SILT** (12.19 to 36.57) Sandy SILT, some clay, trace gravel, subangular to subrounded, fine, low plasticity, brown, stiff to very stiff, massive, moist to wet.	100 100 100 100 100 100		BS2	Gravel:0% Sand:27.9% Silt:62% Clay:10.1% Moisture Content:18% Liquid Limit:17		
1220	15								
1215	20								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-29

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1

APPENDIX B1.29 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-29**	PAGE	**2 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**48.76 m**	Date Completed:	**27 Aug 12**
Coordinates:	**5,898,510 N , 376,004 E (UTM NAD 83)**	Elevation:	**1235 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY SILT** (12.19 to 36.57) Sandy SILT, some clay, trace gravel, subangular to subrounded, fine, low plasticity, brown, stiff to very stiff, massive, moist to wet.	100		BS3			
	27								
	28			100					
	29								
1205	30								
	31			100					
	32								
	33			100		BS4	Gravel:0% Sand:32.3% Silt:56% Clay:11.6% Moisture Content:17%		
	34			100					
1200	35								
	36			100					
	37		**SILTY SAND** (36.57 to 42.67) Silty SAND, some clay and gravel, subangular to subrounded, fine to coarse, non plastic, brown, dense to very dense, massive, moist to saturated.	100					
	38			100					
	39								
1195	40			100					
	41					BS5	Gravel:17.9% Sand:45.6% Silt:22% Clay:14.2% Moisture Content:16% Plastic Limit:19 Liquid Limit:31		
	42			100					
	43		**COMPLETELY WEATHERED BEDROCK** (42.67 to 48.76) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown mottled yellow, hard, massive, dry.	100					
	44								
1190	45			100					
	46								
	47								
	48								
	49		End of Drillhole: 48.76 m	100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-29

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.29 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-30**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**27 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**51.81 m**	Date Completed:	**28 Aug 12**
Coordinates:	**5,897,570 N , 375,613 E (UTM NAD 83)**	Elevation:	**1248 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1–3		**SANDY SILT AND GRAVEL** (0 to 3.05) Sandy SILT and GRAVEL, subrounded to subangular, fine to coarse, brown, firm to stiff, compact to dense, massive, dry. (0.72) BOULDER, approx. 1.2m diameter.					
1243	4–6		**SILT** (3.05 to 6.75) SILT, some clay, sand and gravel, angular, fine to coarse, low plasticity, brown/grey, very stiff to hard, massive, moist.			BS1		
	7–9		**SAND AND GRAVEL** (6.75 to 9.14) SAND and GRAVEL, some silt, trace cobbles, angular, fine, brown grey, dense to very dense, massive, dry.					
1238	10–13		**SILTY CLAY** (9.14 to 13.72) Silty CLAY, trace sand and gravel, subangular, fine to coarse sand, fine gravel, low plasticity, brown, stiff to very stiff, massive, moist.			BS2		
	14–19		**SILT AND SAND** (13.72 to 21.34) SILT and SAND, some gravel, subangular to subrounded, fine to coarse sand, fine gravel, brown, loose to dense, very stiff, massive, dry to wet.	100				
1228	20–21			100				
	22–24		**SILT** (21.34 to 37.7) SILT, some gravel, sand and clay, angular to subrounded, fine to coarse, low to medium plasticity, brown to light brown, stiff to hard, stratified, moist.	100 100		BS3		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-30

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.30	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-30**		PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**		Date Started:	**27 Aug 12**
Location:	**Inside Site D TSF Area**		Total Depth:	**51.81 m**		Date Completed:	**28 Aug 12**
Coordinates:	**5,897,570 N , 375,613 E (UTM NAD 83)**		Elevation:	**1248 m**		Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**		Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**		Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (21.34 to 37.7) SILT, some gravel, sand and clay, angular to subrounded, fine to coarse, low to medium plasticity, brown to light brown, stiff to hard, stratified, moist.	100		BS4		
	27							
	28			100				
	29							
1218	30							
	31			100				
	32					BS5		
	33			100				
	34			100				
1213	35							
	36			100				
	37			100				
	38		**BOULDER** (37.7 to 39) Weathered BOULDER, approx 1.3m diameter.	100				
	39		**GRAVELLY SILT** (39 to 47.24) Gravelly SILT, some sand, trace clay, angular, fine to coarse, non plastic to low plasticity, dark grey/white/grey/yellow/red/purple, very stiff to hard, massive, moist.					
1208	40			100				
	41							
	42			100				
	43							
	44			100				
1203	45							
	46							
	47							
	48		**COMPLETELY WEATHERED BEDROCK** (47.24 to 51.82) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish purple brown, hard, massive, dry.	100				
	49							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-30

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.30	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-30**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**27 Aug 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**51.81 m**	Date Completed:	**28 Aug 12**
Coordinates:	**5,897,570 N , 375,613 E (UTM NAD 83)**	Elevation:	**1248 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**APF**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.		DRILLHOLE NOTES	WELL DETAILS
	51								
	52		End of Drillhole: 51.81 m						
	53								
	54								
1193	55								
	56								
	57								
	58								
	59								
1188	60								
	61								
	62								
	63								
	64								
1183	65								
	66								
	67								
	68								
	69								
1178	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-30

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.30	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-31**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**6 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**57.93 m**	Date Completed:	**7 Sep 12**
Coordinates:	**5,898,002 N , 375,982 E (UTM NAD 83)**	Elevation:	**1243 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS/SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 3.05) Silty SAND and GRAVEL trace cobbles, angular and subangular, non plastic, brown and grey, loose, dry.	100					
	2			100					
	3			100					
			SILTY GRAVELLY SAND (3.05 to 18.3) Silty Gravelly SAND, trace clay, subangular, fine to coarse, low plasticity, dark brown to brown, dense to very dense, massive, moist.	100					
	4			100					
1238	5			100		01	Gravel:34.9% Sand:46.4% Silt:14% Clay:4.3% Moisture Content:8.4% Plastic Limit:14 Liquid Limit:17		
	6			100					
	7			100					
	8			100					
	9			100					
				100					
				20					
1233	10			100					
	11			100					
	12			100					
	13			100					
	14			100		03	Gravel:31.8% Sand:33.1% Silt:26% Clay:8.9% Moisture Content:8.4% Plastic Limit:12 Liquid Limit:22		
1228	15			100					
	16			100					
	17			100					
	18			100					
			SANDY SILT (18.3 to 29.14) Sandy SILT, trace clay and gravel, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.	100					
1223	20			100		04	Gravel:4.8% Sand:33.8% Silt:52% Clay:9.2% Moisture Content:14.5% Plastic Limit:16 Liquid Limit:19		
	21			100					
	22			100					
	23			100					
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-31

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.31	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-31**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**6 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**57.93 m**	Date Completed:	**7 Sep 12**
Coordinates:	**5,898,002 N , 375,982 E (UTM NAD 83)**	Elevation:	**1243 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS/SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY SILT** (18.3 to 29.14) Sandy SILT, trace clay and gravel, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.	100					
	27								
	28			100					
	29			100					
1213	30		**SILTY CLAY** (29.14 to 30.5) Silty CLAY, trace sand, fine, low to medium plasticity, grey, hard, friable, dry.	100					
	31		**SILT AND GRAVEL** (30.5 to 32.54) SILT and GRAVEL, some sand, subangular, fine to coarse, non plastic to low plasticity, dark grey, hard and very dense, massive, moist.	50					
	32			100					
	33		**GRAVELLY SAND** (32.54 to 36.6) Gravelly SAND, some silt, trace cobbles, subangular to subrounded, fine to coarse, low plasticity, brown, dense to very dense, massive, wet.	50					
	34			100					
1208	35			100					
	36			100					
	37		**SILT** (36.6 to 38.1) SILT, trace clay and sand, fine, low plasticity, dark brown/grey, very stiff to hard, massive, moist.	100		07	Gravel:0% Sand:5.4% Silt:85% Clay:9.6% Moisture Content:18.9% Plastic Limit:18 Liquid Limit:25		
	38			100					
	39		**SILTY SAND AND GRAVEL** (38.1 to 40.04) Silty SAND and GRAVEL, subangualr to subrounded, fine to coarse, non plastic, dark brown/grey, dense to very dense, massive, moist.	100					
1203	40			100					
	41		**SILT AND GRAVEL** (40.04 to 57.93) SILT and GRAVEL, some sand, trace clay, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown/grey, hard and very dense, massive, moist to wet.	100					
	42			100					
	43			100					
	44			100					
1198	45					08			
	46			66					
	47								
	48			100					
	49			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-31

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.31 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-31**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**6 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**57.93 m**	Date Completed:	**7 Sep 12**
Coordinates:	**5,898,002 N , 375,982 E (UTM NAD 83)**	Elevation:	**1243 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**HS/SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILT AND GRAVEL** (40.04 to 57.93) SILT and GRAVEL, some sand, trace clay, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown/grey, hard and very dense, massive, moist to wet.	100					
	52			100					
	53			100					
	54			100					
1188	55			100					
	56			100					
	57								
	58		End of Drillhole: 57.93 m						
	59								
1183	60								
	61								
	62								
	63								
	64								
1178	65								
	66								
	67								
	68								
	69								
1173	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-31

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.31	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-32**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**8 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**76.2 m**	Date Completed:	**10 Sep 12**
Coordinates:	**5,896,543 N , 374,526 E (UTM NAD 83)**	Elevation:	**1340 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILT AND GRAVEL** (0 to 10.94) SILT and GRAVEL, some sand, subrounded, dark brown with some grey, stiff with 1m very soft area, moist with some dry and wet areas.	100					
	2			100					
	3			100					
	4			100					
1335	5			100					
	6			100					
	7			100					
	8			100					
	9			100					
				100					
1330	10			38					
				100					
	11			100					
			BOULDERS (10.94 to 13.69) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey.	100					
	12								
	13			100					
	14		**SILTY GRAVELLY SAND** (13.69 to 15.59) Silty Gravelly SAND, trace clay and cobbles, subrounded, fine to coarse, low plasticity, brown/light grey, compact, massive, dry to moist.	100					
1325	15			100					
				100		01	Gravel:32% Sand:34.9% Silt:27% Clay:6.5% Moisture Content:5.6% Plastic Limit:13 Liquid Limit:17		
	16		**SANDY GRAVEL** (15.59 to 30.48) Sandy GRAVEL, some silt, trace clay, subrounded, fine to coarse, dark brown mottled grey, dense, massive, dry to wet.	100					
	17			100					
	18			100					
	19			100					
1320	20			83					
				100					
	21			100					
				100					
	22			100					
	23			100					
	24			100		02a	Gravel:49% Sand:34.2% Silt:13% Clay:3.9% Moisture Content:6.1% Plastic Limit:15 Liquid Limit:29		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-32

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.32	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-32**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**8 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**76.2 m**	Date Completed:	**10 Sep 12**
Coordinates:	**5,896,543 N , 374,526 E (UTM NAD 83)**	Elevation:	**1340 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY GRAVEL** (15.59 to 30.48) Sandy GRAVEL, some silt, trace clay, subrounded, fine to coarse, dark brown mottled grey, dense, massive, dry to wet.	100					
	27								
	28			100 100					
	29			100					
1310	30			100					
	31		**SAND** (30.48 to 37.88) SAND, some silt and gravel, trace clay, subrounded, low plasticity, greyish brown, very dense becoing dense, moist.	100					
	32								
	33								
	34			100					
1305	35			100					
	36			100					
	37			100					
	38		**BOULDERS** (37.88 to 39.63) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey.	100					
	39			100			Gravel:45.1% Sand:28.8% Silt:19% Clay:7% Moisture Content:8.9% Plastic Limit:14 Liquid Limit:22		
1300	40		**SILTY GRAVELLY SAND** (39.63 to 56.34) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey brown, compact to dense, massive, some oxidation, moist. Note: SILT and GRAVEL lenses throughout. 45 m to 72.35 m: Interbedded reworked Weathered Bedrock.	100		02b			
	41								
	42			100					
	43			100					
	44			100					
1295	45								
	46								
	47								
	48			100					
	49					04	Gravel:27.5% Sand:39.1% Silt:24% Clay:9% Moisture Content:7.2% Plastic Limit:14 Liquid Limit:23		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-32

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.32	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-32**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**8 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**76.2 m**	Date Completed:	**10 Sep 12**
Coordinates:	**5,896,543 N , 374,526 E (UTM NAD 83)**	Elevation:	**1340 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILTY GRAVELLY SAND** (39.63 to 56.34) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey brown, compact to dense, massive, some oxidation, moist.						
	52								
	53		Note: SILT and GRAVEL lenses throughout.	50					
	54		45 m to 72.35 m: Interbedded reworked Weathered Bedrock.	100					
1285	55			100					
	56								
	57		**CLAYEY SILT** (56.34 to 68.7) Clayey SILT, trace gravel, subrounded, medium to high plasticity, grey/brown, firm to very stiff, massive, moist.	100					
	58			100					
	59								
1280	60			100					
	61								
	62			100					
	63								
	64			100					
1275	65			90		06	Moisture Content:13.7% Plastic Limit:23 Liquid Limit:31		
	66								
	67								
	68			100					
	69		**SILT AND GRAVEL** (68.7 to 70.1) SILT and GRAVEL, some sand and clay, low to medium plasticity, brown/grey, first 0.8m very stiff, rest loose, friable, dry.	100					
1270	70			100					
	71		**NO RECOVERY** (70.1 to 72.35) Approx. 1.7m no recovery, washed away by drilling	0					
	72			100					
	73		**COMPLETELY WEATHERED BEDROCK** (72.35 to 73.15) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, brown, hard, massive, moist.	100 100 100					
	74			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-32

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.32	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-32**	PAGE	**4 of 4**	
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**	Date Started:	**8 Sep 12**	
Location:	**Site C Embankment**		Total Depth:	**76.2 m**	Date Completed:	**10 Sep 12**	
Coordinates:	**5,896,543 N , 374,526 E (UTM NAD 83)**		Elevation:	**1340 m**	Date Well Installed:		
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**	
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**	

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**HIGHLY WEATHERED BEDROCK** (73.15 to 76.2) Highly Weathered Bedrock, recovered as: GRAVEL, some cobbles, angular to subangular, fine to coarse, purple grey, very dense, massive, moist. End of Drillhole: 76.2 m						
	77								
	78								
	79								
1260	80								
	81								
	82								
	83								
	84								
1255	85								
	86								
	87								
	88								
	89								
1250	90								
	91								
	92								
	93								
	94								
1245	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-32

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.32	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-33**	PAGE	**1 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**10 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**48.78 m**	Date Completed:	**11 Sep 12**
Coordinates:	**5,896,540 N , 374,294 E (UTM NAD 83)**	Elevation:	**1358 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILT AND GRAVEL** (0 to 3.05) SILT and GRAVEL, some sand, subangular, fine to coarse, low plasticity, brown/grey, firm to stiff, compact to dense, massive, moist.	90					
	2			90					
	3			100					
				100					
				90					
	4		**NO RECOVERY** (3.05 to 3.4) Approx. 0.35m no recovery, washed away by drilling	0					
				100					
1353	5		**SILTY GRAVELLY SAND** (3.4 to 29.14) Silty Gravelly SAND, some clay, subangular, fine to coarse, low plasticity, brown/grey, compact to dense, massive, moist.	100		01	Gravel:21.4% Sand:35.4% Silt:31% Clay:12.6% Moisture Content:9.4% Plastic Limit:12 Liquid Limit:28		
	6			100					
	7								
	8								
	9			100					
1348	10								
	11			100					
	12			100					
				100					
	13			100					
	14			100					
1343	15								
	16			100					
	17								
	18			100					
	19			100					
				100					
1338	20			100					
				100					
	21			100					
	22			100					
	23			100					
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-33

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.33	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-33**	PAGE	**2 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**10 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**48.78 m**	Date Completed:	**11 Sep 12**
Coordinates:	**5,896,540 N , 374,294 E (UTM NAD 83)**	Elevation:	**1358 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY GRAVELLY SAND** (3.4 to 29.14) Silty Gravelly SAND, some clay, subangular, fine to coarse, low plasticity, brown/grey, compact to dense, massive, moist.	75 100 100 100 100 100 100					
	27								
	28								
	29								
1328	30		**BOULDER** (29.14 to 30.85) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey.	100 100					
	31		**SILTY GRAVELLY SAND** (30.85 to 39.63) Silty Gravelly SAND, trace clay, subangular, fine to coarse, low plasticity, brown/grey, dense to very dense, massive, moist.	100 100					
	32								
	33			100		03	Gravel:20.7% Sand:39.5% Silt:31% Clay:9.2% Moisture Content:9% Plastic Limit:13 Liquid Limit:24		
	34			100					
1323	35			100					
	36			100					
	37			100					
	38								
	39								
1318	40		**CLAYEY SILT** (39.63 to 42.68) Clayey SILT, trace sand and gravel, subangular, fine to coarse, medium plasticity, greyish light brown, very stiff to hard, massive, moist.	100		04	Gravel:2.1% Sand:9.9% Silt:64% Clay:24.3% Moisture Content:19.6% Plastic Limit:21 Liquid Limit:41		
	41								
	42			100					
	43		**COMPLETELY WEATHERED BEDROCK** (42.68 to 45.23) Completely Weathered Bedrock, recovered as: Silty GRAVEL, some sand, subangular to subrounded, fine to coarse, non plastic, greyish purple brown, very dense, massive, dry.	100 100					
	44			100					
1313	45								
	46		**HIGHLY WEATHERED BEDROCK** (45.23 to 48.78) Highly Weathered Bedrock, recovered as: GRAVEL, some sand, some silt, angular to subangular, fine to coarse, purple reddish brown to greyish brown, very dense, massive, moist.	100 100 100					
	47								
	48			100					
	49		End of Drillhole: 48.78 m						

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-33

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.33	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-34**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Sep 12**
Location:	**Plant Site, Option 2**	Total Depth:	**82.3 m**	Date Completed:	**14 Sep 12**
Coordinates:	**5,895,110 N , 374,575 E (UTM NAD 83)**	Elevation:	**1419 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND** (0 to 38.1) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, massive, moist.	100					
	2			90					
	3			100					
				100					
				100					
	4			100		01	Gravel:3.3% Sand:27.9% Silt:58% Clay:11.2% Moisture Content:15.8% Plastic Limit:15 Liquid Limit:20		
1414	5			100					
	6			100					
	7			100					
	8								
	9			100					
1409	10			100					
	11			100					
				100					
				100					
	12			100					
	13			100					
	14								
1404	15			100					
				100					
	16			100					
	17			100		03	Gravel:12.4% Sand:43.7% Silt:34% Clay:9.9% Moisture Content:8.4% Plastic Limit:12 Liquid Limit:19		
	18			100					
	19			100					
				100					
1399	20			100					
	21			100					
				100					
	22			100					
	23			100					
				100					
	24			100					

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-34

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.34	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-34**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Sep 12**
Location:	**Plant Site, Option 2**	Total Depth:	**82.3 m**	Date Completed:	**14 Sep 12**
Coordinates:	**5,895,110 N , 374,575 E (UTM NAD 83)**	Elevation:	**1419 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
			SILTY SAND (0 to 38.1) Silty SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, massive, moist.	100					
	26			100					
	27			100					
				100					
	28			100					
	29			100					
1389	30			100					
	31			100					
	32								
	33			100					
				100					
	34			100					
1384	35			100					
	36								
	37			100					
	38		**SILTY SANDY GRAVEL** (38.1 to 51.82) Silty Sandy GRAVEL, subangular to subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, massive, moist.	100					
	39			100					
1379	40			100					
	41								
	42			100		04	Gravel:40.1% Sand:30.7% Silt:23% Clay:6.6% Moisture Content:8.4% Plastic Limit:13 Liquid Limit:22		
	43			100					
	44			100					
1374	45			100					
	46		**NO RECOVERY** (45.72 to 46.75) Approx. 1m no recovery, washed away by drilling.	0					
	47			100					
				100					
	48			100					
				100					
	49			100					

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-34

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.34	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\1\01\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\1\01\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-34**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Sep 12**
Location:	**Plant Site, Option 2**	Total Depth:	**82.3 m**	Date Completed:	**14 Sep 12**
Coordinates:	**5,895,110 N , 374,575 E (UTM NAD 83)**	Elevation:	**1419 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51			100 100					
	52		**SILT** (51.82 to 57.91) SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, greyish brown, stiff to very stiff, massive, moist, odor present.			05	Gravel:0.4% Sand:4.1% Silt:81% Clay:15% Moisture Content:16.3% Plastic Limit:17 Liquid Limit:24		
	53			100					
	54								
1364	55								
	56			100					
	57								
	58		**CLAY AND SILT** (57.91 to 67.05) CLAY and SILT, trace sand, fine to coarse, uniformly graded, high plasticity, greyish brown, stiff, moist.						
	59			100					
1359	60								
	61								
	62			100					
	63								
	64								
1354	65			100					
	66								
	67								
	68		**SANDY GRAVELLY SILT** (67.05 to 75.65) Sandy Gravelly SILT, subrounded, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.	100					
	69			100 100					
1349	70			100					
	71			100					
	72								
	73			100					
	74			100					

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-34

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.34	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-34**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**12 Sep 12**
Location:	**Plant Site, Option 2**	Total Depth:	**82.3 m**	Date Completed:	**14 Sep 12**
Coordinates:	**5,895,110 N , 374,575 E (UTM NAD 83)**	Elevation:	**1419 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
				100					
	76		**HIGHLY WEATHERED BEDROCK** (75.65 to 82.3) Highly Weathered Bedrock, partially pulverised by drilling process, recovered as: Sandy SILT, light reddish grey brown.	100					
	77								
	78			100					
	79								
1339	80			100					
	81								
	82			100					
	83		End of Drillhole: 82.3 m						
	84								
1334	85								
	86								
	87								
	88								
	89								
1329	90								
	91								
	92								
	93								
	94								
1324	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Updated elevation using Ldair data.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-34

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.34	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-35**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**54.88 m**	Date Completed:	**18 Sep 12**
Coordinates:	**5,895,961 N , 374,587 E (UTM NAD 83)**	Elevation:	**1320 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SAND** (0 to 3.05) Gravelly SAND, subangular, trace organic matter, non plastic, light and dark brown, loose, moist.	80 90 90					
	3		**SILTY GRAVELLY SAND** (3.05 to 12.2) Silty Gravelly SAND, trace clay, subangular, fine to coarse, low plasticity, greyish brown, dense becoming very dense, massive, moist.	100					
1315	5			100					
	6			100					
	7			100		01	Gravel:32.8% Sand:39.2% Silt:22% Clay:6.5% Moisture Content:8.1% Plastic Limit:15 Liquid Limit:21		
	8			100					
	9			100					
	10			100 100 100 100					
1310				100					
	11			100					
	12		**SILT AND GRAVEL** (12.2 to 13) SILT and GRAVEL, some sand, subrounded, fine to coarse, non plastic, brown/dark brown, hard/very dense, massive, dry.	100 100 100 100 100 100					
	14		**BOULDER** (13 to 13.7) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.7 m.	100 100					
1305	15			100					
	16			100					
	17		**SAND** (13.7 to 14) SAND, fine to coarse, uniformly graded, non plastic, brown, dense, massive, moist.	100 100					
	18		**SILT AND GRAVEL** (14 to 20.85) SILT and GRAVEL, some sand, subrounded, fine to coarse, non plastic, brown/dark brown, hard/very dense, massive, dry.	100					
1300	20			100					
	21		**BOULDER** (20.85 to 21.35) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.5 m.	100 100					
	23		**SILT AND GRAVEL** (21.35 to 36.58) SILT and GRAVEL, some sand, subrounded, fine to coarse, non plastic, brown/dark brown, hard/very dense, massive, dry.	100					
	24								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-35

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.35	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-35**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**54.88 m**	Date Completed:	**18 Sep 12**
Coordinates:	**5,895,961 N , 374,587 E (UTM NAD 83)**	Elevation:	**1320 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT AND GRAVEL** (21.35 to 36.58) SILT and GRAVEL, some sand, subrounded, fine to coarse, non plastic, brown/dark brown, hard/very dense, massive, dry.	100					
	27			100					
	28								
	29			100					
1290	30								
	31			100					
	32								
	33			100					
	34			100					
1285	35			100					
	36			100					
	37		**SILT** (36.58 to 42.68) SILT, some clay and sand, trace gravel, subangular, fine to coarse, medium plasticity, brown and light brown, firm to stiff, massive, moist.	100		03	Gravel:1.7% Sand:2.3% Silt:78% Clay:18.4% Moisture Content:23.3% Plastic Limit:22 Liquid Limit:34		
	38								
	39			100 100					
1280	40			100					
	41					04	Gravel:0% Sand:38.6% Silt:42% Clay:19.4% Moisture Content:25.9% Plastic Limit:27 Liquid Limit:46		
	42			100					
	43		**COMPLETELY WEATHERED BEDROCK** (42.68 to 54.88) Completely Weathered Bedrock, recovered as: Gravelly SILT, some clay and sand, subangular to subrounded, fine to coarse, non plastic, purple brown mottled light grey, hard, dry.	100					
	44								
1275	45			100					
	46			100					
	47								
	48			100					
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-35

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.35	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-35**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**17 Sep 12**
Location:	**Site C Embankment**	Total Depth:	**54.88 m**	Date Completed:	**18 Sep 12**
Coordinates:	**5,895,961 N , 374,587 E (UTM NAD 83)**	Elevation:	**1320 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**COMPLETELY WEATHERED BEDROCK** (42.68 to 54.88) Completely Weathered Bedrock, recovered as: Gravelly SILT, some clay and sand, subangular to subrounded, fine to coarse, non plastic, purple brown mottled light grey, hard, dry.	100					
	52								
	53			100					
	54								
1265	55		End of Drillhole: 54.88 m						
	56								
	57								
	58								
	59								
1260	60								
	61								
	62								
	63								
	64								
1255	65								
	66								
	67								
	68								
	69								
1250	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-35

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.35	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-36**	PAGE	**1 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**109.73 m**	Date Completed:	**21 Sep 12**
Coordinates:	**5,896,574 N , 375,981 E (UTM NAD 83)**	Elevation:	**1324 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY GRAVELLY SAND** (0 to 14.05) Silty Gravelly SAND, trace clay, subangular, fine to coarse, low plasticity, grey brown yellow, dense to very dense, massive, moist.	50					
	2								
	3			100					
	4								
1319	5								
	6			100					
	7			100					
	8								
	9								
1314	10			90		01	Gravel:28.7% Sand:42.4% Silt:24% Clay:5.4% Moisture Content:8.2% Plastic Limit:12 Liquid Limit:17		
	11								
	12			100					
	13			100					
	14			100					
			BOULDER (14.05 to 14.65) BOULDER, diameter approx. 0.6m, pulverized to silty and sandy particles and small rock fragments, light grey.	100					
1309	15			100					
	16		**SILT AND GRAVEL** (14.65 to 20.8) SILT and GRAVEL, some sand, subangular, fine to coarse, low plasticity, grey brown yellow, stiff to hard, dense to very dense, massive, moist.	100					
	17								
	18			50					
	19			100					
1304	20			100					
	21		**SAND** (20.8 to 23.6) SAND, some silt, trace gravel, subangular, fine to coarse, non plastic, grey brown yellow, dense to very dense, massive, moist.	100					
	22			100					
	23			100					
				100					
	24		**BOULDER** (23.6 to 24) BOULDER, diameter approx. 0.4m, pulverized	100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-36

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.36 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-36**	PAGE	**2 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**109.73 m**	Date Completed:	**21 Sep 12**
Coordinates:	**5,896,574 N , 375,981 E (UTM NAD 83)**	Elevation:	**1324 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
			to silty and sandy particles and small rock fragments, light grey.	100					
	26		**SILT AND GRAVEL** (24 to 27.7) SILT and GRAVEL, some sand, subangular, gap graded, low to medium plasticity, greyish brown with trace light brown and golden brown, stiff to hard, moist.	100					
	27								
	28			100					
	29		**BOULDER** (27.7 to 28.9) BOULDER, diameter approx. 1.2m, pulverized to silty and sandy particles and small rock fragments, light grey.	100					
1294	30								
	31		**SAND AND GRAVEL** (28.9 to 50.3) SAND and GRAVEL, some silt, trace clay and cobbles, subrounded, fine to coarse, non plastic to low plasticity, grey brown, dense to very dense, massive, moist to wet.	100					
	32			100					
	33			100					
	34			100					
1289	35			100					
	36			100					
	37			100					
	38			100					
	39			100					
1284	40								
	41			100		03	Gravel:39.3% Sand:35.1% Silt:17% Clay:8.3% Moisture Content:7.9% Plastic Limit:14 Liquid Limit:26		
	42								
	43			100					
	44			100					
1279	45			100					
	46								
	47			100					
	48								
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-36

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.36	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-36**	PAGE	**3 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**109.73 m**	Date Completed:	**21 Sep 12**
Coordinates:	**5,896,574 N , 375,981 E (UTM NAD 83)**	Elevation:	**1324 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILT** (50.3 to 60.96) SILT, trace clay and sand, fine, non plastic, grey brown, stiff to very stiff, massive, moist to wet.	100					
	52			100					
	53								
	54			100		04	Gravel:0% Sand:0.8% Silt:94% Clay:5% Moisture Content:22.6%		
1269	55								
	56			100					
	57			100					
	58								
	59			100					
1264	60								
	61		**SILT AND GRAVEL** (60.96 to 64) SILT and GRAVEL, some sand, trace clay, fine to coarse, non plastic, grey brown, stiff to very stiff, dense to very dense, massive, moist to wet.	90					
	62								
	63								
	64		**GRAVEL** (64 to 67.05) GRAVEL, some silt, trace clay and sand, fine, non plastic, grey brown, dense to very dense, massive, moist to wet.	100					
1259	65								
	66								
	67		**CLAY AND SILT** (67.05 to 88.39) CLAY and SILT, some sand, fine to coarse, high plasticity, brown grey, very stiff to hard, massive, moist. Some sand lenses <0.3 m thick. 85 m to 103 .35 m: Interbedded reworked Weathered Bedrock	100					
	68								
	69			100					
1254	70			0					
	71			100					
	72			100					
	73			100					
	74			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-36

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.36	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-36**	PAGE	**4 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**109.73 m**	Date Completed:	**21 Sep 12**
Coordinates:	**5,896,574 N , 375,981 E (UTM NAD 83)**	Elevation:	**1324 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**CLAY AND SILT** (67.05 to 88.39) CLAY and SILT, some sand, fine to coarse, high plasticity, brown grey, very stiff to hard, massive, moist.	100					
	77		Some sand lenses <0.3 m thick.	100					
	78		85 m to 103 .35 m: Interbedded reworked Weathered Bedrock	100		05	Gravel:0% Sand:16.2% Silt:43% Clay:40.9% Moisture Content:36% Plastic Limit:27 Liquid Limit:55		
1244	80			100					
	81			100					
	82			100					
	83			100					
1239	85			100					
	86			100					
	87			100					
	88			100					
	89		**CLAYEY SILTY SAND** (88.39 to 97.53) Clayey Silty SAND, subangular to subrounded, fine to coarse, low to medium plasticity, white mottled light brown, dense to very dense, laminated, moist.	100					
1234	90			100					
	92			60					
	93			100					
1229	95			100					
	98		**SILTY GRAVEL** (97.53 to 100.7) Silty GRAVEL, some sand, angular to subangular, fine to coarse, non plastic, grey brown mottle light grey, very dense, massive, dry.	100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-36

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
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APPENDIX B1.36	REV. 1

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-36**	PAGE	**5 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**109.73 m**	Date Completed:	**21 Sep 12**
Coordinates:	**5,896,574 N , 375,981 E (UTM NAD 83)**	Elevation:	**1324 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
				100					
	101		**SANDY CLAY AND SILT** (100.7 to 103.35) Sandy CLAY AND SILT, subangular to subrounded, fine to coarse, low to medium plasticity, white mottled light brown, stiff to very stiff, laminated, moist.	100					
	102			100					
	103			100					
				100					
	104		**COMPLETELY WEATHERED BEDROCK** (103.35 to 109.73) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100					
1219	105								
	106			100					
	107								
	108								
	109			100					
1214	110		End of Drillhole: 109.73 m						
	111								
	112								
	113								
	114								
1209	115								
	116								
	117								
	118								
	119								
1204	120								
	121								
	122								
	123								
	124								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-36

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-37**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**22 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**65.5 m**	Date Completed:	**23 Sep 12**
Coordinates:	**5,897,010 N , 376,489 E (UTM NAD 83)**	Elevation:	**1294 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1–4		**SILTY SAND** (0 to 4.8) Silty SAND, some gravel, trace clay, subrounded, fine to coarse, non plastic to low plasticity, brown to greyish brown, compact to dense, massive, trace organic matter, moist.	30 100		01	Gravel:19.6% Sand:49.4% Silt:22% Clay:8.7% Moisture Content:8.9% Plastic Limit:13 Liquid Limit:19		
1289	5–12		**SILT AND SAND** (4.8 to 12.5) SILT and SAND, fine grained, uniformly graded, non plastic, brown, loose to firm, dry.	100 90 100 100 100 100 100					
1284	10–12			100 100					
	13–24		**SANDY SILT AND GRAVEL** (12.5 to 28.33) Sandy SILT and GRAVEL, subangular to subrounded, fine to coarse, non plastic to low plasticity, greyish brown, very stiff, dense, massive, moist.	100 100 100 50 100 100					
1279	15–16			100					
1274	17–24			50 100 100 100 100 100 100 100 100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-37

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.37 | REV. 1

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Project:	**BLACKWATER GOLD PROJECT**		Drill Hole No.	**GT12-37**	PAGE	**2 of 3**	
Contractor:	**Major Drilling Environmental LLC.**		Sample Type:	**Overburden Core**	Date Started:	**22 Sep 12**	
Location:	**Inside Site D TSF Area**		Total Depth:	**65.5 m**	Date Completed:	**23 Sep 12**	
Coordinates:	**5,897,010 N , 376,489 E (UTM NAD 83)**		Elevation:	**1294 m**	Date Well Installed:		
Drilling Method:	**Sonic (rotary-vibratory) Drilling**		Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**	
Drilling Rig:	**Diedrich 80K Sonic Track Rig**		Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**	

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY SILT AND GRAVEL** (12.5 to 28.33) Sandy SILT and GRAVEL, subangular to subrounded, fine to coarse, non plastic to low plasticity, greyish brown, very stiff, dense, massive, moist.	100					
	27			100					
	28			100					
	29		**SILTY SAND AND GRAVEL** (28.33 to 35.8) Silty SAND and GRAVEL, subrounded, fine to course, non plastic, greyish brown and brown, dense, massive, moist.	100					
1264	30			100					
	31			100					
	32								
	33								
	34			100					
1259	35			100					
	36		**SAND** (35.8 to 48.78) SAND, some clay, silt and gravel, subrounded, low plasticity, brown mottled yellow white, dense, massive, dry.	100					
	37			100		02			
	38								
	39								
1254	40			100					
	41			100					
	42			100					
	43					04	Gravel:17.3% Sand:46.6% Silt:20% Clay:16.6% Moisture Content:13.7% Plastic Limit:15 Liquid Limit:19		
	44			100					
1249	45								
	46			100					
	47			100					
	48			100					
	49		**CLAYEY SILT** (48.78 to 49.4) Clayey SILT, trace sand, fine, low to medium	60					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-37

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1

APPENDIX B1.37 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-37**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**22 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**65.5 m**	Date Completed:	**23 Sep 12**
Coordinates:	**5,897,010 N , 376,489 E (UTM NAD 83)**	Elevation:	**1294 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
			plasticity, brown, stiff to hard, massive, dry.						
	51		**SILT AND GRAVEL** (49.4 to 60.91) SILT and GRAVEL, some sand, trace clay, subrounded, fine to coarse, low plasticity, brown/greyish brown, hard and very dense, massive, dry.	100					
	52								
	53			100					
	54		Note: 59.71 to 60.91: Boulder						
1239	55			100					
	56			100					
				100					
	57			100					
	58								
	59			100					
1234	60			90					
	61		**HIGHLY WEATHERED BEDROCK** (60.91 to 65.5) Highly Weathered Bedrock, recovered as: Silty GRAVEL, some cobbles, angular to subangular, fine to coarse, non plastic, purple grey, very dense, massive, dry.	100					
	62								
	63								
	64								
1229	65			40					
	66		End of Drillhole: 65.5 m						
	67								
	68								
	69								
1224	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-37

Knight Piésold CONSULTING

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-38**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**57.91 m**	Date Completed:	**25 Sep 12**
Coordinates:	**5,897,441 N , 376,778 E (UTM NAD 83)**	Elevation:	**1261 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1–24		**SILTY GRAVELLY SAND** (0 to 34.73) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, greyish brown, compact to very dense, stratified, moist to dry.	80 100 100 90 100 100 100 100 100 100 100		01	Gravel:26.9% Sand:41.1% Silt:22% Clay:10% Moisture Content:7.8% Plastic Limit:12 Liquid Limit:12		
1256	5								
1251	10			100 100 51 100 100 100 100					
1246	15					02	Gravel:20.4% Sand:44.9% Silt:30% Clay:4.9% Moisture Content:9.8% Plastic Limit:13 Liquid Limit:19		
1241	20			100 100 100 100 100 100 100 100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-38

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.38	REV. 1

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-38**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**24 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**57.91 m**	Date Completed:	**25 Sep 12**
Coordinates:	**5,897,441 N , 376,778 E (UTM NAD 83)**	Elevation:	**1261 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY GRAVELLY SAND** (0 to 34.73) Silty Gravelly SAND, trace clay, subangular to subrounded, fine to coarse, low plasticity, greyish brown, compact to very dense, stratified, moist to dry.	100					
	27			100					
	28			100					
	29			100					
1231	30			100					
	31			100					
	32			100					
	33								
	34			100					
1226	35		**BOULDER** (34.73 to 35.53) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.8 m.	100					
	36			100					
	37		**SILTY SAND AND GRAVEL** (35.53 to 38.05) Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, non plastic, greyish brown, compact to dense, stratified, moist to dry.	80					
	38			60					
	39			100					
1221	40		**BOULDER** (38.05 to 39.63) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 1.5 m.	100					
	41			100					
	42		**SILTY SAND** (39.63 to 40.93) Silty SAND, fine to coarse, uniformly graded, non plastic, greyish brown, compact to dense, massive, moist.	100					
	43			100					
	44			100					
1216	45		**BOULDER** (40.93 to 41.93) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 1.0 m.	90					
	46			100					
	47		**SILTY CLAY** (41.93 to 42.9) Silty CLAY, uniformly graded, high plasticity, greyish brown, very stiff to hard, moist/dry.	40					
	48		**SILTY SAND AND GRAVEL** (42.9 to 48.78) Silty SAND and GRAVEL, subangular, fine to coarse, non plastic, grey/brown and blue/grey, dense to very dense, massive, moist.						
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-38

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
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Project:	BLACKWATER GOLD PROJECT	Drill Hole No.	GT12-38	PAGE	3 of 3
Contractor:	Major Drilling Environmental LLC.	Sample Type:	Overburden Core	Date Started:	24 Sep 12
Location:	Site D Embankment	Total Depth:	57.91 m	Date Completed:	25 Sep 12
Coordinates:	5,897,441 N , 376,778 E (UTM NAD 83)	Elevation:	1261 m	Date Well Installed:	
Drilling Method:	Sonic (rotary-vibratory) Drilling	Azimuth, Dip:	0°,-90°	Supervised by:	SP
Drilling Rig:	Diedrich 80K Sonic Track Rig	Hole size:	152.4mm (6")	Reviewed by:	BOC

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**COMPLETELY WEATHERED BEDROCK** (48.78 to 53.33) Completely Weathered Bedrock, recovered as: SILT, some sand and gravel, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100					
	52			100					
	53								
	54		**COMPLETELY WEATHERED BEDROCK** (53.33 to 57.91) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish purple brown, hard, massive, dry.	100					
1206	55			100					
	56			100					
	57								
	58		End of Drillhole: 57.91 m						
	59								
1201	60								
	61								
	62								
	63								
	64								
1196	65								
	66								
	67								
	68								
	69								
1191	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

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NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-38

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.38	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-39**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**91.44 m**	Date Completed:	**29 Sep 12**
Coordinates:	**5,897,626 N , 376,433 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT AND GRAVEL** (0 to 14.4) Sandy SILT and GRAVEL, subrounded, fine to coarse, non plastic, brown, hard, very dense, massive, dry. Note: 0.4 to 1.0 m and 14.0 to 14.40: Boulder	100					
	2			100					
	3			100					
	4			100					
	5			100					
1251	6			100					
	7			100					
	8			100					
	9			100					
	10			100					
1246	11			100					
	12			100					
	13			100					
	14			100					
	15		**SILT AND SAND** (14.4 to 16.75) SILT and SAND, trace clay, fine to coarse, non plastic, greyish brown, very stiff and dense, massive, moist to dry.	100					
1241	16			100					
	17			100		02	Gravel:0% Sand:43.3% Silt:48% Clay:8.9% Moisture Content:14.9%		
	18		**SANDY SILT AND GRAVEL** (16.75 to 22.75) Sandy SILT and GRAVEL, subrounded, fine to coarse, non plastic, brown, hard , very dense, massive dry. Note: 16.75 to 17.25 and 22.05 to 22.75: Boulder	0					
	19			100					
1236	20			100					
	21			100					
	22			100					
	23		**SILT** (22.75 to 29.4) SILT, some sand and gravel, subangular to subrounded, fine to coarse, non plastic, brown, very stiff to hard, massive, moist.	100					
	24			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-39

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
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APPENDIX B1.39	REV. 1

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-39**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**91.44 m**	Date Completed:	**29 Sep 12**
Coordinates:	**5,897,626 N , 376,433 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (22.75 to 29.4) SILT, some sand and gravel, subangular to subrounded, fine to coarse, non plastic, brown, very stiff to hard, massive, moist.	100 100 100 100					
1226	30		**SILTY SAND** (29.4 to 31.48) Silty SAND, fine to coarse, non plastic, brown, dense to very dense, massive, moist.	100 100					
	32		**GRAVELLY SILT** (31.48 to 45.73) Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, brown, very stiff, massive, moist. Note: 31.48 to 31.98 and 35.50 to 37.35: Boulders	100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100					
1211	46		**SILTY SAND** (45.73 to 51.83) Silty SAND, fine, non plastic, brown, compact to dense, massive, moist.	100 100 100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

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NEW GOLD INC.
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-39**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**91.44 m**	Date Completed:	**29 Sep 12**
Coordinates:	**5,897,626 N , 376,433 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILTY SAND** (45.73 to 51.83) Silty SAND, fine, non plastic, brown, compact to dense, massive, moist.	100 100 100					
	52		**SANDY SILT** (51.83 to 54.88) Sandy SILT, fine to coarse, non plastic, grey, stiff to very stiff, massive, moist.	100					
	53								
	54			100 100					
1201	55		**SANDY GRAVEL** (54.88 to 59.61) Sandy GRAVEL, some silt, trace clay and cobbles, subrounded, fine to coarse, low plasticity, grey brown, very dense, massive, moist.	100					
	56			100					
	57								
	58			100 100					
	59			100		04	Gravel:48.3% Sand:33.6% Silt:14% Clay:4.6% Moisture Content:7.6% Plastic Limit:14 Liquid Limit:28		
1196	60		**SILTY SAND AND GRAVEL** (59.61 to 60.71) Silty SAND and GRAVEL, subrounded, fine to coarse, non plastic, brown and grey, dense to very dense, moist.	100					
	61			100					
	62		**SANDY SILT AND GRAVEL** (60.71 to 71.2) Sandy SILT and GRAVEL, some clay, trace cobble, subrounded, fine, low plasticity, grey brown and white, very stiff to hard, dense to very dense, massive, moist.	100					
	63			100 100					
	64			100					
1191	65			100					
	66								
	67			100 100					
	68								
	69			100					
1186	70			100					
	71			100					
	72		**COMPLETELY WEATHERED BEDROCK** (71.2 to 88.39) Completely Weathered Bedrock, recovered as: Silty GRAVEL, some sand, many cobbles of intact rock, angular to subangular, fine to coarse, non plastic, greyish brown, very dense, massive, dry.	100 100					
	73			100 100					
	74			100 100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-39

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.39 | REV. 1

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-39**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**26 Sep 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**91.44 m**	Date Completed:	**29 Sep 12**
Coordinates:	**5,897,626 N , 376,433 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP**
Drilling Rig:	**Diedrich 80K Sonic Track Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (71.2 to 88.39) Completely Weathered Bedrock, recovered as: Silty GRAVEL, some sand, many cobbles of intact rock, angular to subangular, fine to coarse, non plastic, greyish brown, very dense, massive, dry.	100 100 100 25 100 100 100 100 50 50 100 100 100 100 100					
	77								
	78								
	79								
1176	80								
	81								
	82								
	83								
	84								
1171	85								
	86								
	87								
	88								
	89		**COMPLETELY WEATHERED BEDROCK** (88.39 to 91.44) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic, greyish brown, hard, massive, dry.	100		06	Gravel:0% Sand:18% Silt:48% Clay:33.7% Moisture Content:28.2% Plastic Limit:27 Liquid Limit:60		
1166	90								
	91								
	92		End of Drillhole: 91.44 m						
	93								
	94								
1161	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-39

Knight Piésold CONSULTING

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-40**	PAGE	**1 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**29 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**102.1 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,897,788 N , 376,559 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP/BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**CLAYEY SILTY GRAVELLY SAND** (0 to 8.32) Clayey Silty Gravelly SAND, subangular, fine to coarse, low to medium plasticity, greyish dark brown, very dense, massive, moist.	100					
	2			100					
	3			100					
	4								
1229	5			100					
	6			100					
				100					
	7			100		01	Gravel:25.7% Sand:39.3% Silt:35% Clay:0% Moisture Content:9.8% Plastic Limit:13 Liquid Limit:20		
	8			100					
			BOULDER (8.32 to 8.92) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.6 m.	100					
	9			100					
1224	10			100					
				100					
	11		**SILT** (8.92 to 41.15) SILT, some clay and sand, trace gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, greyish dark brown, hard, massive, moist with wet and dry sections.	50					
				100					
	12			100					
	13			100					
				100					
				100					
	14					02			
1219	15			100					
	16								
	17			100					
	18								
	19			100			Gravel:4.6% Sand:26.4% Silt:53% Clay:15.6% Moisture Content:16% Plastic Limit:15 Liquid Limit:26		
1214	20					03			
				100					
	21			100					
	22			100					
	23								
	24			100		04	Gravel:0% Sand:13.3% Silt:77% Clay:10.1% Moisture Content:17.7% Plastic Limit:17 Liquid Limit:23		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-40

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.40	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-40**	PAGE	**2 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**29 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**102.1 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,897,788 N , 376,559 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP/BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT** (8.92 to 41.15) SILT, some clay and sand, trace gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, greyish dark brown, hard, massive, moist with wet and dry sections.	100 100					
	27			100					
	28								
	29			100					
1204	30								
	31			100					
	32								
	33			100					
	34			100					
1199	35								
	36			100					
	37			100					
	38			100 100					
	39			100					
1194	40			100					
	41			100					
	42		**CLAYEY SILT AND GRAVEL** (41.15 to 43) Clayey SILT and GRAVEL, subrounded, fine to coarse, low to medium plasticity, light grey, stiff/dense, massive, moist.	100					
	43			100					
	44		**BOULDER** (43 to 43.5) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.5 m.	100					
1189	45		**SILTY SAND** (43.5 to 64.28) Silty SAND, some gravel, trace clay, subrounded, fine to coarse, medium plasticity, light grey, dense, massive, moist.	100		05			
	46								
	47								
	48			100					
	49			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-40

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.40	REV. 1

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-40**	PAGE	**3 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**29 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**102.1 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,897,788 N , 376,559 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP/BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**SILTY SAND** (43.5 to 64.28) Silty SAND, some gravel, trace clay, subrounded, fine to coarse, medium plasticity, light grey, dense, massive, moist.	100					
	52								
	53			100					
	54			100					
1179	55			100					
	56			100					
	57			100					
	58			100		06			
	59			100					
1174	60			100					
	61			100					
	62			100					
	63			100		07	Gravel:23.3% Sand:40.7% Silt:26% Clay:9.6% Moisture Content:18.7% Plastic Limit:19 Liquid Limit:31		
	64			100					
1169	65		**BOULDER** (64.28 to 64.78) BOULDER. Recovered as: Pulverized silt to gravel sized rock fragments, light grey, diameter approx. 0.5 m.	100					
	66								
	67		**CLAYEY SILT AND GRAVEL** (64.78 to 74.67) Clayey SILT and GRAVEL, subrounded, fine to coarse, low plasticity, light grey, very stiff/dense, massive, moist.	100					
	68								
	69								
1164	70			95					
	71								
	72								
	73			97					
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-40

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-40**	PAGE	**4 of 5**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**29 Sep 12**
Location:	**Site D Embankment**	Total Depth:	**102.1 m**	Date Completed:	**4 Oct 12**
Coordinates:	**5,897,788 N , 376,559 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP/BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**CLAYEY SILT** (74.67 to 77.72) Clayey SILT, trace sand and gravel, subangular to subrounded, fine to coarse of various lithologies, low to medium plasticity, grey green mottled yellow, hard, laminated, moist.	99		08			
	77								
	78		**COMPLETELY WEATHERED BEDROCK** (77.72 to 89.92) Completely Weathered Bedrock, recovered as: Silty GRAVEL, angular to subangular, fine to coarse, non plastic, dark green mottle grey, dense, massive, dry.	100					
1154	80								
	81			100					
	82								
	83					09			
	84			100					
1149	85								
	86								
	87			100					
	88								
	89								
1144	90		**HIGHLY WEATHERED BEDROCK** (89.92 to 102.1) Highly Weathered Bedrock, partially pulverised by drilling process, recovered as: Gravelly SILT, many cobbles, light reddish brown to greyish brown.	100					
	91								
	92								
	93			33		10			
	94								
1139	95								
	96			33					
	97								
	98								
	99			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-40

Knight Piésold CONSULTING

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-40**	PAGE	**5 of 5**		
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**29 Sep 12**		
Location:	**Site D Embankment**	Total Depth:	**102.1 m**	Date Completed:	**4 Oct 12**		
Coordinates:	**5,897,788 N , 376,559 E (UTM NAD 83)**	Elevation:	**1234 m**	Date Well Installed:			
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**SP/BOC**		
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**		

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	101					11			
	102			87					
			End of Drillhole: 102.1 m						
	103								
	104								
1129	105								
	106								
	107								
	108								
	109								
1124	110								
	111								
	112								
	113								
	114								
1119	115								
	116								
	117								
	118								
	119								
1114	120								
	121								
	122								
	123								
	124								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-40

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.40	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-41**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**4 Oct 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**89.91 m**	Date Completed:	**7 Oct 12**
Coordinates:	**5,897,873 N , 376,274 E (UTM NAD 83)**	Elevation:	**1226 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SANDY GRAVEL** (0 to 1.52) Silty Sandy GRAVEL, trace clay, fine to coarse of various lithologies, sand is fine to coarse, angular to subrounded, brown grey, compact, massive, moist.	72					
	2								
	3		**SILTY GRAVELLY SAND** (1.52 to 7.62) Silty Gravelly SAND, trace clay and cobbles, angular to subrounded, subangular to subrounded cobbles of andesite, fine to coarse, non plastic, brown grey, dense to very dense, massive, moist to dry.	97					
	4								
1221	5			100					
	6								
	7			77		01	Gravel:31.1% Sand:41.9% Silt:20% Clay:6.9% Moisture Content:9.3% Plastic Limit:13 Liquid Limit:22		
	8		**SAND AND GRAVEL** (7.62 to 10.67) SAND and GRAVEL, some silt, trace clay, angular to subrounded, fine to coarse, non plastic, borwn grey, dense to very dense, massive, moist.	100					
1216	10					02	Gravel:39% Sand:38.2% Silt:16% Clay:7.1% Moisture Content:6.4% Plastic Limit:13 Liquid Limit:24		
	11		**SANDY GRAVELLY SILT** (10.67 to 19.82) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, non plastic, brown grey, stiff to hard, massive, moist.	100					
	12								
	13								
	14			100					
1211	15								
	16								
	17			100					
	18								
	19								
1206	20		**SAND AND GRAVEL** (19.82 to 22.87) SAND and GRAVEL, some silt, trace clay, angular to subrounded, fine to coarse, non plastic, borwn grey, dense to very dense, massive, moist.			03	Gravel:44.1% Sand:38.6% Silt:13% Clay:4.8% Moisture Content:8% Plastic Limit:0 Liquid Limit:0		
	21			100					
	22								
	23		**SANDY GRAVELLY SILT** (22.87 to 28.99) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, non plastic, brown grey, stiff to hard, massive, moist.						
	24			100					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-41

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.41	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-41**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**4 Oct 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**89.91 m**	Date Completed:	**7 Oct 12**
Coordinates:	**5,897,873 N , 376,274 E (UTM NAD 83)**	Elevation:	**1226 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY GRAVELLY SILT** (22.87 to 28.99) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, non plastic, brown grey, stiff to hard, massive, moist.						
	27			67					
	28								
	29		**SILTY SAND** (28.99 to 41.15) Silty SAND, some clay and gravel, trace cobbles and boulders, subangular to subrounded, fine to coarse, non plastic to low plasticity, light brown, dense to very dense, massive, moist.						
1196	30			100					
	31					04	Gravel:17.6% Sand:40.6% Silt:28% Clay:14.1% Moisture Content:10.3% Plastic Limit:15 Liquid Limit:25		
	32								
	33			100					
	34								
1191	35								
	36			100					
	37								
	38								
	39			100					
1186	40								
	41					05	Gravel:10.5% Sand:48.2% Silt:28% Clay:13.8% Moisture Content:12.8% Plastic Limit:0 Liquid Limit:0		
	42		**CLAYEY SILTY SAND** (41.15 to 58.05) Clayey Silty SAND, subangular to subrounded, fine to coarse, low to medium plasticity, white mottled light brown, dense to very dense, laminated, moist. 47.0 to 47.5 m : Silty Sandy GRAVEL.	100					
	43								
	44								
1181	45			100					
	46								
	47								
	48			100		06	Gravel:37.8% Sand:26% Silt:22% Clay:14.2% Moisture Content:20.7% Plastic Limit:19 Liquid Limit:34		
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-41

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.41	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-41**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**4 Oct 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**89.91 m**	Date Completed:	**7 Oct 12**
Coordinates:	**5,897,873 N , 376,274 E (UTM NAD 83)**	Elevation:	**1226 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**CLAYEY SILTY SAND** (41.15 to 58.05) Clayey Silty SAND, subangular to subrounded, fine to coarse, low to medium plasticity, white mottled light brown, dense to very dense, laminated, moist. 47.0 to 47.5 m : Silty Sandy GRAVEL.	100		07	Gravel:0% Sand:38.3% Silt:32% Clay:29.5% Moisture Content:17.1% Plastic Limit:18 Liquid Limit:37		
	52								
	53								
	54			100					
1171	55								
	56								
	57								
	58			100		08	Gravel:0.9% Sand:23.4% Silt:38% Clay:37.5% Moisture Content:30.8% Plastic Limit:26 Liquid Limit:48		
	59		**SANDY CLAY AND SILT** (58.05 to 59.43) Sandy CLAY AND SILT, subangular to subrounded, fine to coarse, low to medium plasticity, black becoming white mottled light brown, stiff to very stiff, laminated, moist.						
1166	60								
	61		**SANDY SILT** (59.43 to 61.3) Sandy SILT, some gravel, trace clay, fine to coarse sand and gravel of various lithologies, subangular to subrounded, non plastic, light grey brown, very stiff to hard, massive, moist.	100					
	62								
	63		**COMPLETELY WEATHERED BEDROCK** (61.3 to 73.28) Completely Weathered Bedrock, recovered as: SILT AND SAND, some clay, trace gravel, angular to subangular, fine to coarse, low plasticity, brown grey, stiff, massive, moist.						
	64			100					
1161	65								
	66								
	67			100					
	68								
	69								
1156	70			100					
	71								
	72								
	73			100					
	74					09	Gravel:0% Sand:48.3% Silt:35% Clay:16.7% Moisture Content:23.4% Plastic Limit:20 Liquid Limit:43		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-41

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.41	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-41**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**4 Oct 12**
Location:	**Inside Site D TSF Area**	Total Depth:	**89.91 m**	Date Completed:	**7 Oct 12**
Coordinates:	**5,897,873 N , 376,274 E (UTM NAD 83)**	Elevation:	**1226 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**HIGHLY WEATHERED BEDROCK** (73.28 to 89.91) Completely Weathered Bedrock, recovered as: GRAVEL, some silt and sand, angular to subangular, fine to coarse, red brown, very dense, massive, moist.	87					
	77								
	78								
	79			100					
1146	80								
	81					10	Gravel:7.5% Sand:65.2% Silt:18% Clay:9.7% Moisture Content:12.7% Plastic Limit:0 Liquid Limit:0		
	82			100					
	83								
	84								
1141	85			84					
	86								
	87								
	88			87					
	89								
1136	90		End of Drillhole: 89.91 m						
	91								
	92								
	93								
	94								
1131	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-41

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.41	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-42**	PAGE	**1 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**8 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**25.91 m**	Date Completed:	**9 Oct 12**
Coordinates:	**5,897,933 N , 377,347 E (UTM NAD 83)**	Elevation:	**1243 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY GRAVEL** (0 to 1.52) Silty GRAVEL, some sand, trace clay, subangular to subrounded, fine to coarse, non plastic, brown, compact to dense, massive, moist.	47					
	2								
	3		**SILTY GRAVELLY SAND** (1.52 to 11.6) Silty Gravelly SAND, trace clay, some cobbles, trace boulders, subangular to subrounded, fine to coarse, non plastic, brown grey, very dense, massive, moist.	96					
	4								
1238	5								
	6			100					
	7								
	8								
	9			100					
1233	10					01	Gravel:30.7% Sand:37.7% Silt:21% Clay:10.2% Moisture Content:12.5%		
	11								
	12		**SILTY GRAVEL** (11.6 to 18.6) Silty GRAVEL, some sand and cobbles, trace clay and boulders, subangular to subrounded, fine to coarse, non plastic, brown grey, dense to very dense, massive, moist.	100					
	13								
	14								
1228	15			84					
	16								
	17								
	18			100					
	19		**MODERATELY WEATHERED BEDROCK** (18.6 to 25.91) ANDESITE, fine grained, equigranular, grey, purple, very strong, fresh, subhorizontal fractures and rubblized zones, some silt infilling >5mm, trace iron oxide staining.						
1223	20								
	21			68					
	22								
	23								
	24			81					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-42

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.42	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-42**	PAGE	**2 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**8 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**25.91 m**	Date Completed:	**9 Oct 12**
Coordinates:	**5,897,933 N , 377,347 E (UTM NAD 83)**	Elevation:	**1243 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		End of Drillhole: 25.91 m						
	27								
	28								
	29								
1213	30								
	31								
	32								
	33								
	34								
1208	35								
	36								
	37								
	38								
	39								
1203	40								
	41								
	42								
	43								
	44								
1198	45								
	46								
	47								
	48								
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-42

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.42	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-43**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**65.53 m**	Date Completed:	**11 Oct 12**
Coordinates:	**5,897,790 N , 376,875 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 13.72) Silty SAND and GRAVEL, trace cobbles and clay, subangular to subrounded, subrounded cobbles, fine to coarse of various lithologies, brown grey, dense, massive, moist.	57					
	2								
	3			100					
	4								
1234	5								
	6			100					
	7								
	8								
	9			100					
1229	10					01	Gravel:34.3% Sand:45.1% Silt:14% Clay:6.6% Moisture Content:8.3%		
	11								
	12			100					
	13								
	14		**GRAVELLY SILT** (13.72 to 14.1) Gravelly SILT, some sand, cobbles and boulders, trace clay, subangular to subrounded, subrounded cobbles, fine to coarse of various lithologies, grey, very stiff, stratified, moist.						
1224	15			100					
	16								
	17		**SAND** (14.1 to 14.6) SAND, some gravel, subangular to subrounded, fine of various lithologies, fine to coarse, grey, loose to compact, massive, wet.						
	18			100					
	19		**GRAVELLY SILT** (14.6 to 36.9) Gravelly SILT, some sand, cobbles and boulders, trace clay, subangular to subrounded, subrounded cobbles, fine to coarse of various lithologies, grey, very stiff, stratified, moist.						
1219	20								
	21			54		02	Gravel:28.6% Sand:35.7% Silt:26% Clay:10% Moisture Content:10%		
	22								
	23								
	24			100			Gravel:28.2% Sand:42.3% Silt:21%		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-43

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.43	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-43**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**65.53 m**	Date Completed:	**11 Oct 12**
Coordinates:	**5,897,790 N , 376,875 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**GRAVELLY SILT** (14.6 to 36.9) Gravelly SILT, some sand, cobbles and boulders, trace clay, subangular to subrounded, subrounded cobbles, fine to coarse of various lithologies, grey, very stiff, stratified, moist.			03	Clay:8.8% Moisture Content:8.9% Plastic Limit:15 Liquid Limit:24		
	27			100					
	28								
	29								
1209	30			100		04	Gravel:0.3% Sand:51.5% Silt:36% Clay:11.8% Moisture Content:14.1% Plastic Limit:14 Liquid Limit:18		
	31								
	32								
	33			100					
	34								
1204	35								
	36			97					
	37		**GRAVELLY SILT** (36.9 to 50.32) Gravelly SILT, some sand and clay, fine to coarse sand and fine gravel, subangular to subrounded, various lithologies, low plasticity, brown to dark brown, very stiff to hard, massive, moist.						
	38								
	39			100					
1199	40								
	41								
	42			100					
	43								
	44					05	Gravel:0% Sand:21.4% Silt:45% Clay:34.1% Moisture Content:24.7%		
1194	45								
	46			100					
	47								
	48								
	49			49			Gravel:10.5% Sand:38% Silt:31%		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-43

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.43	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-43**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**9 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**65.53 m**	Date Completed:	**11 Oct 12**
Coordinates:	**5,897,790 N , 376,875 E (UTM NAD 83)**	Elevation:	**1239 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**BOC**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
						06	Clay:20.9% Moisture Content:17.5%		
	51		**SANDY SILT** (50.32 to 56.39) Sandy SILT, some gravel, trace clay, subangular to subrounded, fine to coarse sand and fine gravel of various lithologies, low plasticity, rusty brown, stiff to very stiff, massive, moist.	100					
	52								
	53					07	Gravel:0% Sand:40.2% Silt:43% Clay:16.7% Moisture Content:23.2% Plastic Limit:20 Liquid Limit:28		
	54			100					
1184	55					08	Gravel:0% Sand:23.7% Silt:49% Clay:27.6% Moisture Content:23.3% Plastic Limit:18 Liquid Limit:34		
	56								
	57		**GRAVELLY SILT** (56.39 to 63.6) Gravelly SILT, some sand, trace clay, cobbles and boulders, subangualr to subrounded, fine to coarse sand and gravel of various lithologies, non plastic, light grey mottled purple yellow, very stiff to hard, massive, moist.	100					
	58								
	59								
1179	60			100					
	61								
	62					09	Gravel:27% Sand:48.2% Silt:25% Clay:0% Moisture Content:15.4%		
	63								
	64		**MODERATELY WEATHERED BEDROCK** (63.6 to 65.53) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy Gravelly SILT, light reddish brown to greyish brown.	81					
1174	65								
	66		End of Drillhole: 65.53 m						
	67								
	68								
	69								
1169	70								
	71								
	72								
	73								
	74								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-43

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.43	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-44**	PAGE	**1 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**11 Oct 12**
Location:	**Site D Embankment, South Abutment**	Total Depth:	**25.91 m**	Date Completed:	**12 Oct 12**
Coordinates:	**5,895,630 N , 376,474 E (UTM NAD 83)**	Elevation:	**1340 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SAND** (0 to 6.8) Gravelly SAND, trace silt, subangular to subrounded, fine to coarse, medium plasticity, brown, loose to compact, massive, moist.	77					
	2								
	3			93					
	4								
1335	5								
	6			89					
	7		**SAND** (6.8 to 8.84) SAND, trace clay, silt and gravel, subangular to subrounded, fine to coarse, uniformly graded, brown/black, compact, massive, moist.			01	Gravel:5.2% Sand:86.3% Silt:8.5% Clay:0% Moisture Content:17.4% Plastic Limit:0 Liquid Limit:0		▼
	8								
	9		**SILTY SAND** (8.84 to 14.62) Silty SAND, trace clay and gravel, angular to subangular, fine to coarse, dark brown, compact, stratified, moist.	93					
1330	10								
	11								
	12			96					
	13					02	Gravel:1.8% Sand:74.1% Silt:20% Clay:3.9% Moisture Content:17.2% Plastic Limit:0 Liquid Limit:0		
	14								
1325	15		**SILTY GRAVELLY SAND** (14.62 to 21.19) Silty Gravelly SAND, some clay, subangular, fine to coarse, low plasticity, grey, dense, massive, moist.	99		03	Gravel:29.2% Sand:34.2% Silt:26% Clay:10.2% Moisture Content:7.3% Plastic Limit:13 Liquid Limit:25		
	16								
	17								
	18			98					
	19								
1320	20								
	21					04			
	22		**MODERATELY WEATHERED BEDROCK** (21.19 to 25.91) Moderately Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy Gravelly SILT, many cobbles, angular to subangular, fine to coarse, light reddish brown to greyish brown.	96					
	23								
	24			87					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-44

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.44	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-44**	PAGE	**2 of 2**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**11 Oct 12**
Location:	**Site D Embankment, South Abutment**	Total Depth:	**25.91 m**	Date Completed:	**12 Oct 12**
Coordinates:	**5,895,630 N , 376,474 E (UTM NAD 83)**	Elevation:	**1340 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		End of Drillhole: 25.91 m						
	27								
	28								
	29								
1310	30								
	31								
	32								
	33								
	34								
1305	35								
	36								
	37								
	38								
	39								
1300	40								
	41								
	42								
	43								
	44								
1295	45								
	46								
	47								
	48								
	49								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-44

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.44	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-45**	PAGE	**1 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**13 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**96 m**	Date Completed:	**17 Oct 12**
Coordinates:	**5,892,526 N , 376,041 E (UTM NAD 83)**	Elevation:	**1621 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 8.22) Silty SAND and GRAVEL, some cobbles and boulders, subangular to subrounded, fine to coarse, medium plasticity, brown, loose to compact, massive, moist.	55				
	2							
	3			45				
	4					19		
1616	5							
	6			96		01		
	7							
	8							
	9		**GLACIAL TILL** (8.22 to 25.91) Sandy SILT, some gravel and boulders, subangular to subrounded, fine to coarse, low to medium plasticity, brown and rusty brown, stiff to very stiff, stratified, moist.	92				
1611	10					20		
	11			98		18		
	12					02		
	13							
	14							
1606	15			98		21		
	16							
	17					26		
	18			81		03		
	19							
1601	20					25		
	21			91				
	22					22		
	23							
	24			98		04		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-45

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.45	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-45**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**13 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**96 m**	Date Completed:	**17 Oct 12**
Coordinates:	**5,892,526 N , 376,041 E (UTM NAD 83)**	Elevation:	**1621 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY SILT** (25.91 to 36.88) Sandy SILT, fine sand, subrounded, medium plasticity, brown, firm, massive, moist.			Proctor sample		
	27			97				
	28		**GLACIAL TILL** (26.84 to 28.96) Silty SAND, some gravel, fine to coarse sand and gravel, subangular, medium to high plasticity, brown, dense, stiff, massive, moist.			23		
	29							
1591	30			99		05		
	31							
	32							
	33			102				
	34					24		
1586	35							
	36			98		06		
	37		**GLACIAL TILL** (36.88 to 86.87) Sandy SILT with some gravel, fine to coarse sand and gravel, subangular to subrounded, medium to high plasticity silt, brown, stiff to very stiff, massive, moist.					
	38							
	39			96				
1581	40					07		
	41							
	42			96				
	43							
	44					08		
1576	45							
	46			99				
	47					25		
	48							
	49			89				
						09		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-45

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. 101-457/6 | REF. NO. 1
APPENDIX B1.45 | REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINTLIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-45**	PAGE	**3 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**13 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**96 m**	Date Completed:	**17 Oct 12**
Coordinates:	**5,892,526 N , 376,041 E (UTM NAD 83)**	Elevation:	**1621 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**GLACIAL TILL** (36.88 to 86.87) Sandy SILT with some gravel, fine to coarse sand and gravel, subangular to subrounded, medium to high plasticity silt, brown, stiff to very stiff, massive, moist.	92		26		
	52							
	53							
	54							
1566	55			100		10		
	56							
	57							
	58			80		27		
	59							
1561	60							
	61			101				
	62					11		
	63					26		
	64			82		28		
1556	65							
	66							
	67			99		12		
	68							
	69							
1551	70			90				
	71					29		
	72							
	73			87				
	74					13		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-45

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.45	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-45**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**13 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**96 m**	Date Completed:	**17 Oct 12**
Coordinates:	**5,892,526 N , 376,041 E (UTM NAD 83)**	Elevation:	**1621 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	76		**GLACIAL TILL** (36.88 to 86.87) Sandy SILT with some gravel, fine to coarse sand and gravel, subangular to subrounded, medium to high plasticity silt, brown, stiff to very stiff, massive, moist.	87		14		
	77							
	78			99				
	79							
1541	80							
	81			64		31		
	82							
	83							
	84			98				
1536	85							
	86					15		
	87		**COMPLETELY WEATHERED BEDROCK** (86.87 to 96) Completely Weathered Bedrock, recovered as: SAND and SILT, some gravel, angular to subangular, fine to coarse, low plasticity, rusty brown, very dense, hard, massive, moist to dry.	99		16		
	88							
	89							
1531	90			98				
	91							
	92					17		
	93							
	94			89				
1526	95					18		
	96		End of Drillhole: 96 m					
	97							
	98							
	99							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-45

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.45	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-46**	PAGE	**1 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**65.5 m**	Date Completed:	**20 Oct 12**
Coordinates:	**5,892,950 N , 376,286 E (UTM NAD 83)**	Elevation:	**1550 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	0		**SILTY SAND AND GRAVEL** (0 to 1.52) Silty SAND and GRAVEL, some cobbles and boulders, subangular to subrounded, fine to coarse, medium plasticity, brown, loose to compact, massive, moist.	64		01		
	1							
	2		**GLACIAL TILL** (1.52 to 15.07) Sandy SILT, some gravel and cobbles, subangular, fine to coarse sand and fine gravel, low to medium plasticity, brown, compact, massive, moist.	35				
	3							
	4					02		
1545	5			100				
	6					03		
	7							
	8			100				
	9					04		
1540	10							
	11					24		
	12			94				
	13					05		
	14							
1535	15		**SAND AND GRAVEL** (15.07 to 16.89) SAND and GRAVEL, some silt, subangular to subrounded, fine to coarse sand and gravel, low plasticity, brown, compact, stratified with sand lamination, moist.	87		06		
	16							
	17		**GLACIAL TILL** (16.89 to 38.1) Sandy SILT, some gravel and cobbles, subangular to subrounded, fine to coarse sand and gravel, low to medium plasticity, dark brown and various color gravel, very stiff, massive, moist.	100				
	18					07		
1530	19							
	20							
	21			100				
	22					08		
	23							
	24			98				

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-46

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.46	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-46**	PAGE	**2 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**65.5 m**	Date Completed:	**20 Oct 12**
Coordinates:	**5,892,950 N , 376,286 E (UTM NAD 83)**	Elevation:	**1550 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	26		**GLACIAL TILL** (16.89 to 38.1) Sandy SILT, some gravel and cobbles, subangular to subrounded, fine to coarse sand and gravel, low to medium plasticity, dark brown and various color gravel, very stiff, massive, moist.			09		
	27			94				
	28					10		
	29							
1520	30			92				
	31					11		
	32							
	33			87				
	34					12		
1515	35					Proctor sample		
	36			90				
	37					13		
	38		**GLACIAL TILL** (38.1 to 55.34) Sandy SILT, some gravel, subangular to subrounded, fine to coarse sand and gravel, low to medium plasticity, dark brown and various color gravel, stiff, massive, moist.	99		14		
1510	40							
	41							
	42			98				
	43					15		
	44							
1505	45			99				
	46					16		
	47							
	48			100				
	49					17		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-46

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.46	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-46**	PAGE	**3 of 3**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**18 Oct 12**
Location:	**Open Pit - East Side**	Total Depth:	**65.5 m**	Date Completed:	**20 Oct 12**
Coordinates:	**5,892,950 N , 376,286 E (UTM NAD 83)**	Elevation:	**1550 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	DRILLHOLE NOTES	WELL DETAILS
	51		**GLACIAL TILL** (38.1 to 55.34) Sandy SILT, some gravel, subangular to subrounded, fine to coarse sand and gravel, low to medium plasticity, dark brown and various color gravel, stiff, massive, moist.	101		18		
	52							
	53							
	54					25		
1495	55			97		19		
	56		**COMPLETELY WEATHERED BEDROCK** (55.34 to 62.48) Completely Weathered Bedrock, recovered as: Gravelly SILT, some sand, angular to subangular, fine to coarse, non plastic, greyish brown, hard, massive, dry.					
	57							
	58			100		20		
	59							
1490	60							
	61			99		21		
	62							
	63		**HIGHLY WEATHERED BEDROCK** (62.48 to 65.5) Highly Weathered Bedrock, completely pulverised by drilling process, recovered as: Sandy SILT, some gravel, angular to subangular, fine to coarse, light reddish brown to greyish brown.					
	64			87				
1485	65					22		
	66		End of Drillhole: 65.5 m					
	67							
	68							
	69							
1480	70							
	71							
	72							
	73							
	74							

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-46

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.46	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	BLACKWATER GOLD PROJECT	Drill Hole No.	GT12-47	PAGE	1 of 4
Contractor:	Major Drilling Environmental LLC.	Sample Type:	Overburden Core	Date Started:	21 Oct 12
Location:	Downstream of Site D Embankment	Total Depth:	92.96 m	Date Completed:	25 Oct 12
Coordinates:	5,899,441 N , 377,756 E (UTM NAD 83)	Elevation:	1188 m	Date Well Installed:	
Drilling Method:	Sonic (rotary-vibratory) Drilling	Azimuth, Dip:	0°,-90°	Supervised by:	AL
Drilling Rig:	Diedrich 80K Sonic Truck Rig	Hole size:	152.4mm (6")	Reviewed by:	BOC

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY GRAVEL** (0 to 6.5) Sandy GRAVEL, trace silt and clay, some cobbles, subangular to rounded, fine to coarse, non plastic, dark brown/grey, compact to dense, massive, moist to wet.	61		01	Gravel:53.8% Sand:37.2% Silt:9% Clay:0% Moisture Content:9.2%		
	2								
	3			90					
	4					02			
1183	5								
	6			95					
	7		**SILT AND SAND** (6.5 to 25.91) SILT and SAND, some gravel, trace clay, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.			03	Gravel:21.1% Sand:40.3% Silt:32% Clay:7% Moisture Content:6.9% Plastic Limit:13 Liquid Limit:22		
	8								
	9			95					
1178	10					04			
	11								
	12			100					
	13					05	Gravel:12.3% Sand:24% Silt:54% Clay:9.6% Moisture Content:12.9% Plastic Limit:17 Liquid Limit:29		
	14								
1173	15			96					
	16					06			
	17								
	18			97		07	Gravel:8.6% Sand:41.9% Silt:41% Clay:8.5% Moisture Content:12.1%		
	19								
1168	20								
	21			98					
	22					08			
	23								
	24			90		09	Gravel:16.4% Sand:38.8% Silt:38% Clay:6.9% Moisture Content:16.6%		

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-47

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.47	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-47**	PAGE	**2 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**21 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**92.96 m**	Date Completed:	**25 Oct 12**
Coordinates:	**5,899,441 N , 377,756 E (UTM NAD 83)**	Elevation:	**1188 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY GRAVELLY SILT** (25.91 to 39.49) Sandy Gravelly SILT, some clay, subangular, fine to coarse, low plasticity, brown and light yellow, very stiff to hard, massive, moist.	101		10			
	27								
	28					11			
	29								
1158	30			100		12			
	31					13			
	32								
	33			100					
	34						Gravel:22.5% Sand:30.9% Silt:37% Clay:10.1% Moisture Content:12.2% Plastic Limit:15 Liquid Limit:25		
1153	35					14			
	36			98					
	37					15			
	38								
	39					16			
1148	40		**CLAYEY SILT** (39.49 to 53.34) Clayey SILT, some sand, subangular, fine to coarse, high plasticity, rusty white and light grey, very stiff to hard, massive, moist.	100		17			
	41								
	42			102					
	43					18	Gravel:0% Sand:12.9% Silt:53% Clay:34.2% Moisture Content:27.4% Plastic Limit:24 Liquid Limit:67		
	44								
1143	45			105					
	46					19			
	47								
	48								
	49			101					
						20			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-47

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.47	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	BLACKWATER GOLD PROJECT	Drill Hole No.	GT12-47	PAGE	3 of 4
Contractor:	Major Drilling Environmental LLC.	Sample Type:	Overburden Core	Date Started:	21 Oct 12
Location:	Downstream of Site D Embankment	Total Depth:	92.96 m	Date Completed:	25 Oct 12
Coordinates:	5,899,441 N , 377,756 E (UTM NAD 83)	Elevation:	1188 m	Date Well Installed:	
Drilling Method:	Sonic (rotary-vibratory) Drilling	Azimuth, Dip:	0°,-90°	Supervised by:	AL
Drilling Rig:	Diedrich 80K Sonic Truck Rig	Hole size:	152.4mm (6")	Reviewed by:	BOC

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	51		**CLAYEY SILT** (39.49 to 53.34) Clayey SILT, some sand, subangular, fine to coarse, high plasticity, rusty white and light grey, very stiff to hard, massive, moist.	95		21			
	52								
	53								
	54		**CLAYEY SANDY SILT** (53.34 to 65.53) Clayey Sandy SILT, trace gravel, subangular, fine to coarse, medium to high plasticity, rusty and greenish light grey to grey, stiff to very stiff, stratified, moist.	100		22			
1133	55								
	56								
	57			100					
	58					23	Gravel:2.4% Sand:47.3% Silt:30% Clay:20.4% Moisture Content:19.7%		
	59								
1128	60								
	61			93		24			
	62								
	63								
	64			100					
1123	65					25	Gravel:0% Sand:20.9% Silt:48% Clay:31.6% Moisture Content:31% Plastic Limit:31 Liquid Limit:57		
	66		**COMPLETELY WEATHERED BEDROCK** (65.53 to 80.77) Completely Weathered Bedrock, recovered as: SILT and CLAY, some sand, fine to coarse, low to medium plasticity, dark green, stiff to very stiff, massive, moist.	100					
	67								
	68					26			
	69			100					
1118	70					27			
	71								
	72								
	73			100					
	74					28			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-47

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.47	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-47**	PAGE	**4 of 4**
Contractor:	**Major Drilling Environmental LLC.**	Sample Type:	**Overburden Core**	Date Started:	**21 Oct 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**92.96 m**	Date Completed:	**25 Oct 12**
Coordinates:	**5,899,441 N , 377,756 E (UTM NAD 83)**	Elevation:	**1188 m**	Date Well Installed:	
Drilling Method:	**Sonic (rotary-vibratory) Drilling**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL**
Drilling Rig:	**Diedrich 80K Sonic Truck Rig**	Hole size:	**152.4mm (6")**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	LAB TESTING RESULTS	DRILLHOLE NOTES	WELL DETAILS
	76		**COMPLETELY WEATHERED BEDROCK** (65.53 to 80.77) Completely Weathered Bedrock, recovered as: SILT and CLAY, some sand, fine to coarse, low to medium plasticity, dark green, stiff to very stiff, massive, moist.	98					
	77								
	78								
	79			100					
1108	80								
	81		**COMPLETELY WEATHERED BEDROCK** (80.77 to 85.79) Completely Weathered Bedrock, recovered as: Sandy SILT, some gravel, angular to subangular, fine to coarse sand, fine gravel, low to medium plasticity, light to dark brown, very stiff to hard, massive, moist to dry.	89		29			
	82								
	83								
	84								
1103	85			93					
	86		**HIGHLY WEATHERED BEDROCK** (85.79 to 92.96) Highly Weathered Bedrock, recovered as: Sandy Gravelly SILT, angular to subangular, fine to coarse, non plastic, light to dark brown, very stiff to hard, massive, moist to dry.						
	87								
	88			98		30	Gravel:0% Sand:38.8% Silt:45% Clay:15.9% Moisture Content:17.7%		
	89								
1098	90								
	91			100					
	92								
	93		End of Drillhole: 92.96 m						
	94								
1093	95								
	96								
	97								
	98								
	99								

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR GT12-47

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.47	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG - SONIC, SEPT 19.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**21 Mar 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.84 m**	Date Completed:	**21 Mar 12**
Coordinates:	**5,899,360 N , 374,655 E (UTM NAD 83)**	Elevation:	**1302 m**	Date Well Installed:	**21 Mar 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**120.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SILT** (0 to 7.77) Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.										
	2			66		SPT1	19/28/34	62					
	3			77		SPT2	18/35/44	79					
1297	5			86		SPT3	18/50+	100+					
	6												
	7			102		SPT4	12/16/25	41					
	8		**SILTY SAND AND GRAVEL** (7.77 to 13.87) Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, purple, very dense, massive moist to dry.	96		SPT5	25/50+	100+					
	9			157		SPT6	50+	100+					
1292	10												
	11			118		SPT7	37/50+	100+					
	12			0		SPT8	50+	100+					
	13												
	14		**COMPLETELY WEATHERED BEDROCK** (13.87 to 16.46) Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, hard, massive, moist to wet.	165		SPT9	50+	100+				Bedrock	
1287	15												
	16												
	17		**MODERATELY WEATHERED ANDESITE** (16.46 to 40.84) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered										
	18												
	19												
1282	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-01D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.48	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**21 Mar 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.84 m**	Date Completed:	**21 Mar 12**
Coordinates:	**5,899,360 N , 374,655 E (UTM NAD 83)**	Elevation:	**1302 m**	Date Well Installed:	**21 Mar 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**120.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**MODERATELY WEATHERED ANDESITE** (16.46 to 40.84) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered										
	27												
	28												
	29												
1272	30												
	31												
	32												
	33												
	34												
1267	35												
	36												
	37												
	38												
	39												
1262	40												
	41		End of Drillhole: 40.84 m										
	42												
	43												
	44												
1257	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-01D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.48	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01S**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**
Location:	**Downstream of Site D Embankment**	Total Depth:	**13.56 m**
Coordinates:	**5,899,360 N , 374,658 E (UTM NAD 83)**	Elevation:	**1302 m**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**

PAGE **1 of 1**
Date Started: **22 Mar 12**
Date Completed: **22 Mar 12**
Date Well Installed: **22 Mar 12**
Supervised by: **AL/HS**
Reviewed by: **JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**GRAVELLY SILT** (0 to 7.62) Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.										
	2			28		SPT1	18/45/27	72					
	3			71		SPT2	11/16/30	46					
	4												
1297	5			75		SPT3	7/50+	100+					
	6			85		SPT4	50+	100+					
	7												
	8		**SILTY SAND AND GRAVEL** (7.62 to 9.14) Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, light grey/brown, very dense, massive, moist to dry	63		SPT5	36/44/50+	44					
	9			121		SPT6	26/50+	100+					
1292	10		**COMPLETELY WEATHERED BEDROCK** (9.14 to 10.36) Sandy SILT, some gravel, angular to subangular, fine to coarse, low to medium plasticity, dark greenish brown, hard, moist to wet									Bedrock	
	11												
	12												
	13		**MODERATELY WEATHERED ANDESITE** (10.36 to 13.56) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.										
	14												
1287	15		End of Drillhole: 13.56 m										
	16												
	17												
	18												
	19												
1282	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-01S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.49** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**4 Apr 12**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**41.61 m**	Date Completed:	**4 May 12**
Coordinates:	**5,894,670 N , 374,690 E (UTM NAD 83)**	Elevation:	**1406 m**	Date Well Installed:	**4 May 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 3.96) Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.	71		SPT1	9/16/17	33					
	2			102		SPT2	18/50+	100+					
	3												
	4		**SANDY SILT** (3.96 to 7.01) Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.	112		SPT3	9/18/20	38					
1401	5												
	6			76		SPT4	21/47/50+	47					
	7		**SILTY SAND** (7.01 to 17.68) Silty SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, non plastic, brown, dense to very dense, massive, dry.	82		SPT5	13/46/40	86					
	8												
	9			109		SPT6	19/27/34	61					
1396	10			67		SPT7	8/26/47	73					
	11												
	12			46		SPT8	10/17/12	29					
	13												
	14			52		SPT9	10/13/38	51					
1391	15			89		SPT10	8/18/50+	18					
	16			150		SPT11	50+	100+					
	17												
	18		**SILT** (17.68 to 19.63) SILT, some to trace sand, fine to coarse, low to medium plasticity, brown, very stiff to hard, moist.										
	19			162		SPT12	14/34/50+	34					
1386	20		**SANDY GRAVEL AND SILT** (19.63 to 22.6) Sandy GRAVEL and SILT, subangular, fine to coarse, non plastic to low plasticity, very dense, brown, moist.										
	21												
	22			180		SPT13	24/39/50+	39					
	23		**CLAYEY SILT** (22.6 to 28.35) Clayey SILT, some sand, fine to coarse, low to medium plasticity, brown, hard, varved, friable, wet.										
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-02D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.50** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**4 Apr 12**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**41.61 m**	Date Completed:	**4 May 12**
Coordinates:	**5,894,670 N , 374,690 E (UTM NAD 83)**	Elevation:	**1406 m**	Date Well Installed:	**4 May 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**CLAYEY SILT** (22.6 to 28.35) Clayey SILT, some sand, fine to coarse, low to medium plasticity, brown, hard, varved, friable, wet.	167		SPT14	11/34/50+	34					
	27												
	28												
	29		**GRAVELLY SILT** (28.35 to 32.92) Gravelly SILT, some sand, angular, fine to coarse, low plasticity, brown, very stiff to hard, fine fluvial sand lamination, moist.	85		SPT15	60+	100+					
1376	30												
	31			104		SPT16	22/67+	100+					
	32												
	33		**SILTY SAND** (32.92 to 41.61) Silty SAND, fine to coarse, low to medium plasticity, brown, compact to dense, massive, moist.										
1371	34												
	35			113		SPT17	9/14/19	33					
	36												
	37												
	38			95		SPT18	5/8/14	22					
	39												
1366	40												
	41			144		SPT19	4/8/19	27					
	42		End of Drillhole: 41.61 m										
	43												
	44												
1361	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-02D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.50	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**4 May 12**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**11.89 m**	Date Completed:	**4 Jun 12**
Coordinates:	**5,894,670 N , 374,704 E (UTM NAD 83)**	Elevation:	**1407 m**	Date Well Installed:	**4 Jun 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 3.96) Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.	79		SPT1	8/20/34	54					
	2												
	3			92		SPT2	26/42/52	94					
	4												
1402	5		**SANDY SILT** (3.96 to 7.01) Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.	94		SPT3	13/19/23	42					
	6			108		SPT4	18/25/30	55					
	7												
	8		**SILTY SAND** (7.01 to 11.89) Silty SAND, trace gravel, subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, moist.	95		SPT5	28/50+	100+					
	9			72		SPT6	25/50+	100+					
1397	10			85		SPT7	9/15/17	32					
	11												
	12			85		SPT8	30/64	64					
	13		End of Drillhole: 11.89 m										
	14												
1392	15												
	16												
	17												
	18												
	19												
1387	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-02S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.51** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**4 Oct 12**
Location:	**Downslope of Deposit**	Total Depth:	**39.62 m**	Date Completed:	**4 Dec 12**
Coordinates:	**5,893,860 N , 376,013 E (UTM NAD 83)**	Elevation:	**1465 m**	Date Well Installed:	**4 Dec 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND** (0 to 3.96) Silty SAND, trace gravel, subrounded and subangular, fine to coarse, low plasticity, brown/yellow, loose to very dense, massive, wet.	89		SPT1	32/28/33	61				
	2											
	3			30		SPT2	5/4/3	7				
	4		**SILTY SAND** (3.96 to 29.87) Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.	69		SPT3	9/13/17	30				
1460	5											
	6			64		SPT4	12/22/38	60				
	7			256		SPT5	50+	100+				
	8											
	9			98		SPT6	42/50+	100+				
1455	10			144		SPT7	24/49/56	100+				
	11											
	12			112		SPT8	18/35/35	70				
	13			114		SPT9	30/50/61	100+				
	14											
1450	15			85		SPT10	16/32/50+	32				
	16											
	17											
	18			95		SPT11	28/50+	100+				
	19											
1445	20											
	21			66		SPT12	10/47/50+	100+				
	22											
	23											
	24			77		SPT13	10/21/27	48				

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-03D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.52	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**4 Oct 12**
Location:	**Downslope of Deposit**	Total Depth:	**39.62 m**	Date Completed:	**4 Dec 12**
Coordinates:	**5,893,860 N , 376,013 E (UTM NAD 83)**	Elevation:	**1465 m**	Date Well Installed:	**4 Dec 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY SAND** (3.96 to 29.87) Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.										
	27			80		SPT14	15/18/42	60					
	28												
	29												
1435	30		**SANDY GRAVEL** (29.87 to 32.92) Sandy GRAVEL, trace silt, angular to rounded, fine to coarse, brown grey yellow, dense to very dense, massive, moist.	33		SPT15	50+	100+					
	31												
	32												
	33		**SILTY SAND** (32.92 to 34.44) Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.	50		SPT16	45/42/50+	100+					
	34												
1430	35		**SAND** (34.44 to 35.96) SAND, some gravel, trace cobbles, subrounded, fine to coarse, non plastic, brown, very dense, massive, moist.										
	36			66		SPT17	26/54/50+	100+					
	37		**SANDY SILT** (35.96 to 39.62) Sandy SILT, some gravel, subangular, fine to coarse, low to medium plasticity, dark brown, hard, massive, moist.										
	38												
	39			87		SPT18	27/37/50+	100+					
1425	40		End of Drillhole: 39.62 m										
	41												
	42												
	43												
	44												
1420	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-03D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.52	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03S**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**
Location:	**Downslope of Deposit**	Total Depth:	**24.38 m**
Coordinates:	**5,893,860 N , 376,004 E (UTM NAD 83)**	Elevation:	**1465 m**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**

PAGE **1 of 1**
Date Started: **13 Apr 12**
Date Completed: **13 Apr 12**
Date Well Installed: **13 Apr 12**
Supervised by: **AL/HS**
Reviewed by: **JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND** (0 to 3.96) Silty SAND, trace gravel, subrounded to subangular, fine to coarse, low plasticity, brown/yellow, compact, massive, moist.										
	2												
	3												
	4		**SILTY SAND** (3.96 to 24.38) Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, moist.										
1460	5												
	6												
	7												
	8												
	9												
1455	10												
	11												
	12												
	13												
	14												
1450	15												
	16												
	17												
	18												
	19												
1445	20												
	21												
	22												
	23												
	24												
			End of Drillhole: 24.38 m										

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-03S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.53** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**14 Apr 12**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**37.95 m**	Date Completed:	**15 Apr 12**
Coordinates:	**5,892,500 N , 374,110 E (UTM NAD 83)**	Elevation:	**1558 m**	Date Well Installed:	**15 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	DRILLHOLE NOTES	WELL DETAILS
	1		**FILL** (0 to 5.49) Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.	85		SPT1	12/19/24	43				
	2											
	3			69		SPT2	8/18/26	44				
	4			48		SPT3	10/33/46	79				
1553	5											
	6		**SAND AND GRAVEL** (5.49 to 7.01) SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry.	36		SPT4	17/50+	100+				
	7			92		SPT5	33/70	70				
	8		**SANDY SILT** (7.01 to 25.6) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, hard, massive, moist.									
	9			79		SPT6	33/49/41	90				
1548	10			72		SPT7	18/26/41	67				
	11											
	12			98		SPT8	24/51/62	100+				
	13											
	14			100		SPT9	23/36/36	72				
1543	15			102		SPT10	15/35/46	81				
	16											
	17											
	18			103		SPT11	39/37/44	81				
	19											
1538	20											
	21			59		SPT12	29/64	64				
	22											
	23											
	24			85		SPT13	50+	100+				

RMR VALUE ◆ 20 40 60 80
RQD (%) ■ 20 40 60 80
SPT 'N' VALUES ● 20 40 60 80

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-04D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.54** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**14 Apr 12**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**37.95 m**	Date Completed:	**15 Apr 12**
Coordinates:	**5,892,500 N , 374,110 E (UTM NAD 83)**	Elevation:	**1558 m**	Date Well Installed:	**15 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**MODERATELY WEATHERED ANDESITE** (25.6 to 37.95) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.									Bedrock	
1528	30												
1523	35												
	38		End of Drillhole: 37.95 m										
1518	40												
1513	45												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-04D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.54	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**15 Apr 12**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**14.78 m**	Date Completed:	**15 Apr 12**
Coordinates:	**5,892,500 N , 374,116 E (UTM NAD 83)**	Elevation:	**1558 m**	Date Well Installed:	**15 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**FILL** (0 to 3.05) Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.	82		SPT1	9/14/19	33					
	2			41		SPT2	12/23/29	52					
	3		**SAND AND GRAVEL** (3.05 to 7.62) SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry to moist.	94		SPT3	21/52/50+	100+					
1553	5			80		SPT4	15/26/28	54					
	6			76		SPT5	24/49/50+	100+					
	8		**SANDY SILT** (7.62 to 14.78) Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff to hard, massive, moist.	82		SPT6	34/58/50	108					
1548	10			51		SPT7	19/42/53	95					
	11			97		SPT8	22/50	50					
1543	15		End of Drillhole: 14.78 m										
1538	20												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-04S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.55	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**27 Apr 12**
Location:	**South of TSF**	Total Depth:	**27.74 m**	Date Completed:	**27 Apr 12**
Coordinates:	**5,896,210 N , 371,310 E (UTM NAD 83)**	Elevation:	**1373 m**	Date Well Installed:	**27 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**120.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 11.89) Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.	85		SPT1	15/24/23	47					
	2												
	3			101		SPT2	28/50+	100+					
	4												
1368	5			97		SPT3	27/50+	100+					
	6			115		SPT4	26/31/21	52					
	7												
	8			90		SPT5	15/28/27	55					
	9			153		SPT6	28/50+	100+					
1363	10												
	11			115		SPT7	42/50+	100+					
			(10.36) Boulder										
	12		**SILTY SAND AND GRAVEL** (11.89 to 12.5) Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist to wet.	126		SPT8	55+	100+				Bedrock	
	13												
	14												
1358	15		**MODERATELY WEATHERED ANDESITE** (12.5 to 27.74) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered										
	16												
	17												
	18												
	19												
1353	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-05D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.56	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**27 Apr 12**
Location:	**South of TSF**	Total Depth:	**27.74 m**	Date Completed:	**27 Apr 12**
Coordinates:	**5,896,210 N , 371,310 E (UTM NAD 83)**	Elevation:	**1373 m**	Date Well Installed:	**27 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**120.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**MODERATELY WEATHERED ANDESITE** (12.5 to 27.74) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered										
	27												
	28		End of Drillhole: 27.74 m										
	29												
1343	30												
	31												
	32												
	33												
	34												
1338	35												
	36												
	37												
	38												
	39												
1333	40												
	41												
	42												
	43												
	44												
1328	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-05D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.56	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**27 Apr 12**
Location:	**South of TSF**	Total Depth:	**11.88 m**	Date Completed:	**28 Apr 12**
Coordinates:	**5,896,210 N , 371,309 E (UTM NAD 83)**	Elevation:	**1373 m**	Date Well Installed:	**28 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 11.73) Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.	107		SPT1	18/38/59	97					
	2												
	3			75		SPT2	34/50+	100+					
	4												
1368	5			85		SPT3	50/50+	100+					
	6			75		SPT4	14/23/55	78					
	7												
	8			108		SPT5	18/26/39	65					
	9			136		SPT6	28/45/61	100+					
1363	10												
	11			102		SPT7	10/31/37	68					
	12		**COMPLETELY WEATHERED BEDROCK** (11.73 to 11.88) Sandy, Clayey SILT, some gravel, angular to subangular, fine to coarse, low plasticity, purple brown and greeny grey, hard, massive, moist to wet.	164		SPT8	30/50+	100+				Bedrock	
	13		End of Drillhole: 11.88 m										
	14												
1358	15												
	16												
	17												
	18												
	19												
1353	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-05S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.57	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**28 Apr 12**
Location:	**Downstream of Site C Embankment**	Total Depth:	**39.93 m**	Date Completed:	**28 Apr 12**
Coordinates:	**5,896,470 N , 374,807 E (UTM NAD 83)**	Elevation:	**1278 m**	Date Well Installed:	**28 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 21.03) Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.	69		SPT1	5/39/13	52					
	2												
	3			102		SPT2	8/11/17	28					
	4												
1273	5			148		SPT3	40/58	58					
	6			138		SPT4	30/57	57					
	7												
	8			118		SPT5	56	100+					
	9			114		SPT6	21/56/50+	56					
1268	10												
	11			85		SPT7	67	100+					
	12			154		SPT8	23/50+	100+					
	13												
	14			115		SPT9	34/52/52	100+					
1263	15			125		SPT10	65+	100+					
	16												
	17												
	18			115		SPT11	14/15/16	31					
	19												
1258	20												
	21		**SILT** (21.03 to 25.6) SILT, trace sand, some cobbles, subrounded, fine to coarse, low plasticity, brown, hard, massive, moist to wet.	75		SPT12	7/25/43	68					
	22												
	23												
	24			109		SPT13	28/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-06D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.58	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**28 Apr 12**
Location:	**Downstream of Site C Embankment**	Total Depth:	**39.93 m**	Date Completed:	**28 Apr 12**
Coordinates:	**5,896,470 N , 374,807 E (UTM NAD 83)**	Elevation:	**1278 m**	Date Well Installed:	**28 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	26		**SAND** (25.6 to 27.13) SAND, some gravel, trace silt, angular to subangular, fine to coarse, non-plastic, brown, very dense, massive, moist.	57		SPT14	21/33/52	85					
	27												
	28		**SILTY SAND AND GRAVEL** (27.13 to 33.83) Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist.										
1248	29												
	30			96		SPT15	32/54/50+	54					
	31												
	32												
	33			33		SPT16	23/61/51	100+					
	34		**SILT** (33.83 to 39.93) SILT, some sand, fine to coarse, uniformly graded, low to medium plasticity, orange brown, hard, massive, moist.										
1243	35												
	36												
	37			115		SPT17	10/17/23	40					
	38												
	39												
1238	40		End of Drillhole: 39.93 m	115		SPT18	9/17/23	40					
	41												
	42												
	43												
	44												
1233	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-06D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.58** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**28 Apr 12**
Location:	**Downstream of Site C Embankment**	Total Depth:	**22.55 m**	Date Completed:	**29 Apr 12**
Coordinates:	**5,896,470 N , 374,804 E (UTM NAD 83)**	Elevation:	**1278 m**	Date Well Installed:	**29 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SANDY SILT** (0 to 14.93) Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.	36		SPT1	9/23/22	45					
	2												
	3			115		SPT2	7/17/24	41					
	4			150		SPT3	34/50+	100+					
1273	5												
	6			131		SPT4	36/50+	100+					
	7												
	8			114		SPT5	35/56/50+	56					
	9			148		SPT6	26/68	68					
1268	10												
	11			141		SPT7	26/62	62					
	12			85		SPT8	50+	100+					
	13												
	14			121		SPT9	25/50+	100+					
1263	15			102		SPT10	46/50+	100+					
	16		**GRAVELLY SILT** (14.93 to 17.98) Gravelly SILT, trace sand, subrounded, fine to coarse, low plasticity, dark brown, hard, massive, moist to wet.										
	17												
	18		**SANDY SILT** (17.98 to 22.55) Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low plasticity, yellow to brown, hard, massive, moist.	112		SPT11	12/22/27	49					
	19												
1258	20												
	21			103		SPT12	18/29/36	65					
	22												
	23		End of Drillhole: 22.55 m										
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-06S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.59** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**29 Apr 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.49 m**	Date Completed:	**30 Apr 12**
Coordinates:	**5,899,440 N , 376,395 E (UTM NAD 83)**	Elevation:	**1221 m**	Date Well Installed:	**30 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SAND AND SILT** (0 to 6.1) SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, stiff to very stiff, dense to very dense, massive, moist to dry.	82		SPT1	22/37/51	88					
	2												
	3			77		SPT2	8/19/23	42					
	4												
1216	5			77		SPT3	8/17/21	38					
	6			143		SPT4	44/50+	100+					
	7		**SAND AND GRAVEL** (6.1 to 10.67) SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.	91		SPT5	25/50+	100+					
	8												
	9			125		SPT6	68+	100+					
1211	10												
	11		**SAND** (10.67 to 14.93) SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, brown, very dense, stratified, dry to moist.	110		SPT7	8/45/50+	45					
	12			115		SPT8	10/26/40	66					
	13												
	14			66		SPT9	27/50+	100+					
1206	15		**SAND AND GRAVEL** (14.93 to 24.37) SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, dense to very dense, massive, wet.	127		SPT10	32/50+	100+					
	16												
	17												
	18			64		SPT11	10/50/50+	50					
	19												
1201	20												
	21			84		SPT12	19/32/55+	32					
	22												
	23												
	24			221		SPT13	95/50+	100+					

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-07D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.60** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**29 Apr 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.49 m**	Date Completed:	**30 Apr 12**
Coordinates:	**5,899,440 N , 376,395 E (UTM NAD 83)**	Elevation:	**1221 m**	Date Well Installed:	**30 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 / RQD (%) ■ 20 40 60 80 / SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT AND SAND** (24.37 to 25.6) SILT and SAND, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, very stiff to hard, dense to very dense, massive, wet.										
	27			100		SPT14	25/45/50+	45					
	28		**SILTY SAND AND GRAVEL** (25.6 to 30.17) Silty SAND and GRAVEL, subrounded, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.										
	29												
1191	30			114		SPT15	40/50+	100+					
	31		**SILTY SAND** (30.17 to 40.49) Silty SAND, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very dense, massive, moist.										
	32												
	33			91		SPT16	16/55/50+	55					
	34												
1186	35												
	36			140		SPT17	20/51/50+	51					
	37												
	38												
	39												
1181	40			50		SPT18	9/20/30	50					
	41		End of Drillhole: 40.49 m										
	42												
	43												
	44												
1176	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-07D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.60	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**30 Apr 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**24.08 m**	Date Completed:	**30 Apr 12**
Coordinates:	**5,899,440 N , 376,399 E (UTM NAD 83)**	Elevation:	**1221 m**	Date Well Installed:	**30 Apr 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**AL/HS**
Drilling Rig:	**Mobile B-54**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
1216	1		**SAND AND SILT** (0 to 6.1) SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, firm to stiff, compact to dense, massive, moist to dry.										
1211	6		**SAND AND GRAVEL** (6.1 to 10.67) SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.										
1206	11		**SAND** (10.67 to 14.93) SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, cohesive, brown, dense to very dense, stratified, dry to moist.										
1201	15		**SAND AND GRAVEL** (14.93 to 24.08) SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, very dense, massive, wet.										
	24		End of Drillhole: 24.08 m										

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-07S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.61** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\06\A\DAT\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**8 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**36.42 m**	Date Completed:	**9 Aug 12**
Coordinates:	**5,899,192 N , 377,889 E (UTM NAD 83)**	Elevation:	**1181 m**	Date Well Installed:	**9 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 5.03) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.										
	2												
	3												
	4												
1176	5		**SANDY SILT** (5.03 to 13.72) Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.										
	6												
	7												
	8												
	9												
1171	10												
	11												
	12												
	13												
	14		**SAND AND GRAVEL** (13.72 to 19.2) SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
1166	15												
	16												
	17												
	18												
	19												
1161	20		**SAND AND GRAVEL** (19.2 to 36.42) SAND and GRAVEL, some silt and clay, subangular to subrounded, fine to coarse, brown yellow, dense to very dense, massive, moist.										
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-08D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.62	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**8 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**36.42 m**	Date Completed:	**9 Aug 12**
Coordinates:	**5,899,192 N , 377,889 E (UTM NAD 83)**	Elevation:	**1181 m**	Date Well Installed:	**9 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SAND AND GRAVEL** (19.2 to 36.42) SAND and GRAVEL, some silt and clay, subangular to subrounded, fine to coarse, brown yellow, dense to very dense, massive, moist.										
	27												
	28												
	29												
1151	30												
	31												
	32												
	33												
	34												
1146	35												
	36												
	37		End of Drillhole: 36.42 m										
	38												
	39												
1141	40												
	41												
	42												
	43												
	44												
1136	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-08D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.62	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**10 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**20.12 m**	Date Completed:	**11 Aug 12**
Coordinates:	**5,899,198 N , 377,899 E (UTM NAD 83)**	Elevation:	**1181 m**	Date Well Installed:	**11 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 5.03) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.										
	2												
	3												
	4												
1176	5												
	6		**SANDY SILT** (5.03 to 13.72) Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.										
	7												
	8												
	9												
1171	10												
	11												
	12												
	13												
	14		**SAND AND GRAVEL** (13.72 to 20.12) SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
1166	15												
	16												
	17												
	18												
	19												
1161	20												
			End of Drillhole: 20.12 m										
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-08S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.63	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**11 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**34.44 m**	Date Completed:	**12 Aug 12**
Coordinates:	**5,899,688 N , 378,334 E (UTM NAD 83)**	Elevation:	**1167 m**	Date Well Installed:	**12 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 5.49) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.										
	2												
	3												
	4												
1162	5												
	6		**SILT** (5.49 to 6.1) SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.										
	7												
	8		**SILT AND SAND** (6.1 to 10.06) SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.										
	9												
1157	10												
	11		**SILT** (10.06 to 11.89) SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.										
	12		**SAND AND GRAVEL** (11.89 to 17.98) SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	13												
	14												
1152	15												
	16												
	17												
	18		**SILT AND SAND** (17.98 to 28.95) SILT and SAND, trace clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, moist.										
	19												
1147	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-09D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.64	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**11 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**34.44 m**	Date Completed:	**12 Aug 12**
Coordinates:	**5,899,688 N , 378,334 E (UTM NAD 83)**	Elevation:	**1167 m**	Date Well Installed:	**12 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SILT AND SAND** (17.98 to 28.95) SILT and SAND, trace clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, moist.										
	27												
	28												
	29												
1137	30		**SAND AND GRAVEL** (28.95 to 34.14) SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	31												
	32												
	33												
	34												
1132	35		**SILT AND SAND** (34.14 to 34.44) SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist. End of Drillhole: 34.44 m										
	36												
	37												
	38												
	39												
1127	40												
	41												
	42												
	43												
	44												
1122	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-09D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.64	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**12 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.85 m**	Date Completed:	**13 Aug 12**
Coordinates:	**5,899,687 N , 378,324 E (UTM NAD 83)**	Elevation:	**1167 m**	Date Well Installed:	**13 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 5.49) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.										
	2												
	3												
	4												
1162	5												
	6		**SILT** (5.49 to 6.1) SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.										
	7												
	8		**SILT AND SAND** (6.1 to 10.06) SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.										
	9												
1157	10												
	11		**SILT** (10.06 to 11.89) SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.										
	12		**SAND AND GRAVEL** (11.89 to 15.85) SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	13												
	14												
1152	15												
	16		End of Drillhole: 15.85 m										
	17												
	18												
	19												
1147	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-09S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.65	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**17 Aug 12**
Location:	**Upslope West of Deposit**	Total Depth:	**42.06 m**	Date Completed:	**17 Aug 12**
Coordinates:	**5,892,263 N , 375,045 E (UTM NAD 83)**	Elevation:	**1677 m**	Date Well Installed:	**17 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**114.3**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 2.13) Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.										
	2												
	3		**SILT AND SAND** (2.13 to 3.66) SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, dense, massive, moist to dry.										
	4												
1672	5		**SILTY SAND AND GRAVEL** (3.66 to 5.18) Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.										
	6												
	7		**COMPLETELY WEATHERED BEDROCK** (5.18 to 7.62) Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.										
	8												
	9												
1667	10		**MODERATELY WEATHERED ANDESITE** (7.62 to 42.06) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.										
	11												
	12												
	13												
	14												
1662	15												
	16												
	17												▼
	18												
	19												
1657	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-10D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX	REV.
B1.66	0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\AT\ASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\AT\ASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**17 Aug 12**
Location:	**Upslope West of Deposit**	Total Depth:	**42.06 m**	Date Completed:	**17 Aug 12**
Coordinates:	**5,892,263 N , 375,045 E (UTM NAD 83)**	Elevation:	**1677 m**	Date Well Installed:	**17 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**114.3**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**MODERATELY WEATHERED ANDESITE** (7.62 to 42.06) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.										
	27												
	28												
	29												
1647	30												
	31												
	32												
	33												
	34												
1642	35												
	36												
	37												
	38												
	39												
1637	40												
	41												
	42		End of Drillhole: 42.06 m										
	43												
	44												
1632	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-10D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.66	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**18 Aug 12**
Location:	**Upslope West of Deposit**	Total Depth:	**7.01 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,892,260 N , 375,037 E (UTM NAD 83)**	Elevation:	**1677 m**	Date Well Installed:	**18 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 2.13) Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.										
	2												
	3		**SILT AND SAND** (2.13 to 3.66) SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, compact to dense, massive, moist to dry.									
	4												
1672	5		**SILTY SAND AND GRAVEL** (3.66 to 5.18) Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.										
	6												
	7		**COMPLETELY WEATHERED BEDROCK** (5.18 to 7.01) Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.										
	8												
	9		End of Drillhole: 7.01 m										
1667	10												
	11												
	12												
	13												
	14												
1662	15												
	16												
	17												
	18												
	19												
1657	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-10S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.67	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**18 Aug 12**
Location:	**Upslope East of Deposit**	Total Depth:	**46.63 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,892,168 N , 375,773 E (UTM NAD 83)**	Elevation:	**1688 m**	Date Well Installed:	**19 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**114.3**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 1.52) Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.										
	2		**SILT AND SAND** (1.52 to 4.57) SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.										
	3												
	4												
1683	5		**SILTY SAND AND GRAVEL** (4.57 to 15.85) Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.										
	6												
	7												
	8												
	9												
1678	10												
	11												
	12												
	13												
	14												
1673	15												
	16		**COMPLETELY WEATHERED BEDROCK** (15.85 to 19.81) Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.										
	17												
	18												
	19												
1668	20		**MODERATELY WEATHERED ANDESITE** (19.81 to 46.63) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.										
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-11D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.68	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**18 Aug 12**
Location:	**Upslope East of Deposit**	Total Depth:	**46.63 m**	Date Completed:	**18 Aug 12**
Coordinates:	**5,892,168 N , 375,773 E (UTM NAD 83)**	Elevation:	**1688 m**	Date Well Installed:	**19 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**114.3**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**MODERATELY WEATHERED ANDESITE** (19.81 to 46.63) Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.										
	27												
	28												
	29												
1658	30												
	31												
	32												
	33												
	34												
1653	35												
	36												
	37												
	38												
	39												
1648	40												
	41												
	42												
	43												
	44												
1643	45												
	46												
	47		End of Drillhole: 46.63 m										
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-11D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.68	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11S**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**
Location:	**Upslope East of Deposit**	Total Depth:	**19.81 m**
Coordinates:	**5,892,171 N , 375,782 E (UTM NAD 83)**	Elevation:	**1688 m**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**114.3**

PAGE **1 of 1**
Date Started: **20 Aug 12**
Date Completed: **20 Aug 12**
Date Well Installed: **20 Aug 12**
Supervised by: **DMW**
Reviewed by: **JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 1.52) Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.										
	2		**SILT AND SAND** (1.52 to 4.57) SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.										
	3												
	4												
1683	5		**SILTY SAND AND GRAVEL** (4.57 to 15.85) Silty SAND and GRAVEL, subangular, fine to coarse, brown, dense to very dense, massive, moist.										
	6												
	7												
	8												
	9												
1678	10												
	11												
	12												
	13												
	14												
1673	15												
	16		**COMPLETELY WEATHERED BEDROCK** (15.85 to 19.81) Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.										
	17												
	18												
	19												
1668	20		End of Drillhole: 19.81 m										
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-11S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO. **101-457/6** | REF. NO. **1**
APPENDIX **B1.69** | REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**21 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**35.2 m**	Date Completed:	**22 Aug 12**
Coordinates:	**5,896,260 N , 378,485 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	**22 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
1251	1		**SILTY SAND AND GRAVEL** (0 to 7.31) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, moist.										▼
	2												
	3												
	4												
	5												
	6												
	7												
	8		**SILT AND SAND** (7.31 to 9.14) SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff and dense, massive, moist.										
	9												
1246	10		**SAND AND GRAVEL** (9.14 to 15.85) SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	11												
	12												
	13												
	14												
1241	15												
	16		**SILT AND SAND** (15.85 to 24.38) SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff, dense, massive, moist.										
	17												
	18												
	19												
1236	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-12D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.70	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**21 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**35.2 m**	Date Completed:	**22 Aug 12**
Coordinates:	**5,896,260 N , 378,485 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	**22 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SILTY SAND AND GRAVEL** (24.38 to 35.2) Silty SAND and GRAVEL, trace clay and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	27												
	28												
	29												
1226	30												
	31												
	32												
	33												
	34												
1221	35		End of Drillhole: 35.2 m										
	36												
	37												
	38												
	39												
1216	40												
	41												
	42												
	43												
	44												
1211	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-12D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.70	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**23 Aug 12**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.24 m**	Date Completed:	**23 Aug 12**
Coordinates:	**5,896,256 N , 378,493 E (UTM NAD 83)**	Elevation:	**1256 m**	Date Well Installed:	**23 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
1251	1–7		**SILTY SAND AND GRAVEL** (0 to 7.31) Silty SAND and GRAVEL, trace cobble, subrounded, fine to coarse, brown, compact to dense, massive, moist.										
	7–9		**SILT AND SAND** (7.31 to 9.14) SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff, dense, massive, moist.										
1246	9–15		**SAND AND GRAVEL** (9.14 to 15.24) SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
1241	15		End of Drillhole: 15.24 m										
1236	16–24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-12S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.71	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13D**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**24 Aug 12**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**39.01 m**	Date Completed:	**24 Aug 12**
Coordinates:	**5,893,844 N , 370,815 E (UTM NAD 83)**	Elevation:	**1364 m**	Date Well Installed:	**24 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**JS**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
1359	1–5		**SAND AND GRAVEL** (0 to 13.41) SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.										
1354	10–13		**SILTY SAND** (13.41 to 16.76) Silty SAND, trace gravel, subangular to subrounded, fine to coarse, low plasticity, grey, dense, massive, wet.										
1349	15–16		**SANDY GRAVELLY SILT** (16.76 to 27.43) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey, very stiff to hard, massive, moist.										
1344	20–24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-13D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.72	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13D**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**24 Aug 12**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**39.01 m**	Date Completed:	**24 Aug 12**
Coordinates:	**5,893,844 N , 370,815 E (UTM NAD 83)**	Elevation:	**1364 m**	Date Well Installed:	**24 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**JS**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**SANDY GRAVELLY SILT** (16.76 to 27.43) Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey, very stiff to hard, massive, moist.										
	27												
	28		**SILT** (27.43 to 35.96) SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, grey, firm to very stiff, massive, moist.									
	29												
1334	30												
	31												
	32												
	33												
	34												
1329	35												
	36		**GRAVELLY SILT** (35.96 to 39.01) Gravelly SILT, some sand, trace clay, subangular, fine to coarse, low plasticity, brown, very stiff to hard, massive, wet.										
	37												
	38												
	39		End of Drillhole: 39.01 m										
1324	40												
	41												
	42												
	43												
	44												
1319	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-13D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.72	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13S**	PAGE	**1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**24 Aug 12**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**13.41 m**	Date Completed:	**24 Aug 12**
Coordinates:	**5,893,841 N , 370,809 E (UTM NAD 83)**	Elevation:	**1365 m**	Date Well Installed:	**24 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**JS**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**152.4**	Reviewed by:	**JS**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ / RQD (%) ■ / SPT 'N' VALUES ● (20 40 60 80)	DRILLHOLE NOTES	WELL DETAILS
1360	1–13		**SAND AND GRAVEL** (0 to 13.41) SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.										
1355			End of Drillhole: 13.41 m										
1350	14–20												
1345	21–24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW12-13S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.73	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW-05 (ODK)**	PAGE	**1 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**14 Aug 12**
Location:	**Upstream of Camp Septic Field**	Total Depth:	**39.32 m**	Date Completed:	**15 Aug 12**
Coordinates:	**5,894,076 N , 376,758 E (UTM NAD 83)**	Elevation:	**1472 m**	Date Well Installed:	**15 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 7.31) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to very dense, massive, moist										
	2												
	3												
	4												
1467	5												
	6												
	7												
	8		**GRAVEL AND COBBLES** (7.31 to 19.81) GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.									
	9												
1462	10												
	11												
	12												
	13												
	14												
1457	15												
	16												
	17												
	18												
	19												
1452	20		**SILT AND SAND** (19.81 to 20.42) SILT and SAND, angular, fine to coarse, low plasticity, brown, stiff to very stiff, dense, massive, dry.										
	21		**GRAVEL AND COBBLES** (20.42 to 39.32) GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.										
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW-05 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **B1.74**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DATA\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW-05 (ODK)**	PAGE	**2 of 2**
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Date Started:	**14 Aug 12**
Location:	**Upstream of Camp Septic Field**	Total Depth:	**39.32 m**	Date Completed:	**15 Aug 12**
Coordinates:	**5,894,076 N , 376,758 E (UTM NAD 83)**	Elevation:	**1472 m**	Date Well Installed:	**15 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip:	**0°,-90°**	Supervised by:	**DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size:	**139.7**	Reviewed by:	**BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	26		**GRAVEL AND COBBLES** (20.42 to 39.32) GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.										
	27												
	28												
	29												
1442	30												
	31												
	32												
	33												
	34												
1437	35												
	36												
	37												
	38												
	39												
1432	40		End of Drillhole: 39.32 m										
	41												
	42												
	43												
	44												
1427	45												
	46												
	47												
	48												
	49												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW-05 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.74	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No. **MW-06 (ODK)**	PAGE **1 of 1**
Contractor:	**Westech Drilling Corp.**	Sample Type: **Cuttings**	Date Started: **16 Aug 12**
Location:	**Downstream of Camp Septic Field**	Total Depth: **18.59 m**	Date Completed: **16 Aug 12**
Coordinates:	**5,893,974 N , 376,839 E (UTM NAD 83)**	Elevation: **1456 m**	Date Well Installed: **16 Aug 12**
Drilling Method:	**ODEX**	Azimuth, Dip: **0°,-90°**	Supervised by: **DMW**
Drilling Rig:	**Simco 2800 HD**	Hole size: **139.7**	Reviewed by: **BOC**

ELEVATION (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	TOTAL CORE / SAMPLE RECOVERY (%)	SAMPLE TYPE	SAMPLE NO.	SPT BLOW COUNTS *Refusal Penetration*	SPT 'N' VALUE / *RQD (%)*	RMR VALUE	ROCK HARDNESS	RMR VALUE ◆ 20 40 60 80 RQD (%) ■ 20 40 60 80 SPT 'N' VALUES ● 20 40 60 80	DRILLHOLE NOTES	WELL DETAILS
	1		**SILTY SAND AND GRAVEL** (0 to 1.52) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to very dense, massive, moist.										
	2		**SILT AND SAND** (1.52 to 4.57) SILT and SAND, angular to subrounded, fine to coarse, slightly plastic, brown, stiff to very stiff, compact to dense, massive, moist.										
	3												
	4												
1451	5		**SILTY SAND AND GRAVEL** (4.57 to 13.76) Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.										
	6												
	7												
	8												
	9												
1446	10												
	11												
	12												
	13												
	14		**GRAVEL AND COBBLES** (13.76 to 18.59) GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.										
1441	15												
	16												
	17												
	18												
	19		End of Drillhole: 18.59 m										
1436	20												
	21												
	22												
	23												
	24												

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
DRILLHOLE LOG FOR MW-06 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX B1.75	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, DRILLHOLE LOG, DATA TEMPLATE MAY22.GDT, 20 Sep 13

APPENDIX B2

GEOTECHNICAL RMR/RQD SHEETS

(Pages B2-1 to B2-32)

Knight Piésold CONSULTING

GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-01

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 07-Mar-12
Date Completed: 14-Mar-12

Location: Site D Embankment
Drill Hole ID: GT12-01
Coordinates : 376,021 easting
5,898,690 northing

Surface Elevation: 1,245.0 m
Total Depth: 88.3 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		61.3		0.0		0						OB				**OVERBURDEN**	OB								
61.3	1183.74	65.4	4.12	0.00	0	0.00	0	0	0	0	R0	Alt. Andesite	None	None	No Structure	CASING - No Recovery	AND						0	15	**24**
65.4	1179.62	66.3	0.91	0.94	100	0.12	13	Max	5	25	R3	Alt. Andesite	Reddish-grey	Fine-Grained	Massive	Fine-grained, reddish grey, very weak, no structure, highly weathered, broken from 216' to 217'; joints very close, slightly rough planar, open, soft rusty infill (<2mm) and trace brown clay infill.	AND	0	1	1	2	1	5	15	**33**
66.3	1178.71	67.0	0.69	0.64	93	0.00	0	Max	5	20	R2	Alt. Andesite	Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, dark reddish brown, very weak, highly weathered; joints very close, rough undulating, wide, soft rusty infill <2mm.	AND	0	1	1	2	1	5	15	**31**
67.0	1178.02	68.5	1.52	1.41	93	0.76	50	11	118	50	R4	Alt. Andesite	Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, dark reddish brown, very weak, moderately to highly weathered; joints very close, slightly rough planar, open, soft rusty infill and soft reddish gravelly clay infill (<5mm).	AND	0	1	1	2	1	5	15	**42**
68.5	1176.50	70.0	1.52	1.44	94	0.37	24	Max	5	25	R3	Alt. Andesite	Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, dark reddish brown, very weak, highly weathered, fault at last 1' of run; joints very close, rough planar, open, soft rusty infill and gravelly clay (approx. 10cm).	AND	0	1	1	2	1	5	15	**34**
70.0	1174.98	71.5	1.52	0.98	64	0.20	13	Max	5	25	R3	Alt. Andesite	Dark Brownish Grey	Fine-Grained	Massive	Fine-grained, dark brownish grey, very weak, highly weathered, first 3' continued fault from previous run, another fault at last 1'; joints very close, slightly rough planar, open, soft rusty infill, high plasticity gravelly clay at end of run.	AND	0	1	1	2	1	5	15	**33**
71.5	1173.45	73.1	1.52	1.34	88	0.49	32	12	103	25	R3	Alt. Andesite	Dark Grey	Fine-Grained	Massive	Fine-grained, dark grey, very weak, moderately weathered; joints close, slightly rough planar, partly open, soft rusty infill <2mm.	AND	0	1	3	2	3	9	15	**41**
73.1	1171.93	74.6	1.52	1.50	98	1.13	74	11	125	25	R3	Alt. Andesite	Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, dark reddish brown, moderately weathered, very weak, some calcite veins altered to yellow/rusty color; joints very close, open, slightly rough planar, dip ~70° to core axis, soft rusty infill <2mm and altered calcite infill.	AND	0	1	1	2	3	7	15	**47**
74.6	1170.40	76.1	1.52	1.51	99	1.51	99	6	216	50	R4	Alt. Andesite	Dark Grey and Reddish	Fine-Grained	Massive	Fine-grained, dark grey and reddish, very weak, slightly weathered, random calcite veins (some altered); joints close, partly open, slightly rough planar, soft rust and clay infill.	AND	0	4	1	2	3	10	15	**58**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
76.1	1168.88	77.6	1.52	1.42	93	1.21	79	4	284	50	R4	Alt. Andesite	Dark Reddish Grey with Greenish Grey	Fine-Grained	Massive	Fine-grained, dark reddish grey with greenish grey zones of soft clay, very weak, moderately weathered, large calcite intrusion altered to soft greenish grey clay, ~60cm long; joints close, open, dip ~60° to core axis, slightly rough planar, soft rusty infill <2mm.	AND	0	1	1	2	3	7	15	**52**
77.6	1167.36	79.2	1.52	1.55	100	1.26	83	10	141	50	R4	Alt. Andesite	Greenish Grey with Reddish Stain	Fine-Grained	Massive	Fine-grained, greenish grey with reddish stain, very weak, moderately weathered, calcite veins and granular calcite inclusion, slightly altered to light green color; joints very close, partly open, dip~60° to core axis, slightly rough planar, rusty infill.	AND	0	4	1	2	3	10	15	**54**
79.2	1165.83	80.7	1.52	1.53	100	1.42	93	4	306	50	R4	Alt. Andesite	Dark Reddish Grey with Greenish Grey	Fine-Grained	Massive	Fine-grained, dark reddish grey with greenish grey, very weak, slightly weathered, calcite veins and granular inclusion alter to green color; joints close, partly open, slightly rough undulating, dip ~45° to core axis, sandy rock fragments infill.	AND	0	4	3	4	3	14	15	**62**
80.7	1164.31	82.2	1.52	1.53	100	1.25	82	4	306	75	R4	Alt. Andesite	Dark Reddish Grey with Greenish Grey	Fine-Grained	Massive	Fine-grained, dark reddish grey with greenish grey, very weak, moderately weathered, calcite veins and granular inclusion alter to green color; joints close, partly open, slightly rough undulating, dip ~45° to core axis, sandy rock fragments infill	AND	0	4	3	4	3	14	15	**62**
82.2	1162.78	83.7	1.52	1.33	87	1.33	87	6	190	75	R4	Alt. Andesite	Green Mottled Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, green mottled dark reddish brown, very weak, moderately weathered, granular calcite inclusion, shear plane at 274'; joints close, dip ~60° to core axis, partly open, rough planar, sandy silt/clay infill <3mm.	AND	0	4	3	2	3	12	15	**59**
83.7	1161.26	85.3	1.52	1.31	86	0.52	34	13	94	75	R4	Alt. Andesite	Dark Reddish Brown	Fine-Grained	Massive	Fine-grained, dark reddish brown, very weak, moderately weathered, a steeply dipping calcite vein and other random veinlets disintegrate core into blocks; joints very close, predominantly dip ~ 70° to core axis, open, rough undulating, soft altered calcite infill.	AND	0	1	3	2	3	9	15	**45**
85.3	1159.74	86.8	1.52	1.31	86	0.32	21	Max	5	75	R4	Alt. Andesite	Dark Grey with Reddish Stain	Fine-Grained	Massive	Fine-grained, dark grey with reddish stain, very weak, moderately weathered, fault at 282' to 283'; joints close, dip ~45° to core axis, open, slightly rough planar, calcite infill <5mm.	AND	0	1	1	2	3	7	15	**40**
86.8	1158.21	88.3	1.52	1.52	100	1.35	89	4	304	75	R4	Alt. Andesite	Dark Grey with Dark Reddish Stain	Fine-Grained	Massive	Fine-grained, dark grey with dark reddish stain, very weak, moderately weathered, random calcite veins; joints close, partly open, rough planar, dip ~60° to core axis, fine gravelly rock fragments infill.	AND	0	4	3	4	3	14	15	**63**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-02

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 14-Mar-12
Date Completed: 18-Mar-12

Location: Site D Embankment
Drill Hole ID: GT12-02
Coordinates : 376,420 easting
5,898,110 northing

Surface Elevation: 1,218.0 m
Total Depth: 106.5 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		86.3		0.0		0.00										**OVERBURDEN**	OB							
86.3	1131.75	89.4	3.11	0.00	0	0.00	0		0		R0		None	None	Massive	Casing - No Recovery							0	15	**24**
89.4	1128.64	91.0	1.62	1.00	62	0.00	0	Max	5	110	R5	Andesite	Dark Grey/Black	Fine-grained	Massive	Top 60cm somewhat competent, rest gouge and crushed rock material, dark grey/black, soft red infilling, light grey mottling, yellowish mineral specks.	AND	0	0	3	0	1	4	15	**37**
91.0	1127.02	91.3	0.30	0.27	89	0.11	36	4	54	25	R3	Andesite	Brown, Black/Dark Grey	Fine-grained	Massive	Extremely soft and crumbly, weathered brown, black/dark grey, some red infilling.	AND	0	0	3	0	1	4	15	**36**
91.3	1126.72	92.8	1.52	1.52	100	0.15	10	12	117	25	R3	Andesite	Light Blue Grey	Fine-grained	Massive	Top 60cm very weak, weathered gouge material, light blue grey rock with red on joint faces, infill pale blue, crushed rock.	AND	0	0	2	0	3	5	15	**34**
92.8	1125.19	94.3	1.52	1.58	100	0.72	47	10	144	100	R5	Andesite	Brown and Grey Mottled	Fine-grained	Massive	Brown and grey mottled, yellow specks, slightly weathered, easily scratched but not easily broken, red clayey infill on one joint.	AND	0	4	3	2	5	14	15	**55**
94.3	1123.67	95.9	1.52	1.47	96	0.39	26	6	210	75	R4	Andesite	Reddy Brown Mottled with Yellow Specks	Fine-grained	Massive	Reddy brown mottled with pale yellow and orange, slightly weathered, top 70cm all rubble and crushed rock, soft red mineral inclusions, 2.5cm diameter hard yellow green bleb at 85cm.	AND	0	2	3	2	5	12	15	**49**
95.9	1122.15	97.4	1.52	1.53	100	0.50	33	10	139	50	R4	Andesite	Reddy Brown with Yellow Flecks	Fine-grained	Massive	Reddy brown with yellow flecks, slightly weathered , 1.05-1.45m very rubbly and crushed, trace reddy soft clayey material, yellowy green mineral.	AND	0	1	3	2	5	11	15	**46**
97.4	1120.62	98.9	1.52	1.46	96	0.34	22	8	162	50	R4	Andesite	Browny Reddy Grey	Fine-grained	Massive	Browny reddy grey mottled, slightly weathered, top 40cm mechanically broken, joint faces green and black mottled, trace reddy soft clayey material.	AND	0	4	1	2	5	12	15	**46**
98.9	1119.10	100.4	1.52	1.50	98	0.75	49	9	150	100	R5	Andesite	Light Blue	Fine-grained	Massive	Light blue, slightly weathered, some reddy clayey infill, some yellowy green infill.	AND	0	1	1	2	5	9	15	**50**
100.4	1117.57	102.0	1.52	1.50	98	0.89	58	8	167	75	R4	Andesite	Light Grey with Beige Staining	Fine-grained	Massive	Fine-grained, light grey with beige staining, weak, slightly weathered, joints close, open, dip 45-80 degrees to core axis, slightly rough undulating, trace clay infill and rusty surface stain.	AND	0	1	3	2	5	11	15	**52**
102.0	1116.05	103.5	1.52	1.51	99	0.92	60	8	168	75	R4	Andesite	Light Grey	Fine-grained	Massive	Fine-grained, light grey, weak, slightly weathered, joints close, partly open, dipping 60 degrees to core axis, slightly rough planar, soft rusty infill and rusty surface staining.	AND	0	4	3	2	5	14	15	**56**

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition						Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)		
103.5	1114.53	105.0	1.52	1.54	100	1.11	73	7	193	75	R4	Andesite	Light Grey	Fine-grained	Massive	Fine-grained, light grey, weak, slightly weathered, joints close, dipping 0-60 degrees to core axis, partly open, slightly rough planar, rusty surface staining and some gravelly rock fragments.	AND	0	4	3	4	5	16	15	**60**
105.0	1113.00	106.5	1.52	1.53	100	0.59	39	10	139	50	R4	Andesite	Rusty Orange to Grey with Reddish Staining	Fine-grained	Massive	Fine-grained, 0-1.06m rusty orange, 1.06-1.53m grey with reddish staining, weak, moderately weathered, joints close, dip 20-45 degrees to core axis, soft rusty infill.	AND	0	1	3	2	3	9	15	**45**
END OF DRILLHOLE																									

GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-03

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 18-Mar-12
Date Completed: 21-Mar-12

Location: Site D Embankment,
Drill Hole ID: GT12-03
Coordinates : 375,495 easting
5,899,320 northing

Surface Elevation: 1,272.0 m
Total Depth: 74.4 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		53.3		0.0		0						Overburden				**OVERBURDEN**	OB								
53.3	1218.66	56.4	3.05	0.00	0	0.00	0		0		R0	Alt. Andesite				Casing - No Recovery	AND						0	15	**24**
56.4	1215.61	57.6	1.22	1.45	100	0.00	0	Max	5	25	R3	Alt. Andesite	Dark Brown	Fine-grained	Massive	Fine-grained with calcite grains, dark brown, very weak, highly weathered, broken zone and rubble zone, sandy clay infill, signs of oxidation.	AND	0	0	1	0	1	2	15	**28**
57.6	1214.40	59.1	1.52	1.34	88	0.00	0	Max	5	25	R3	Alt. Andesite	Dark Brown	Fine-grained	Massive	Fine-grained with calcite grains, dark brown, very weak, highly weathered, broken zone and rubble zone, sandy clay infill, signs of oxidation.	AND	0	0	1	0	1	2	15	**28**
59.1	1212.87	60.7	1.52	1.27	83	0.00	0	Max	5	25	R3	Alt. Andesite	Dark Reddish Brown	Fine-grained	Massive	Fine-grained, dark reddish brown, very weak, highly weathered, rubble zone, sand and gravelly clay infill, predominant joint dipping 45 degrees to core axis, close, open, rough planar.	AND	0	0	1	0	1	2	15	**28**
60.7	1211.35	62.2	1.52	1.47	96	0.62	41	12	113	75	R4	Alt. Andesite	Reddish Grey	Fine-grained	Massive	Fine-grained, reddish grey, weak, joints dip 30-60 degrees to core axis, close, open, slightly rough planar, soft gravelly clay infill, moderately weathered.	AND	0	1	1	2	3	7	15	**45**
62.2	1209.82	63.7	1.52	1.50	98	0.78	51	11	125	75	R4	Alt. Andesite	Reddish Grey	Fine-grained	Massive	Fine-grained, reddish grey, weak, rubble zone last 30cm of run, moderately weathered, close, slightly rough planar, joints 60 degrees to core axis, soft infill.	AND	0	1	1	2	3	7	15	**47**
63.7	1208.30	65.2	1.52	1.53	100	0.25	16	Max	5	25	R3	Alt. Andesite	Reddish Grey	Fine-grained	Massive	Fine-grained with coarse calcite grains, reddish grey, weak, rubble zone after 0.25m, soft clay with large rock fragments, highly weathered.	AND	0	1	1	2	3	7	15	**35**
65.2	1206.78	66.7	1.52	1.52	100	0.10	7	Max	5	25	R3	Alt. Andesite	Dark Reddish Brown	Fine-grained	Massive	Fine-grained with calcite veins and inclusions, dark reddish brown, rubble most of run, highly weathered, decomposed to gravelly clay.	AND	0	0	1	0	1	2	15	**29**
66.7	1205.25	68.3	1.52	1.48	97	1.11	73	6	211	125	R5	Alt. Andesite	Grey-Green phasing to Red/Brown	Fine-grained	Massive	Top 35cm weathered and rubbly, weathered on joints, grey-green 35-54cm, rest red/brown with many crystalline inclusions, mottled. Only chipped when hit with hammer, but scratches easily.	AND	0	1	3	4	3	11	15	**59**
68.3	1203.73	69.8	1.52	1.19	78	0.41	27	15	74	125	R5	Alt. Andesite	Reddy Purpley Brown	Fine-grained	Massive	Extremely rubbly and fractured, clay and crushed rock infills, reddy purpley brown, some greeny white infill, mottled, crystalline inclusions.	AND	0	0	1	0	3	4	15	**42**

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	**RMR-89 Total**
69.8	1202.20	71.3	1.52	1.56	100	1.13	74	9	156	125	R5	Alt. Andesite	Reddish Purple mottled with Orange, Green and Grey	Fine-grained	Massive	Reddy, purpley mottled with orange, green and grey, hard white infills, clay and crushed rock infills.	AND	0	1	3	2	3	9	15	**57**
71.3	1200.68	72.8	1.52	1.49	98	1.49	98	5	248	125	R5	Alt. Andesite	Dark Grey, Black and Blue-Grey mottled with white, Reddy Purpley Brown Rock	Fine-grained	Massive	Dark grey, black and blue-grey mottled with white, reddy purpley brown rock banding (approx. 10-20cm), green grey from 131-135cm, hard white infill.	AND	0	1	3	4	3	11	15	**65**
72.8	1199.16	73.8	1.00	1.00	100	0.97	97	4	200	110	R5	Alt. Andesite	Dark Grey and Black Mottled	Fine-grained	Massive	Dark grey and black mottled, occasional red/orange bands and inclusions, green vein 22-25cm.	AND	0	1	3	4	3	11	15	**63**
73.8	1198.15	74.4	0.52	0.55	100	0.00	0	9	55	110	R5	Alt. Andesite	Dark Grey and Black Mottled	Fine-grained	Massive	Dark grey and black mottled, occasional red/orange bands and inclusions, grey gouge material from 40-55cm, rusty clay infill.	AND	0	4	1	2	5	12	15	**46**
END OF DRILLHOLE																									

GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-04

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 23-Mar-12
Date Completed: 28-Mar-12

Location: Site C Embankment
Drill Hole ID: GT12-04
Coordinates : 374,474 easting
5,896,470 northing

Surface Elevation: 1,331.0 m
Total Depth: 91.6 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		72.5		0.0		0										**OVERBURDEN**	OB							
72.5	1258.46	74.1	1.52	0.00	0	0.00	0		0		R0					CASING - no recovery							0	15	**24**
74.1	1256.94	74.8	0.76	0.76	100	0.32	42	4	152	200	R5	Alt. Andesite	Dark Purple	Fine to Medium Grained	Massive	Dark purple rock with rectangular green grains, first 23cm rubbly, strong, joints slightly weathered, clay in one joint.	AND	0	1	3	2	5	11	15	**56**
74.8	1256.21	76.3	1.55	1.43	92	0.67	43	8	159	200	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Purple rock with green rectangular grains, red splotches of colour (still with green rectangular grains), strong, rubbly joints, gougy crushed rock last 5 cm of run.	AND	0	0	3	3	5	11	15	**56**
76.3	1254.65	77.9	1.52	1.59	100	1.12	73	6	227	150	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Rubble 103-110cm, purple rock with green rectangular grains and red splotches, strong.	AND	0	0	3	3	5	11	15	**61**
77.9	1253.13	79.4	1.52	1.56	100	1.04	68	7	195	150	R5	Alt. Andesite	Orange and Dark Grey mottled with Green and Black	Fine to Medium Grained	Massive	30-35 cm rubbly and orange clay joint, orange clay has white flecks. 81-131 cm orange and dark grey mottled with green and black. Rest of run is purple rock with green rectangular grains.	AND	0	0	3	0	3	6	15	**54**
79.4	1251.60	80.9	1.52	1.58	100	0.39	26	Max	5	75	R4	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Purple rock with green rectangular grains. 62-67cm bluey 'reassembled gravel', orangey. 67-158cm heavily fractured and rubbly. 67-72cm rubble and reddish clay.	AND	0	0	3	0	3	6	15	**40**
80.9	1250.08	82.4	1.52	1.50	98	0.75	49	18	79	150	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	104-130cm fractured, 112-117cm rubble. Purple rock with green rectangular grains.	AND	0	0	3	3	3	9	15	**52**
82.4	1248.56	84.0	1.52	1.54	100	1.15	75	9	154	100	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	125-154cm almost all splotchy red. Rest purple rock with green rectangular grains. Crushed rock and hard white infill in joint at 110cm. Trace green and white mineral inclusions (5mm dia.). 89-91cm and last 8 cm of run fractured.	AND	0	0	3	3	5	11	15	**57**
84.0	1247.03	84.4	0.43	0.43	100	0.43	100	4	86	150	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Purple rock with green rectangular grain and red splotches.	AND	0	1	3	4	5	13	15	**67**
84.4	1246.60	85.5	1.09	0.99	90	0.14	13	10	90	100	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	0-32cm 45 degree joint, marks 9cm weak area (soft, gougy, fractured, discoloured). Sharp contrast, after 9cm rock becomes purple rock with green rectangular grains and red splotches. Fractured.	AND	0	1	3	4	5	13	15	**48**

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
85.5	1245.51	87.0	1.52	1.50	98	0.78	51	10	136	150	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Top 12cm rubble. One joint with crushed infill, rest no infill. Joint along core axis 60-105cm. Purple with green rectangular grains and red splotches.	AND	0	0	3	3	5	11	15	**55**
87.0	1243.98	88.5	1.52	1.56	100	0.88	58	8	173	150	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	One joint at 1.41m clay and crushed rock infill, rest no infill. Purple with green rectangular grains, red splotches and grey splotches. Green mineral inclusion (2cm dia.). Rock is non-foliated, but has planes of weakness.	AND	0	0	3	3	5	11	15	**57**
88.5	1242.46	90.1	1.52	1.59	100	1.41	93	5	265	200	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Purple with green rectangular grains, red splotches, grey splotches. Competent.	AND	0	4	1	6	6	17	15	**73**
90.1	1240.94	91.6	1.52	1.51	99	1.16	76	8	168	200	R5	Alt. Andesite	Purple	Fine to Medium Grained	Massive	Purple rock with green rectangular grains. Rusty coloured veinlets, some red splotches, white veinlets (trace). Competent.	AND	0	4	3	4	6	17	15	**68**
END OF DRILLHOLE																									

Knight Piésold CONSULTING

GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-05

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 28-Mar-12
Date Completed: 02-Apr-12

Location: Site C Embankment
Drill Hole ID: GT12-05
Coordinates : 374,706 easting
5,895,650 northing

Surface Elevation: 1,363.0 m
Total Depth: 120.1 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		78.9		0.0		0										**OVERBURDEN**	OB							
78.9	1284.06	80.5	1.52	1.02	67	0.42	28	8	113	75	R4	Andesite	Grey	Fine grained/ Porphyritic	Massive	Fine-grained, grey, porphyritic, medium strong, moderately weathered, joint 10-45 degrees to core axis, very close, open to very wide, slightly rough planar, yellow firm low plasticity clay infill up to 15cm, dark rusty soft infill approx. 1mm.	AND	0	0	3	0	3	6	15	**42**
80.5	1282.54	82.0	1.52	1.45	95	0.00	0	20	69	25	R3	Andesite	Yellowish Grey	Fine grained/ Porphyritic	Massive	Rubble zone, gravelly and cobbly rock fragments cemented in yellow firm low plasticity clay, rock fragments origin from bedrock, some white calcite chunks.	AND	0	0	1	0	1	2	15	**29**
82.0	1281.01	83.5	1.52	1.52	100	0.84	55	6	217	25	R3	Andesite	Greenish Grey	Fine grained/ Porphyritic	Massive	Fine-grained, white speckled greenish grey, very weak, porphyritic, highly weathered, lateral and vertical fractures, close, open to wide, slightly rough undulating, soft low plasticity clay infill up to 5cm.	AND	0	0	3	0	1	4	15	**41**
83.5	1279.49	85.0	1.52	1.48	97	1.01	66	6	211	25	R3	Andesite	Brown and Grey	Fine grained/ Porphyritic	Massive	Fine-grained, white speckled (elongated), brown and grey, very weak, porphyritic, highly weathered, joints 70 degrees to core axis, partly open, close, slightly rough undulating, soft rusty brown infill (greater than 5mm).	AND	0	0	3	0	1	4	15	**43**
85.0	1277.96	86.6	1.52	1.50	98	1.44	94	5	250	25	R3	Andesite	Burgundy and Rusty Brown	Fine Grained	Massive	Fine-grained, burgundy and rusty brown, very weak, highly weathered, joints random, close, partly open, slightly rough undulating, soft rusty infill.	AND	0	1	3	2	1	7	15	**53**
86.6	1276.44	88.1	1.52	1.53	100	0.99	65	7	191	25	R3	Andesite	White Speckled Burgundy and Brown	Fine Grained	Massive	Fine-grained, white speckled burgundy and brown, very weak, highly weathered, predominant joint set dips 30 degrees to core axis, very close, partly open, slightly rough planar, soft gravelly clay infill (less than 5 mm).	AND	0	4	3	2	1	10	15	**49**
88.1	1274.92	89.6	1.52	1.45	95	1.07	70	7	181	50	R4	Andesite	White Speckled Burgundy and Brown	Fine Grained	Massive	Fine-grained, white speckled burgundy and brown, very weak, highly weathered, joints 30-70 degrees to core axis, close, partly open, slightly rough planar, gravelly clay infill (less than 5mm).	AND	0	4	3	2	1	10	15	**52**
89.6	1273.39	91.1	1.52	1.45	95	1.09	72	8	161	50	R4	Andesite	White Speckled Rusty Brown and Dark Grey	Fine Grained	Massive	Fine-grained, white speckled rusty brown and dark grey, calcite elongated crystals, weak, highly weathered, joints dip 30-70 degrees to core axis, very close, open, rough planar, gravelly rock fragments infilling, rusty staining.	AND	0	0	3	3	1	7	15	**49**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
91.1	1271.87	92.7	1.52	1.53	100	0.84	55	8	170	25	R3	Andesite	White Speckled and Burgundy Stained Rusty Brown	Fine Grained	Massive	Fine-grained, white speckled and burgundy stained rusty brown, very weak, highly weathered, joints random, close, open, rough planar, gravelly infill.	AND	0	0	3	3	1	7	15	**44**
92.7	1270.35	94.2	1.52	1.51	99	1.30	85	5	252	50	R4	Andesite	White Speckled Dark Grey	Fine Grained	Massive	Fine-grained, white speckled dark grey, weak, highly to moderately weathered, joints 30-60 degrees to core axis, close, partly open, slightly rough planar, some sandy/fine gravelly rock fragment infill.	AND	0	4	3	4	2	13	15	**59**
94.2	1268.82	95.7	1.52	1.53	100	1.21	79	7	191	50	R4	Andesite	White Speckled Dark Grey	Fine Grained	Massive	Fine-grained, white speckled dark grey, weak, highly to moderately weathered, joints 30-60 degrees to core axis, close, partly open, slightly rough planar, some sandy/fine gravelly rock fragment infill.	AND	0	4	3	4	2	13	15	**57**
95.7	1267.30	97.2	1.52	1.55	100	0.90	59	7	194	50	R4	Andesite	Reddy Purpley Grey	Fine Grained	Massive	Highly weathered, weak, crumbly, reddy purpley grey with large rectangular grains.	AND	0	1	3	4	1	9	15	**49**
97.2	1265.77	98.8	1.52	1.53	100	1.28	84	5	255	100	R5	Andesite	Grey with Orange Splotches	Fine Grained	Massive	Weathered, grey with orange splotches and white rectangular grains, moderately competent.	AND	0	0	5	3	3	11	15	**60**
98.8	1264.25	100.3	1.52	1.54	100	0.68	45	9	154	150	R5	Andesite	Reddish Brown	Fine Grained	Massive	Reddy brown with white rectangular grains, 45-59cm crumbly, joint at 115cm with crumbly clayey infill, slightly weathered.	AND	0	1	1	2	5	9	15	**52**
100.3	1262.73	101.8	1.52	1.57	100	0.76	50	10	143	150	R5	Andesite	Reddish Brown	Fine Grained	Massive	Fractured 55-105cm, reddy brown with white rectangular grains, somewhat crumbly, some crushed rock infill.	AND	0	1	3	4	5	13	15	**57**
101.8	1261.20	103.3	1.52	1.49	98	0.98	64	8	166	75	R4	Andesite	Reddish Grey and Brown	Fine Grained	Massive	Some crushed infill, white on 1 joint face, reddy grey and brown, white rectangular grains, somewhat strong/competent, not crumbly.	AND	0	0	1	3	5	9	15	**51**
103.3	1259.68	104.8	1.52	1.56	100	0.84	55	7	195	100	R5	Andesite	Brownish Reddish Grey	Fine Grained	Massive	Brownish, reddish grey with white rectangular grains, trace weathering, weak zone 42-72cm, weak zone has crushed rock and some weathered veining.	AND	0	0	3	3	5	11	15	**54**
104.8	1258.15	106.4	1.52	1.56	100	1.30	85	6	223	150	R5	Andesite	Purpley Brown Mottled	Fine Grained	Massive	Purpley brown mottled, trace to some white rectangular grains, competent, 70-90cm fractured zone with soft black infill and slight weathering, 1 joint at 27cm with clay infill.	AND	0	4	3	2	5	14	15	**66**
106.4	1256.63	107.9	1.52	1.50	98	1.16	76	5	250	125	R5	Andesite	Grey with red and green splotches	Fine Grained	Massive	Crushed rock and clay in 1 joint, rest no infill, grey with red and greeny splotches and white rectangular grains, patches of light grey mottling with no white rectangular grains (like reassembled gravel), void in rock at 123cm, six 1.5cm diameter voids filled with black soft mineral at 74cm, black and white small spots on 1 joint face.	AND	0	4	3	4	6	17	15	**66**
107.9	1255.11	109.4	1.52	1.46	96	1.46	96	4	292	125	R5	Andesite	Yellowish White Speckled Dark Grey	Fine Grained	Massive	Fine-grained, yellowish white speckled dark grey, elongated calcite crystals (approx. 5mm long), medium strong, slightly weathered, joints dip 30 degrees to core axis, moderately close, rough planar, partly open, silty gravelly rock fragment infill.	AND	0	4	3	4	5	16	15	**70**

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
109.4	1253.58	110.9	1.52	1.54	100	1.20	79	8	171	100	R5	Andesite	Yellowish White Speckled Dark Grey	Fine Grained	Massive	Fine-grained, yellowish white speckled dark grey, elongated calcite crystals (approx. 5mm long), medium strong, slightly weathered, joints dip 30-60 degrees to core axis, 1 vertical joint, close, partly open, slightly rough planar and undulating, calcite infill and rusty surface staining, some gravelly infill.	AND	0	1	5	4	5	15	15	**62**
110.9	1252.06	112.5	1.52	1.54	100	1.23	81	8	171	100	R5	Andesite	Yellowish White Speckled Dark Grey	Fine Grained	Massive	Fine-grained, yellowish white speckled dark grey, elongated calcite crystals (approx. 5mm long), medium strong, slightly weathered, joints dip 30 degrees to core axis to lateral, very close, partly open, rough planar and undulating, some sandy infill and burgundy calcite infill at end of run.	AND	0	1	3	2	5	11	15	**59**
112.5	1250.53	114.0	1.52	1.52	100	0.97	64	6	217	75	R4	Andesite	Grey with White Patches	Fine Grained	Massive	Fine-grained, grey with white patches, moderately strong, slightly weathered, broken/sub vertical fracture with cross cutting joints, random joints, partly open, very close, rough undulating, gravelly infill.	AND	0	1	3	4	5	13	15	**56**
114.0	1249.01	115.5	1.52	1.47	96	1.13	74	9	147	125	R5	Andesite	Dark Grey	Fine Grained	Massive	Fine-grained, dark grey, moderately strong, slightly weathered, joints dip 45-70 degrees to core axis, very close, partly open to tight, slightly rough undulating, surface stains, partial coverage.	AND	0	4	3	4	5	16	15	**63**
115.5	1247.49	117.0	1.52	1.54	100	0.65	43	19	77	150	R5	Andesite	Dark Grey	Fine Grained	Massive	Fine-grained, dark grey, moderately strong, slightly weathered, very jointed, predominant joint set dip 60 degrees to core axis with sub vertical cross cutting joints, very close, partly open, slightly rough planar, some soft clay infill and surface stains.	AND	0	4	3	2	5	14	15	**56**
117.0	1245.96	118.6	1.52	1.55	100	1.26	83	8	172	150	R5	Andesite	Dark Burgundy-Grey	Fine Grained	Massive	Fine-grained, dark burgundy-grey, moderately strong, minimal weathering, joints dip 45 degrees to core axis, very close, from 9.35-0.7m, tight to partly open, rough planar, no infill or gravelly fragments.	AND	0	4	3	4	6	17	15	**68**
118.6	1244.44	120.1	1.52	1.52	100	1.52	100	0	1520	150	R5	Andesite	Dark Burgundy-Grey	Fine Grained	Massive	Fine-grained, dark burgundy grey, unweathered, moderately strong, no joints.	AND	0	6	6	6	6	24	15	**89**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-06

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 02-Apr-12
Date Completed: 04-Apr-12

Location: Site C Embankment
Drill Hole ID: GT12-06
Coordinates : 374,569 easting
5,896,100 northing

Surface Elevation: 1,281.0 m
Total Depth: 67.1 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		42.1		0.0		0										**OVERBURDEN**	OB								
42.1	1238.94	42.7	0.61	0.00	0	0.00	0		0		R0	Altered Andesite				Casing - No Recovery.							0	15	**24**
42.7	1238.33	44.2	1.52	1.48	97	0.00	0	Max	5	50	R4	Altered Andesite	Dark Burgundy Brown	Fine Grained	Massive	Fine-grained, dark burgundy brown, weak, random and cross-cutting joints, dipping 30 degrees and vertical, very close, open, slightly rough planar, surface staining and soft rusty infill.	AND	0	0	5	2	1	8	15	**37**
44.2	1236.81	45.7	1.52	1.50	98	1.05	69	Max	5	50	R4	Altered Andesite	Dark Burgundy	Fine Grained	Massive	Fine-grained, dark burgundy, weak, broken zone at beginning of run, becoming more competent toward end, joints dip 45 degrees to core axis, close, partly open, slightly rough planar, surfaces stain and fine gravelly infill.	AND	0	1	3	4	1	9	15	**48**
45.7	1235.28	47.2	1.52	1.41	93	0.22	14	Max	5	50	R4	Altered Andesite	Dark Burgundy	Fine Grained	Massive	Fine-grained, dark burgundy, weak, joints dip 60 degrees to core axis, very close, partly open, slightly rough planar, surface staining.	AND	0	1	3	4	1	9	15	**39**
47.2	1233.76	48.8	1.52	1.31	86	0.00	0	Max	5	25	R3	Altered Andesite	Burgundy to Grey	Fine Grained	Massive	Broken zone, predominant joint set dips 60 degrees to core axis, very close, slightly rough planar, surface staining, several crushed segments, angular fine to coarse gravelly rock fragments with traces silty/clay coating.	AND	0	0	6	3	1	10	15	**36**
48.8	1232.23	50.3	1.52	1.32	87	0.11	7	Max	5	50	R4	Altered Andesite	Dark Burgundy/ Grey	Fine Grained	Massive	0-0.3m continued broken zone, highly weathered, fine-grained, dark burgundy/grey, weak, altered calcite veins, sublateral joints, close, open to partly open, slightly rough planar, surface stain and fine gravelly infill.	AND	0	0	3	3	1	7	15	**36**
50.3	1230.71	51.8	1.52	1.51	99	0.00	0	Max	5	75	R4	Altered Andesite	Dark Burgundy/ Grey	Fine Grained	Massive	Highly weathered, fine-grained, dark burgundy/grey, weak, altered calcite veins, heavily jointed, predominant joint set dips 45 degrees to core axis, very close, partly open, slightly rough planar, surface stain and fine gravelly infill.	AND	0	1	5	4	1	11	15	**42**
51.8	1229.19	53.3	1.52	1.41	93	0.23	15	Max	5	100	R5	Altered Andesite	Red with some grey, white and black specks	Fine Grained	Massive	0-37cm rubble, 37-67cm crushed, heavily fractured, soft, clayey, crushed rock infill, 107-118cm crushed/rubble, red, non foliated, non weathered, black specks, trace grey, white and black specks on some joint faces.	AND	0	0	5	3	3	11	15	**45**
53.3	1227.66	54.9	1.52	1.54	100	1.22	80	6	220	100	R5	Altered Andesite	Red with large grey splotches	Fine Grained	Massive	Red with large grey splotchy inclusions, hard white infill, hard orange infill, some soft white infill, some calcite.	AND	0	1	3	2	5	11	15	**59**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
54.9	1226.14	56.4	1.52	1.47	96	0.95	62	8	163	175	R5	Altered Andesite	Dark Grey with trace Red	Fine Grained	Massive	0-50cm fractured and rubbly, soft and hard white material, crushed, calcite, rock is mostly dark grey with trace reddy rock, green chlorite spots, soft red spots, white veinlets, dark green and light green specks.	AND	0	1	3	4	5	13	15	**61**
56.4	1224.61	57.9	1.52	1.52	100	1.23	81	5	253	125	R5	Altered Andesite	Dark Grey with green specks and red splotches	Fine Grained	Massive	112-132cm rubbly and fractured, dark grey rock with white veinlets and inclusions, green specks and red splotches, vuggy at 88cm, white inclusion with small red dots and green 18cm from end of run.	AND	0	0	3	3	5	11	15	**61**
57.9	1223.09	59.4	1.52	1.55	100	0.77	51	9	155	175	R5	Altered Andesite	Dark Grey with reddish splotches	Fine Grained	Massive	Dark grey with large green and white grains, white veinlets, some reddish splotches, reddish colouring on joint faecs, 0-31cm rubble, 31-77cm fractured, crushed rock, vuggy in white inclusion 34cm from end, non foliated but break on planes of weakness or veins.	AND	0	0	3	3	5	11	15	**56**
59.4	1221.57	61.0	1.52	1.54	100	0.93	61	8	171	100	R5	Altered Andesite	Dark Green	Fine Grained	Massive	84-94cm, 120-144cm fractured, crushed rock, dark grey with white veinlets and inclusions, light and dark green specks, reddish colouring on joint faces, hard white infills, one joint with reddy clay infill.	AND	0	1	3	4	5	13	15	**57**
61.0	1220.04	62.5	1.52	1.55	100	1.45	95	5	258	125	R5	Altered Andesite	Black with white and green inclusions	Fine Grained	Massive	Black rock with white round white and green inclusions, trace red soft material, hard white infill, some pinky mineral on joint faces, very competent.	AND	0	4	3	4	5	16	15	**69**
62.5	1218.52	64.0	1.52	1.48	97	1.23	81	4	296	175	R5	Altered Andesite	Black with dark green and white specks, trace dark red splotches	Fine Grained	Massive	Black rock, white veinlets, dark green specks, white specks, trace dark red splotches, black specks, hard and soft white infills, hard white infill has trace pink and green, last 29cm fractured.	AND	0	4	3	2	5	14	15	**67**
64.0	1217.00	65.5	1.52	1.41	93	0.46	30	11	118	100	R5	Altered Andesite	Black/Dark Grey	Fine Grained	Massive	0-20cm, 65-106cm crushed, rubbly, some soft white infill in 65-106cm rubble zone, heavily fractured, black/dark grey, white veinlets, some reddish veinlets, whtie with dark green and red inclusions (vuggy).	AND	0	0	3	0	5	8	15	**46**
65.5	1215.47	67.1	1.52	1.40	92	0.21	14	Max	5	75	R4	Altered Andesite	Dark Grey/Black	Fine Grained	Massive	Heavily fractured, only last 21cm of run intact, dark grey/black with white veinlets, green specks, white specks, red specks.	AND	0	0	6	3	3	12	15	**44**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-07

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILING
Drill Type: MOBILE B-54
Date Started: 07-Apr-12
Date Completed: 08-Apr-12

Location: Plant Site, Option 1
Drill Hole ID: GT12-07
Coordinates : 375,495 easting
5,894,940 northing

Surface Elevation: 1,444.0 m
Total Depth: 36.4 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		5.8		0.0		0										**OVERBURDEN**	OB								
5.8	1438.21	8.5	2.74		0		0		0		R0	Altered Andesite				Casing - No Recovery	AND						0	15	**24**
8.5	1435.47	9.0	0.46	0.21	46	0.00	0	5	35	50	R4	Altered Andesite	Burgundy/ Grey	Fine-grained	Massive	Fine-grained with calcite crystal grains up to 5mm, weak to moderately strong, burgundy/grey, highly weathered, planar, slightly rough joint surface with soft calcite infill	AND	0	1	3	2	1	7	15	**36**
9.0	1435.01	10.5	1.52	1.49	98	0.54	35	Max	5	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse and elongated calcite grains, white speckled burgundy grey, moderately strong, moderately weathered, predominant joints dip 60 degrees to core axis, very close, slightly rough planar, open and partly open, rusty surface staining or sandy and gravelly fragments infill.	AND	0	0	3	0	3	6	15	**41**
10.5	1433.48	12.0	1.52	1.52	100	0.64	42	Max	5	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse and elongated calcite grains, white speckled burgundy grey, joints dip 30-60 degrees to core axis, very close, slightly rough planar, open, surface stain and sandy/gravelly infill.	AND	0	0	3	0	3	6	15	**42**
12.0	1431.96	13.6	1.52	1.53	100	1.32	87	10	139	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse calcite grains, white speckled burgundy grey, moderately strong, moderately weathered, joints dip 30-70 degrees to core axis, close, partly open, slightly rough undulating, rusty surface staining.	AND	0	1	3	4	3	11	15	**58**
13.6	1430.44	15.1	1.52	1.52	100	1.33	87	6	217	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse calcite grains, white speckled burgundy grey, moderately strong, moderately weathered, joints dip 30-70 degrees to core axis, close, partly open, slightly rough undulating, rusty surface staining.	AND	0	1	3	4	3	11	15	**59**
15.1	1428.91	16.6	1.52	1.52	100	1.04	68	9	152	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse calcite grains, white speckled burgundy grey, joints dip 20-30 degrees to core axis, very close, rough planar, partly open, rusty surface staining and gravelly fragments.	AND	0	1	3	4	3	11	15	**54**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
16.6	1427.39	18.1	1.52	1.52	100	1.26	83	10	138	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with coarse calcite grains, white speckled burgundy grey, joints dip 20-30 degrees to core axis, very close, rough planar, partly open, rusty surface staining and gravelly fragments. Last 20cm greenish grey, joints dip 30-45 to core axis, partly open, slightly rough undulating, surface staining and gravelly infill.	AND	0	1	3	4	3	11	15	**57**
18.1	1425.87	19.7	1.52	1.50	98	1.13	74	9	150	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, white speckled burgundy grey with green staining, less calcite than previous runs, moderately weathered, moderately strong, joints 30-60 degrees to core axis, close, open, rough planar and undulating, soft rusty stain and infill.	AND	0	0	3	2	3	8	15	**52**
19.7	1424.34	21.2	1.52	1.52	100	0.96	63	10	138	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, white speckled burgundy grey, moderately strong, slightly to moderately weathered, joints dip 30-45 degrees to core axis, close, open, slightly rough planar, surface staining and gravelly infill or calcite veins.	AND	0	0	3	4	4	11	15	**53**
21.2	1422.82	22.7	1.52	1.59	100	1.42	93	5	265	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, white speckled burgundy, moderately strong, slightly weathered, joints 45 degrees to core axis, one steep joint (approx. 20 degrees) along healed fracture, close, partly open, slightly rough planar, rusty surface staining.	AND	0	1	3	4	5	13	15	**63**
22.7	1421.29	24.2	1.52	1.47	96	1.24	81	10	134	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, white speckled burgundy, moderately strong, slightly weathered, joints 45 degrees to core axis, close, slightly rough planar, partly open, surface staining.	AND	0	1	1	4	5	11	15	**56**
24.2	1419.77	25.8	1.52	1.48	97	1.07	70	7	185	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained with elongated calcite grains (approx. 1cm), white speckled burgundy/light grey, moderately strong, slightly to moderately weathered, joints along core axis, very close, partly open, slightly rough undulating, rusty surface staining, partial coverage.	AND	0	1	3	4	4	12	15	**56**
25.8	1418.25	27.3	1.52	1.51	99	0.83	54	10	137	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, random calcite veins and grains (up to 1cm long), 0-0.57m greenish light grey, rest burgundy grey, moderately strong, 0.84-1.51m rubble zone, slightly weathered to moderately weathered, joints 70 degrees to core axis, close, open, rough planar and slightly rough planar, surface staining and soft rock fragments in rubble zone.	AND	0	0	3	2	4	9	15	**49**
27.3	1416.72	28.8	1.52	1.50	98	1.11	73	6	214	75	R4	Altered Andesite	White Speckled Burgundy-Grey	Fine-grained	Massive	Fine-grained, some calcite grains, burgundy/light grey, moderately strong, slightly weathered, joints dip 45-60 degrees to core axis, very close, partly open, slightly rough planar, rusty greenish grey staining.	AND	0	1	3	4	5	13	15	**58**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
28.8	1415.20	30.3	1.52	1.52	100	1.43	94	3	380	75	R4	Altered Andesite	Light Greenish Grey	Fine-grained	Massive	Fine-grained, sub vertical calcite veins, altered to yellow, light greenish grey with yellow stain, moderately strong, slightly weathered, joints dip 60 degrees to core axis, very close, partly open, slightly rough planar, surface stain and coarse gravelly infill.	AND	0	1	3	4	5	13	15	**64**
30.3	1413.67	31.9	1.52	1.67	100	1.12	73	9	167	100	R5	Altered Andesite	Dark Green Mottled Light Grey	Fine-grained	Massive	Fine-grained, dark green mottled light grey, moderately strong, slightly weathered, joints dip 30 degrees to core axis, close, partly open, slightly rough planar, yellow/rusty surface stain.	AND	0	1	3	4	5	13	15	**59**
31.9	1412.15	33.4	1.52	1.47	96	1.43	94	1	735	100	R5	Altered Andesite	Dark Green Mottled Light Grey	Fine-grained	Massive	Fine-grained, dark green mottled light grey, moderately strong, slightly weathered, 1 joint dipping 30 degrees to core axis, rough planar, partly open, partial yellow surface stain.	AND	0	1	3	4	5	13	15	**69**
33.4	1410.63	34.9	1.52	1.57	100	1.40	92	5	262	100	R5	Altered Andesite	Dark Green Mottled Light Grey	Fine-grained	Massive	Fine-grained, dark green mottled light grey, moderately strong, slightly weathered, one broken zone from 1.18-1.30m, joints dip 45 degrees to core axis, close, partly open, rough planar, partial yellow/rusty surface stain.	AND	0	1	3	4	5	13	15	**64**
34.9	1409.10	36.4	1.52	1.52	100	1.41	93	4	304	100	R5	Altered Andesite	Dark Green Mottled Light Grey changing back to White Speckled Burgundy-Grey	Fine-grained	Massive	0-1.22m Fine-grained, dark green mottled light grey, moderately strong, slightly weathered. 1.22-1.52m gradual change back to burgundy with white speckles altered andesite, medium strong, slightly weathered, joints dip 30 degrees to core axis, moderately close, partly open, slightly rough planar, partial yellow/rusty surface staining.	AND	0	1	3	4	5	13	15	**65**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-08

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 19-Nov-12
Date Completed: 27-Nov-12

Location: Telus Tower/Primary
Drill Hole ID: GT12-08
Coordinates : 375,620 easting
5,894,150 northing

Surface Elevation: 1,507.0 m
Total Depth: 400.5 m
Azimuth: 80
Inclination: 65

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		2.6		0.0		0						Overburden				**Casing - No Recovery**	OB								
2.6	1504.65	2.9	0.30	0.29	95	0.17	56	2	97	200	R5	Andesite	White Speckled Red	Fine Grained	Massive	Fine grained with elongated calcite grains up to 5mm, white speckled red, strong, slightly weathered; two joints dip 45° to core axis, close, partly open, slightly rough planar, partial surface staining.	AND	0	4	3	4	5	16	15	**62**
2.9	1504.38	4.4	1.52	1.52	100	1.52	100	1	760	200	R5	Andesite	White Speckled Red	Fine Grained	Massive	Fine-grained with elongated calcite grains, white speckled red, strong, slightly weathered; one joint dipping 80° to core axis, partly open, rough undulating, partial rusty surface stain; four steeply dipping irregular healed fractures.	AND	0	4	3	4	5	16	15	**78**
4.4	1502.99	5.9	1.52	1.56	100	1.46	96	7	195	200	R5	Andesite	White Speckled Red	Fine Grained	Massive	Fine-grained with elongated calcite grains, white speckled red, strong, slightly weathered; joints dip 30° to 45° to core axis, close, partly open to tight, rough planar, no infill or some yellow soft clay infill partial coverage.	AND	0	4	3	2	5	14	15	**70**
5.9	1501.61	7.5	1.52	1.52	100	1.20	79	6	217	200	R5	Andesite	Burgundy and Light Grey	Fine Grained	Massive	Fine-grained with elongated calcite grains, burgundy and light grey, strong, slightly weathered; joints dip 30° to core axis, close, partly open, slightly rough planar, white soft infill.	AND	0	4	3	2	5	14	15	**66**
7.5	1500.20	9.0	1.49	1.52	100	1.23	82	4	304	200	R5	Andesite	White Mottled Burgundy/Light Grey	Fine Grained	Massive	Fine-grained, calcite veins and grains, white mottled burgundy light grey, strong, slightly weathered; joints dip 30° to core axis, moderately close, slightly rough planar, open, light yellow soft calcite or gypsum infill	AND	0	1	3	2	5	11	15	**65**
9.0	1498.85	10.5	1.52	1.52	100	1.35	89	4	304	200	R5	Andesite	White Mottled Burgundy/Light Grey	Fine Grained	Massive	Fine-grained, calcite veins and grains, white mottled burgundy light grey, strong; one vertical white vein along core axis, slightly to moderately weathered; vertical joint along vein, open, rough planar, soft white infill.	AND	0	0	5	0	3	8	15	**63**
10.5	1497.47	12.0	1.52	1.52	100	1.22	80	5	253	200	R5	Andesite	White Speckled Dull Purple	Fine Grained	Massive	Fine-grained, white speckled dull purple, strong, slightly weathered; joints dip 30° to 45° to core axis, moderately close, partly open to wide, slightly rough planar, soft white infill, one joint has approx. 30mm purple soft sandy silt/clay infill.	AND	0	0	3	0	5	8	15	**61**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
12.0	1496.09	13.6	1.52	1.52	100	1.52	100	3	380	200	R5	Andesite	White Speckled Dull Purple	Fine Grained	Massive	Fine-grained, white speckled dull purple, strong, slightly weathered; joints along 3 calcite veins, dip 20°-40° to core axis, moderately close, partly open, slightly rough planar, white soft calcite infill.	AND	0	1	3	2	5	11	15	**70**
13.6	1494.71	15.1	1.52	1.50	98	1.07	70	8	167	200	R5	Andesite	White Speckled Dull Purple	Fine Grained	Massive	Fine-grained, white speckled dull purple, strong, slightly weathered; joints along 3 calcite veins, dip 20°-40° to core axis, moderately close, partly open, slightly rough planar, white soft calcite infill.	AND	0	1	3	2	5	11	15	**61**
15.1	1493.33	16.6	1.52	1.52	100	0.89	58	15	95	50	R4	Andesite	White Speckled Dull Purple	Fine Grained	Massive	Fine-grained, calcite veins and grains, white speckled purple, moderately strong, moderately weathered; joints along calcite veins, 30° to core axis, very close, partly open to wide, slightly rough planar, white or light green and rusty soft white infill up to 2cm.	AND	0	0	3	0	3	6	15	**44**
16.6	1491.95	18.1	1.52	1.52	100	0.19	12	Max	5	25	R3	Andesite	Light Grey	Fine Grained	Massive	Fine-grained, 0.1-0.7 m light grey and heavily fractured and weathered (broken zone), random calcite veins disintegrated rock mass predominant joint set dips 30° to core axis, very close, planar smooth to slightly rough, partly open, white soft calcite infill; broken zone has rusty staining.	AND	0	1	5	2	1	9	15	**37**
18.1	1490.56	19.7	1.52	1.52	100	1.36	89	4	304	100	R5	Andesite	White Speckled Purple	Fine Grained	Massive	Fine-grained with calcite grains up to 5mm, white speckled purple, medium strong, slightly weathered; joints dip 20° to core axis, rough planar, partly open, moderately close, trace white powdery infill.	AND	0	4	3	2	5	14	15	**65**
19.7	1489.18	21.2	1.52	1.50	98	1.13	74	5	250	100	R5	Altered Andesite	White Speckled Purple	Fine Grained	Massive	Fine-grained with calcite grains up to 5mm, white speckled purple, medium strong, slightly weathered; two calcite veins, joints dip 30° to 45° to core axis, close, partly open, rough planar, hard calcite infill or no infill.	AND	0	4	3	4	5	16	15	**63**
21.2	1487.80	22.7	1.52	1.52	100	1.36	89	6	217	100	R5	Andesite	White Speckled Purple	Fine Grained	Massive	Fine-grained with calcite grains up to 5mm, white speckled purple, medium strong, slightly weathered, joints dip 45° to core axis, close, partly open, slightly rough planar, trace white powdery infill or partial surface stain.	AND	0	4	3	4	5	16	15	**66**
22.7	1486.42	24.2	1.52	1.54	100	1.54	100	4	308	100	R5	Andesite	White Speckled Purple	Fine Grained	Massive	Fine-grained with calcite grains up to 5mm, white speckled purple, medium strong, slightly weathered; joints dip 45° to 70° to core axis, moderately close, partly open, slightly rough planar/undulating, partial surface stain.	AND	0	4	3	4	5	16	15	**69**
24.2	1485.04	25.8	1.52	1.56	100	1.45	95	1	780	100	R5	Andesite	White Speckled Grey	Fine Grained	Massive	Fine-grained with calcite grains, white speckled grey, medium strong, minimal weathering; one joint dips 30° to core axis, partly open, slightly rough planar, partial dull grey surface stain.	AND	0	4	3	4	5	16	15	**73**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
25.8	1483.66	27.3	1.52	1.52	100	1.52	100	4	304	100	R5	Andesite	White Speckled Purple-Grey	Fine Grained	Massive	Fine-grained, white speckled purple grey, medium strong, minimal weathering; joints dip 30° to core axis, moderately close, partly open, slightly rough planar, partial surface stain and white soft gypsum infill.	AND	0	4	3	2	5	14	15	**67**
27.3	1482.28	28.8	1.52	1.53	100	1.53	100	6	219	100	R5	Andesite	White Speckled Purple-Grey	Fine Grained	Massive	Fine-grained, white speckled purple grey, medium strong, minimal weathering; joints dip 45° to 60° to core axis, close, partly open to tight, slightly rough planar, white powdery infill.	AND	0	4	3	2	5	14	15	**66**
28.8	1480.90	30.3	1.52	1.46	96	1.23	81	4	292	100	R5	Andesite	White Speckled Purple-Grey	Fine Grained	Massive	Fine-grained, white speckled purple grey, medium strong, minimal weathering; joints dip 30° to 45° to core axis, moderately close, partly open to tight, slightly rough planar, white powdery infill.	AND	0	4	3	2	5	14	15	**63**
END OF DRILLHOLE																										

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-09

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 16-Apr-12
Date Completed: 23-Apr-12

Location: Site D Embankment
Drill Hole ID: GT12-09
Coordinates : 376,624 easting
5,897,640 northing

Surface Elevation: 1,239.0 m
Total Depth: 125.0 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		81.1		0.0		0										**OVERBURDEN**	OB							
81.1	1157.93	83.2	2.13	0.00	0	0.00	0		0		R0					Casing - No Recovery							0	15	**24**
83.2	1155.79	83.8	0.61	0.13	21	0.00	0	7	16	90	R4	Andesite	Reddish Brown	Fine to Medium Grained	Massive	Rubble. Reddish brown, green on joint faces, weathered on joints.	AND	0	0	1	0	1	2	15	**34**
83.8	1155.18	84.6	0.76	0.24	31	0.00	0	8	27	100	R5	Andesite	Grey and Brown	Fine to Medium Grained	Massive	Rubble. Grey and brown with green faces and green and black specks. Weathered.	AND	0	0	1	0	1	2	15	**35**
84.6	1154.42	85.3	0.76	0.42	55	0.00	0	10	38	125	R5	Andesite	Grey and Reddish Brown	Fine to Medium Grained	Massive	Rubble, but more competent than last run. Grey and reddish brown with green specks. Weathered. Some large white rectangular grains.	AND	0	0	1	0	1	2	15	**36**
85.3	1153.66	86.9	1.52	0.27	18	0.00	0	Max	5	25	R3	Andesite	Reddish Brown	Fine to Medium Grained	Massive	Weathered rubble, reddish brown, green and yellow specks, vuggy.	AND	0	0	1	0	1	2	15	**28**
86.9	1152.14	87.6	0.76	0.31	41	0.00	0	8	34	50	R4	Andesite	Reddy Brown, White and Black Inclusions	Fine to Medium Grained	Massive	Rubble. Reddy brown with white and black inclusions, very weathered.	AND	0	0	1	0	1	2	15	**31**
87.6	1151.37	88.4	0.76	0.73	96	0.24	31	8	81	150	R5	Andesite	Reddy Brown, White and Black Inclusions	Fine to Medium Grained	Massive	Reddy brown, white and black inclusions, white and black specks on joint faces, trace dark green inclusions.	AND	0	0	3	3	1	7	15	**47**
88.4	1150.61	89.9	1.52	0.69	45	0.10	7	10	63	100	R5	Andesite	Reddy Brown and Grey	Fine to Medium Grained	Massive	Weathered, vuggy, reddy brown and grey, white and black specks on joint faces, 0-11cm and 42-53cm rubble.	AND	0	0	3	3	1	7	15	**41**
89.9	1149.09	90.7	0.76	0.73	96	0.11	14	9	73	50	R4	Andesite	Reddish Brown	Fine to Medium Grained	Massive	Top 40cm very weak, rubbly, and fractured, reddish brown with large white grains, black and yellow-green specks.	AND	0	0	3	3	1	7	15	**38**
90.7	1148.33	91.4	0.76	0.90	100	0.20	26	11	75	100	R5	Andesite	Reddish Brown	Fine to Medium Grained	Massive	Heavily fractured, reddish brown with white rectangular grains, green/yellow specks, black specks, rubbly 63-65cm, 130-136cm.	AND	0	0	3	3	1	7	15	**44**
91.4	1147.56	92.2	0.76	0.06	8	0.00	0	Max	5	20	R2	Andesite	Reddy Brown	Fine to Medium Grained	Massive	Rubble. Weathered, reddy brown.	AND	0	0	1	0	1	2	15	**28**
92.2	1146.80	93.0	0.76	0.68	89	0.00	0	12	52	50	R4	Andesite	Brown	Fine to Medium Grained	Massive	Weak, brown rubble, vuggy.	AND	0	0	1	0	1	2	15	**31**
93.0	1146.04	93.7	0.76	0.13	17	0.00	0	Max	5	20	R2	Andesite	Brown	Fine to Medium Grained	Massive	Rubble, brown, weathered.	AND	0	0	1	0	1	2	15	**28**
93.7	1145.28	94.5	0.76	0.43	56	0.00	0	Max	5	50	R4	Andesite	Reddy/Purpley Brown	Fine to Medium Grained	Massive	Rubble, very weathered, reddy/purpley brown with green rectangular grains.	AND	0	0	1	0	1	2	15	**31**
94.5	1144.52	95.2	0.76	0.42	55	0.00	0	Max	5	100	R5	Andesite	Multicoloured	Fine to Medium Grained	Massive	Rubble, dark green, light green, red, grey/brown, crushed rock.	AND	0	0	1	0	1	2	15	**34**
95.2	1143.75	96.0	0.76	0.17	22	0.00	0	Max	5	20	R2	Andesite	Multicoloured	Fine to Medium Grained	Massive	Rubble, red, orange, light green and dark green.	AND	0	0	1	0	1	2	15	**28**
96.0	1142.99	96.8	0.76	0.49	64	0.00	0	Max	5	50	R4	Andesite	Multicoloured	Fine to Medium Grained	Massive	Weathered rubble, orange/grey/red with light green, dark green, and red inclusions, light green with black specks on some joint faces.	AND	0	0	1	0	1	2	15	**31**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
96.8	1142.23	97.5	0.76	0.92	100	0.22	29	Max	5	125	R5	Andesite	Purple with green and dark green inclusions	Fine to Medium Grained	Massive	Purpley with green and dark green inclusions, white rectangular grains, red splotches, orange with black spots on one joint face, vuggy, more competent.	AND	0	0	5	3	1	9	15	**47**
97.5	1141.47	98.3	0.76	0.79	100	0.00	0	Max	5	175	R5	Andesite	Purple with green specks	Fine to Medium Grained	Massive	Weathered first 10cm, purple with green specks, white rectangular grains, red splotches, trace white infill.	AND	0	0	5	3	1	9	15	**45**
98.3	1140.71	99.1	0.76	0.77	100	0.00	0	Max	5	50	R4	Andesite	Purple with Green and Red	Fine to Medium Grained	Massive	Rubble, purpley with green and red, some white rectangular grains.	AND	0	0	1	0	1	2	15	**31**
99.1	1139.94	100.6	1.52	0.70	46	0.00	0	Max	5	60	R4	Andesite	Purple and Red	Fine to Medium Grained	Massive	Rubble, purple and red, green and white rectangular grains, soft red infill, light and dark green inclusions.	AND	0	0	1	0	1	2	15	**31**
100.6	1138.42	101.3	0.76	0.56	73	0.00	0	Max	5	25	R3	Andesite	Red	Fine to Medium Grained	Massive	Rubble, red, red joint faces and soft red infill, green inclusions, some white grains.	AND	0	0	1	0	1	2	15	**28**
101.3	1137.66	102.1	0.76	0.52	68	0.00	0	Max	5	25	R3	Andesite	Red	Fine to Medium Grained	Massive	Rubble, red, red joint faces and soft red infill, dark and light green inclusions, some white specks.	AND	0	0	1	0	1	2	15	**28**
102.1	1136.90	102.9	0.76	0.56	73	0.24	31	6	80	175	R5	Andesite	Red and Purple	Fine to Medium Grained	Massive	First 14cm rubble, very vuggy, red and purple with light green specks, soft red infill.	AND	0	0	5	3	1	9	15	**50**
102.9	1136.14	103.6	0.76	0.42	55	0.00	0	5	70	175	R5	Andesite	Red and Purple	Fine to Medium Grained	Massive	Rubble 10-27cm, soft purpley clay infill, red and purple with light green inclusions and white rectangular grains.	AND	0	0	1	0	1	2	15	**39**
103.6	1135.37	104.4	0.76	0.73	96	0.00	0	10	66	100	R5	Andesite	Purple	Fine to Medium Grained	Massive	First 20cm rubble, purple with green and red inclusions and white rectangular grains, vuggy, large dark green vuggy patch at 0.70m.	AND	0	0	5	3	1	9	15	**42**
104.4	1134.61	105.2	0.76	0.87	100	0.10	13	9	87	100	R5	Andesite	Purpley Grey	Fine Grained	Massive	Soft red inclusions on joint face, purpley grey with white rectangular grains, green inclusions, white inclusions, soft red inclusions, very fractured, slightly vuggy.	AND	0	0	5	3	1	9	15	**44**
105.2	1133.85	106.7	1.52	1.43	94	0.65	43	11	119	75	R4	Andesite	Reddish Grey	Fine Grained	Massive	Last 32cm very fractured, reddish grey with soft red inclusions, white inclusions, green and black specks, white rectangular grains, vuggy white mineralization at 32cm.	AND	0	0	3	3	3	9	15	**47**
106.7	1132.33	107.4	0.76	0.74	97	0.44	58	4	148	20	R2	Andesite	Reddish Grey	Fine Grained	Massive	Reddish grey with white rectangular grains: rubble 0-20cm, at 24cm abrupt change to shear zone (white, red soft infill in joint), whole rest of run soft grey and green gouge like material, delineating joint 7cm into shear zone, 31cm from top of run.	AND	0	0	3	3	3	9	15	**45**
107.4	1131.56	108.2	0.76	0.80	100	0.71	93	3	200	50	R4	Andesite	Green	Fine Grained	Massive	Shear zone ends at 55cm, shear zone is weathered, weak, green with white veinlets, joint separates new rock, joint has soft pink and green infill, rock after 55cm green with black, green and some orange specks and white rectangular grains.	AND	0	0	3	3	3	9	15	**56**
108.2	1130.80	109.7	1.52	1.50	98	1.35	89	6	214	50	R4	Andesite	Brown to Light Blue Green	Fine Grained	Massive	0-67cm brown with white veinlets, black specks, some green, slightly weathered, 67-150cm light blue green, soft whitey green/blue infills, white veinlets, black specks, white rectangular grains, fractured, weak, green specks, white powdery soft infill.	AND	0	1	1	2	5	9	15	**55**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
109.7	1129.28	111.2	1.52	1.55	100	1.31	86	4	310	20	R2	Andesite	Dark Grey	Fine-grained	Massive	Fine-grained, white speckled dark grey, weak, highly weathered, subvertical green calcite vein, joints 20 degrees to core axis, close, open, slightly rough undulating, rusty surface stain and soft sandy clay or gypsum infill.	AND	0	0	3	0	1	4	15	**48**
111.2	1127.75	112.8	1.52	1.55	100	1.29	85	3	388	25	R3	Andesite	White Speckled Dark Grey	Fine-grained	Massive	Fine-grained, random calcite veins and crystalline inclusions, white speckled dark grey, weak, moderately weathered, joints 20 degrees to core axis, close, partly open, slightly rough undulating, soft infill and staining.	AND	0	1	3	2	3	9	15	**54**
112.8	1126.23	114.3	1.52	1.52	100	1.40	92	1	760	25	R3	Andesite	White Speckled Dark Grey	Fine-grained	Massive	Fine-grained, random calcite veins and crystalline inclusions, white speckled dark grey, weak, moderately weathered, 1 vertical calcite vein, 1 joint 45 degrees to core axis, open, rough planar, gravelly infill.	AND	0	0	3	3	3	9	15	**59**
114.3	1124.71	115.8	1.52	1.53	100	1.26	83	4	306	20	R2	Andesite	Greenish Grey with Burgundy Stain	Fine-grained	Massive	Fine-grained, greenish grey with burgundy stain, weak, moderately weathered, joints dip 30 degrees to core axis, open, moderately close, rough planar, gravelly soft white infill.	AND	0	1	3	2	5	11	15	**54**
115.8	1123.18	117.3	1.52	1.53	100	1.46	96	3	383	20	R2	Andesite	Greenish Grey with Burgundy Stain	Fine-grained	Massive	Fine-grained, greenish grey with burgundy stain, weak, moderately weathered, joints nearly perpendicular to core axis, moderately close, rough planar, no infill or calcite infill.	AND	0	4	5	4	3	16	15	**63**
117.3	1121.66	118.9	1.52	1.48	97	1.21	79	4	296	20	R2	Andesite	Greenish Grey with Burgundy Stain	Fine-grained	Massive	Fine-grained, greenish grey with burgundy stain, weak, moderately weathered, joints 20-45 degrees to core axis, partly open, moderately close, rough planar, no infill or gravelly fragments infill.	AND	0	4	5	4	3	16	15	**58**
118.9	1120.13	120.4	1.52	1.50	98	1.50	98	4	300	25	R3	Andesite	Greenish Grey with Dark Brown Stain	Fine-grained	Massive	Fine-grained, greenish grey with dark brown staining, subvertical calcite veins, joints along veins, 0-30 degrees to core axis, partly open, moderately close, rough planar, soft white calcite/gypsum infill.	AND	0	4	3	2	3	12	15	**59**
120.4	1118.61	121.9	1.52	1.54	100	1.54	100	1	770	50	R4	Andesite	Dark Green with Dark Brown Stain	Fine-grained	Massive	Fine-grained, dark green with dark brown stain, 4 healed fractures with calcite infill, 1 joint 45 degrees to core axis, partly open, slightly rough planar, calcite/gypsum infill, slightly weathered.	AND	0	4	3	2	5	14	15	**68**
121.9	1117.09	123.4	1.52	1.56	100	1.48	97	4	312	50	R4	Andesite	White Speckled Dark Brown/Black	Fine-grained	Massive	Fine-grained, white speckled dark brown/black, medium strong, slightly weathered, joints 20-60 degrees to core axis, partly open, rough planar, calcite infill.	AND	0	4	3	4	5	16	15	**65**
123.4	1115.56	125.0	1.52	1.55	100	1.55	100	2	517	50	R4	Andesite	Dark Burgundy/ Black	Fine-grained	Massive	Fine-grained, dark burgundy/black, medium strong, slightly weathered, joints along calcite veins and healed fractures, 30 degrees to core axis, partly open, medium close, slightly rough planar, white calcite infill.	AND	0	4	3	4	5	16	15	**68**
END OF DRILLHOLE																										

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-10

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 23-Apr-12
Date Completed: 24-Apr-12

Location: Site D Embankment
Drill Hole ID: GT12-10
Coordinates : 376,926 easting
5,897,280 northing

Surface Elevation: 1,258.0 m
Total Depth: 45.7 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		24.4		0.0		0										**OVERBURDEN**	OB							
24.4	1233.62	27.0	2.59	0.00	0	0.00	0		0		R0					Casing - No Recovery							0	15	**24**
27.0	1231.03	27.4	0.46	0.50	100	0.00	0	11	42	75	R4	Andesite	Blue-Grey and Green	Fine Grained	Massive	Weathered, heavily fractured blue-grey and green rock, white rectangular grains, orange surface staining, some dark green inclusions.	AND	0	0	3	3	1	7	15	**38**
27.4	1230.57	29.0	1.52	1.41	93	0.50	33	15	88	75	R4	Andesite	Blue Grey	Fine Grained	Massive	Moderately weathered, fractured, blue grey with large white rectangular grains, trace to some red colouring, orange surface staining, strong, rubble 72-78cm.	AND	0	0	3	3	3	9	15	**45**
29.0	1229.05	30.5	1.52	1.46	96	0.87	57	9	146	75	R4	Andesite	Green with White	Fine Grained	Massive	11-20cm soft grey gouge-like material, green with white rectangular grains, black specks, orange surface surface staining, light green inclusions.	AND	0	0	3	0	3	6	15	**47**
30.5	1227.52	32.0	1.52	1.52	100	1.13	74	6	217	50	R4	Andesite	White Speckled Greenish Light Grey with Dark Burgundy Stain	Fine Grained	Massive	Fine-grained, calcite inclusions 5mm long, white speckled greenish light grey with dark burgundy stain, weak to moderately strong, highly weathered, joints 30-45 degrees to core axis, close, partly open, slightly rough planar, sandy infill less than 5mm and dark brown/black surface staining.	AND	0	1	3	4	3	11	15	**54**
32.0	1226.00	33.5	1.52	1.56	100	1.56	100	0	1560	75	R4	Andesite	White Speckled Greenish Light Grey with Dark Burgundy Stain	Fine Grained	Massive	Fine-grained, calcite inclusions 5mm long, white speckled greenish light grey with dark burgundy stain, moderately weathered, no joints.	AND	0	6	6	6	3	21	15	**82**
33.5	1224.47	35.1	1.52	1.57	100	1.54	100	2	523	100	R5	Andesite	White Speckled Greenish Light Grey with Orange and Burgundy Stain	Fine Grained	Massive	Fine-grained, white speckled greenish light grey with orange and burgundy staining, medium strong, moderately weathered, 2 joints 70 degrees to core axis, very close, partly open, slightly rough planar, trace sandy infill, dark surface stain.	AND	0	1	3	4	3	11	15	**67**
35.1	1222.95	36.6	1.52	1.42	93	1.42	93	2	473	100	R5	Andesite	Greenish Light Grey	Fine Grained	Massive	Fine-grained, greenish light grey, medium strong, moderately weathered, 2 joints 30-45 degrees to core axis, moderately close, tight, slightly rough planar, partial stain.	AND	0	4	3	6	3	16	15	**70**
36.6	1221.43	38.1	1.52	1.55	100	1.52	100	2	517	100	R5	Andesite	Greenish Light Grey	Fine Grained	Massive	Fine-grained, greenish light grey, medium strong, moderately weathered, 2 joints 60 degrees to core axis, very close, partly open, rough planar, no infill.	AND	0	1	5	6	3	15	15	**70**
38.1	1219.90	39.6	1.52	1.53	100	1.53	100	1	765	100	R5	Andesite	Greenish Light Grey	Fine Grained	Massive	Fine-grained, greenish light grey, medium strong, moderately weathered, 1 joints 30 degrees to core axis, partly open, rough planar, hard calcite infill.	AND	0	1	5	4	3	13	15	**71**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
39.6	1218.38	41.1	1.52	1.47	96	1.47	96	3	368	100	R5	Andesite	White Speckled Burgundy/ Grey	Fine Grained	Massive	Fine-grained with calcite grains, white speckled burgundy/grey, medium strong, slightly weathered, 3 joints perpendicular to core axis, moderately close, tight, rough/stepped, no infill.	AND	0	4	5	6	5	20	15	**73**
41.1	1216.85	42.7	1.52	1.55	100	1.55	100	5	258	100	R5	Andesite	White Speckled Burgundy/ Grey	Fine Grained	Massive	Fine-grained with calcite grains, white speckled burgundy/grey, medium strong, slightly weathered, joints 70 degrees to core axis, close, partly open to tight, rough planar, no infill or thin calcite infill (veinlet).	AND	0	4	5	4	5	18	15	**71**
42.7	1215.33	44.2	1.52	1.46	96	1.29	85	6	209	100	R5	Andesite	White Speckled Burgundy/ Grey	Fine Grained	Massive	Fine-grained with calcite grains, white speckled burgundy/grey, medium strong, slightly weathered, joints 30-70 degrees to core axis, very close, partly open, rough planar, partial surface stain infill.	AND	0	1	5	4	5	15	15	**64**
44.2	1213.81	45.7	1.52	1.56	100	1.42	93	3	390	100	R5	Andesite	White Speckled Burgundy/ Grey	Fine Grained	Massive	Fine-grained with calcite grains, white speckled burgundy/grey, medium strong, slightly weathered, joints 30 and 60 degrees to core axis, very close to moderately wide, partly open, slightly rough planar, partial surface stain.	AND	0	1	3	4	5	13	15	**66**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-11

PROJECT: BLACKWATER
Client: NEW GOLD INC.
Drilling Company: WESTECH
Drill Type: MOBILE B-54
Date Started: 24-Apr-12
Date Completed: 26-Apr-12

Location: Site D Embankment
Drill Hole ID: GT12-11
Coordinates : 377,036 easting
5,896,980 northing

Surface Elevation: 1,282.0 m
Total Depth: 68.6 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							RMR CALCULATIONS						
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition: Persis- P	Apert- A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 UCS Rating	RMR-89 RQD Rating	RMR-89 Joint Spac. Rating	RMR-89 Joint Condition Rating	RMR-89 Water Rating	**RMR-89 Total** Min. Joint	**RMR-89 Total** By Joint
0.0		2.4		0.0		0		0		0						**OVERBURDEN**	OB														
2.4	1279.56	4.1	1.68	0.00	0	0.00	0	0	0	0	R0					Casing - No Recovery							0	15	1.0	3.0	5.0	0.0	15	**24**	**24**
4.1	1277.89	4.6	0.46	0.48	100	0.12	26	6	69	175	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green/white rectangular grains, hard. Strong, rubble 20-32cm.	AND	0	0	1	3	1	5	15	13.3	6.3	5.9	5.0	15	**45**	**45**
4.6	1277.43	6.1	1.52	1.45	95	1.19	78	7	181	150	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green/white rectangular grains, red splotches, some hard white infilling, strong.	AND	0	0	3	3	3	9	15	12.2	15.3	7.4	9.0	15	**59**	**59**
6.1	1275.90	7.6	1.52	1.54	100	1.54	100	5	257	175	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green/white rectangular grains, red splotches, some hard white infilling, strong, some brown clay infill.	AND	0	0	1	0	3	4	15	13.3	20.2	8.2	4.0	15	**61**	**61**
7.6	1274.38	9.1	1.52	1.52	100	1.27	83	5	253	175	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green/white rectangular grains and red splotches, one joint has soft brown clay infill.	AND	0	1	3	2	3	9	15	13.3	16.5	8.2	9.0	15	**62**	**62**
9.1	1272.86	10.7	1.52	1.52	100	1.43	94	5	253	175	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green/white rectangular grains and red splotches, strong, trace brown veinlets, soft brown infill.	AND	0	4	1	2	3	10	15	13.3	18.8	8.2	10.0	15	**65**	**65**
10.7	1271.33	12.2	1.52	1.48	97	0.99	65	7	185	150	R5	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	Soft orange brown infill, purpley grey, white rectangular grains, black specks, some soft powdery white infill, fractured zone 120-132cm with orange, brown and white powdery infill.	AND	0	1	1	2	5	9	15	12.2	12.7	7.4	9.0	15	**56**	**56**
12.2	1269.81	13.7	1.52	1.61	100	1.57	100	6	230	100	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with large white/green rectangular grains, black specks, shallow dipping joints 20 degree to core axis.	AND	0	4	1	6	5	16	15	9.4	20.2	7.9	16.0	15	**69**	**69**
13.7	1268.28	15.2	1.52	1.48	97	1.45	95	2	493	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, medium strong, slightly weathered, 2 joints perpendicular to core axis, very close, partly open, rough planar, partial rusty surface stain.	AND	0	4	3	4	5	16	15	9.4	19.1	10.7	16.0	15	**70**	**70**
15.2	1266.76	16.8	1.52	1.53	100	1.47	96	3	383	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, minimal weathering, medium strong, 2 joints very close perpendicular to core axis, 1 joint far apart, 45 degrees to core axis, slightly rough planar to rough planar, partial surface stain or hard calcite infill.	AND	0	4	3	4	6	17	15	9.4	19.4	9.6	17.0	15	**70**	**70**
16.8	1265.24	18.3	1.52	1.57	100	1.49	98	3	393	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, minimal weathering, joints 30-60 degrees to core axis, close to wide, partly open, rough planar, partial surface staining.	AND	0	4	3	4	6	17	15	9.4	19.7	9.7	17.0	15	**71**	**71**
18.3	1263.71	19.8	1.52	1.47	96	1.40	92	3	368	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, 3 joints dip 30-60 degrees to core axis, close to moderately close, partly open, slightly rough planar, partial surface stain.	AND	0	4	1	4	6	15	15	9.4	18.3	9.4	15.0	15	**67**	**67**
19.8	1262.19	21.3	1.52	1.56	100	1.56	100	1	780	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, 1 joint, tight, slightly rough planar, 45 degrees to core axis, trace soft beige clayey infill.	AND	0	4	1	2	6	13	15	9.4	20.2	13.1	13.0	15	**71**	**71**
21.3	1260.67	22.9	1.52	1.50	98	1.40	92	2	500	100	R5	Alt. Andesite	Light Grey/White Speckled Purple/Light Grey	Fine-Grained	Massive	Fine-grained, light grey/white speckled purple light grey, 2 joints 45-60 degrees to core axis, close, rough planar, tight, partial surface stain.	AND	0	5	3	4	6	18	15	9.4	18.3	10.8	18.0	15	**71**	**71**

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DRILL RUN DATA												GEOLOGY - COMMENTS					Field Rock Interpretation	DISCONTINUITY DATA - RATING SYSTEMS							RMR CALCULATIONS						
																		Joint Condition													
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes		Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 UCS Rating	RMR-89 RQD Rating	RMR-89 Joint Spac. Rating	RMR-89 Joint Condition Rating	RMR-89 Water Rating	**RMR-89 Total** Min. Joint	**RMR-89 Total** By Joint
22.9	1259.14	24.4	1.52	1.55	100	1.21	79	7	194	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light purple/grey, medium strong, slightly weathered, 77'-78' broken zone over multiple calcite veins, joints random, rough stepped/planar, open, very close to close, soft calcite infill.	AND	0	1	3	2	5	11	15	9.4	15.6	7.5	11.0	15	**59**	**59**
24.4	1257.62	25.9	1.52	1.56	100	1.42	93	6	223	100	R5	Alt. Andesite	White Speckled and Banded Purple/Light Grey	Fine-Grained	Massive	Fine-grained, white speckled and banded purple/light grey with red stain, medium strong to weak, slightly weathered, subvertical calcite veins, joints random along veins, open to partly open, very close, rough planar/stepped, rusty surface stain and calcite infill.	AND	0	1	3	2	5	11	15	9.4	18.6	7.9	11.0	15	**62**	**62**
25.9	1256.09	27.4	1.52	1.50	98	1.21	79	9	150	50	R4	Alt. Andesite	White Speckled and Banded Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled and bands of light purple/gery, weak to moderately strong, moderately weathered, multiple calcite veins 20 degrees to core axis and subvertical, joints along veins, very close, rough planar, open, soft calcite infill.	AND	0	1	3	2	3	9	15	5.7	15.6	7.0	9.0	15	**52**	**52**
27.4	1254.57	29.0	1.52	1.55	100	1.45	95	6	221	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light purple grey, medium strong, slightly weathered, joints 45-70 degrees to core axis, close, partly open, slightly rough planar, hard calcite infill and partial dark stain.	AND	0	4	3	4	5	16	15	9.4	19.1	7.8	16.0	15	**67**	**67**
29.0	1253.05	30.5	1.52	1.54	100	1.41	93	3	385	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light purple grey, medium strong, slightly weathered, joints 30 degrees to core axis, very close, partly open, rough planar, partial soft calcite infill.	AND	0	4	3	2	5	14	15	9.4	18.5	9.6	14.0	15	**67**	**67**
30.5	1251.52	32.0	1.52	1.53	100	1.53	100	3	383	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light purple grey, medium strong, slightly weathered, joints 30 degrees to core axis, moderately close, partly open, slightly rough planar, rusty brown surface stain.	AND	0	4	3	4	5	16	15	9.4	20.2	9.6	16.0	15	**70**	**70**
32.0	1250.00	33.5	1.52	1.53	100	1.25	82	8	170	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light grey/purple, slightly weathered, medium strong to weak, joints 45-70 degrees to core axis, close, partly open, rough planar, light rusty surface stain, halo penetration 3cm.	AND	0	4	3	4	5	16	15	9.4	16.2	7.2	16.0	15	**64**	**64**
33.5	1248.47	35.1	1.52	1.50	98	1.46	96	4	300	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light grey/purple, joints 30-60 degrees to core axis, moderately close, tight, slighlty rough planar, partial surface stain (dark rusty brown), halo penetration 2cm.	AND	0	5	3	4	5	17	15	9.4	19.2	8.7	17.0	15	**69**	**69**
35.1	1246.95	36.6	1.52	1.53	100	1.53	100	4	306	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light grey/purple, joints 20-45 degrees to core axis, one joint perpendicular to core axis, close, partly open, slightly rough planar, beige soft infilll less than 2mm or partial surface stain.	AND	0	4	1	2	5	12	15	9.4	20.2	8.8	12.0	15	**65**	**65**
36.6	1245.43	38.1	1.52	1.50	98	1.50	98	4	300	100	R5	Alt. Andesite	White Speckled Light Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled light grey/purple, joints 30-80 degrees to core axis, moderately close, tight, rough planar/stepped, partial surface stain.	AND	0	5	3	4	5	17	15	9.4	19.8	8.7	17.0	15	**70**	**70**
38.1	1243.90	39.6	1.52	1.56	100	1.56	100	3	390	110	R5	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	Purpley grey, white rectangular grains, black specks, red specks, brown splotches, often near joint or vein, strong.	AND	0	4	2	6	6	18	15	10.0	20.2	9.7	18.0	15	**73**	**73**
39.6	1242.38	41.1	1.52	1.53	100	1.39	91	6	219	125	R5	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	Purpley grey, white rectangular grains, black specks, red specks, brown splotches near joints, white and dark green inclusions, slightly fractured zone 126-134cm, some soft orange brown infilling.	AND	0	1	2	2	6	11	15	10.9	18.2	7.8	11.0	15	**63**	**63**
41.1	1240.85	42.7	1.52	1.52	100	1.21	79	7	190	100	R5	Alt. Andesite	Purpley Grey. Red Mottled	Fine-Grained	Massive	93-124cm fractured zone, joints have soft orange brown clay infill, purpley grey and red mottled, white rectangular grains, black specks, brown splotches.	AND	0	1	1	2	6	10	15	9.4	15.6	7.5	10.0	15	**57**	**57**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							RMR CALCULATIONS						
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition: Persis-P	Joint Condition: Apert-A	Joint Condition: Rough R	Joint Condition: Infill I	Joint Condition: Weath W	TOTAL (RMR)	Water Rating	RMR-89 UCS Rating	RMR-89 RQD Rating	RMR-89 Joint Spac. Rating	RMR-89 Joint Condition Rating	RMR-89 Water Rating	**RMR-89 Total** Min. Joint	**RMR-89 Total** By Joint
42.7	1239.33	44.2	1.52	1.52	100	1.52	100	3	380	150	R5	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	Purpley grey, white rectangular grains, one joint has soft orange and brown infill, black specks, some green specks, strong.	AND	0	4	1	2	6	13	15	12.2	20.1	9.6	13.0	15	**70**	**70**
44.2	1237.81	45.7	1.52	1.49	98	1.31	86	6	213	100	R5	Alt. Andesite	Purpley and Reddish Grey	Fine-Grained	Massive	Purpley and reddish grey, white rectangular grains, black specks, soft orange-brown infill.	AND	0	1	1	2	6	10	15	9.4	17.0	7.7	10.0	15	**59**	**59**
45.7	1236.28	47.2	1.52	1.55	100	1.48	97	8	172	75	R4	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	Soft orange brown infill, purpley grey rock with white rectangular grains and black specks.	AND	0	4	1	2	6	13	15	7.7	19.5	7.2	13.0	15	**62**	**62**
47.2	1234.76	48.8	1.52	1.54	100	0.76	50	9	154	75	R4	Alt. Andesite	Purpley Grey	Fine-Grained	Massive	0-90cm fractured with soft orange and hard white infill, pureply grey rock with white rectangular grains and black specks. Displaced crushed white and orange rock, 29-32cm purpley grey gouge material with white rectangular granules.	AND	0	0	1	0	6	7	15	7.7	10.0	7.0	7.0	15	**47**	**47**
48.8	1233.23	50.3	1.52	1.47	96	1.33	87	4	294	75	R4	Alt. Andesite	Greyey Purple	Fine-Grained	Massive	Greyey purple with white rectangular grains, red splotches, white and brown veinlets, orange splotches, orange brown soft infill mixed with rubble in 2 joints (aperture = 2.5cm).	AND	0	0	1	0	6	7	15	7.7	17.3	8.7	7.0	15	**56**	**56**
50.3	1231.71	51.2	0.91	0.95	100	0.45	49	5	158	20	R2	Alt. Andesite	Red with some Grey	Fine-Grained	Massive	Red, some grey, traces of white rectangular grains and black specks, rubble 45-60cm, 70-82cm, last 11cm of run greyey purple rock with white rectangular grains and red splotches (as before).	AND	0	0	1	2	6	9	15	3.0	9.9	7.1	9.0	15	**44**	**44**
51.2	1230.80	51.8	0.61	0.60	98	0.40	66	0	600	150	R5	Alt. Andesite	Grey and Red Mottled	Fine-Grained	Massive	Grey and red mottled, black specks, first 12cm rubble, trace of white rectangular grains.	AND	0	6	6	6	6	24	15	12.2	12.8	11.7	24.0	15	**76**	**76**
51.8	1230.19	53.3	1.52	1.52	100	1.52	100	1	760	150	R5	Alt. Andesite	Red Mottled	Fine-Grained	Massive	Red mottled with white rectangular grains, dark green specks, random white blebs.	AND	0	4	3	6	6	19	15	12.2	20.1	12.9	19.0	15	**79**	**79**
53.3	1228.66	54.9	1.52	1.59	100	1.59	100	2	528	100	R5	Alt. Andesite	Reddy Purple	Fine-Grained	Massive	Reddy purple with dark green blebs, white blebs, white rectangular grains, trace orange staining, trace green splotches, trace red splotches.	AND	0	4	3	6	6	19	15	9.4	20.2	11.0	19.0	15	**75**	**75**
54.9	1227.14	56.4	1.52	1.52	100	1.50	98	1	760	125	R5	Alt. Andesite	Purple	Fine-Grained	Massive	Purple with green specks and white rectangular grains. 0-31cm large green inclusion with some orange (mottled, random).	AND	0	4	3	6	6	19	15	10.9	19.8	12.9	19.0	15	**78**	**78**
56.4	1225.61	57.9	1.52	1.48	97	1.48	97	2	493	125	R5	Alt. Andesite	White Speckled Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled purple grey, medium strong, slightly weathered, joints 45 degrees to core axis, moderately close, tight, slightly rough planar, no infill.	AND	0	5	3	6	5	19	15	10.9	19.5	10.7	19.0	15	**75**	**75**
57.9	1224.09	59.4	1.52	1.54	100	1.54	100	2	513	125	R5	Alt. Andesite	Purple Grey	Fine-Grained	Massive	Fine-grained, purple grey, medium strong, minimal weathering, joints 70-90 degrees to core axis, moderately close, partly open, slightly rough planar, partial surface stain (yellow, rusty).	AND	0	4	3	4	6	17	15	10.9	20.2	10.9	17.0	15	**74**	**74**
59.4	1222.57	61.0	1.52	1.48	97	1.48	97	2	493	125	R5	Alt. Andesite	Purple Grey	Fine-Grained	Massive	Fine-grained, purple grey, medium strong, minimal weathering, 1 joint 20 degrees to core axis, 1 joint 60 degrees to core axis, partly open, close, slightly rough planar, soft beige infill (less than 1 mm), partial coverage.	AND	0	4	3	2	6	15	15	10.9	19.5	10.7	15.0	15	**71**	**71**
61.0	1221.04	62.5	1.52	1.55	100	1.55	100	1	775	125	R5	Alt. Andesite	White Speckled Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled purple grey with burgundy and green staining, medium strong, minimal weathering, 1 joint 70 degrees to core axis, partly open, rough planar, trace beige soft infill.	AND	0	4	3	2	6	15	15	10.9	20.2	13.1	15.0	15	**74**	**74**
62.5	1219.52	64.0	1.52	1.55	100	1.42	93	5	258	125	R5	Alt. Andesite	White Speckled Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled purple grey with burgundy and green staining, medium strong, minimal weathering, joint set 60 degrees to core axis, very close, partly open, rough planar, hard calcite infill, partial coverage.	AND	0	4	5	4	6	19	15	10.9	18.6	8.3	19.0	15	**72**	**72**

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DRILL RUN DATA												GEOLOGY - COMMENTS					DISCONTINUITY DATA - RATING SYSTEMS								RMR CALCULATIONS						
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition						Water Rating	RMR-89 UCS Rating	RMR-89 RQD Rating	RMR-89 Joint Spac. Rating	RMR-89 Joint Condition Rating	RMR-89 Water Rating	**RMR-89 Total** Min. Joint	**RMR-89 Total** By Joint
																		Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)								
64.0	1218.00	65.5	1.52	1.47	96	1.47	96	2	490	125	R5	Alt. Andesite	White Speckled Purple/Grey	Fine-Grained	Massive	Fine-grained, white speckled purple grey with burgundy/red staining, medium strong, unweathered, 2 joints 45 degrees to core axis, moderately close, tight, rough planar, no infill.	AND	0	5	3	6	6	20	15	10.9	19.4	10.7	20.0	15	**76**	**76**
65.5	1216.47	67.1	1.52	1.53	100	1.53	100	3	383	125	R5	Alt. Andesite	Grey with Red Stains/ Bands	Fine-Grained	Massive	Fine-grained, grey with red staining/banding, medium strong, slightly weathered, joints 70-90 degrees to core axis, moderately close, partly open, rouhg planar, trace beige soft infill (partial coverage), halo penetration 3mm.	AND	0	4	3	4	5	16	15	10.9	20.2	9.6	16.0	15	**72**	**72**
67.1	1214.95	68.6	1.52	1.53	100	1.53	100	2	510	125	R5	Alt. Andesite	Grey with Red Stains/ Bands	Fine-Grained	Massive	Fine-grained, grey with red staining/banding, medium strong, slightly weathered, 1 joint perpendicular to core axis, 1 joint nearly parallel to core axis, wavy, rough undulating, partly open, soft yellow infill 2mm, partial coverage.	AND	0	4	5	2	5	16	15	10.9	20.2	10.8	16.0	15	**73**	**73**
END OF DRILLHOLE																														

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-12

PROJECT: BLACKWATER
Client: NEW GOLD INC.
Drilling Company: WESTECH
Drill Type: MOBILE B-54
Date Started: 26-Apr-12
Date Completed: 27-Apr-12

Location: Site D Embankment,
Drill Hole ID: GT12-12
Coordinates : 376,780 easting
5,895,900 northing

Surface Elevation: 1,335.0 m
Total Depth: 39.6 m
Azimuth: 0
Inclination: 90

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		22.2		0.0		0										**OVERBURDEN**	OB								
22.2	1312.75	24.1	1.83	0.00	0	0.00	0		0		R0					Casing - No Recovery							0	15	**24**
24.1	1310.92	24.4	0.30	0.33	100	0.00	0	4	66	50	R4	Alt. Andesite	Purple/Red	Fine Grained	Massive	Purple/red with white rectangular grains, orange specks, orange staining on joints, soft orangey brown infill.	AND	0	1	3	2	3	9	15	**39**
24.4	1310.62	25.9	1.52	1.52	100	1.25	82	3	380	75	R4	Alt. Andesite	Purple	Fine Grained	Massive	Purple with white rectangular grains, orange specks, red splotches, green inclusions, rubble 47-68cm, moderately weathered.	AND	0	0	3	3	3	9	15	**57**
25.9	1309.09	27.4	1.52	1.58	100	1.51	99	2	527	75	R4	Alt. Andesite	Purple	Fine Grained	Massive	Purple with white rectangular grains, orange specks, white veinlets, red inclusions/veinlets, green inclusions, competent.	AND	0	0	3	6	3	12	15	**66**
27.4	1307.57	29.0	1.52	1.50	98	1.12	73	6	214	50	R4	Alt. Andesite	Red and Purple	Fine Grained	Massive	Red and purple with white rectangular grains, orange specks, orange surface staining, green inclusions, white veinlets as joint infill, soft infill.	AND	0	1	3	2	3	9	15	**52**
29.0	1306.05	30.5	1.52	1.55	100	1.39	91	6	221	50	R4	Alt. Andesite	Purple	Fine Grained	Massive	Purple with white rectangular grains, orange specks, green inclusions, large green, red and orange mineral inclusions (10cm sections), no infill, white veinlets.	AND	0	4	3	6	3	16	15	**63**
30.5	1304.52	32.0	1.52	1.55	100	1.23	81	5	258	50	R4	Alt. Andesite	Purple	Fine Grained	Massive	Crushed zone 53-61cm, purple with white rectangular grains, orange specks, white veinlets, large green, orange and white mineral inclusions, trace weathering on 1 joint.	AND	0	1	1	2	3	7	15	**52**
32.0	1303.00	33.5	1.52	1.55	100	1.17	77	7	194	25	R3	Alt. Andesite	Purple	Fine Grained	Massive	Purple with white rectangular grains, orange specks, large green, red, and white mineral inclusions, white veinlets, some stained orange veinlets, soft gouge and crushed rock infill in 2 joints, 86-117cm fractured with gouge in joints.	AND	0	0	1	0	3	4	15	**45**
33.5	1301.47	35.1	1.52	1.52	100	1.26	83	6	217	25	R3	Alt. Andesite	Rusty White Speckled Grey	Fine Grained	Massive	Fine-grained, rusty white speckled grey, weak, moderately weathered, joint set 30 degrees to core axis, close, open to partly open, rough planar, rusty surface stan and red/rusty soft gravelly clay infill (greater than 5mm at one joint).	AND	0	0	3	0	3	6	15	**49**
35.1	1299.95	36.6	1.52	1.55	100	1.22	80	6	221	25	R3	Alt. Andesite	Rusty White Speckled Grey	Fine Grained	Massive	Fine-grained, rusty white speckled grey, weak, moderately weathered, joints 60 degrees to core axis, very close to moderately wide, open, rough planar, rusty surface stain and gravelly infill.	AND	0	0	3	3	3	9	15	**51**
36.6	1298.43	38.1	1.52	1.52	100	1.52	100	1	760	75	R4	Alt. Andesite	White Specled Purple/Grey	Fine Grained	Massive	Fine-grained, white speckled purple/grey, medium strong, slightly weathered, 1 joint 70 degrees to core axis, partly open, rough planar, surface staining.	AND	0	4	3	4	5	16	15	**72**

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DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Joint Condition					TOTAL (RMR)	Water Rating	RMR-89 Total
																		Persis- P	Apert- A	Rough R	Infill I	Weath W			
38.1	1296.90	39.6	1.52	1.55	100	1.50	98	6	221	100	R5	Alt. Andesite	Purple Grey	Fine Grained	Massive	Fine-grained, purple grey, medium strong, slightly weathered, joints 45-90 degrees to core axis, very close to moderately wide, partly open, rouhg planar, rusty surface staining (partial coverage).	AND	0	4	3	4	5	16	15	**68**
END OF DRILLHOLE																									

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GEOTECHNICAL DRILLHOLE LOGGING DATA SHEET
ROCK MASS CLASSIFICATION - RMR 1989
BORE HOLE I.D. GT12-28

PROJECT: BLACKWATER GOLD
Client: NEW GOLD INC.
Drilling Company: WESTECH DRILLING
Drill Type: MOBILE B-54
Date Started: 25-Aug-12
Date Completed: 26-Aug-12

Location: West Saddle Dam
Drill Hole ID: GT12-28
Coordinates : 371,774 easting
5,894,840 northing

Surface Elevation: 1,338.0 m
Total Depth: 27.7 m
Azimuth: 0
Inclination: 90

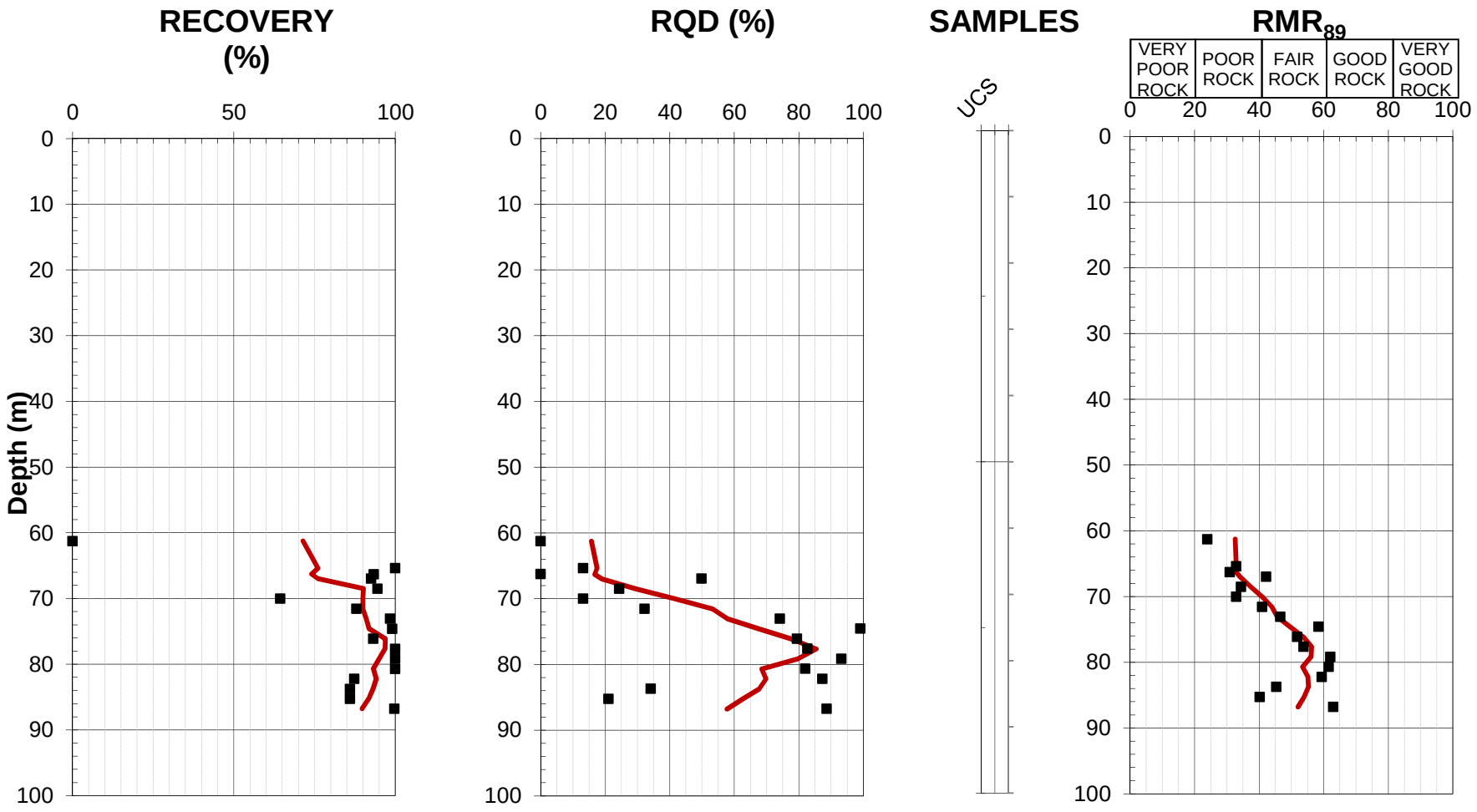
DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS							
																		Joint Condition							
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
0.0		11.6		0.0		0										**OVERBURDEN**	OB								
11.6	1326.42	13.4	1.83	0.00	0	0.00	0		0		R0					Casing - No Recovery							0	15	**24**
13.4	1324.59	14.0	0.61	0.48	79	0.28	46	6	69	50	R4	Felsic Lapilli Tuff	Light Green	Medium Grained/ Brecciated	Laminated	Brecciated Felsic Lapilli Tuff, medium grained, light green, strong ser/mod-strong silica alteration, slightly weathered, black veins, laminated, calcite and iron infilling. Clast supported, sub-angular clasts, rare lathy feldspar grains in matrix.	FLPT	0	4	1	2	4	11	15	**47**
14.0	1323.98	15.5	1.52	1.42	93	0.72	47	13	101	100	R5	Felsic Lapilli Tuff	Light Greenish Grey	Medium Grained/ Brecciated	Laminated	Brecciated Felsic Lapilli Tuff, medium grained, light green, strong ser/mod-strong silica alteration, slightly weathered, black veins, laminated, calcite and iron infilling. Clast supported, sub-angular clasts, rare lathy feldspar grains in matrix.	FLPT	0	4	1	2	4	11	15	**51**
15.5	1322.46	17.1	1.52	1.42	93	0.35	23	21	65	50	R4	Felsic Lapilli Tuff	Light Greenish Grey	Medium Grained/ Brecciated	Laminated	Brecciated Felsic Lapilli Tuff, medium grained, light green, strong ser/mod-strong silica alteration, slightly weathered, highly fractured, black veins, laminated, calcite and iron infilling. Clast supported, sub-angular clasts, rare lathy feldspar grains in matrix.	FLPT	0	4	1	2	4	11	15	**43**
17.1	1320.93	18.6	1.52	1.47	96	1.05	69	12	113	80	R4	Felsic Lapilli Tuff	Light Greenish Grey	Brecciated/Fine Grained	Well Laminated	0.00 m - 0.93 m - Felsic lapilli tuff. Very strong ser/mod-strong silica alteration. Clast supported, sub-angular clasts, rare lathy feldspar grains in matrix. 0.93 m - 1.52 m - Well laminated felsic tuff with similar very strong sericite, moderate sil (banded) and fine disseminated pyrite (0.1%).	FLPT	0	5	1	2	4	12	15	**55**
18.6	1319.41	20.1	1.52	1.52	100	0.70	46	12	117	80	R4	Felsic Tuff	Light Grey with Green Bands	Brecciated/Fine Grained	Well Laminated	Well laminated felsic tuff with similar very strong sericite, moderate sil (banded) and fine disseminated pyrite (0.1%), calcite and white clay infill.	FT	0	0	3	0	4	7	15	**46**
20.1	1317.88	21.6	1.52	1.50	98	0.35	23	30	48	25	R3	Felsic Tuff	Light Grey with Green Bands	Brecciated/Fine Grained	Well Laminated	Well laminated felsic tuff with similar very strong sericite, moderate sil (banded) and fine disseminated pyrite (0.1%)	FT	0	4	5	2	3	14	15	**44**
21.6	1316.36	23.2	1.52	1.53	100	1.45	95	4	306	25	R3	Felsic Tuff/Fault Zone	Light Grey with Green Bands to Light Grey with Dark Pyrite bands	Brecciated/Fine Grained	Well Laminated	First 0.11 m is Well laminated felsic tuff with similar very strong sericite, moderate sil (banded) and fine disseminated pyrite (0.1%) 0.11 m - 1.52 m - Healed fault or structure, crumbly to massive with patchy dark pyrite in gouge (0.5%)	FT	0	4	1	2	3	10	15	**56**

DRILL RUN DATA												GEOLOGY - COMMENTS						DISCONTINUITY DATA - RATING SYSTEMS								
																		Joint Condition								
Depth From (m)	Elev. From (m)	Depth To (m)	Run Length (m)	Recov. Length (m)	Recov. (%)	RQD Length (m)	RQD (%)	# of Fractures	Average Fracture Spac. (mm)	UCS (Est.) (MPa)	ROCK CLASS.	Lithology (Client)	Rock Colour	Rock Grain Size / Texture	Structure	Other Notes	Field Rock Interpretation	Persis-P	Apert-A	Rough R	Infill I	Weath W	TOTAL (RMR)	Water Rating	RMR-89 Total
23.2	1314.84	24.7	1.52	1.52	100	1.25	82	5	253	25	R3	Fault Zone/Felsic Tuff	Light Grey with Dark Pyrite bands to Light Grey/White	Medium Grained	Laminated to Massive	0.00 m - 1.33 m - Healed fault or structure, crumbly to massive with patchy dark pyrite in gouge (0.5%). 1.33 m - 1.52 m - Variable felsic tuff with some clasts, laminated to massive, alteration similar to previous, very strong sericite, weak silica, moderate clay.	FT	0	4	1	2	3	10	15	**53**
24.7	1313.31	26.2	1.52	1.45	95	0.62	41	14	97	50	R4	Felsic Tuff	Light Grey/White	Medium Grained	Laminated to Massive	Variable felsic tuff with some clasts, laminated to massive, alteration similar to previous, very strong sericite, weak silica, moderate clay.	FT	0	5	1	2	3	11	15	**46**
26.2	1311.79	27.7	1.52	1.52	100	1.02	67	10	138	100	R5	Felsic Tuff/Diorite Dyke	Light Grey/White to Light Grey with Black and White Grains, and back to Light Grey/White	Fine to Medium Grained, porphyritic.	Laminated to Massive	0.00 m - 0.24 m - Variable felsic tuff with some clasts, laminated to massive, alteration similar to previous, very strong sericite, weak silica, moderate clay. 0.24m - 1.14 m - Fine to medium grained, porphyritic, light grey diorite dyke, slightly weathered. 1.14 m - 1.52 m - Variable felsic tuff with some clasts, laminated to massive, alteration similar to previous, very strong sericite, weak silica, moderate clay.	FT	0	5	1	2	4	12	15	**56**
END OF DRILLHOLE																									

APPENDIX B3

DOWNHOLE RECOVERY, RQD AND RMR PLOTS

(Figures B3.1 to B3.13)



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-01

Knight Piésold CONSULTING

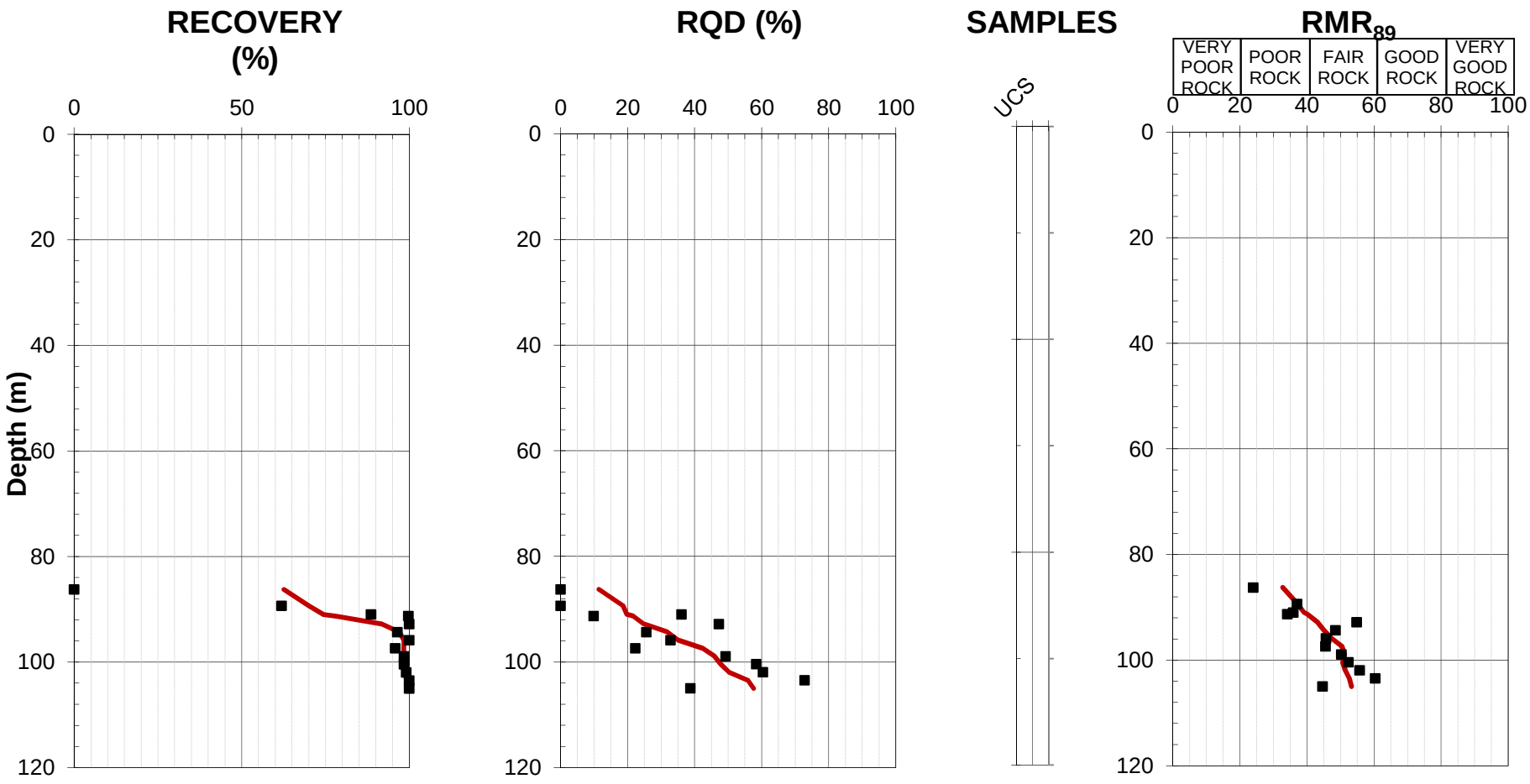
P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.1

REV 0

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	20FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB



LEGEND:
- **Data Point**
- **Moving Average (~10 m average)**

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	20FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-02

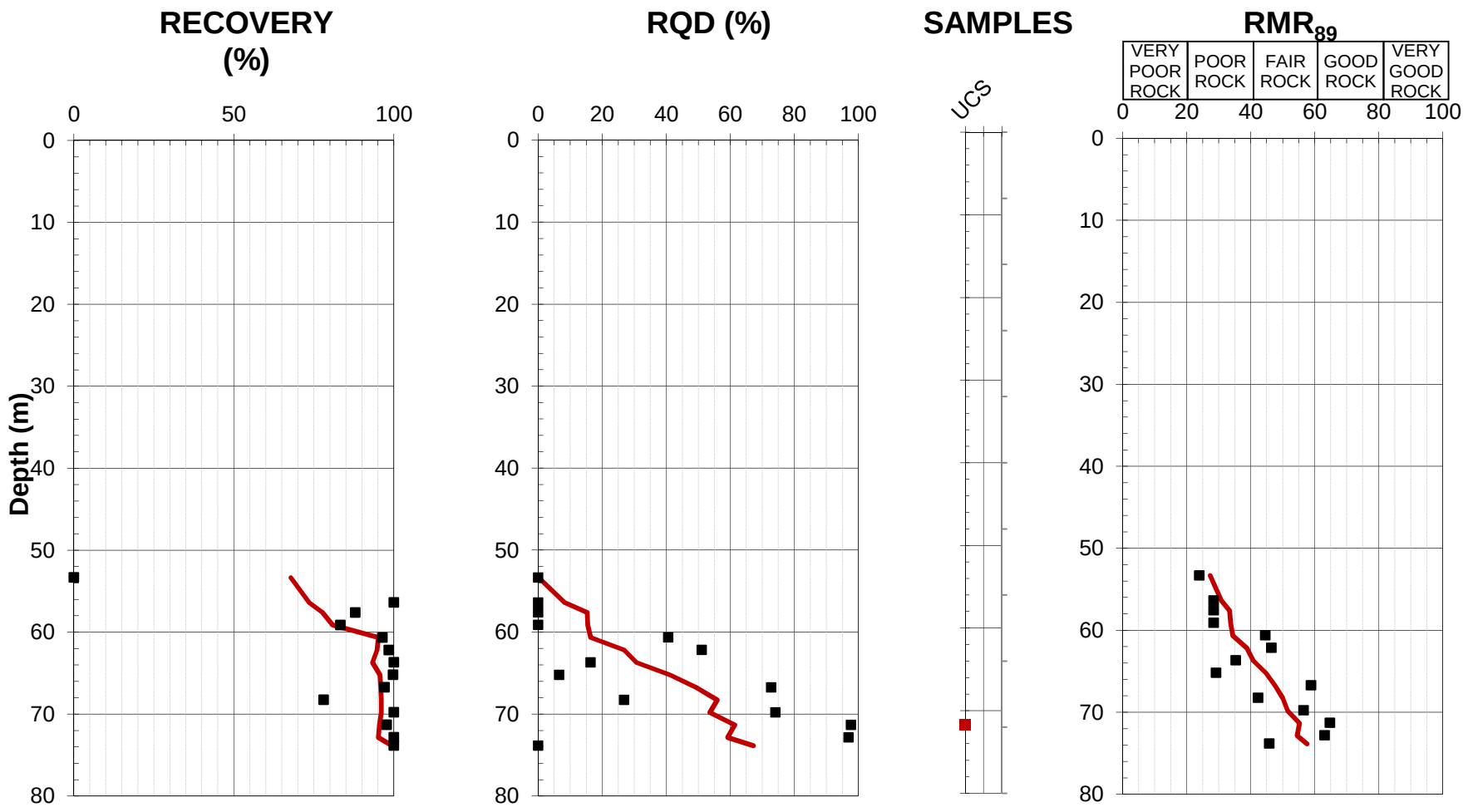
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.2

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	20FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-03

Knight Piésold CONSULTING

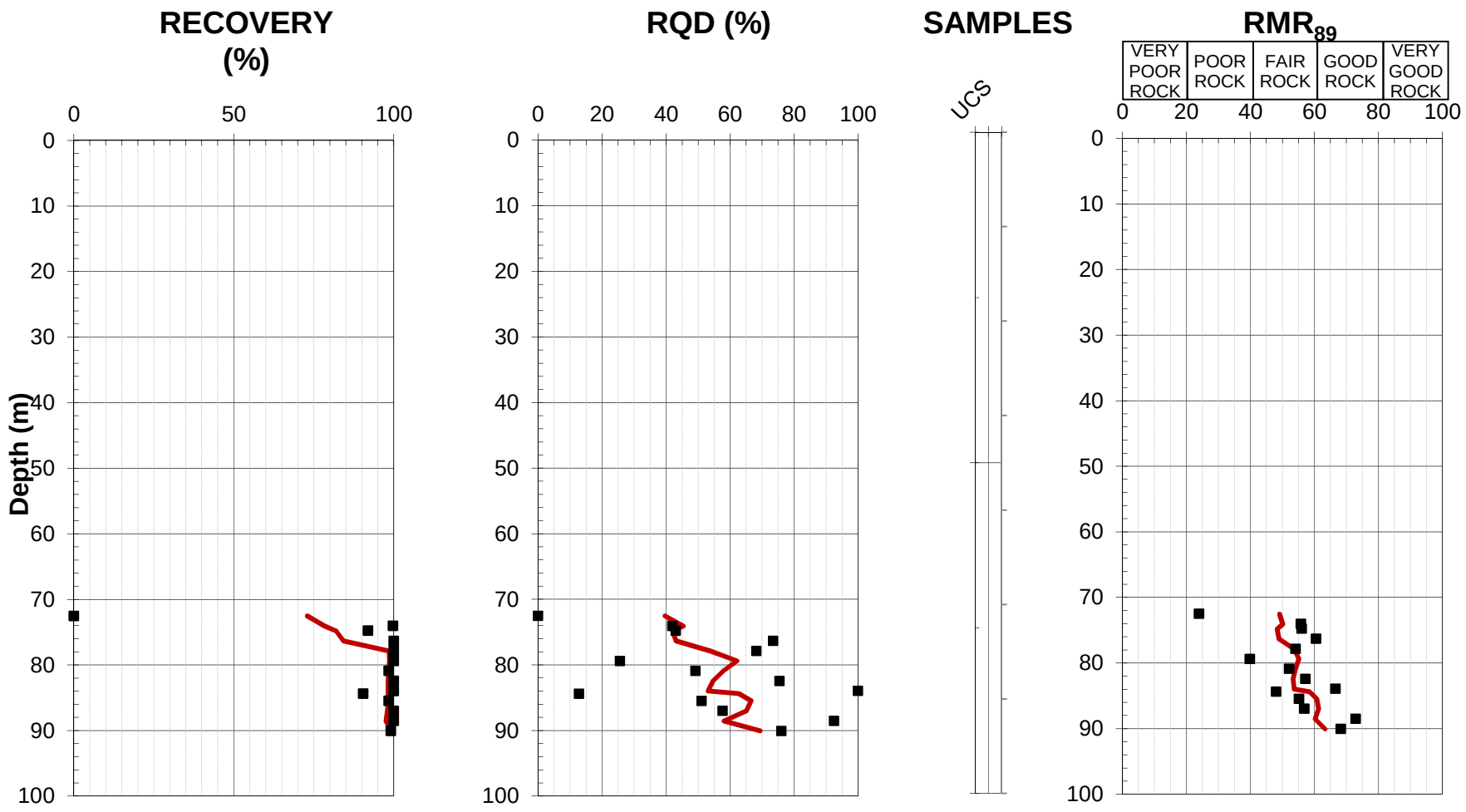
P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.3

REV 0

M:\1\01\00004\03\A\Data\2002 SI\Kemess North Oct 2002 SI\Consolidated Data - Final Version of Files\Logging Spreadsheets\KN-02-58\KN-02-58-new graphs.xls RMR Graph



LEGEND:
- **Data Point**
- **Moving Average (~10 m average)**

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	20FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-04

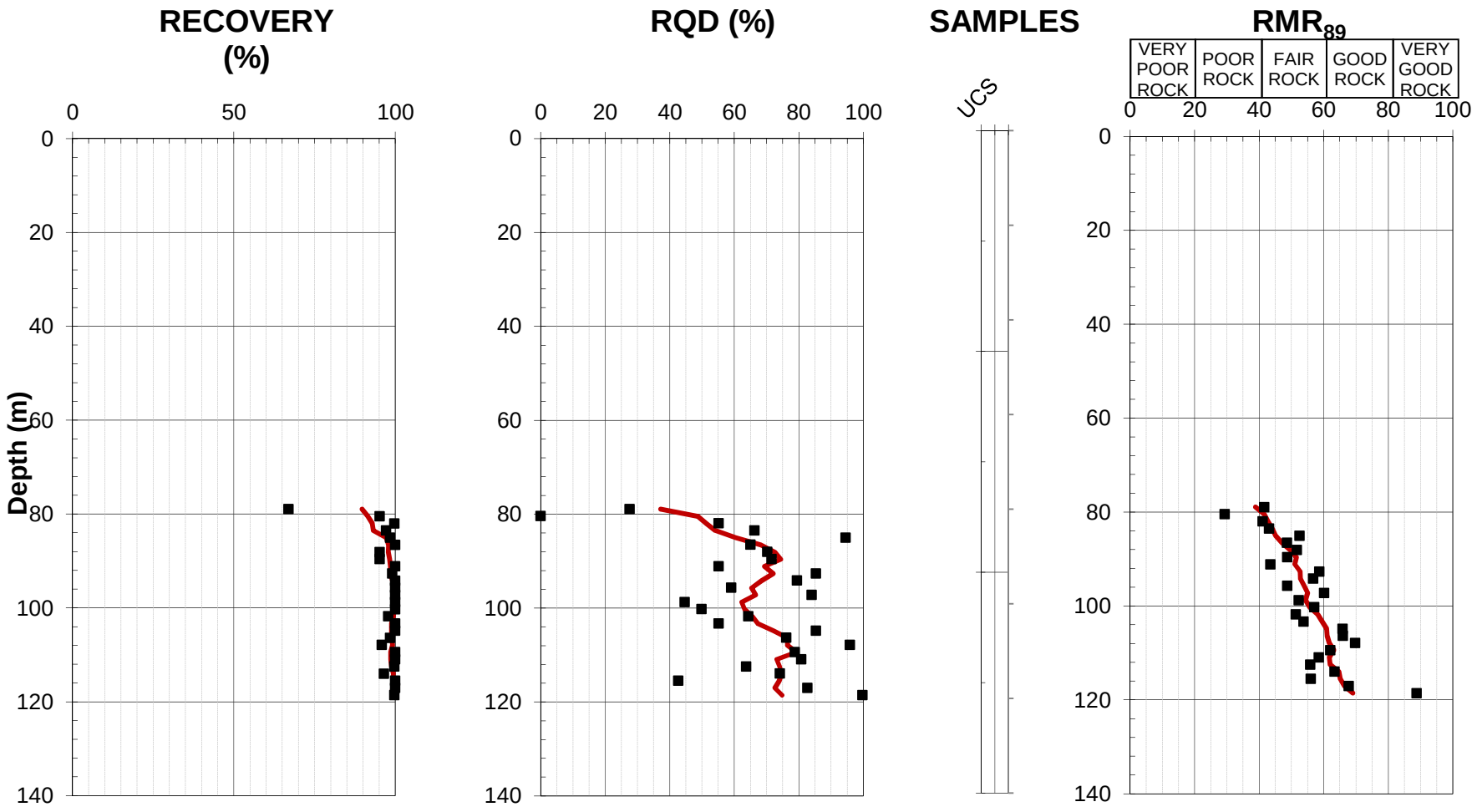
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.4

REV 0



NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	20FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-05

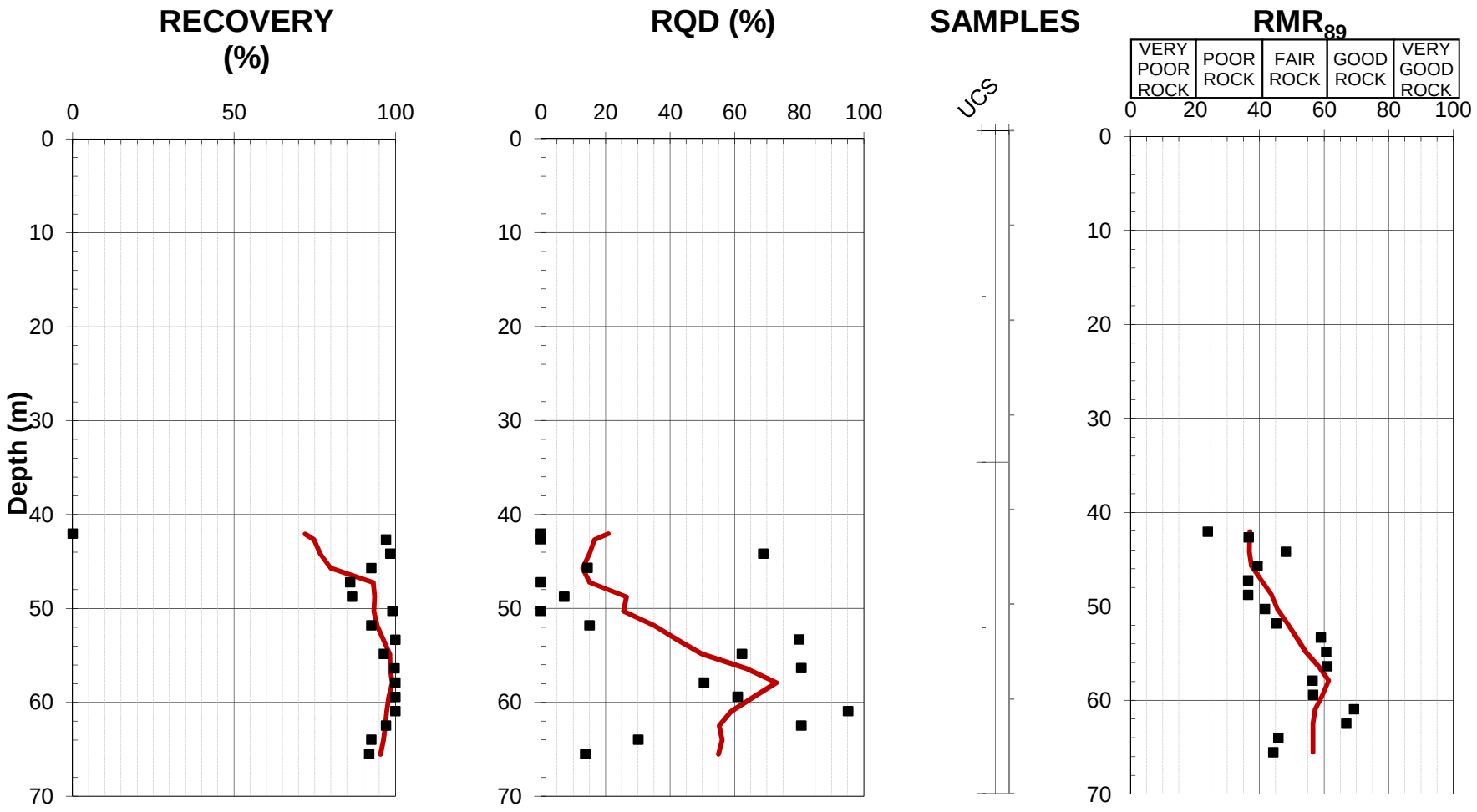
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.5

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-06

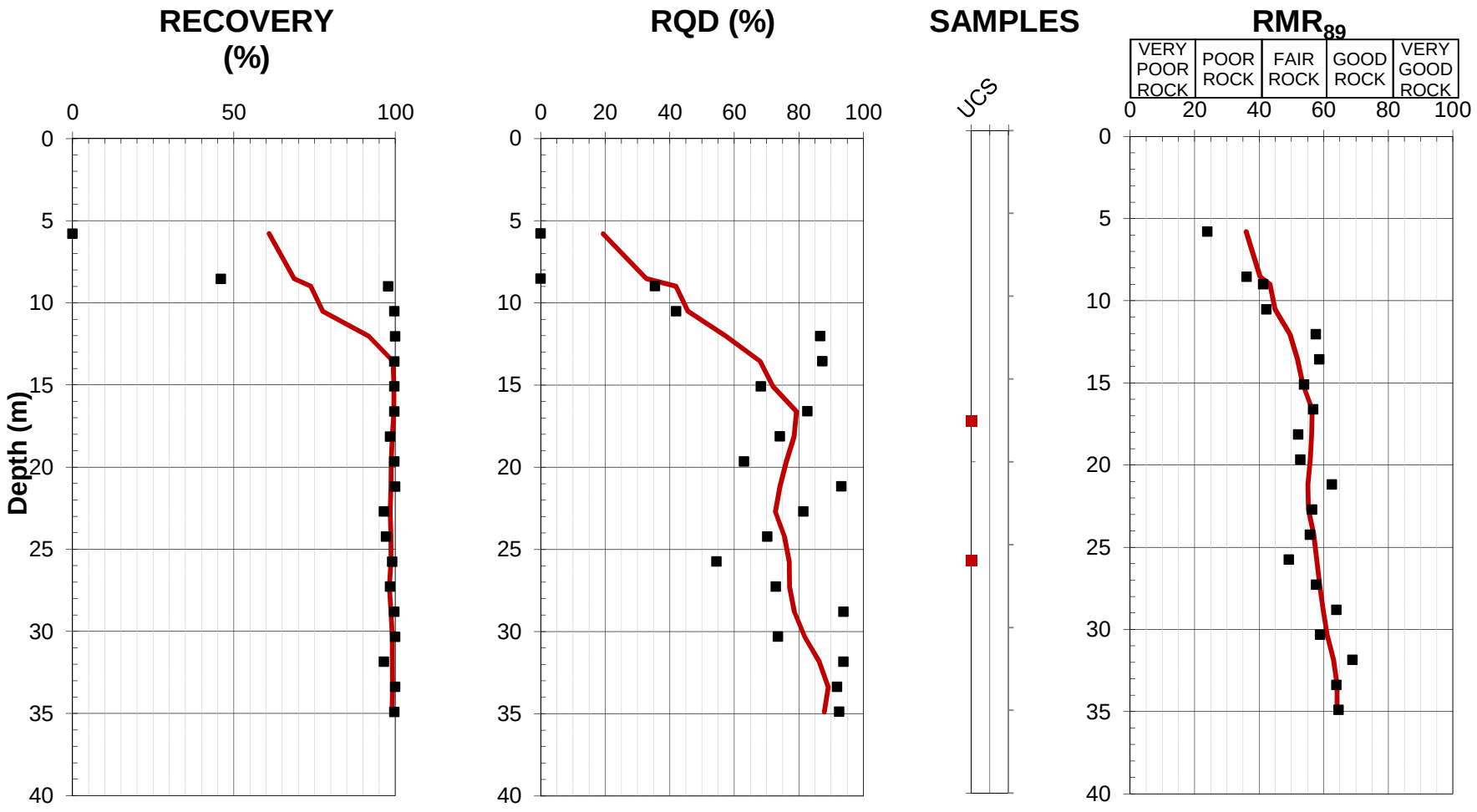
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.6

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-07

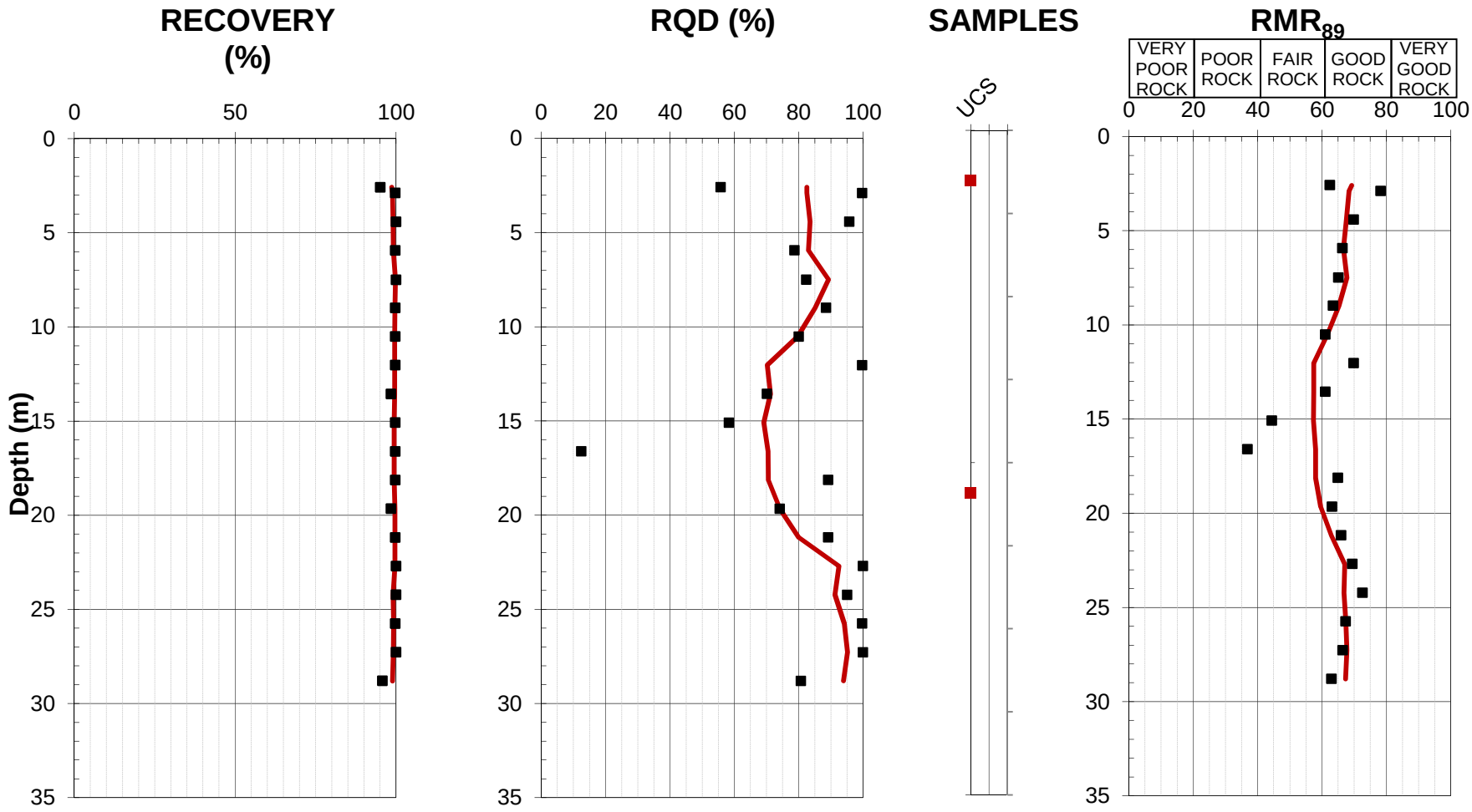
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.7

REV 0



LEGEND:
- **Data Point**
- **Moving Average (~10 m average)**

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-08

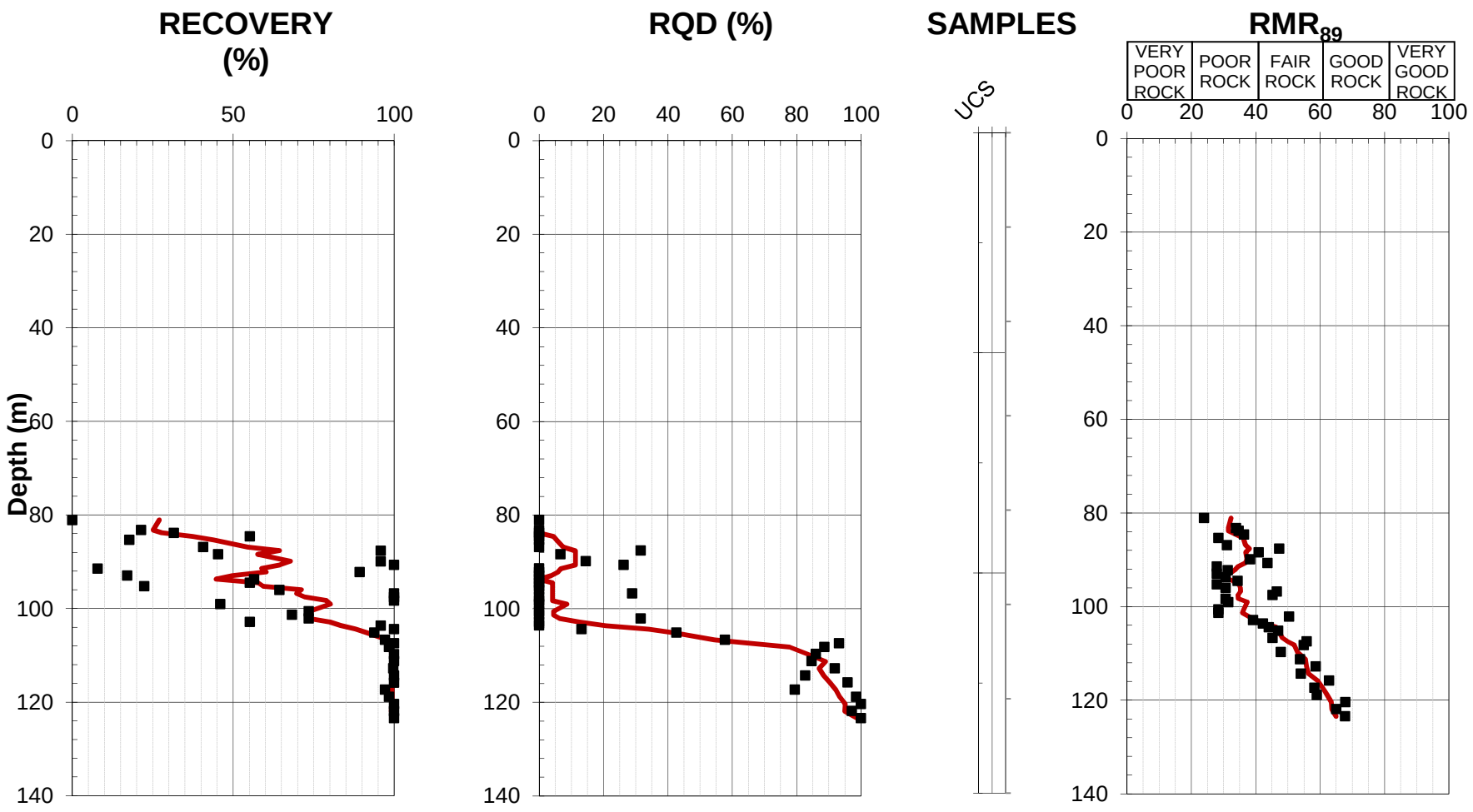
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.8

REV 0



NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-09

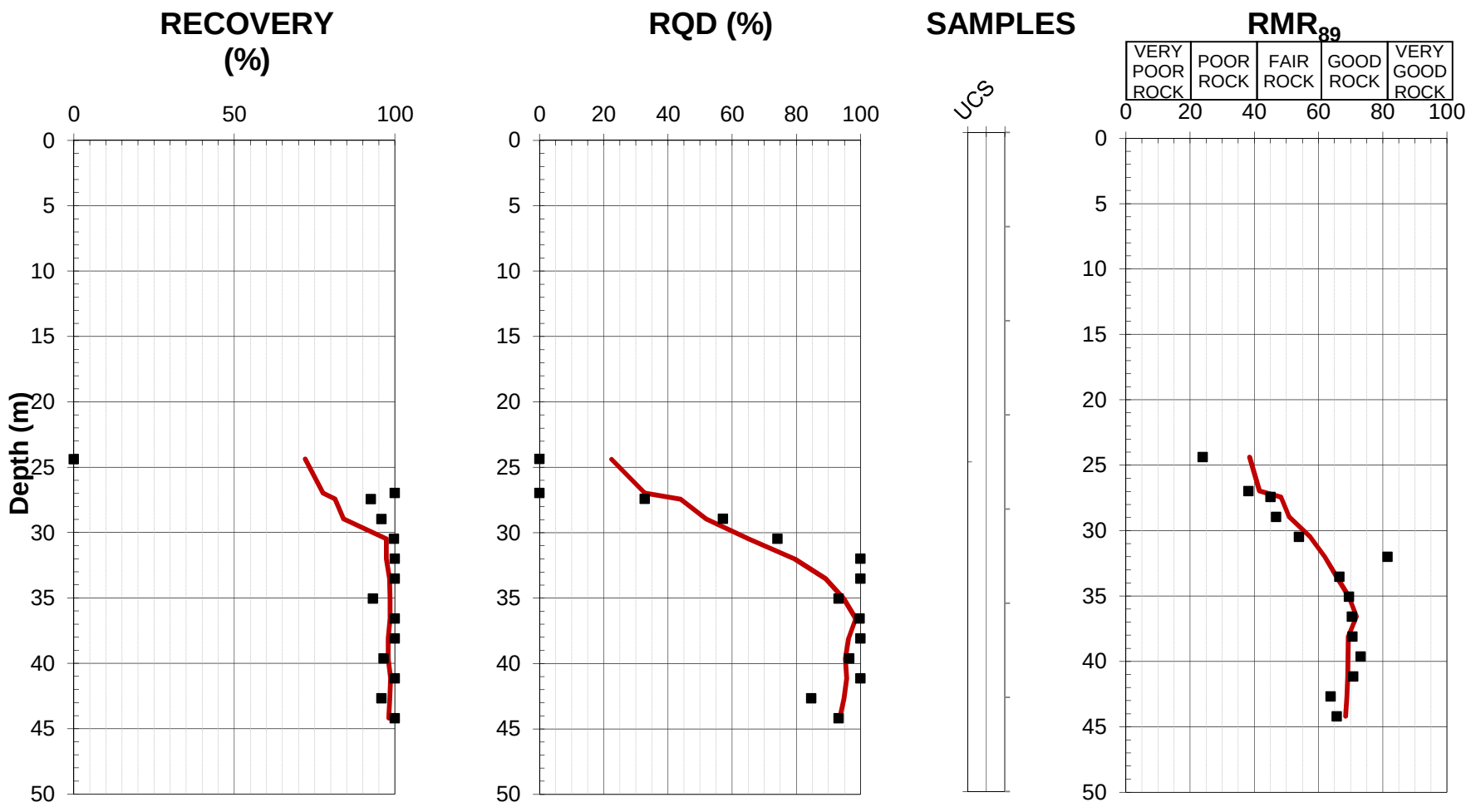
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.9

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-10

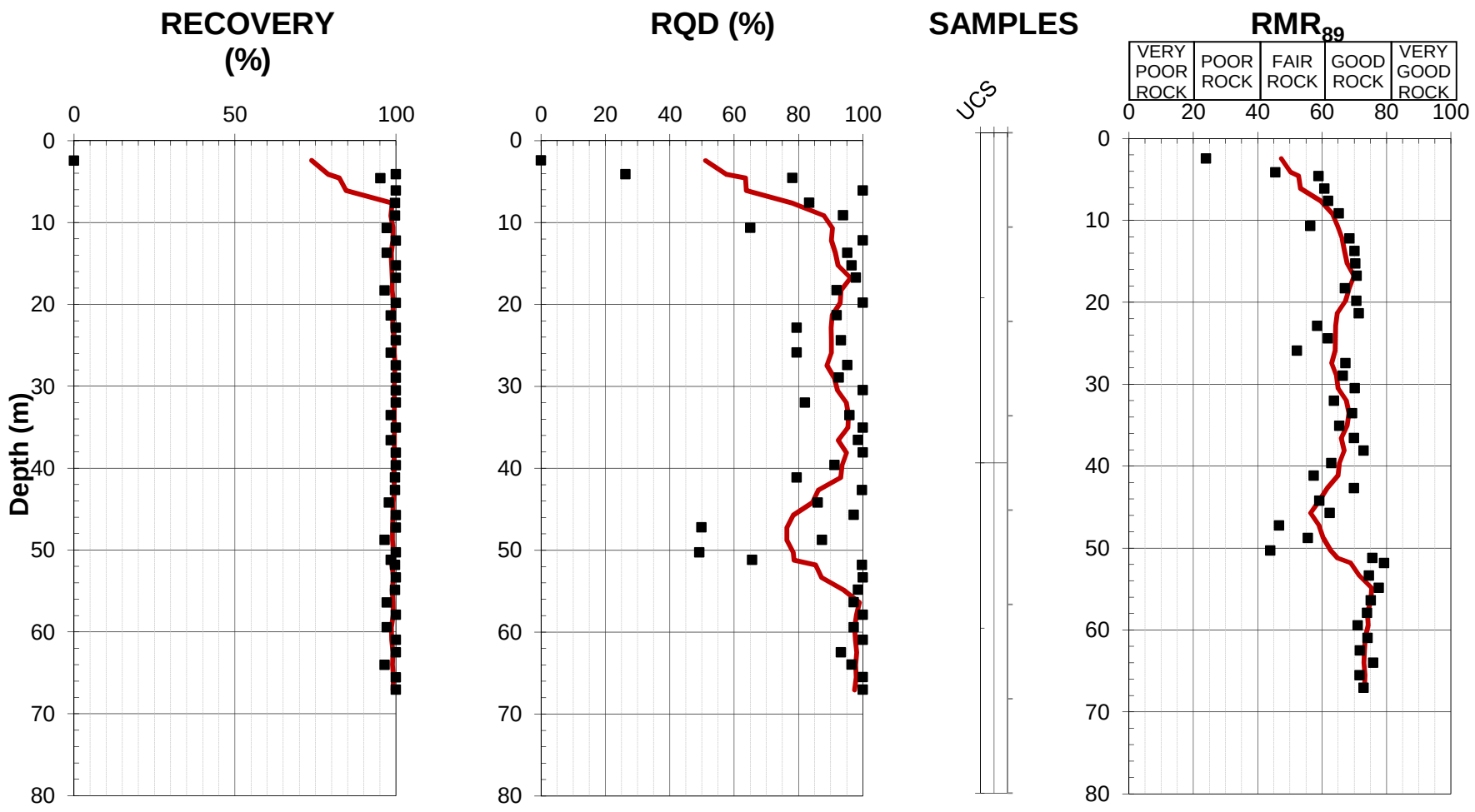
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.10

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-11

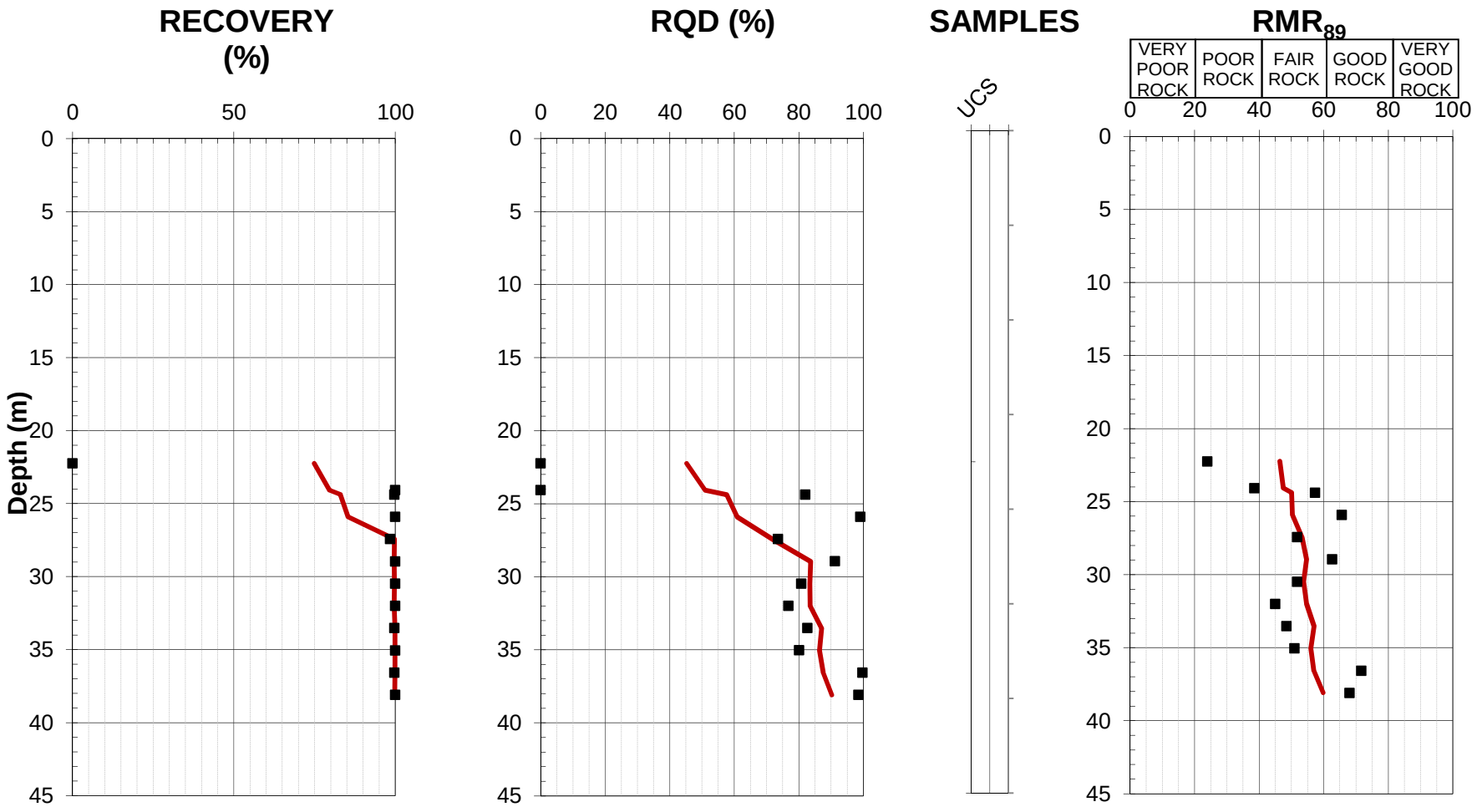
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.11

REV 0



LEGEND:
- **Data Point**
- **Moving Average (~10 m average)**

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-12

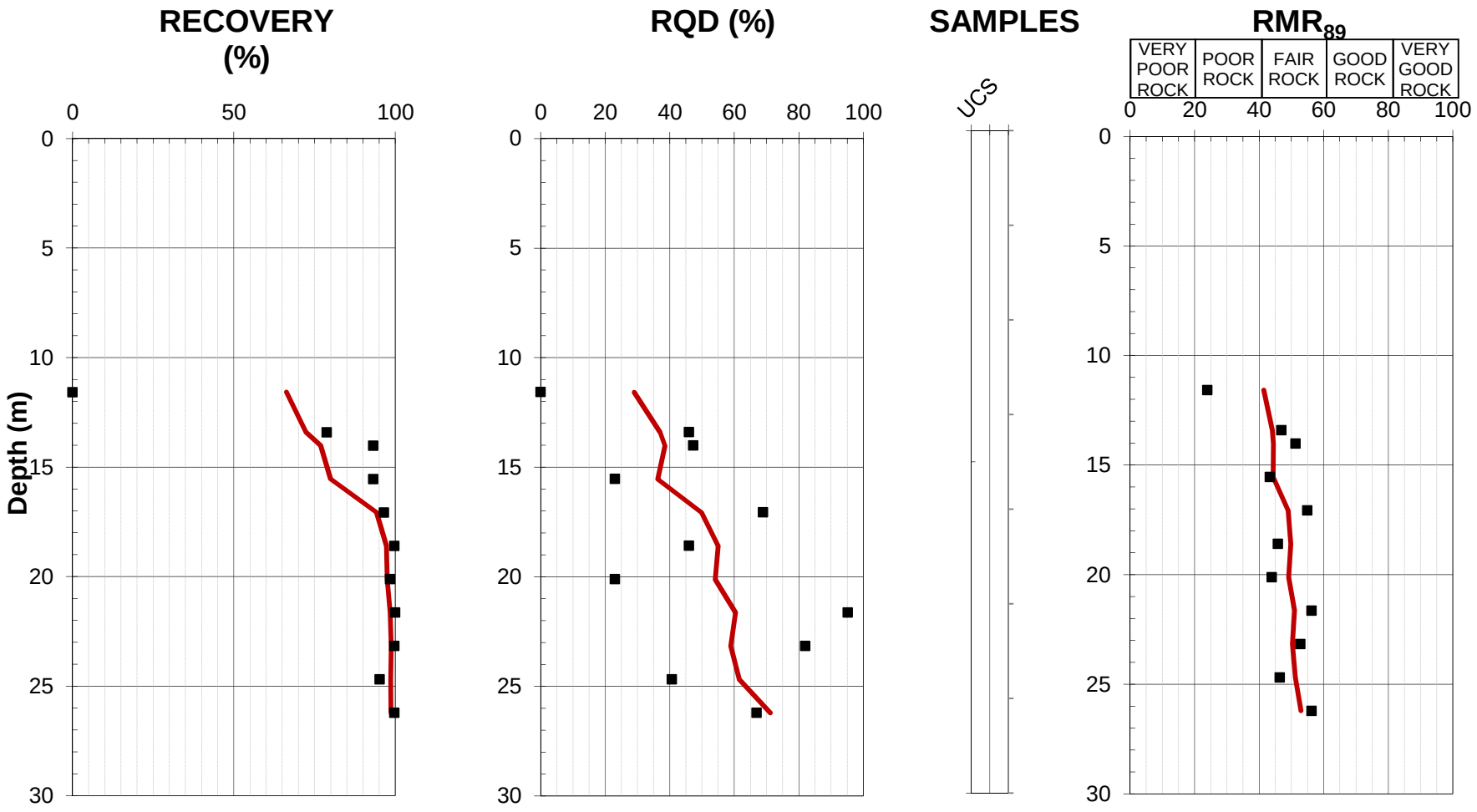
Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.12

REV 0



LEGEND:
- Data Point
- Moving Average (~10 m average)

NOTES:
1. RMR VALUES DISPLAYED ARE THE MINIMUM RMR OF EACH RUN.

REV	DATE	DESCRIPTION	PREP'	CHK'	APP'
0	21FEB'13	ISSUED WITH REPORT	JEF	BOC	KJB

NEW GOLD INC.

BLACKWATER GOLD PROJECT

DOWNHOLE PLOTS FOR GT12-28

Knight Piésold CONSULTING

P/A NO. VA101-457/6

REF. NO. 1

FIGURE B3.13

REV 0

APPENDIX C

WELL DETAILS AND HYDRAULIC CONDUCTIVITY TESTS

Appendix C1 Monitoring Well and Standpipe Details
Appendix C2 Lugeon Testing
Appendix C3 Response Testing

APPENDIX C1

MONITORING WELL AND STANDPIPE DETAILS

(Pages C1-1 to C1-71)

Knight Piésold CONSULTING

TABLE C1.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
MONITORING WELL SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Coordinates[1]		Elevation	Drilling Company	Drilling Technique	Drillhole Size	Total Depth	Depth to Bedrock	Completion Zone		Date of Water Level Measurement	Water Level After Installation	Hydraulic Conductivity	Purpose of Drillhole
	Northing	Easting												
	m	m	m				m	m	From (m)	To (m)	(dd-mm-yy)	(m below PVC)	(m/s)	
MW12-01-D	5,899,360.0	374,655	1,302	Westech Drilling	Odex Drilling	6"	40.8	13.6	30.42	40.84	04/04/2012	13.11	$<1 \times 10^{-08}$	Northern abutment of TSF
MW12-01-S	5,899,360.0	374,658	1,302	Westech Drilling	Odex Drilling	6"	13.6	10.4	7.62	13.56	04/04/2012	10.37	n/a	
MW12-02-D	5,894,670.0	374,690	1,406	Westech Drilling	Odex Drilling	6"	41.2	-	34.75	39.01	14/04/2012	5.93	6×10^{-6}	Downslope of NAG Waste Dump and Open Pit
MW12-02-S	5,894,670.0	374,704	1,407	Westech Drilling	Odex Drilling	6"	11.9	-	7.01	11.89	14/04/2012	1.55	9×10^{-6}	
MW12-03-D	5,893,860.0	376,013	1,465	Westech Drilling	Odex Drilling	6"	39.6	-	32.00	38.10	28/04/2012	25.99	4×10^{-5}	Downslope of Open Pit
MW12-03-S	5,893,860.0	376,004	1,465	Westech Drilling	Odex Drilling	6"	24.4	-	14.32	23.47	28/04/2012	dry	n/a	
MW12-04-D	5,892,500.0	374,110	1,558	Westech Drilling	Odex Drilling	6"	38.0	-	31.79	37.95	28/04/2012	3.39	2×10^{-5}	Outside Open Pit Area and upslope of NAG Waste rock
MW12-04-S	5,892,500.0	374,116	1,558	Westech Drilling	Odex Drilling	6"	14.8	-	8.99	14.78	28/04/2012	1.52	5×10^{-7}	
MW12-05-D	5,896,210.0	371,310	1,373	Westech Drilling	Odex Drilling	6"	27.7	12.5	21.64	27.74	30/04/2012	0.72	4×10^{-6}	Southern Starter Dam
MW12-05-S	5,896,210.0	371,309	1,373	Westech Drilling	Odex Drilling	6"	11.9	-	6.10	11.89	30/04/2012	1.59	$<1 \times 10^{-8}$	
MW12-06-D	5,896,470.0	374,807	1,278	Westech Drilling	Odex Drilling	6"	39.9	-	33.83	39.93	30/04/2012	36.69	$<1 \times 10^{-8}$	Downstream of Southern Starter Dam
MW12-06-S	5,896,470.0	374,804	1,278	Westech Drilling	Odex Drilling	6"	22.6	-	16.76	22.55	30/04/2012	9.77	8×10^{-6}	
MW12-07-D	5,899,440.0	376,395	1,221	Westech Drilling	Odex Drilling	6"	40.5	-	33.83	40.49	06/06/2012	18.23	2×10^{-4}	Downstream of TSF
MW12-07-S	5,899,440.0	376,399	1,221	Westech Drilling	Odex Drilling	6"	24.1	-	18.29	24.08	05/06/2012	18.46	1×10^{-4}	
MW12-08D	5,899,260.0	377,911	1,168	Westech Drilling	Odex Drilling	6"	36.4	-	29.70	36.42	19/08/2012	10.65	2×10^{-6}	Downstream of TSF
MW12-08S	5,899,260.0	377,911	1,168	Westech Drilling	Odex Drilling	6"	20.1	-	14.17	20.12	19/08/2012	12.27	9×10^{-5}	
MW12-09D	5,899,680.0	378,321	1,165	Westech Drilling	Odex Drilling	6"	34.4	-	28.65	34.44	19/08/2012	11.36	6×10^{-6}	Downstream of TSF
MW12-09S	5,899,680.0	378,321	1,165	Westech Drilling	Odex Drilling	6"	15.9	-	10.36	15.85	19/08/2012	11.42	n/a	
MW12-10D	5,892,260.0	375,033	1,665	Westech Drilling	Odex Drilling	6"	42.1	5.2	33.22	42.06	20/08/2012	18.00	$<1 \times 10^{-8}$	Upstream of Deposit, west
MW12-10S	5,892,260.0	375,033	1,665	Westech Drilling	Odex Drilling	6"	7.0	5.2	3.35	7.01	20/08/2012	dry	n/a	
MW12-11D	5,892,180.0	375,769	1,680	Westech Drilling	Odex Drilling	6"	46.6	17.0	36.27	46.63	20/08/2012	8.50	7×10^{-7}	Upstream of Deposit, east
MW12-11S	5,892,180.0	375,769	1,680	Westech Drilling	Odex Drilling	6"	19.8	17.0	14.02	19.81	21/08/2012	8.29	4×10^{-5}	
MW12-12D	5,896,250.0	378,490	1,245	Westech Drilling	Odex Drilling	6"	35.2	-	29.26	35.20	23/08/2012	2.18	1×10^{-7}	Downstream of TSF and Camp area
MW12-12S	5,896,250.0	378,490	1,245	Westech Drilling	Odex Drilling	6"	15.2	-	9.45	15.24	23/08/2012	2.00	1×10^{-4}	
MW12-13D	5,893,830.0	370,808	1,368	Westech Drilling	Odex Drilling	6"	39.5	-	35.81	38.86	12/09/2012	8.73	1×10^{-4}	West of TSF
MW12-13S	5,893,830.0	370,808	1,368	Westech Drilling	Odex Drilling	6"	13.4	-	9.14	13.41	12/09/2012	9.57	$>1 \times 10^{-4}$	
DK/MW-05	5,894,075.5	376,757	1,461	Westech Drilling	Odex Drilling	6"	39.3	-	33.4	39.32	21/08/2012	dry	n/a	Upstream of Camp Septic
DK/MW-06	5,893,974.5	376,837	1,445	Westech Drilling	Odex Drilling	6"	18.6	-	12.3	16.59	21/08/2012	dry	n/a	Downstream of Camp Septic

NOTES:

1. COORDINATE SYSTEM: UTM NAD83
2. GEOTECH (GT) DRILL HOLES ALONG EMBANKMENT ALIGNMENTS; EOH WHEN HYDRAULIC CONDUCTIVITY OF 10-5 cm/s OR LESS IN TWO CONSECTIVE PACKER TESTS
3. PACKER TESTS TO BE CONDUCTED EVERY APPROX. 6 m IN COMPETENT BEDROCK
2. HYDROGEO (MW) DRILL HOLES MAX DEPTH APPROX 40 m
3. MORE ACCURATE LOCATION OF DRILL HOLE COLLARS PENDING SURVEYING BY ALLNORTH

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	11SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	26JUL'13	ISSUED WITH REPORT	JS	BB	KJB

TABLE C1.2

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
STANDPIPE AND VIBRATING WIRE SUMMARY

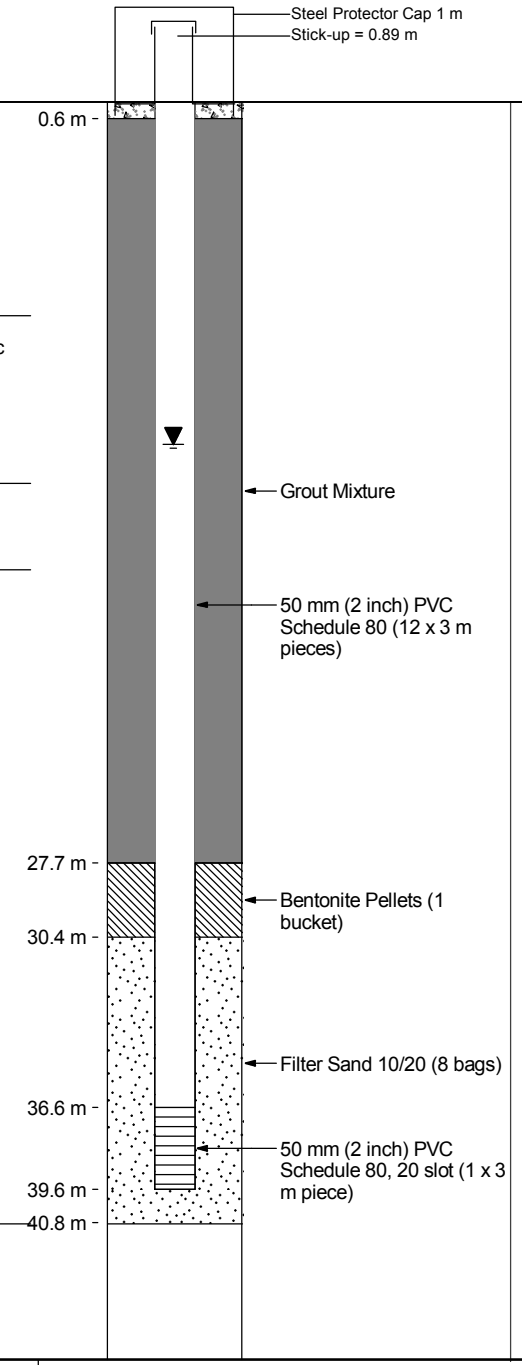
Print Sep/20/13 9:01:03

Drillhole Identification #	Piezometer #	Installation Depth (m)		Material Monitored	Groundwater Measurement (m)	Piezometric Head (m)
		From	To			
GT12-01	VW21108	27.4		sand and gravel	130	1385.8
	standpipe	66.9	73.2	highly weathered bedrock	23.4	
GT12-02	VW21106	13		sand and gravel	-74	1143.2
	VW21110	36		sand and gravel	106	1323.3
	VW18565	95		weathered bedrock	221	1437.9
GT12-03	standpipe	53.3	58.8	Completely/highly weathered bedrock	27.5	
GT12-04	standpipe	66.4	74.1	Sand and gravel	54.9	
GT12-05	VW21107	11		sand and gravel	damaged	damaged
	VW21109	28		sand and gravel	-2	1365.6
	VW18566	80		weathered bedrock	113	1480.7
GT12-06	standpipe	45.7	51.8	highly weathered bedrock	31.2	
GT12-07	standpipe	13.7	19.8	moderately weathered bedrock	6.8	
GT12-08	standpipe	6.1	12.2	slightly weathered bedrock	4.6	
GT12-09	standpipe	105	111.3	highly weathered bedrock	32.3	
GT12-10	standpipe	26.6	32.9	slightly weathered bedrock	17.6	
GT12-11	standpipe	10.7	15.5	moderately/slightly weathered bedrock	12.5	
GT12-12	standpipe	18.3	24.4	completely weathered bedrock	dry	
GT12-28	standpipe	11	14.9	slightly weathered bedrock	3	

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	26JUL'13	ISSUED FOR REPORT	JS	BB	KJB

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**21/03/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.84 m**	Date Installation:	**21/03/2012**
Coordinates:	**5,899,360 N , 374,655 E (UTM NAD 83)**	Elevation:	**1302 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**120.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1297	5		GRAVELLY SILT Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.
1292	10		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, purple, very dense, massive moist to dry.
1287	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, hard, massive, moist to wet.
1282	20		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered
1277	25		
1272	30		
1267	35		
1262	40		
1257	45		



NOTES

Water Level measured at 12.22 mbgs on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-01D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.2**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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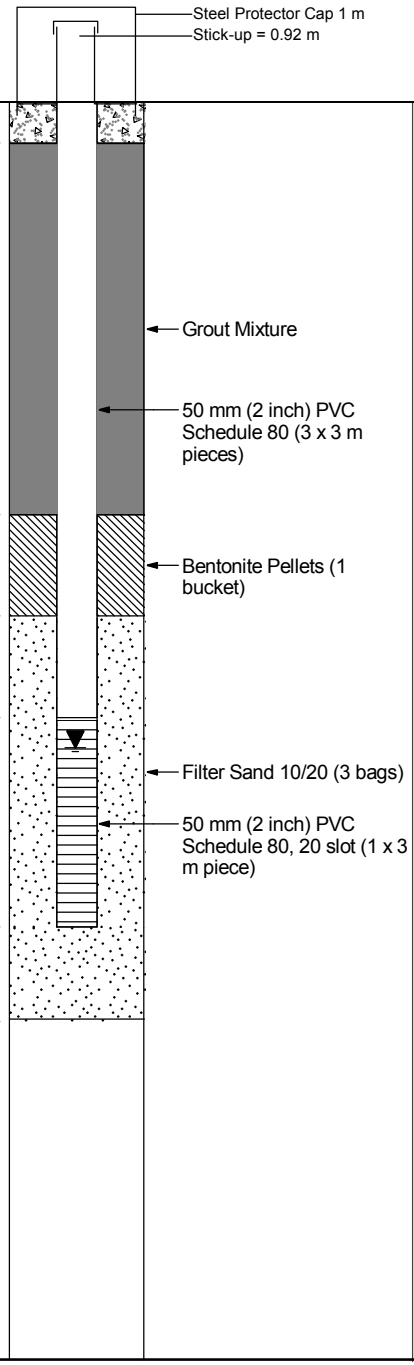
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**22/03/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**13.56 m**	Date Installation:	**22/03/2012**
Coordinates:	**5,899,360 N , 374,658 E (UTM NAD 83)**	Elevation:	**1302 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			GRAVELLY SILT Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.	0.6 m
1297	5			
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, light grey/brown, very dense, massive, moist to dry	7.6 m
			COMPLETELY WEATHERED BEDROCK Sandy SILT, some gravel, angular to subangular, fine to coarse, low to medium plasticity, dark greenish brown, hard, moist to wet	9.1 m
1292	10		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.	12.2 m
				13.6 m
1287	15			



NOTES

Water Level measured at 9.45 mbgs on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-01S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.3	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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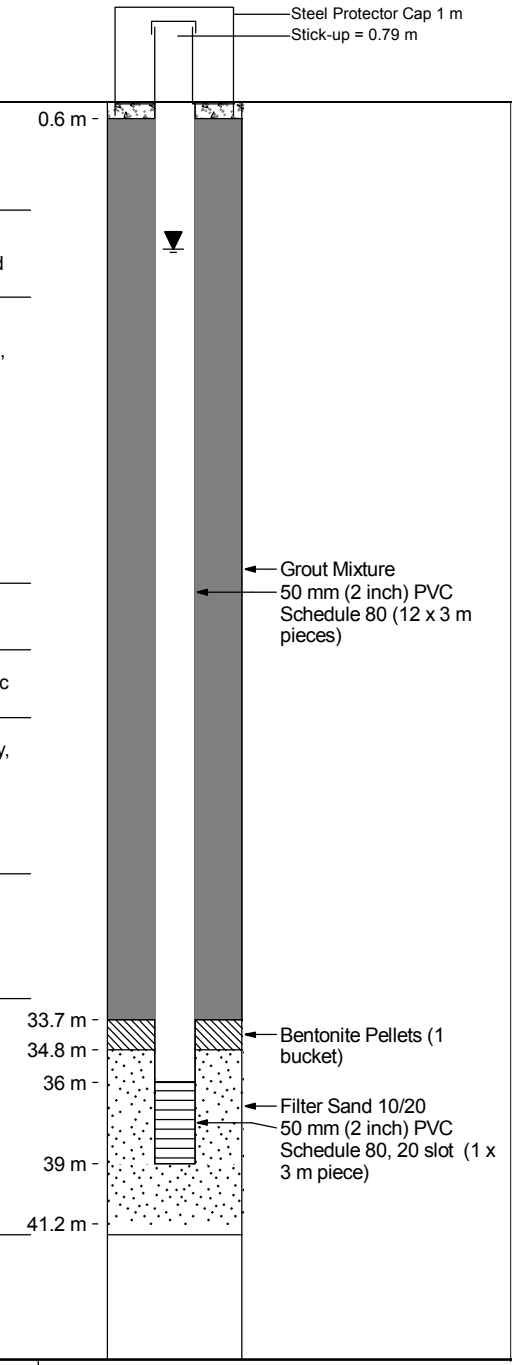
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/04/2012**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**41.61 m**	Date Installation:	**04/05/2012**
Coordinates:	**5,894,670 N , 374,690 E (UTM NAD 83)**	Elevation:	**1406 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1401	5		**SILTY SAND AND GRAVEL** Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.
			SANDY SILT Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.
1396	10		**SILTY SAND** Silty SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, non plastic, brown, dense to very dense, massive, dry.
1391	15		
1386	20		**SILT** SILT, some to trace sand, fine to coarse, low to medium plasticity, brown, very stiff to hard, moist.
			SANDY GRAVEL AND SILT Sandy GRAVEL and SILT, subangular, fine to coarse, non plastic to low plasticity, very dense, brown, moist.
1381	25		**CLAYEY SILT** Clayey SILT, some sand, fine to coarse, low to medium plasticity, brown, hard, varved, friable, wet.
1376	30		**GRAVELLY SILT** Gravelly SILT, some sand, angular, fine to coarse, low plasticity, brown, very stiff to hard, fine fluvial sand lamination, moist.
1371	35		**SILTY SAND** Silty SAND, fine to coarse, low to medium plasticity, brown, compact to dense, massive, moist.
1366	40		
1361	45		



NOTES

Water Level measured at 5.14 mbgs on 14/04/2012

Water return at 35.1 m

Water bearing layer (35.05 m to 41.15 m) - 1 gal/min

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-02D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.4	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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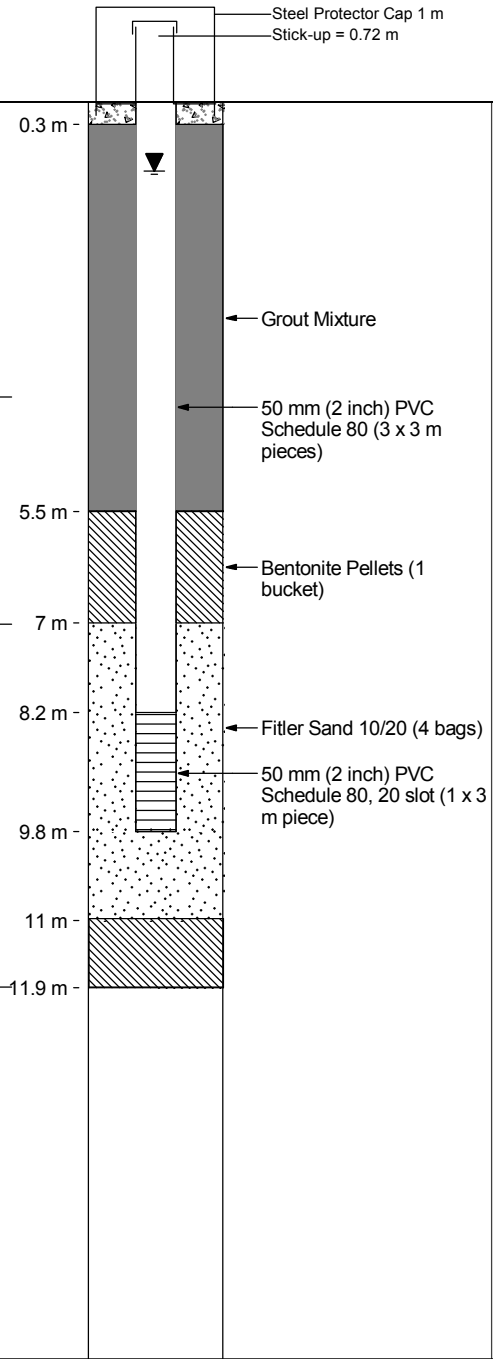
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/05/2012**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**11.89 m**	Date Installation:	**04/06/2012**
Coordinates:	**5,894,670 N , 374,704 E (UTM NAD 83)**	Elevation:	**1407 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.	
1402	5		SANDY SILT Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.	
			SILTY SAND Silty SAND, trace gravel, subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, moist.	
1397	10			
1392	15			



NOTES

Water Level measured at 0.83 mbgs on 14/04/2012

Water return at 8.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-02S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.5	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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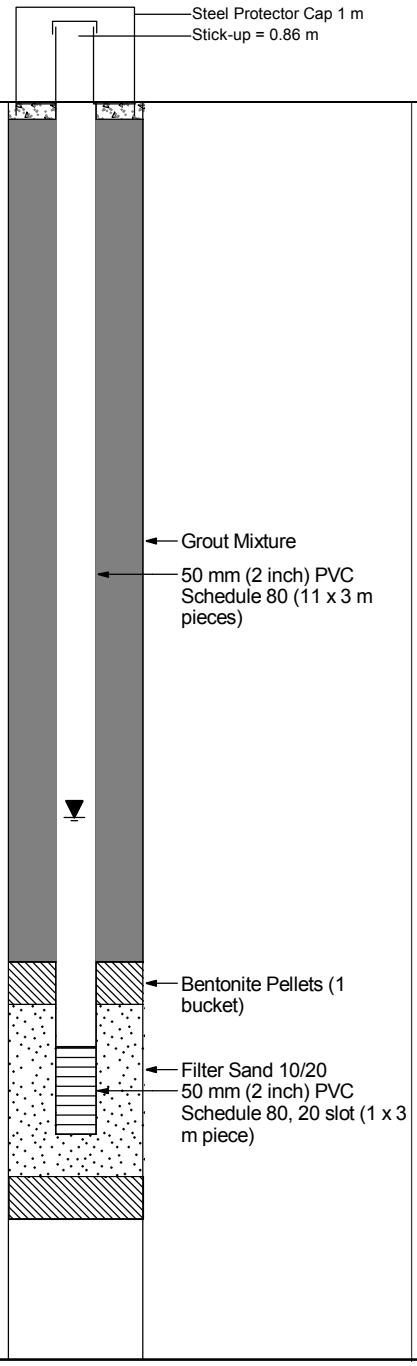
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/10/2012**
Location:	**Downslope of Deposit**	Total Depth:	**39.62 m**	Date Installation:	**04/12/2012**
Coordinates:	**5,893,860 N , 376,013 E (UTM NAD 83)**	Elevation:	**1465 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			SILTY SAND Silty SAND, trace gravel, subrounded and subangular, fine to coarse, low plasticity, brown/yellow, loose to very dense, massive, wet.	0.6 m
1460	5		SILTY SAND Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.	
1455	10			
1450	15			
1445	20			
1440	25			
1435	30		SANDY GRAVEL Sandy GRAVEL, trace silt, angular to rounded, fine to coarse, brown grey yellow, dense to very dense, massive, moist.	30.5 m 32 m
			SILTY SAND Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.	33.5 m
1430	35		SAND SAND, some gravel, trace cobbles, subrounded, fine to coarse, non plastic, brown, very dense, massive, moist.	36.6 m
			SANDY SILT Sandy SILT, some gravel, subangular, fine to coarse, low to medium plasticity, dark brown, hard, massive, moist.	38.1 m 39.6 m
1425	40			



NOTES

Water Level measured at 25.13 mbgs on 28/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-03D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.6	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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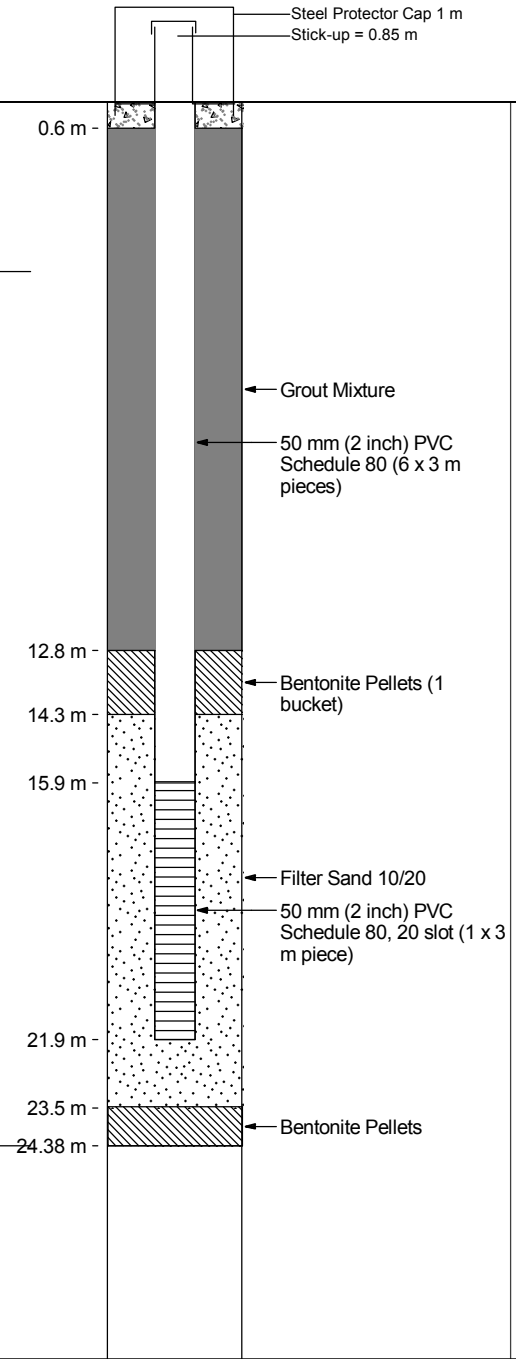
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**13/04/2012**
Location:	**Downslope of Deposit**	Total Depth:	**24.38 m**	Date Installation:	**13/04/2012**
Coordinates:	**5,893,860 N , 376,004 E (UTM NAD 83)**	Elevation:	**1465 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m) | DEPTH - (m) | GRAPHIC LOG

1460 — 5
1455 — 10
1450 — 15
1445 — 20
1440 — 25

SILTY SAND
Silty SAND, trace gravel, subrounded to subangular, fine to coarse, low plasticity, brown/yellow, compact, massive, moist.

SILTY SAND
Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, moist.



NOTES

Well was dry on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-03S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.7	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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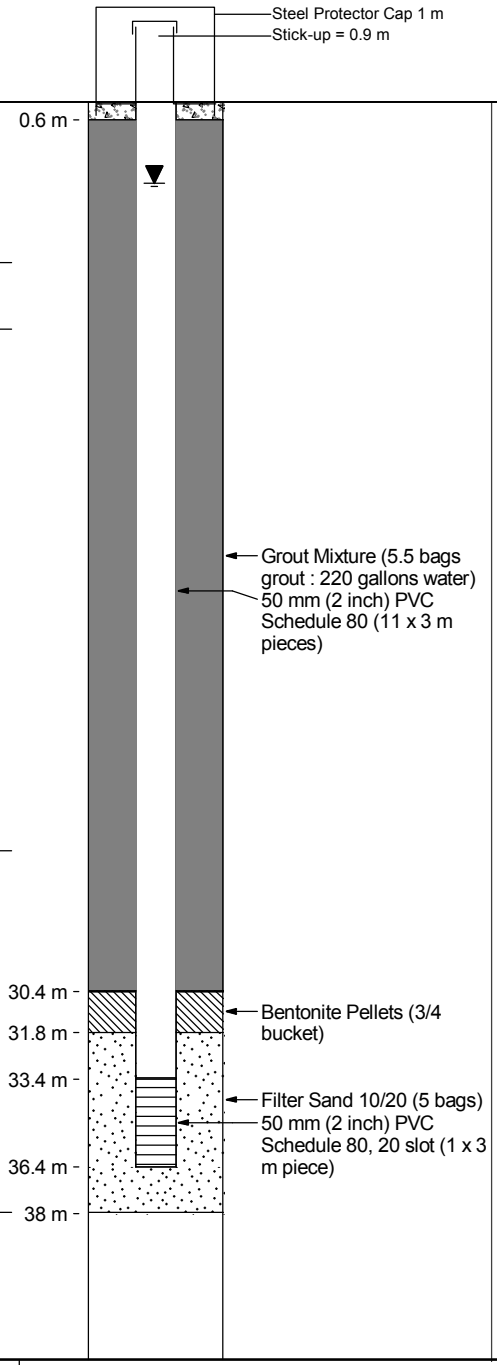
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**14/04/2012**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**37.95 m**	Date Installation:	**15/04/2012**
Coordinates:	**5,892,500 N , 374,110 E (UTM NAD 83)**	Elevation:	**1558 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			FILL Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.
1553	5		SAND AND GRAVEL SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry.
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, hard, massive, moist.
1548	10		
1543	15		
1538	20		
1533	25		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1528	30		
1523	35		
1518	40		



NOTES

Water Level measured at 2.53 mbgs on 28/04/2012

Water return at 3.4 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-04D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.8**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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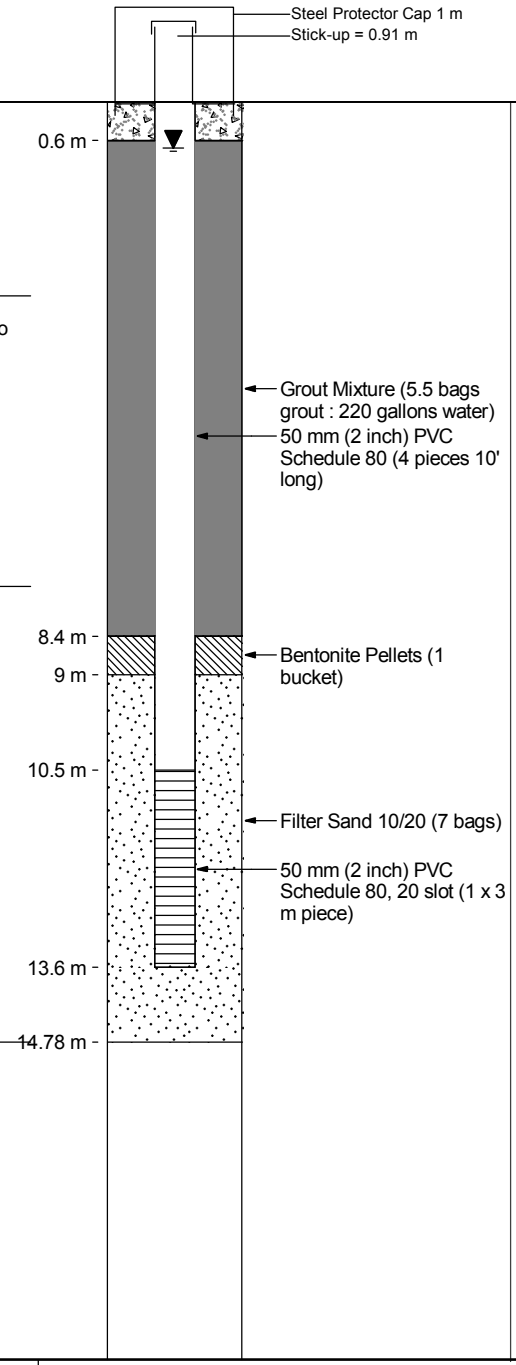
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**15/04/2012**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**14.78 m**	Date Installation:	**15/04/2012**
Coordinates:	**5,892,500 N , 374,116 E (UTM NAD 83)**	Elevation:	**1558 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			FILL Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry to moist.
1553	5		
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff to hard, massive, moist.
1548	10		
1543	15		



NOTES

Water Level measured at 0.61 mbgs on 28/04/2012

Water return at 6.1 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-04S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.9**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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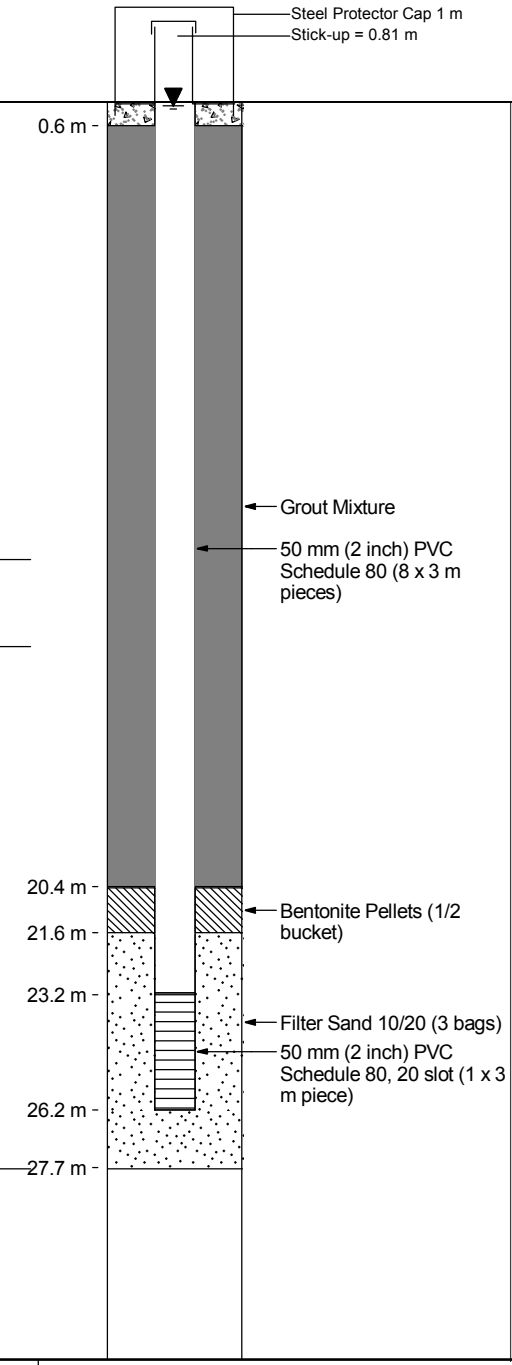
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**27/04/2012**
Location:	**South of TSF**	Total Depth:	**27.74 m**	Date Installation:	**27/04/2012**
Coordinates:	**5,896,210 N , 371,310 E (UTM NAD 83)**	Elevation:	**1373 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**120.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.
1368	5		
1363	10		Boulder
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist to wet.
1358	15		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered
1353	20		
1348	25		
1343	30		



NOTES

Water Level measured at 0.09 mags on 30/04/2012

Water return at 23.8 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-05D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.10	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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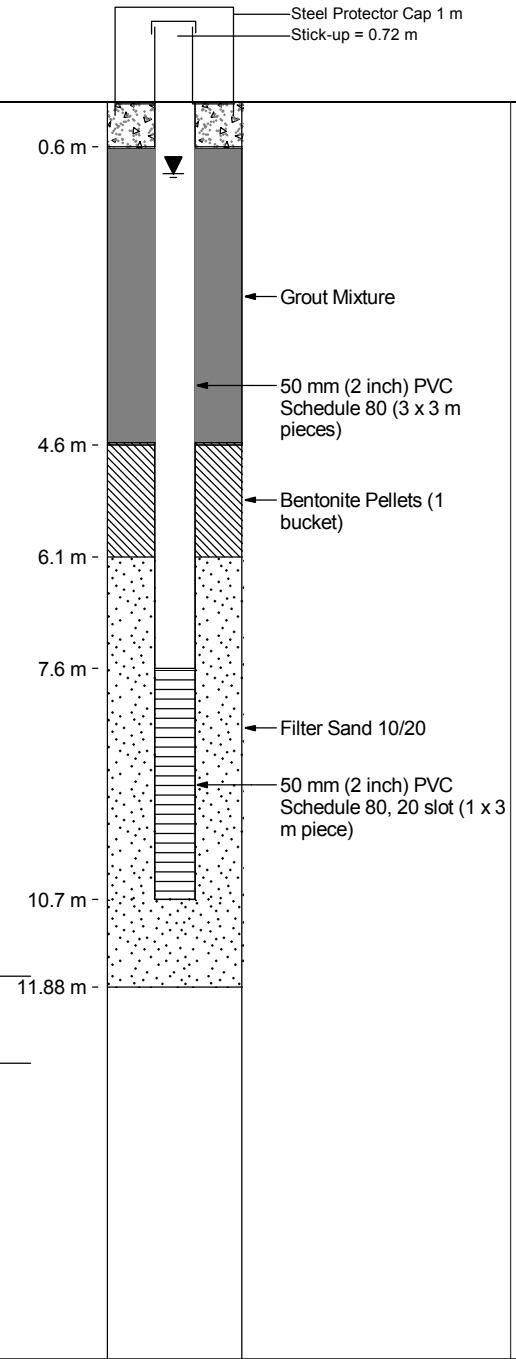
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**27/04/2012**
Location:	**South of TSF**	Total Depth:	**11.88 m**	Date Installation:	**28/04/2012**
Coordinates:	**5,896,210 N , 371,309 E (UTM NAD 83)**	Elevation:	**1373 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.	
1368	5			
1363	10			
			COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular to subangular, fine to coarse, low plasticity, purple brown and greeny grey, hard, massive, moist to wet.	11.88 m
1358	15			



NOTES

Water Level measured at 0.87 mbgs on 30/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-05S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.11	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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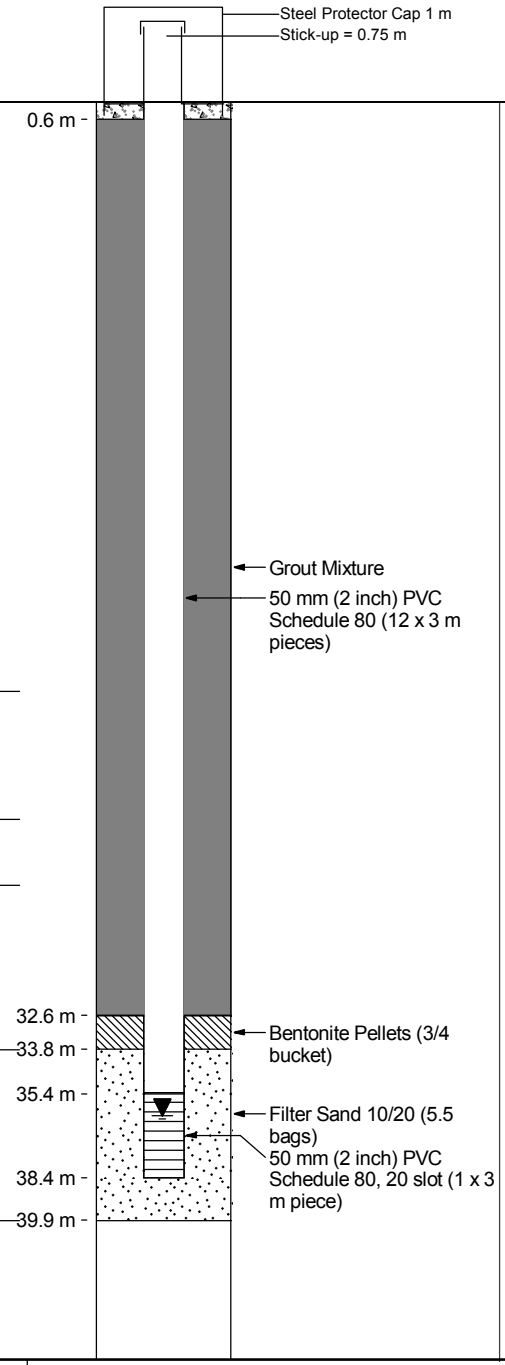
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**28/04/2012**
Location:	**Downstream of Site C Embankment**	Total Depth:	**39.93 m**	Date Installation:	**28/04/2012**
Coordinates:	**5,896,470 N , 374,807 E (UTM NAD 83)**	Elevation:	**1278 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1273	5		SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.
1268	10		
1263	15		
1258	20		SILT SILT, trace sand, some cobbles, subrounded, fine to coarse, low plasticity, brown, hard, massive, moist to wet.
1253	25		SAND SAND, some gravel, trace silt, angular to subangular, fine to coarse, non-plastic, brown, very dense, massive, moist.
1248	30		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist.
1243	35		SILT SILT, some sand, fine to coarse, uniformly graded, low to medium plasticity, orange brown, hard, massive, moist.
1238	40		



NOTES

Water Level measured at 35.94 mbgs on 30/04/2012

Water return at 19.5 m

Water return at 33.2 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-06D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.12**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**28/04/2012**
Location:	**Downstream of Site C Embankment**	Total Depth:	**22.55 m**	Date Installation:	**29/04/2012**
Coordinates:	**5,896,470 N , 374,804 E (UTM NAD 83)**	Elevation:	**1278 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		NOTES
			Steel Protector Cap 1 m Stick-up = 0.89 m	
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.	Water Level measured at 8.88 mbgs on 30/04/2012
1273	5			
1268	10			
1263	15		GRAVELLY SILT Gravelly SILT, trace sand, subrounded, fine to coarse, low plasticity, dark brown, hard, massive, moist to wet.	
1258	20		SANDY SILT Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low plasticity, yellow to brown, hard, massive, moist.	
1253	25			

0.6 m
15.2 m
16.8 m
18.3 m
21.5 m
22.6 m

Grout Mixture
50 mm (2 inch) PVC Schedule 80 (7 x 3 m pieces)
Bentonite Pellets (1 bucket)
Filter Sand 10/20
50 mm (2 inch) PVC Schedule 80, 20 slot (1 x 3 m piece)

Water return at 21.0 m - approximately 0.5 gal/min

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-06S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.13	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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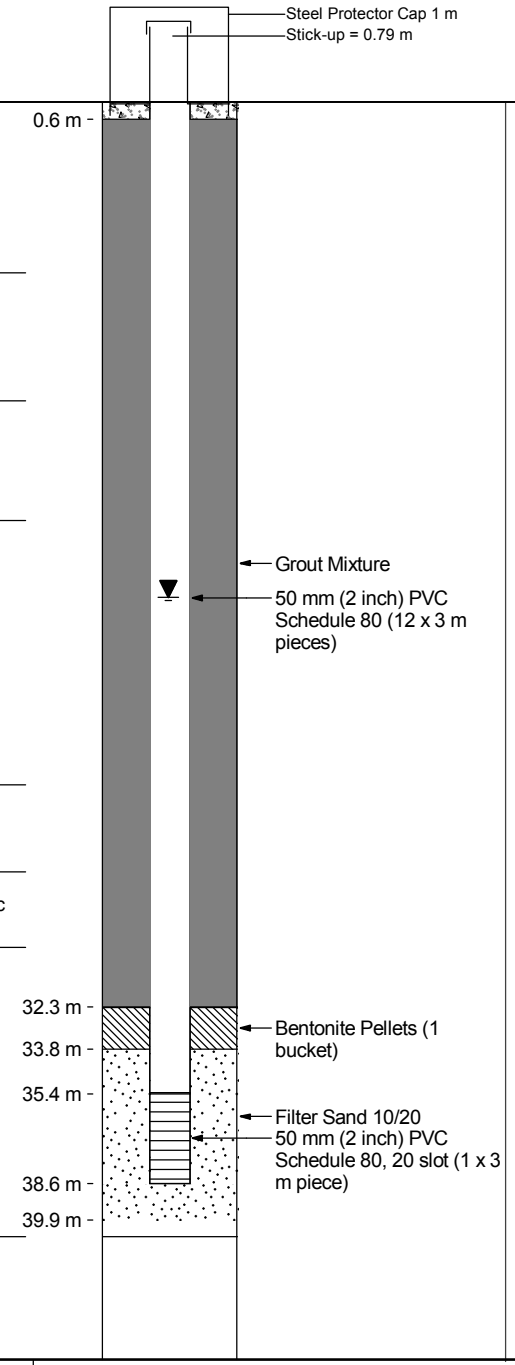
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**29/04/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.49 m**	Date Installation:	**30/04/2012**
Coordinates:	**5,899,440 N , 376,395 E (UTM NAD 83)**	Elevation:	**1221 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1216	5		**SAND AND SILT** SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, stiff to very stiff, dense to very dense, massive, moist to dry.
1211	10		**SAND AND GRAVEL** SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1206	15		**SAND** SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, brown, very dense, stratified, dry to moist.
1201	20		**SAND AND GRAVEL** SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, dense to very dense, massive, wet.
1196	25		**SILT AND SAND** SILT and SAND, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, very stiff to hard, dense to very dense, massive, wet.
1191	30		**SILTY SAND AND GRAVEL** Silty SAND and GRAVEL, subrounded, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1186	35		**SILTY SAND** Silty SAND, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very dense, massive, moist.
1181	40		



NOTES

Water Level measured at 17.44 mbgs on 06/06/2012

Water return at 18.0 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-07D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.14**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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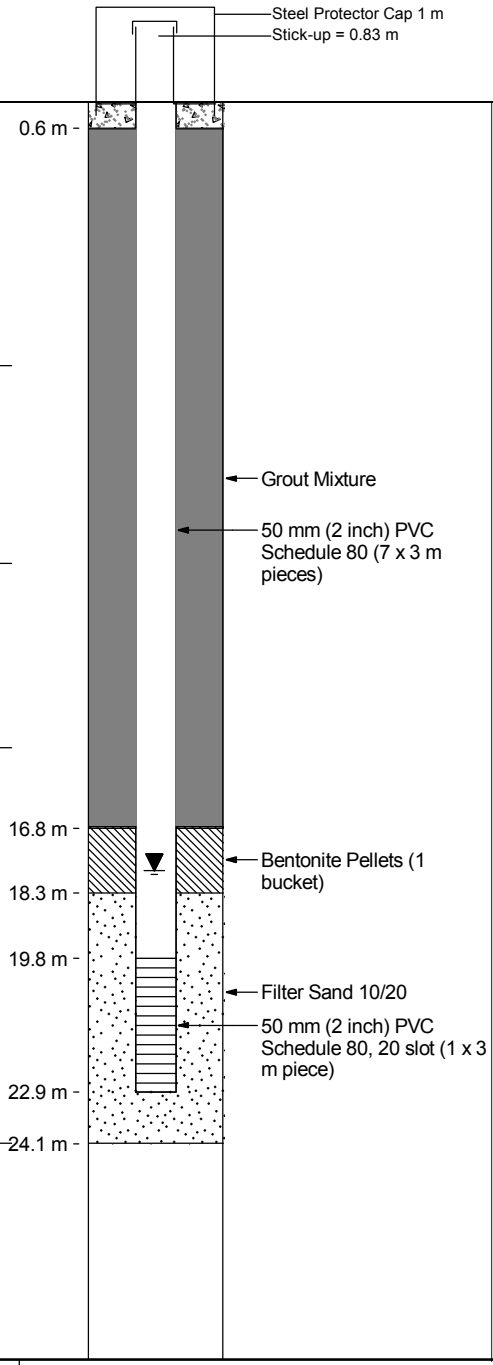
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**30/04/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**24.08 m**	Date Installation:	**30/04/2012**
Coordinates:	**5,899,440 N , 376,399 E (UTM NAD 83)**	Elevation:	**1221 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SAND AND SILT SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, firm to stiff, compact to dense, massive, moist to dry.
1216	5		SAND AND GRAVEL SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1211	10		SAND SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, cohesive, brown, dense to very dense, stratified, dry to moist.
1206	15		SAND AND GRAVEL SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, very dense, massive, wet.
1201	20		
1196	25		



NOTES

Water Level measured at 17.63 mbgs on 05/06/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-07S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.15	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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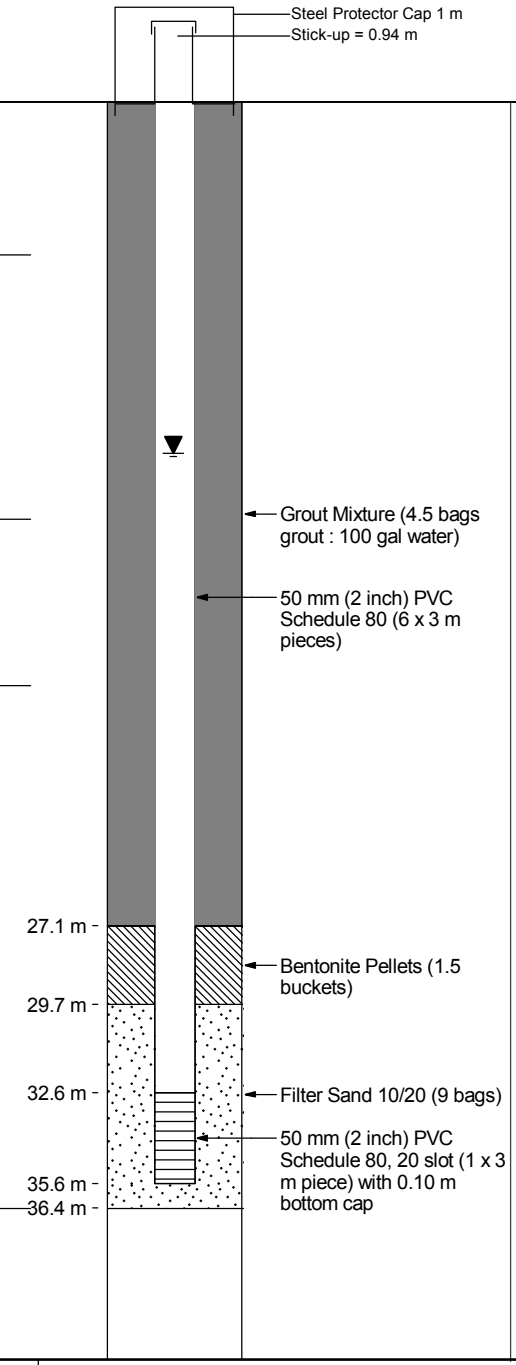
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**08/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**36.42 m**	Date Installation:	**09/08/2012**
Coordinates:	**5,899,192 N , 377,889 E (UTM NAD 83)**	Elevation:	**1181 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1176	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.
1171	10		SANDY SILT Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.
1166	15		SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1161	20		SAND AND GRAVEL SAND and GRAVEL, some silt and clay, subangular to subrounded, fine to coarse, brown yellow, dense to very dense, massive, moist.
1156	25		
1151	30		
1146	35		
1141	40		



NOTES

Water Level measured at 11.33 mbgs on 19/08/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-08D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.16**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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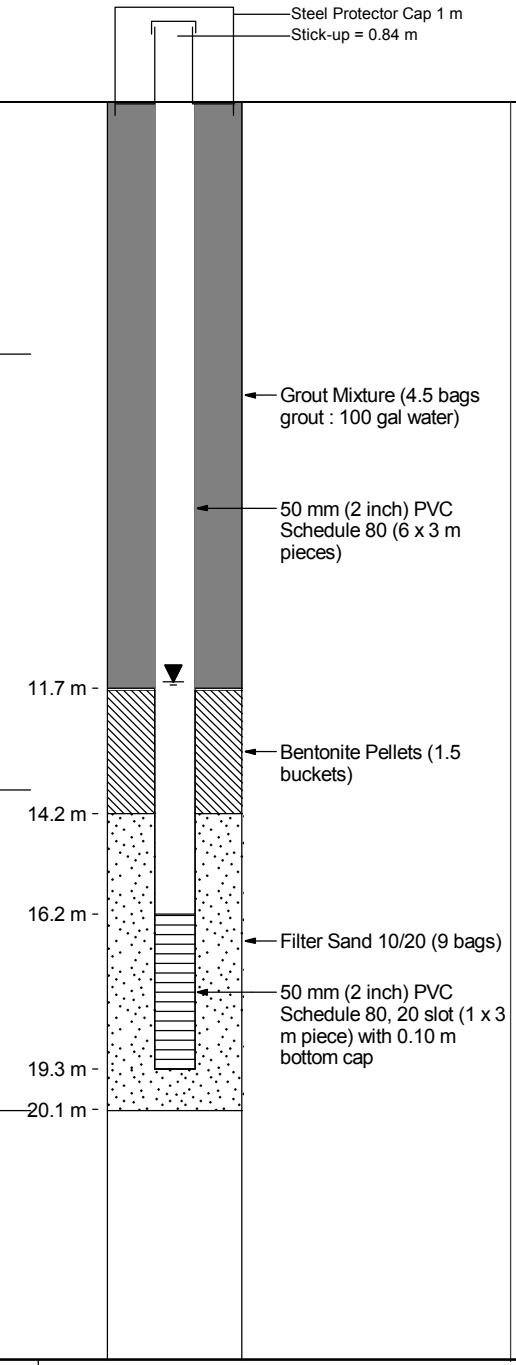
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**10/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**20.12 m**	Date Installation:	**11/08/2012**
Coordinates:	**5,899,198 N , 377,899 E (UTM NAD 83)**	Elevation:	**1181 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.
1176	5		SANDY SILT Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.
1171	10		
			SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1166	15		
1161	20		



NOTES

- Water Level measured at 11.43 mbgs on 19/08/2012
- Moisture at and below 4.5 m
- Water return on startup at 8.8 m
- Water return on startup at 10.4 m
- Water return on startup at 14.3 m
- ~3-5 gal/min at 15.3 m
- ~20 gal/min at 16.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-08S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.17**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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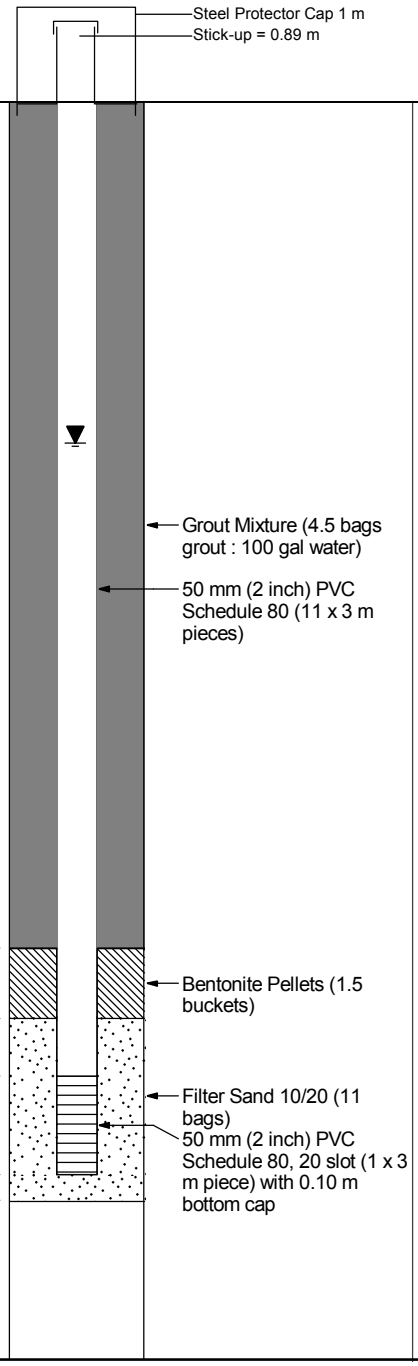
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**11/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**34.44 m**	Date Installation:	**12/08/2012**
Coordinates:	**5,899,688 N , 378,334 E (UTM NAD 83)**	Elevation:	**1167 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.
1162	5		SILT SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.
			SILT AND SAND SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.
1157	10		SILT SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1152	15		
			SILT AND SAND SILT and SAND, trace clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, moist.
1147	20		
1142	25		
1137	30		SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1132	35		SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.



NOTES

- Water Level measured at 10.47 mbgs on 19/08/2012
- ~3 gal/min 13 m to 15 m
- No water return on start up at 18 m
- ~0.5 gal/min on startup at 24.38m
- ~1-2 gal/min at 29 to 31.69 m
- ~ 3-5 gal/min at 32 to 34 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-09D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.18**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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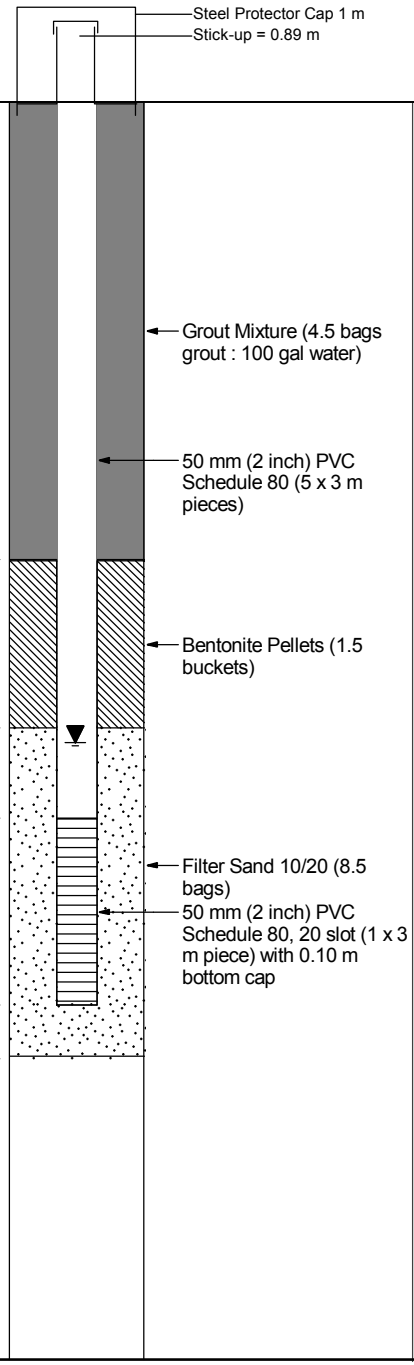
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**12/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.85 m**	Date Installation:	**13/08/2012**
Coordinates:	**5,899,687 N , 378,324 E (UTM NAD 83)**	Elevation:	**1167 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.
1162	5		SILT SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.
			SILT AND SAND SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.
1157	10		SILT SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1152	15		
1147	20		



NOTES

Water Level measured at 10.53 mbgs on 19/08/2012

~3 gal/min 13 m to 15 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-09S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.19**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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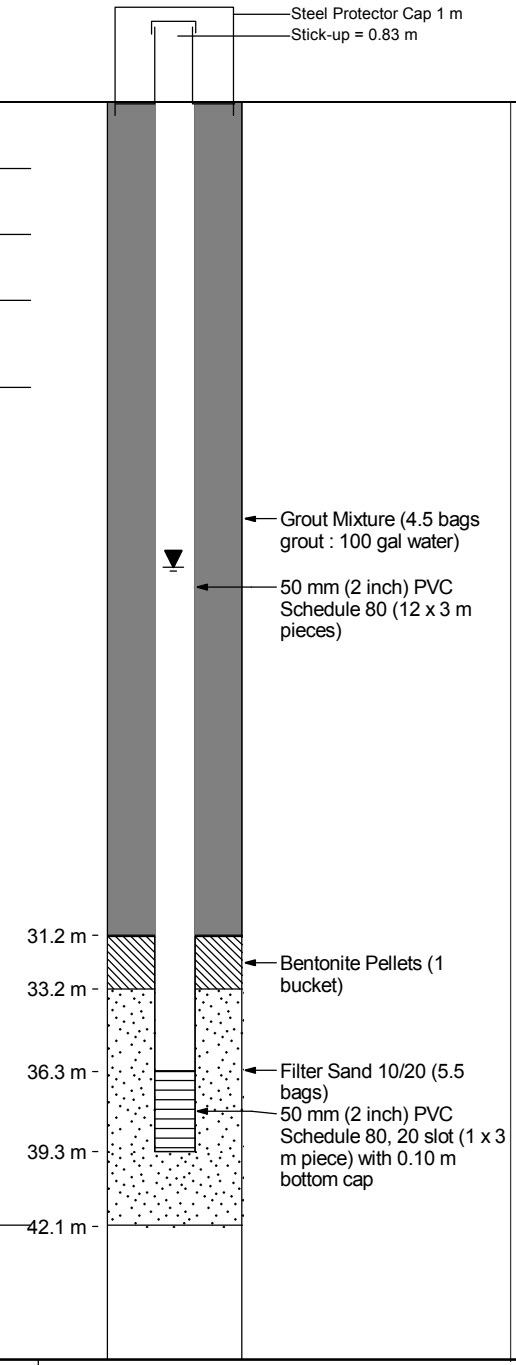
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**17/08/2012**
Location:	**Upslope West of Deposit**	Total Depth:	**42.06 m**	Date Installation:	**17/08/2012**
Coordinates:	**5,892,263 N , 375,045 E (UTM NAD 83)**	Elevation:	**1677 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.
			SILT AND SAND SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, dense, massive, moist to dry.
1672	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.
			COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.
1667	10		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1662	15		
1657	20		
1652	25		
1647	30		
1642	35		
1637	40		
1632	45		



NOTES

Water Level measured at 17.17 mbgs on 08/10/2012

Well was dry on 20/08/12

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-10D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.20**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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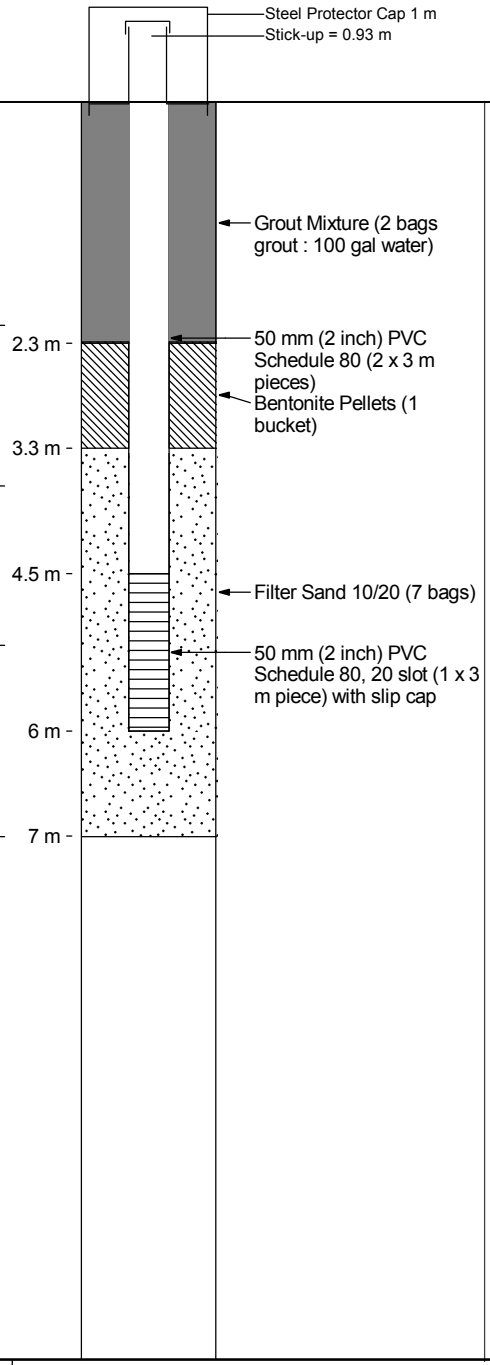
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**18/08/2012**
Location:	**Upslope West of Deposit**	Total Depth:	**7.01 m**	Date Installation:	**18/08/2012**
Coordinates:	**5,892,260 N , 375,037 E (UTM NAD 83)**	Elevation:	**1677 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.
			SILT AND SAND SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, compact to dense, massive, moist to dry.
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.
1672	5		**COMPLETELY WEATHERED BEDROCK** Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.
1667	10		



NOTES

Well was dry on 20/08/2012

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-10S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.21	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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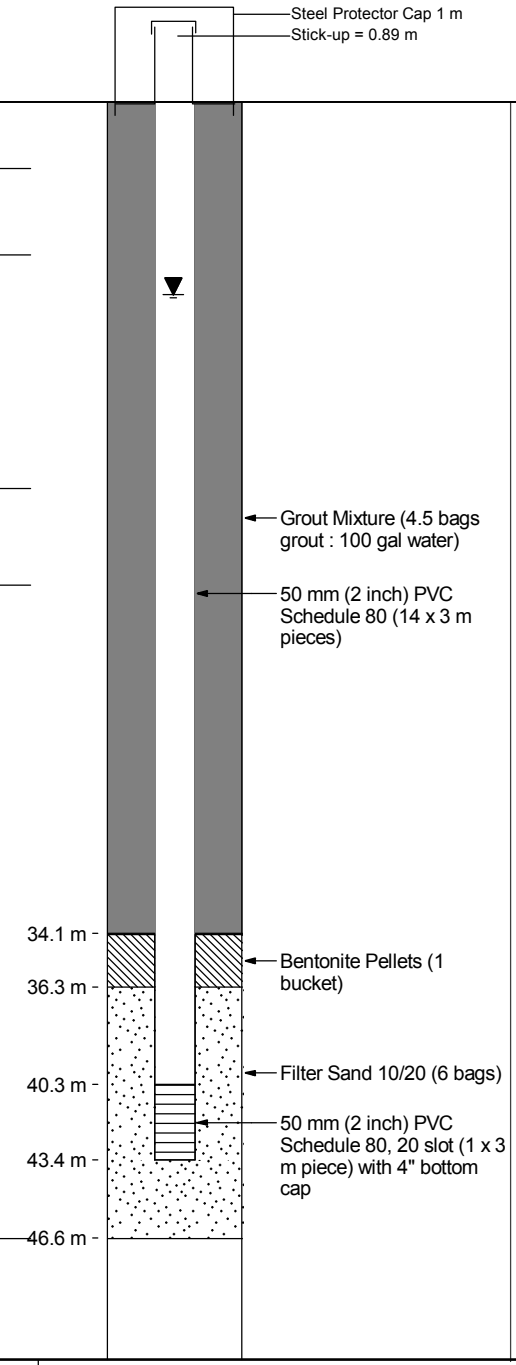
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**18/08/2012**
Location:	**Upslope East of Deposit**	Total Depth:	**46.63 m**	Date Installation:	**19/08/2012**
Coordinates:	**5,892,168 N , 375,773 E (UTM NAD 83)**	Elevation:	**1688 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1683	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
1678	10		
1673	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.
1668	20		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1663	25		
1658	30		
1653	35		
1648	40		
1643	45		
1638	50		



NOTES

Water Level measured at 7.61 mbgs on 20/08/2012

~2 gal/min water return 15.3 m to 19.8 m

~1 gal/min water return at 42.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-11D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.22**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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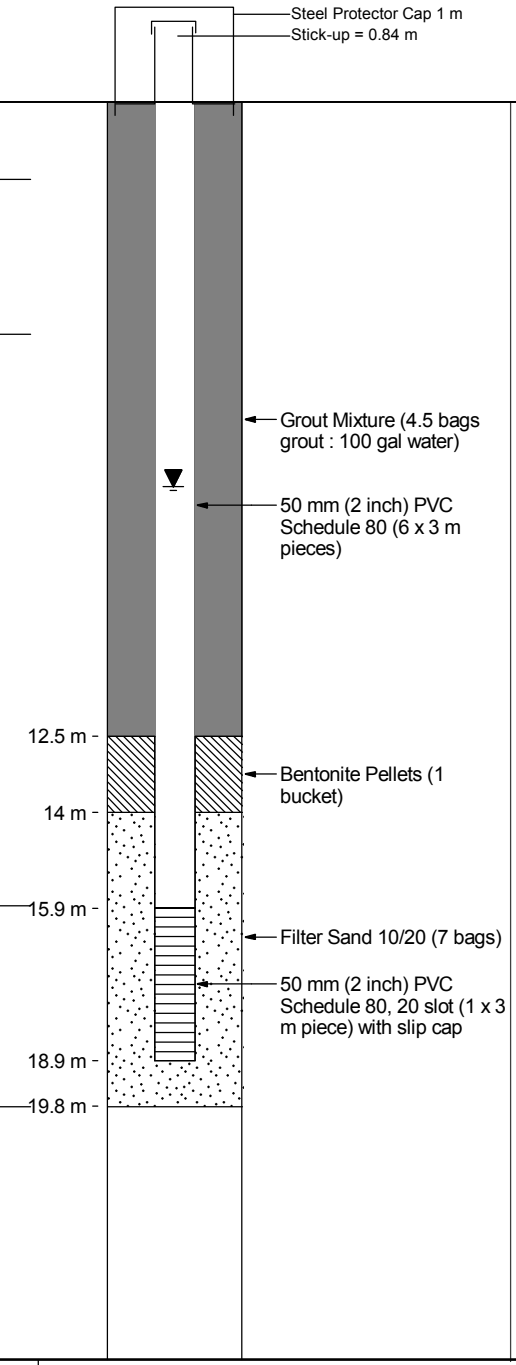
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**20/08/2012**
Location:	**Upslope East of Deposit**	Total Depth:	**19.81 m**	Date Installation:	**20/08/2012**
Coordinates:	**5,892,171 N , 375,782 E (UTM NAD 83)**	Elevation:	**1688 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.
1683	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, dense to very dense, massive, moist.
1678	10		
1673	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.
1668	20		



NOTES

Water Level measured at 7.45 mbgs on 21/08/2012

~2 gal/min water return 15.3 m to EOH

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-11S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.23**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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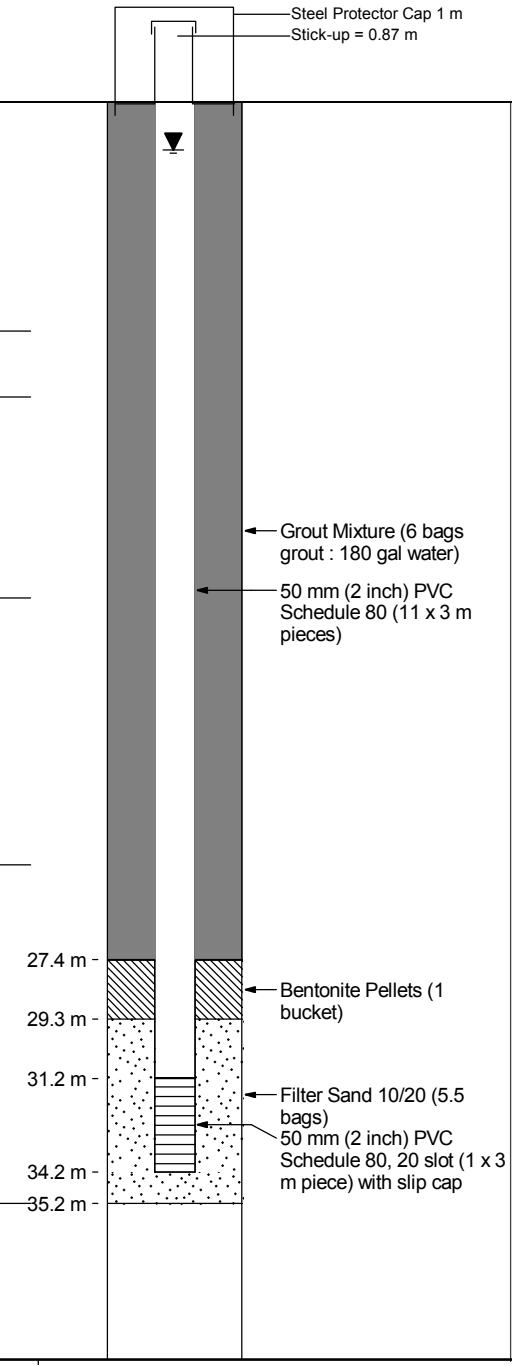
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**21/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**35.2 m**	Date Installation:	**22/08/2012**
Coordinates:	**5,896,260 N , 378,485 E (UTM NAD 83)**	Elevation:	**1256 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1251	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff and dense, massive, moist.
1246	10		SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1241	15		SILT AND SAND SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff, dense, massive, moist.
1236	20		
1231	25		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1226	30		
1221	35		
1216			



NOTES

Water Level measured at 1.31 mbgs on 23/08/2012

~1 gal/min water return from 4 to 7 m

~2 gal/min water return from 9 to 15 m

~2 gal/min water return from 33 m EOH

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-12D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.24**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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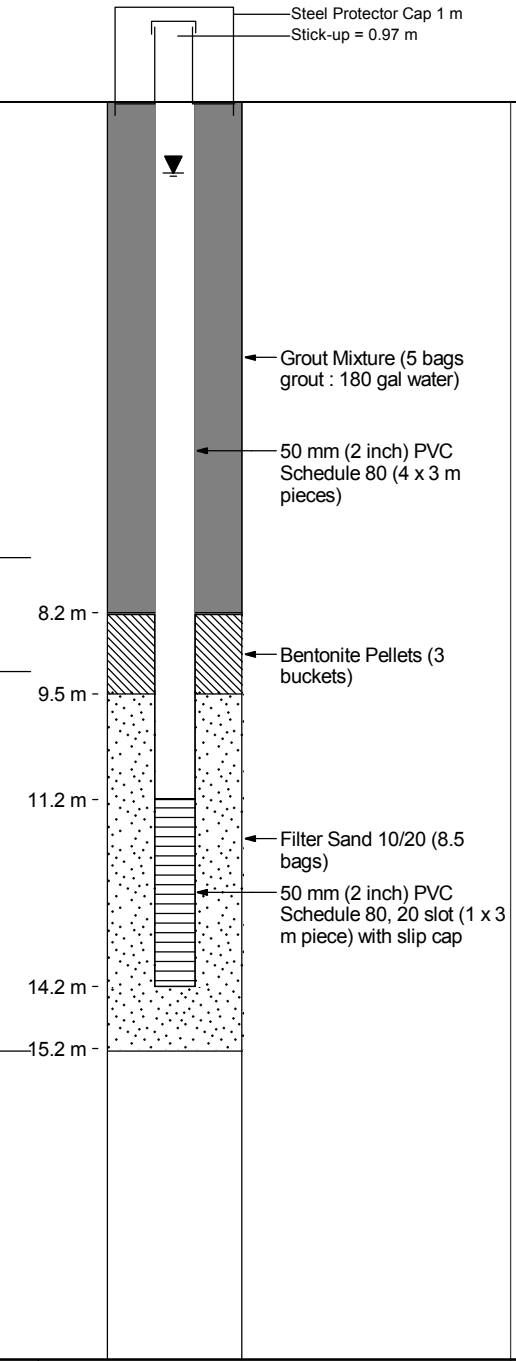
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**23/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.24 m**	Date Installation:	**23/08/2012**
Coordinates:	**5,896,256 N , 378,493 E (UTM NAD 83)**	Elevation:	**1256 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1251	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobble, subrounded, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff, dense, massive, moist.
1246	10		SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1241	15		
1236	20		



NOTES

Water Level measured at 1.03 mbgs on 23/08/2012

~1 gal/min water return from 4 to 7 m

~2 gal/min water return from 9 to EOH

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-12S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.25**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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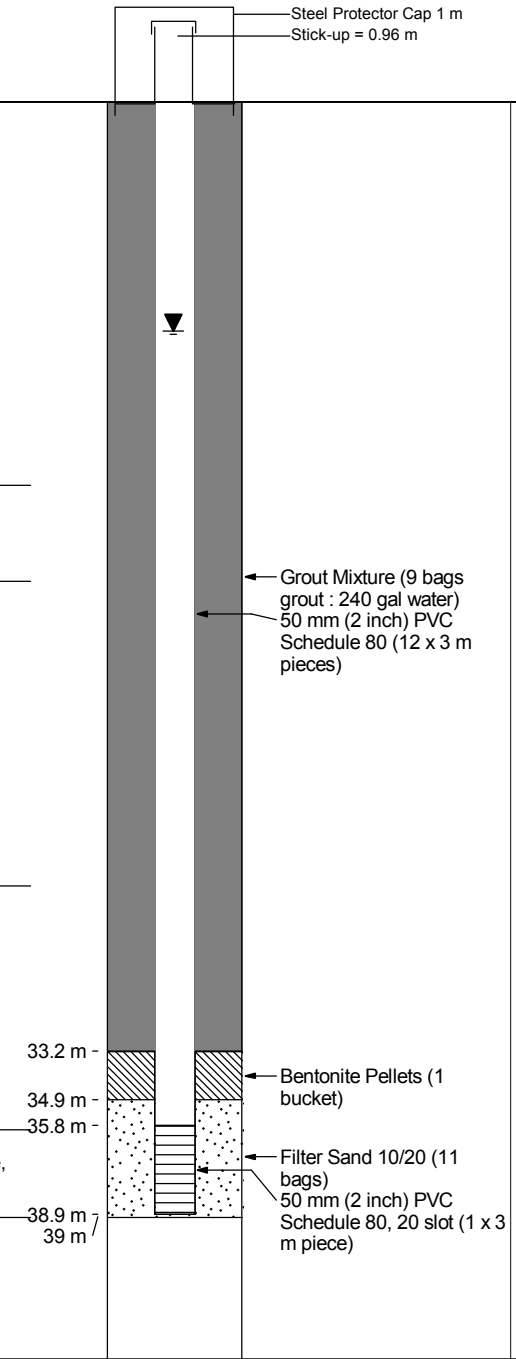
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**24/08/2012**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**39.01 m**	Date Installation:	**24/08/2012**
Coordinates:	**5,893,844 N , 370,815 E (UTM NAD 83)**	Elevation:	**1364 m**	Supervised by:	**JS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1359	5		**SAND AND GRAVEL** SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.
1354	10		
1349	15		**SILTY SAND** Silty SAND, trace gravel, subangular to subrounded, fine to coarse, low plasticity, grey, dense, massive, wet.
1344	20		**SANDY GRAVELLY SILT** Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey, very stiff to hard, massive, moist.
1339	25		
1334	30		**SILT** SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, grey, firm to very stiff, massive, moist.
1329	35		**GRAVELLY SILT** Gravelly SILT, some sand, trace clay, subangular, fine to coarse, low plasticity, brown, very stiff to hard, massive, wet.
1324	40		



NOTES

Water Level measured at 7.77 mbgs on 12/09/2012

Water return at 36.0 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-13D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.26**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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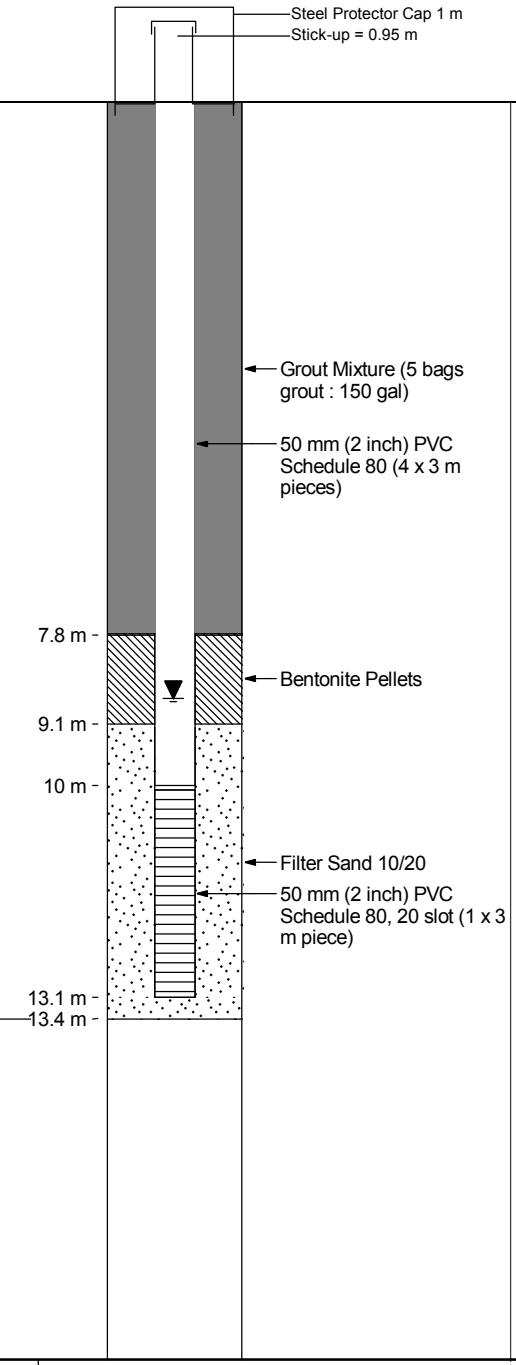
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**24/08/2012**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**13.41 m**	Date Installation:	**24/08/2012**
Coordinates:	**5,893,841 N , 370,809 E (UTM NAD 83)**	Elevation:	**1365 m**	Supervised by:	**JS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SAND AND GRAVEL SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.
1360	5		
1355	10		
1350	15		



NOTES

Water Level measured at 8.62 mbgs on 12/09/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-13S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.27	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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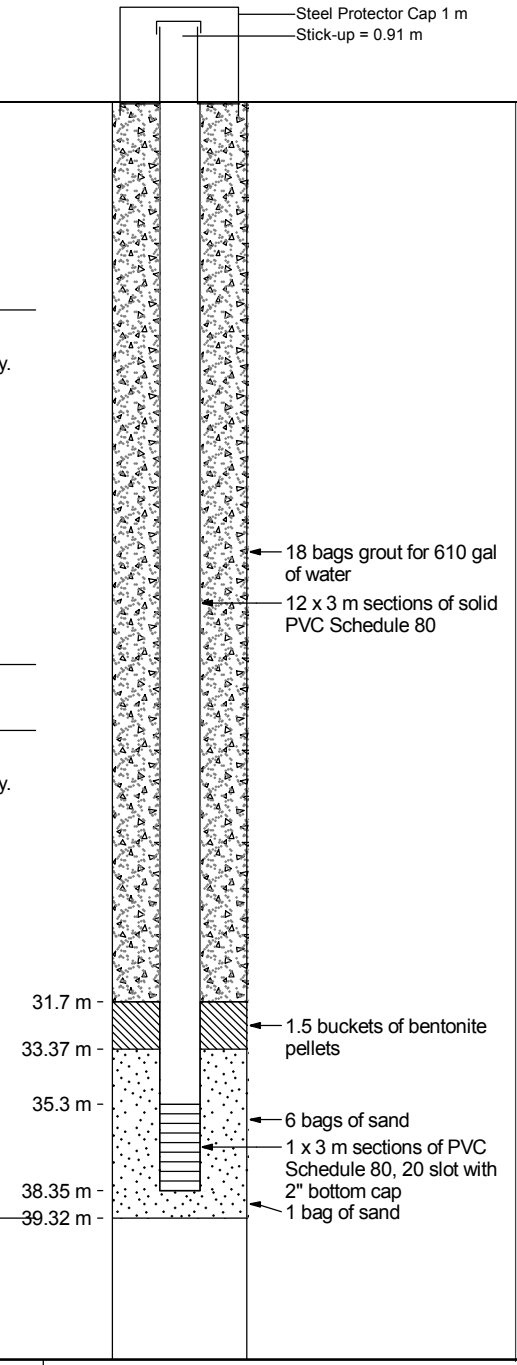
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No. **MW-05 (ODK)**		**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**14/08/2012**
Location:	**Upstream of Camp Septic Field**	Total Depth:	**39.32 m**	Date Installation:	**15/08/2012**
Coordinates:	**5,894,076 N , 376,758 E (UTM NAD 83)**	Elevation:	**1472 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1467	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to very dense, massive, moist
			GRAVEL AND COBBLES GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.
1462	10		
1457	15		
1452	20		SILT AND SAND SILT and SAND, angular, fine to coarse, low plasticity, brown, stiff to very stiff, dense, massive, dry.
			GRAVEL AND COBBLES GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.
1447	25		
1442	30		
1437	35		
1432	40		



NOTES

No observations of water return

Water level: dry

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW-05 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
APPENDIX C1.28	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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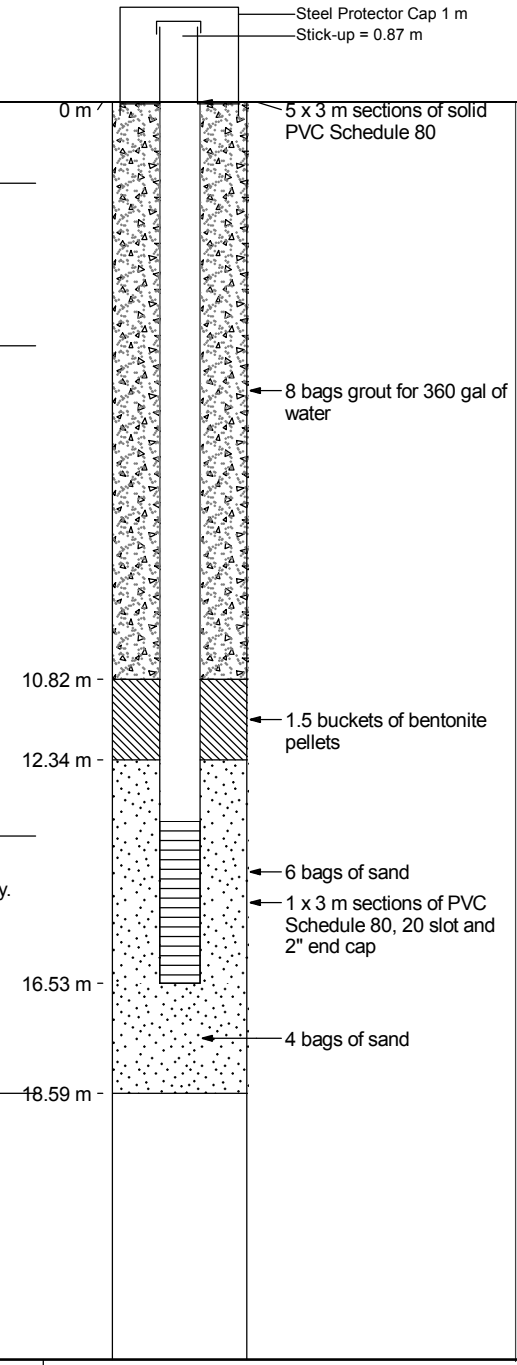
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No. **MW-06 (ODK)**		**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**16/08/2012**
Location:	**Downstream of Camp Septic Field**	Total Depth:	**18.59 m**	Date Installation:	**16/08/2012**
Coordinates:	**5,893,974 N , 376,839 E (UTM NAD 83)**	Elevation:	**1456 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to very dense, massive, moist.
			SILT AND SAND SILT and SAND, angular to subrounded, fine to coarse, slightly plastic, brown, stiff to very stiff, compact to dense, massive, moist.
1451	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1446	10		
			GRAVEL AND COBBLES GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.
1441	15		
1436	20		



NOTES

Water level: dry

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW-06 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
APPENDIX **C1.29**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-01**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**07/03/2012**
Location:	**Site D Embankment**	Total Depth:	**88.29 m**	Date Installation:	**14/03/2012**
Coordinates:	**5,898,690 N , 376,021 E (UTM NAD 83)**	Elevation:	**1245 m**	Supervised by:	**AL**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			Stick-up = 0.83 m	**NOTES**
			SILTY SAND Silty SAND, some gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, yellowish brown, compact to very dense, massive, moist to wet.	0.61 m
1240	5			
1235	10			
1230	15		BOULDER from 12.80m to 13.41m. Cuttings are pink, hard with sharp edges.	
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse grained, low to medium plasticity, brown, stiff to very stiff, massive, moist to dry. Gravel fragments are mostly pink & greenish-grey andesite.	
1225	20			
1220	25		BOULDER from 14.33m to 14.63m.	26 m
			SILTY SAND Silty SAND, some gravel, subangular to subrounded, fine to coarse, medium plasticity, brown, compact to dense, massive, wet.	
1215	30			
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse, medium plasticity, green to brown, firm to stiff, massive, trace quartz, moist.	
1210	35			
1205	40			
1200	45			
1195	50			
1190	55			
			COMPLETELY WEATHERED ANDESITE Gravelly SAND, some silt, subangular to subrounded, fine to coarse, medium plasticity, yellowish brown, very dense, massive, signs of oxidation, moist.	
1185	60			
			NO RECOVERY No Recovery (Casing Advanced)	
1180	65			65.22 m
			HIGHLY WEATHERED ANDESITE ANDESITE, fine grained, porphyritic, dark reddish brown to reddish grey, weak to medium strong, no structure, highly weathered, joints very closely spaced, iron oxide staining (<2mm) and trace brown gravelly clay infill.	66.9 m 68.58 m 71.62 m 73.15 m 74.67 m
1175	70			
1170	75			

VW sensor

Grout Mix: 10 bags grout mix, 7 bags cement, 170 gallons of water.
50 mm (2 inch) PVC Schedule 80

Bentonite Pellets (3/4 bucket)

Filter Sand 10/20
50 mm (2 inch) PVC Schedule 80, slotted with 0.10 m bottom cap

Filter Sand 10/20

Bentonite Pellets (3/4 bucket)

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed one vibrating wire piezometer at 26 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-01

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.30	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-02**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**14/03/2012**
Location:	**Site D Embankment**	Total Depth:	**106.52 m**	Date Installation:	**18/03/2012**
Coordinates:	**5,898,110 N , 376,420 E (UTM NAD 83)**	Elevation:	**1218 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		NOTES
1213	5		**GRAVELLY SAND** Gravelly SAND, some silt, subangular to rounded, fine to coarse, non plastic to low plasticity, yellowish brown to grey, loose to compact, massive, moist to dry.	
1208	10			
1203	15		**SANDY SILT** Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, yellowish brown, stiff to very stiff, massive, moist to dry.	13 m - VW sensor
1198	20			
1193	25			
1188	30			
1183	35		**SILTY SAND AND GRAVEL** Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low plasticity, yellowish brown to greenish grey, compact, massive, wet to moist.	36 m - 36.5 m / VW sensor
1178	40			
1173	45		**SAND AND SILT** Gravelly SAND and SILT, angular to rounded, fine to coarse, low plasticity, whitish grey, dense/firm, massive, white clayey decomposed rock inclusion, moist.	
1168	50		**GRAVEL AND SILT** GRAVEL and SILT, trace sand, subangular to angular, fine to coarse, low plasticity, yellowish brown, compact, massive, oxidized, moist to wet.	
1163	55			
1158	60		**GRAVELLY SILT** Gravelly SILT, trace sand, angular to rounded, fine to coarse, low to medium plasticity, light whitish/yellowish grey to yellowish brown/orange, stiff to very stiff, massive, oxidized, moist.	
1153	65			
1148	70			
1143	75		**SANDY SILT** Sandy SILT, some gravel, trace clay, subangular to subrounded, fine to coarse, low to medium plasticity, rusty brown to orangey brown, stiff to hard, massive, signs of oxidation, moist to saturated.	
1138	80			
1133	85		**COMPLETELY WEATHERED BEDROCK** Silty GRAVEL and SAND, subangular to subrounded, fine to coarse, low plasticity, dark rusty colour, compact to very dense, possible decomposed rock, slightly moist.	
1128	90		**NO RECOVERY** No Recovery (Advancing of Casing)	
1123	95		**HIGHLY WEATHERED ANDESITE** ANDESITE, fine grained, porphyritic, dark grey/black to reddish grey, weak to very strong, iron oxide staining (<2mm) and trace brown clay infill.	95 m - VW sensor 98 m - Van Ruth Plug
1118	100			

Grout Mix: 10 bags grout mix, 7 bags cement, 170 gallons of water.

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Installed three Vibrating-Wire Piezometer installed at 13 m, 36 m, and 95 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-02

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.31	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-03**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**18/03/2012**
Location:	**Site D Embankment, North Abutment**	Total Depth:	**74.37 m**	Date Installation:	**21/02/2012**
Coordinates:	**5,899,320 N , 375,495 E (UTM NAD 83)**	Elevation:	**1272 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			Stick-up = 0.89 m	**NOTES**
			0.61 m -	
1267	5		SILTY SAND Silty SAND, some gravel, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, compact, massive, moist. (Fluvial Deposit)	
1262	10		SILT SILT, low to medium plasticity, brown, firm, moist. (Lacustrine deposit)	
1257	15		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, low to medium plasticity, brown, loose to compact, massive, moist. (Fluvial Deposit)	
1252	20		SILT SILT, trace gravel, rounded, fine to coarse, low to medium plasticity, brown/yellow, stiff, massive, dry. (Glacial Till)	
1247	25		GRAVELLY SILT Gravelly SILT, trace sand, cobbles and boulders, subangular to rounded, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist. (Glacial Till)	
1242	30		SILT SILT, some gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, hard, massive, friable, dry to moist. (Lacustrine Deposit)	
1237	35		SANDY SILT AND GRAVEL Sandy SILT and GRAVEL, angular to subrounded, fine to coarse, low plasticity, dark brown with some orange and grey, firm to hard, massive, trace oxidation, friable, moist to dry. (Glacial Till)	
1232	40			
1227	45		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular to subrounded, fine to coarse, non plastic, brown, compact, massive, moist to wet. (Fluvial Deposit)	
1222	50			
			51.51 m -	
			COMPLETELY WEATHERED BEDROCK SAND, some silt, trace gravel, subangular, fine to coarse, low plasticity, dark brown, compact, massive, moist. (Decomposed Bedrock)	53.34 m -
1217	55			54.86 m -
			NO RECOVERY No Recovery (Advancing of Casing)	57.91 m -
				58.82 m ⁄
1212	60		HIGHLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, dark reddish brown to reddish grey, weak to moderately strong, highly weathered, joints dip at 30° - 60°, joints are open and closely spaced, iron oxide staining (<2mm) and trace brown sandy clay infill, some calcite grains, veins and inclusions.	60.29 m -
				61 m ⁄
1207	65			

Grout Mix: 10 bags grout mix, 7 bags cement, 170 gallons of water.
50 mm (2 inch) PVC Schedule 80

Bentonite Pellets (3/4 bucket)

Filter Sand 10/20
50 mm (2 inch) PVC Schedule 80, slotted with 0.10 m bottom cap

Filter Sand 10/20

Bentonite Pellets (3/4 bucket)

Van Ruth Plug

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-03

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.32	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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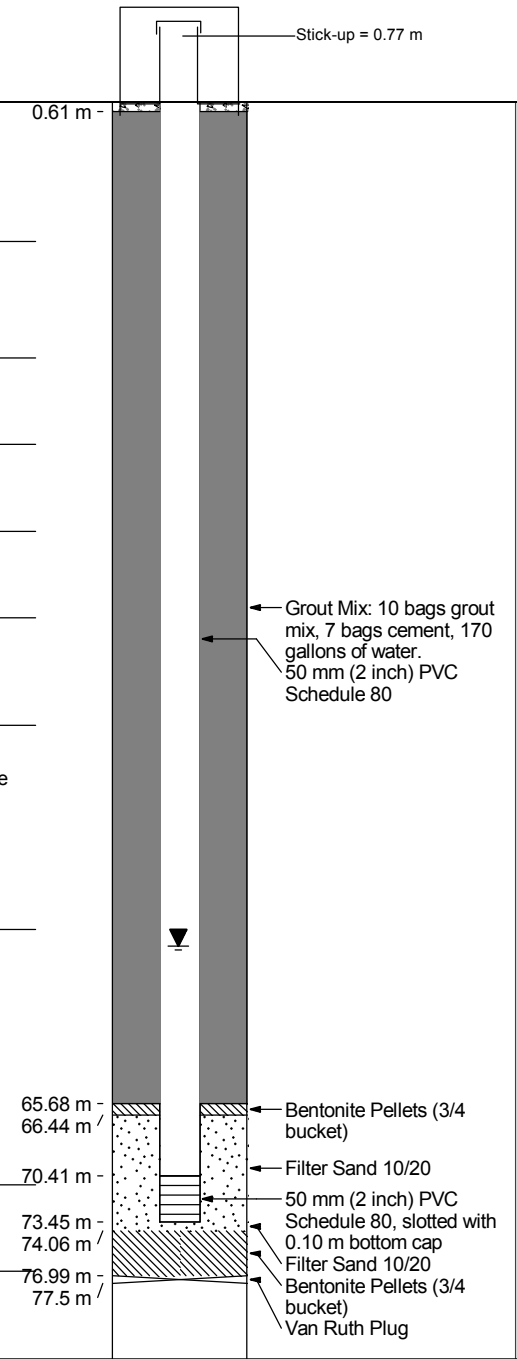
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-04**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**23/03/2012**
Location:	**Site C Embankment**	Total Depth:	**91.59 m**	Date Installation:	**28/03/2012**
Coordinates:	**5,896,470 N , 374,474 E (UTM NAD 83)**	Elevation:	**1331 m**	Supervised by:	**HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1326	5		**GRAVELLY SILT** Gravelly SILT, subangular to subrounded, fine to coarse, gap graded, low to medium plasticity, brown, stiff, massive, friable, wet to moist. (Fluvial Deposit)
1321	10		**GRAVEL AND SAND** GRAVEL and SAND, some silt, angular to subrounded, fine to coarse, low plasticity, brown, dense to very dense, massive, moist. (Fluvial Deposit)
1316	15		
1311	20		**SILT** SILT, some sand, trace gravel, subrounded to subangular, fine, gap graded, low to medium plasticity, brown, very stiff to hard, massive, moist. (Lacustrine Deposit)
1306	25		**SANDY SILT** Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown to orange-brown, very stiff, massive, saturated to dry. (Glacial Till)
1301	30		**SILTY SAND** Silty SAND, subangular to subrounded, fine to coarse, non plastic, cohesive, brown, dense to very dense, laminated with some silt layers, dry to moist. (Glacial-Fluvial Deposit)
1296	35		**SILT AND SAND** SILT and SAND, trace gravel, rounded to subrounded, fine to medium, uniformly graded, non plastic, light brown to brown, laminated, compact to dense, stiff to very stiff silt, some lamination, wet. (Glacial-Fluvial Deposit)
1291	40		**SAND AND GRAVEL** SAND and GRAVEL, some silt, angular to subangular, fine to coarse, non plastic to low plasticity, brown (gravel fragments are multicoloured), very dense, massive, moist to wet. (Glacial Till)
1286	45		
1281	50		
1276	55		**SILT** SILT, some clay and sand, trace gravel, angular to subrounded, fine, non plastic to medium plasticity, brown with multicoloured gravel fragments, very stiff to hard, massive, moist to wet. (Glacial Till)
1271	60		
1266	65		
1261	70		**SAND AND GRAVEL** SAND and GRAVEL, some silt, angular to subangular, fine to medium grained, non plastic, very dense, brown, massive, wet. (Glacial-Fluvial Deposit)
1256	75		
1251	80		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-04

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.33	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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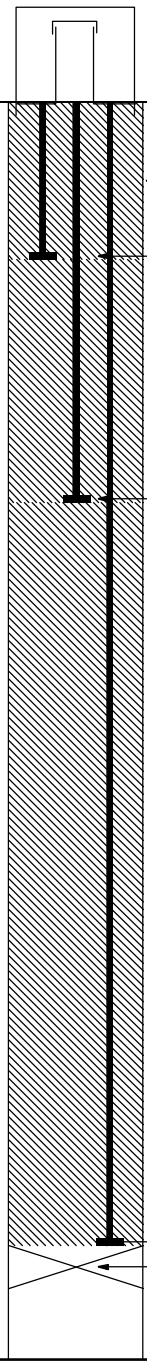
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-05**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**28/03/2012**
Location:	**Site C Embankment**	Total Depth:	**120.09 m**	Date Installation:	**04/02/2012**
Coordinates:	**5,895,650 N , 374,706 E (UTM NAD 83)**	Elevation:	**1363 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			NO RECOVERY No Recovery
1358	5		GRAVELLY SILT Gravelly SILT, some sand, angular to rounded, fine to coarse, gap graded, low to medium plasticity, brown, firm, massive, moist (Fluvial Deposit)
1353	10		NO RECOVERY No recovery. Sloppy wet sand/silt/gravel.
1348	15		SAND AND GRAVEL SAND and GRAVEL, some silt, trace cobbles, angular to rounded, fine to coarse, non plastic to medium plasticity, yellowish brown to dark grey, loose to compact, massive, moist to wet. (Fluvial Deposit)
1343	20		
1338	25		GRAVELLY SAND Gravelly SAND, trace cobbles and silt, angular to subrounded, fine to coarse, non plastic, brown, massive, moist. Note: Heaving sands at 21.30 m prevented SPT. (Fluvial Deposit)
1333	30		
1328	35		SILT AND SAND Gravelly SILT and SAND, angular to subrounded, fine to coarse, non plastic to medium plasticity, brown, stiff to hard, compact to very dense, massive, moist. (Glacial Till)
1323	40		
1318	45		SILTY SAND Silty SAND, some gravel and clay, angular to rounded, fine to coarse, low to medium plasticity, brown, dense to very dense, massive, moist to wet. (Lacustrine Deposit)
1313	50		
1308	55		SANDY SILT Sandy SILT, some gravel, subangular to rounded, fine to coarse, non-plastic to low plasticity, brown with purple gravel fragments, stiff, massive, moist. (Glacial Till)
1303	60		
1298	65		SILT AND CLAY SILT and CLAY, trace sand and gravel, angular to subangular, fine to coarse, medium to low plasticity, brown, firm to stiff, laminated, saturated. (Lacustrine Deposit)
1293	70		SILT AND GRAVEL SILT and GRAVEL, some sand, angular to rounded, fine to coarse grained, non plastic to medium plasticity, brown with black and orange gravel fragments, stiff to hard, dense to very dense, massive, friable, moist to saturated. (Glacio-Fluvial Deposit)
1288	75		
1283	80		COMPLETELY WEATHERED BEDROCK Clayey Gravelly SILT, trace sand, angular, fine to coarse, medium plasticity, orange with orange and black gravel fragments, very stiff to hard, massive, saturated. (Decomposed/Completely Weathered Bedrock)
1278	85		



NOTES

- Grout Mix: 10 bags grout mix, 7 bags cement, 170 gallons of water.
- VW sensor (11 m)
- VW sensor (28 m)
- VW sensor (80 m)
- Van Ruth Plug (83 m)

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Three Vibrating-Wire Piezometer installed at 11 m, 28 m, and 80 m. Artesian conditions from 25.9 m.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-05

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.34	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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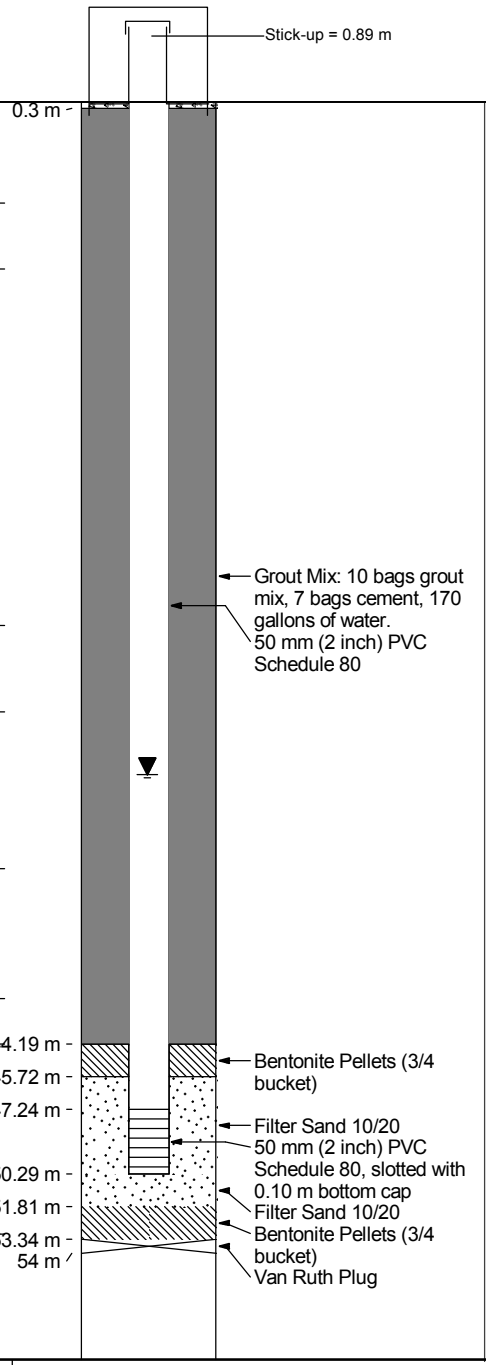
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-06**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**04/02/2012**
Location:	**Site C Embankment**	Total Depth:	**67.05 m**	Date Installation:	**04/04/2012**
Coordinates:	**5,896,100 N , 374,569 E (UTM NAD 83)**	Elevation:	**1281 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SAND AND GRAVEL SAND and GRAVEL, subrounded to subangular, fine to coarse, well graded, non plastic, grey and brown, loose to compact, massive, dry to moist. (Fluvial Deposit)
1276	5		SILTY SAND Silty SAND, some clay, fine, low plasticity, brown, compact, varved, moist. (Lacustrine Deposit)
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, some clay, angular to subrounded, fine to coarse, non plastic to low plasticity, brown to dark brown with multicoloured gravel fragments, compact to dense, varved, moist to saturated. (Glacial Till)
1271	10		
1266	15		
1261	20		
1256	25		SILT SILT, some clay, trace sand, fine, uniformly graded, low to medium plasticity, brown and orange, stiff to very stiff, stratified, fissured, friable, dry. (Lacustrine Deposit)
			SILTY SAND Silty SAND, some clay, fine to coarse, non plastic, brown to orange-grey, very dense, massive, moist. (Lacustrine Deposit)
1251	30		
1246	35		
			COMPLETELY WEATHERED BEDROCK Gravelly SILT, angular, fine, low plasticity, dark brown with white/yellow gravel fragments, very stiff, massive, elongated calcite crystals, moist. (Decomposed/Completely Weathered Bedrock)
1241	40		
			NO RECOVERY No Recovery (Advancing of Casing)
			HIGHLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, burgundy brown, medium strong to strong, highly weathered with numerous rubble zones, cross cutting joints, close to very closely spaced, dipping 30°-90° and are partly open with slightly rough and planar surfaces, surface staining of joints, iron oxide staining (<2mm) and trace brown clay infill.
1236	45		
1231	50		
			MODERATELY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, dark grey to reddish brown, strong to very strong, moderately weathered and highly fractured with numerous broken and rubble zones, joints close slightly rough and planar surfaces and are partly open, iron oxide staining and calcite infill <2mm.
1226	55		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-06

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.35	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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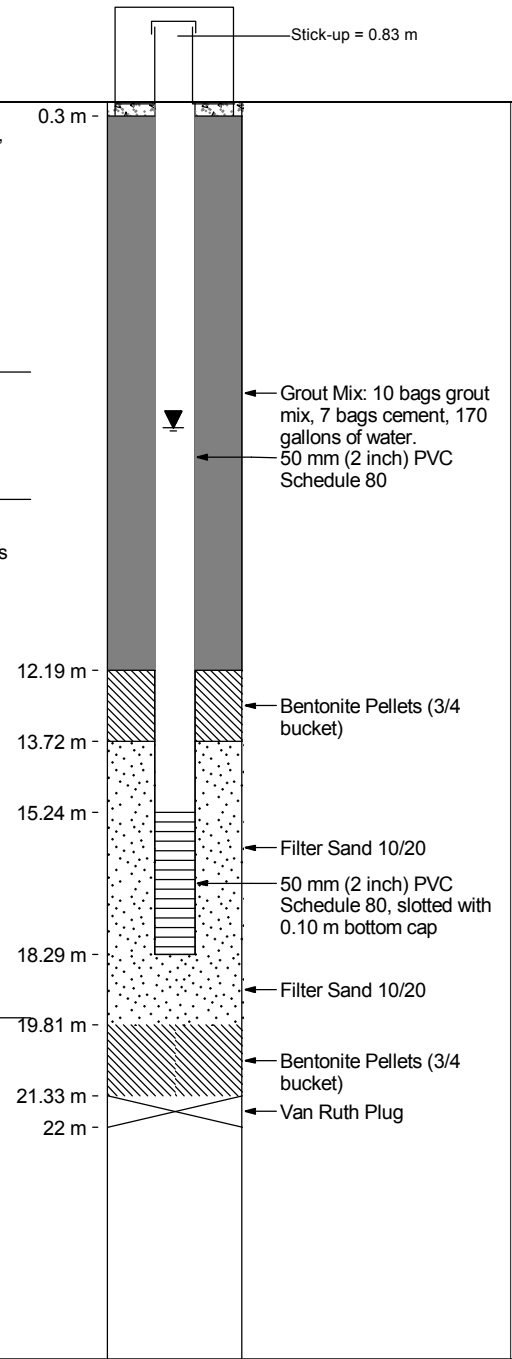
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-07**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**04/07/2012**
Location:	**Plant Site, Option 1**	Total Depth:	**36.42 m**	Date Installation:	**04/08/2012**
Coordinates:	**5,894,940 N , 375,495 E (UTM NAD 83)**	Elevation:	**1444 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1439	5		SAND AND GRAVEL Silty SAND and GRAVEL, subangular to rounded, fine to coarse, brown to light grey with multicoloured gravel fragments, loose to compact, stratified, slightly friable, dry to wet. (Fluvial Deposit)
			NO RECOVERY No Recovery (Advancing of Casing).
1434	10		MODERATELY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, reddish grey, medium strong to strong, moderately weathered, close to very close joints are open to partly open and dipping at ~30°-70°, joint surfaces are rough to slightly rough and planar to undulating, iron oxide staining, gravel infill.
1429	15		
1424	20		SLIGHTLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, greenish grey to burgundy, medium strong to strong, slightly weathered, very close to close joints are open to partly open and dip at ~45°-60°, joint surfaces are slightly rough and plan to undulating, iron oxide staining, gravelly infill, random calcite veins and grains.
1419	25		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-07

Knight Piésold CONSULTING

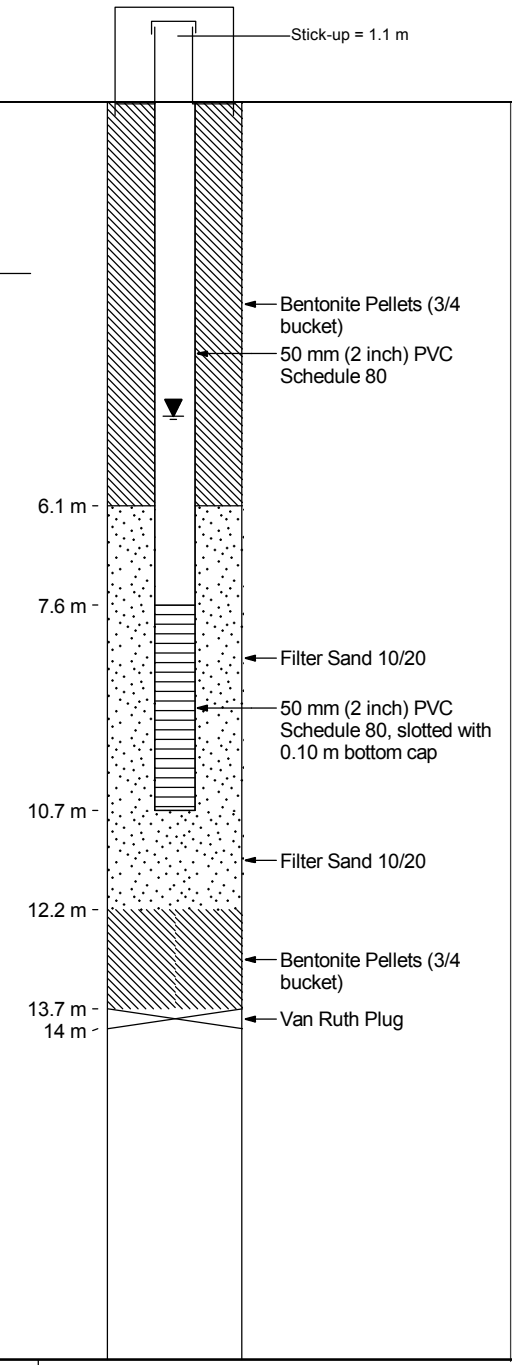
PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.36**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 203 - 2013 TSF GEOTECHNICAL SI (ROTARY P4A)\GINT\LIBRARY\BLACKWATER LIBRARY V2.GLB, WELL COMPLETION DETAILS REVISED, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-08**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**04/09/2012**
Location:	**TELUS Tower / Primary Crusher**	Total Depth:	**30.36 m**	Date Installation:	**04/10/2012**
Coordinates:	**5,894,150 N , 375,620 E (UTM NAD 83)**	Elevation:	**1507 m**	Supervised by:	**AL**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SAND AND GRAVEL SAND and GRAVEL, subrounded, fine to coarse, non plastic, brown, compact, damp. (Fluvial Deposit)
			SLIGHTLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, reddish grey, moderately strong, slightly weathered to fresh, close to very close joints dipping at ~20°-80° and are partly open to wide, joint surfaces are smooth to slightly rough and planar, iron oxide staining, calcite veining.
1502	5		
1497	10		
1492	15		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. The groundwater was approximately 5.7 m below grade on April 16, 2012 (6 days after completion).

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-08

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.37	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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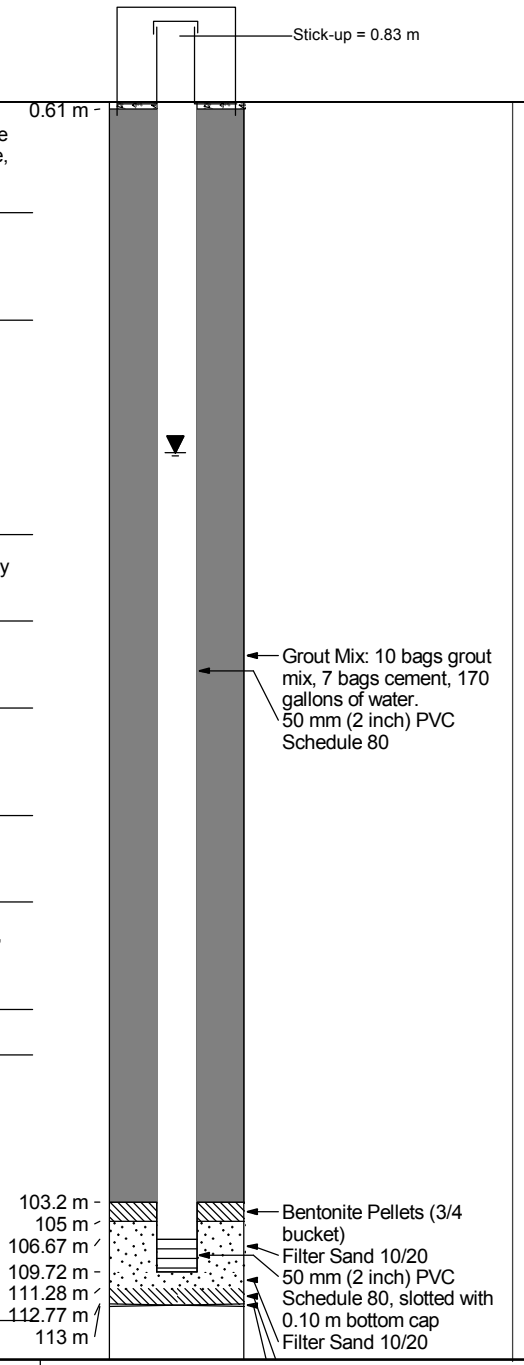
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-09**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**16/04/2012**
Location:	**Site D Embankment**	Total Depth:	**124.96 m**	Date Installation:	**23/04/2012**
Coordinates:	**5,897,640 N , 376,624 E (UTM NAD 83)**	Elevation:	**1239 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1234	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, angular to subrounded, fine to coarse, non plastic to low plasticity, brown, compact, massive, saturated to dry. (Fluvial Deposit)
1229	10		SILT AND SAND SILT and SAND, some gravel, trace clay, subrounded to subangular, fine to coarse, medium plasticity, grey, loose to dense, soft to hard, massive, friable, moist to dry. (Glacio-fluvial Deposit)
1224	15		
1219	20		GRAVELLY SILT AND SAND Gravelly SILT and SAND, subangular to subrounded, fine to coarse, non plastic to medium plasticity, grey and brown with multicoloured gravel fragments, very stiff to hard, dense to very dense, massive, friable in places, moist to saturated. (Glacial Till)
1214	25		
1209	30		
1204	35		
1199	40		
1194	45		SAND SAND, trace gravel and silt, subangular, fine to coarse, uniformly graded, non plastic to low plasticity, grey, compact, massive, moist. (Glacio-fluvial Deposit)
1189	50		SILTY CLAY AND SAND Silty CLAY and SAND, fine grained, low to medium plasticity, grey/brown, dense, stiff to hard, varved, friable, moist to dry. (Lacustrine Deposit)
1184	55		
1179	60		SAND AND GRAVEL SAND and GRAVEL, some silt, subangular to subrounded, fine to coarse, non plastic to medium plasticity, brown and grey with multicoloured gravel fragments, very dense, massive, moist. (Glacio-fluvial Deposit)
1174	65		
1169	70		SAND AND GRAVEL SAND and GRAVEL, some clay and silt, subangular to subrounded, fine to coarse, low plasticity, grey white, compact, moist. (Volcanic Ash)
1164	75		
1159	80		COMPLETELY WEATHERED BEDROCK Gravelly SAND and SILT, angular to subrounded, fine to coarse, non plastic to medium plasticity, orange-brown to white-grey, compact to dense, stiff to hard, stratified, moist. (Decomposed/Completely Weathered Bedrock)
1154	85		NO RECOVERY No Recovery (Advancing of Casing)
1149	90		HIGHLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, red and purple, medium strong to very strong, highly weathered, joints are close, open and dipping at 20°-45°, slightly rough and undulating joint surfaces, white calcite infill, iron oxide staining, some sub-vertical calcite and gypsum veins, very fractured and vuggy in places.
1144	95		
1139	100		
1134	105		
1129	110		
1124	115		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-09

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.38	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI_2012 - REVC.GPJ
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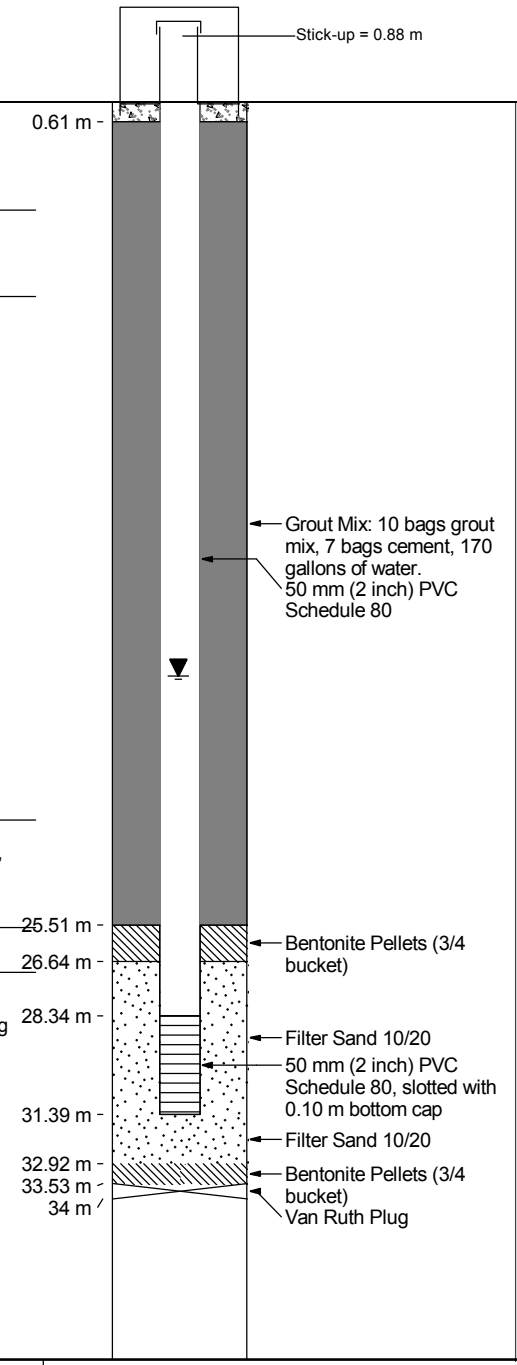
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-10**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**23/04/2012**
Location:	**Site D Embankment**	Total Depth:	**45.72 m**	Date Installation:	**24/04/2012**
Coordinates:	**5,897,280 N , 376,926 E (UTM NAD 83)**	Elevation:	**1258 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILT SILT, some gravel and sand, angular to subrounded, fine to coarse, low to medium plasticity, brown with blue-grey gravel fragments, soft to firm, massive, friable, dry to moist. (Fluvial Deposit)
1253	5		SAND AND GRAVEL SAND and GRAVEL, some silt, subrounded, fine to coarse, cohesive, non plastic to low plasticity, purple and brown, dense, massive, dry to moist. (Fluvial Deposit)
			SILT AND GRAVEL SILT and GRAVEL, some sand, angular to subrounded, fine to coarse, non plastic to medium plasticity, brown and grey with multicoloured gravel fragments, stiff to hard, massive, slightly friable, dry to moist. (Glacial Till)
1248	10		
1243	15		
1238	20		
			COMPLETELY WEATHERED ANDESITE Silty SAND and GRAVEL, angular to subangular, fine to coarse, cohesive to non-cohesive, non plastic to low plasticity, brown, grey, green and orange, dense, massive, friable, dry to moist. (Decomposed/Completely Weathered Bedrock)
1233	25		NO RECOVERY No Recovery (Advancing of Casing).
			SLIGHTLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, grey to dark burgundy, medium strong to strong, slightly weathered, close joints dipping at ~30°-70° are partly open with slightly rough, planar joint surfaces, iron oxide staining, calcite infill.
1228	30		
1223	35		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-10

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.39	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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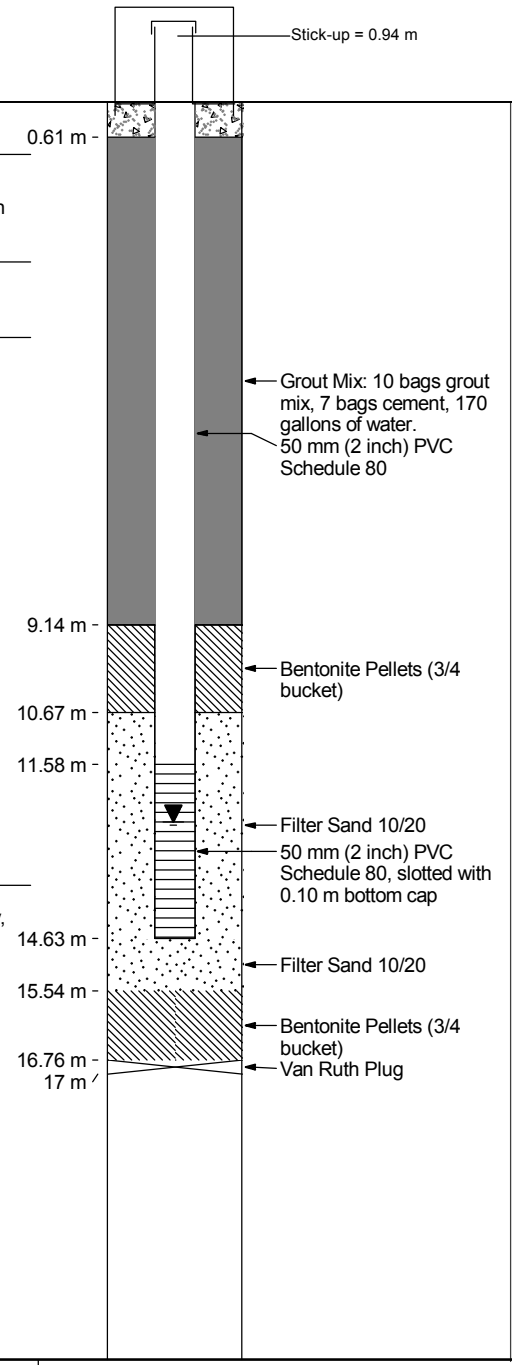
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-11**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**24/04/2012**
Location:	**Site D Embankment**	Total Depth:	**68.58 m**	Date Installation:	**26/04/2012**
Coordinates:	**5,896,980 N , 377,036 E (UTM NAD 83)**	Elevation:	**1282 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			NO RECOVERY No Recovery
			GRAVELLY SILT Gravelly SILT, some sand, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown with purple and green gravel fragments, soft to very soft, massive, moist to saturated. (Lacustrine Deposit)
			NO RECOVERY No Recovery (Advancing of Casing).
1277	5		MODERATELY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, purple grey, strong to very strong, moderately weathered, joints dipping at ~20°, iron oxide staining and trace brown clay infill, trace brown veinlet.
1272	10		
1267	15		SLIGHTLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, reddish grey to purple grey, strong to very strong, slightly weathered, close to wide joints are tight to partly open and dip at ~30°-70°, joint surfaces are rough and planar or stepped, some iron oxide staining, calcite infill, some calcite veins.
1262	20		



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-11

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.40	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-12**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**26/04/2012**
Location:	**Site D Embankment, South Abutment**	Total Depth:	**39.62 m**	Date Installation:	**27/04/2012**
Coordinates:	**5,895,900 N , 376,780 E (UTM NAD 83)**	Elevation:	**1335 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		NOTES
			Stick-up = 0.78 m	
			SILT SILT, trace gravel, subangular to subrounded, fine to coarse, gap graded, medium plasticity, brown, hard, massive, friable, dry to moist. (Lacustrine Deposit)	
			0.61 m	
			SILT, SAND AND GRAVEL SILT, SAND and GRAVEL, trace boulder, subrounded (angular boulder), fine to coarse, low plasticity, brown, hard, dense, massive, friable, dry. (Fluvial Deposit)	
1330	5		GRAVELLY SAND Gravelly SAND, trace silt and boulder, angular to subrounded, fine to coarse, well graded, non plastic to low plasticity, brown, compact, massive, dry to moist. (Fluvial Deposit)	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, angular to subrounded, fine to coarse, non cohesive, non plastic to medium plasticity, brown with multicolored gravel fragments, dense to very dense, massive but with some stratification, moist to dry. (Fluvial Deposit)	
1325	10			
1320	15			
			SAND SAND, some gravel and clay, subrounded, fine, non plastic to high plasticity, brown, compact to dense, laminated, saturated to dry. (Fluvial Deposit)	
			16.76 m	
			18.29 m	
1315	20		COMPLETELY WEATHERED BEDROCK SAND and GRAVEL, trace silt, angular to rounded, fine to coarse, non plastic, brown to grey, very dense, stratified, dry. (Completely Weathered/Decomposed Bedrock)	
			19.81 m	
			NO RECOVERY No Recovery (Advancing of Casing).	
			22.86 m	
			SLIGHTLY WEATHERED ANDESITE ANDESITE, fine-grained, porphyritic, reddish grey to white speckled grey, moderately strong, slightly to moderately weathered, close joints are open to partly open and dip ~30°-90°, joint surfaces are rough and planar, some iron oxide staining, trace calcite infill.	
			24.38 m	
1310	25			
			25.91 m	
			26.25 m	
1305	30			

Grout Mix: 10 bags grout mix, 7 bags cement, 170 gallons of water.
50 mm (2 inch) PVC Schedule 80

Bentonite Pellets (3/4 bucket)

Filter Sand 10/20

50 mm (2 inch) PVC Schedule 80, slotted with 0.10 m bottom cap

Filter Sand 10/20

Bentonite Pellets (3/4 bucket)

Van Ruth Plug

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Well is dry.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-12

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.41	REV. 1

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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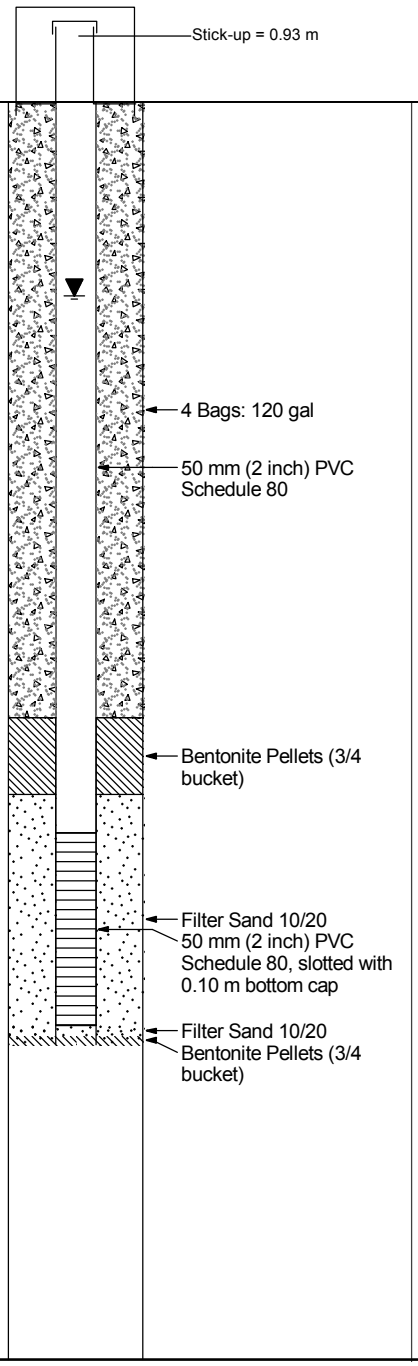
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**GT12-28**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**SPT**	Drilling Started:	**25/08/2012**
Location:	**West Saddle Dam**	Total Depth:	**27.74 m**	Date Installation:	
Coordinates:	**5,894,842 N , 371,772 E (UTM NAD 83)**	Elevation:	**1349 m**	Supervised by:	**JS**
Drilling Method:	**ODEX / HQ3 Diamond Drilling**	Hole Diameter:	**96mm (HQ3)mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		
			GRAVEL GRAVEL, some sand and clay, trace silt, angular, fine to coarse, non-plastic, brown, dense, massive, moist to wet	
1344	5		SAND AND GRAVEL SAND and GRAVEL, subrounded, fine, non plastic, brown, very dense, stratified, moist to wet.	
			SAND SAND some clay, silt and gravel, angular, fine to coarse uniformly graded, non-plastic, brown to grey, very dense, massive, wet. (Alluvium)	
			SAND SAND, some gravel, angular, fine to coarse, non-plastic, brown grey, dense to very dense, stratified, wet (Alluvium).	
1339	10		GRAVEL GRAVEL, trace silt and sand, angular to subrounded, fine to coarse, non plastic, brown grey, dense to very dense, massive, wet.	9.75 m 10.97 m
			NO RECOVERY No Recovery (Advancing of Casing).	11.58 m
1334	15		SLIGHTLY WEATHERED FELSIC TUFF FELSIC LAPILLI TUFF, fine grained, porphyritic, grey green, medium strong to strong, slightly weathered, clast supported matrix becoming thinly flow banded, lose joints are open to partly open and dip ~30°-90°, joint surfaces are planar, trace calcite infill, trace pyrite.	14.63 m 14.8 m 14.93 m



NOTES

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information.

REV. 1 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR GT12-28

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.42**	REV. **1**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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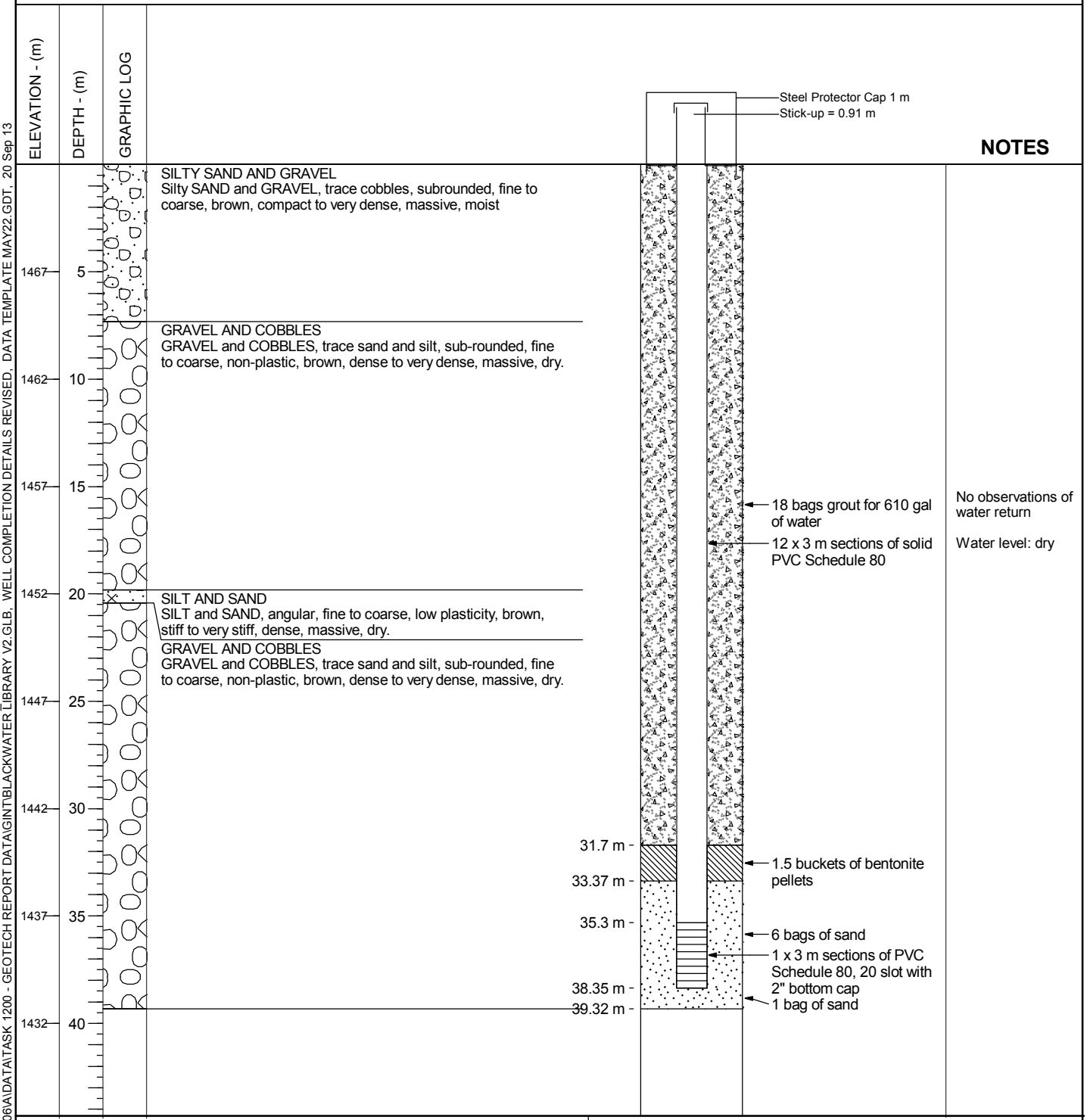
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No. **MW-05 (ODK)**		**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**14/08/2012**
Location:	**Upstream of Camp Septic Field**	Total Depth:	**39.32 m**	Date Installation:	**15/08/2012**
Coordinates:	**5,894,076 N , 376,758 E (UTM NAD 83)**	Elevation:	**1472 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**BOC**



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW-05 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.28	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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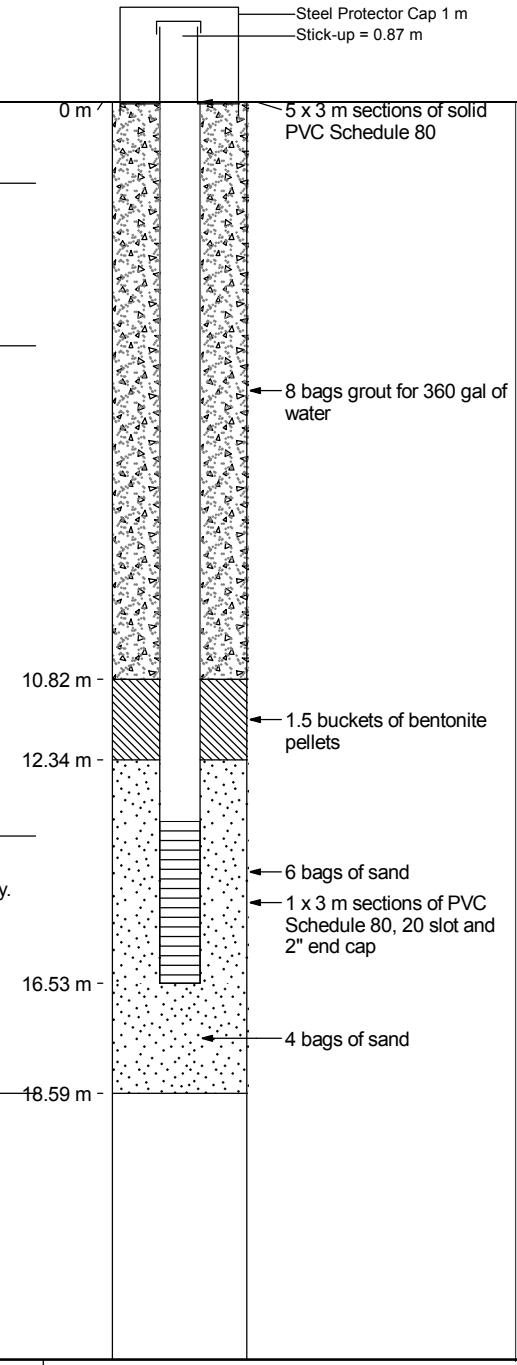
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No. **MW-06 (ODK)**		**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**16/08/2012**
Location:	**Downstream of Camp Septic Field**	Total Depth:	**18.59 m**	Date Installation:	**16/08/2012**
Coordinates:	**5,893,974 N , 376,839 E (UTM NAD 83)**	Elevation:	**1456 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**BOC**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to very dense, massive, moist.
			SILT AND SAND SILT and SAND, angular to subrounded, fine to coarse, slightly plastic, brown, stiff to very stiff, compact to dense, massive, moist.
1451	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1446	10		
			GRAVEL AND COBBLES GRAVEL and COBBLES, trace sand and silt, sub-rounded, fine to coarse, non-plastic, brown, dense to very dense, massive, dry.
1441	15		
1436	20		



NOTES

Water level: dry

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW-06 (ODK)

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.29	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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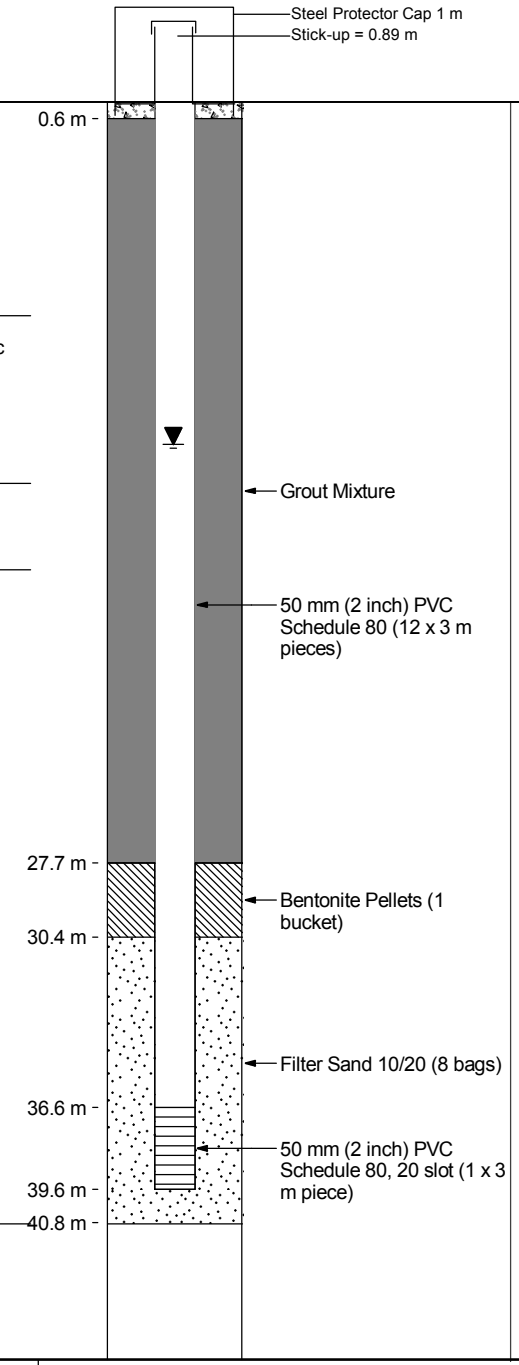
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**21/03/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.84 m**	Date Installation:	**21/03/2012**
Coordinates:	**5,899,360 N , 374,655 E (UTM NAD 83)**	Elevation:	**1302 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**120.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1297	5		GRAVELLY SILT Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.
1292	10		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, purple, very dense, massive moist to dry.
1287	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, hard, massive, moist to wet.
1282	20		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered
1277	25		
1272	30		
1267	35		
1262	40		
1257	45		



NOTES

Water Level measured at 12.22 mbgs on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-01D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.2	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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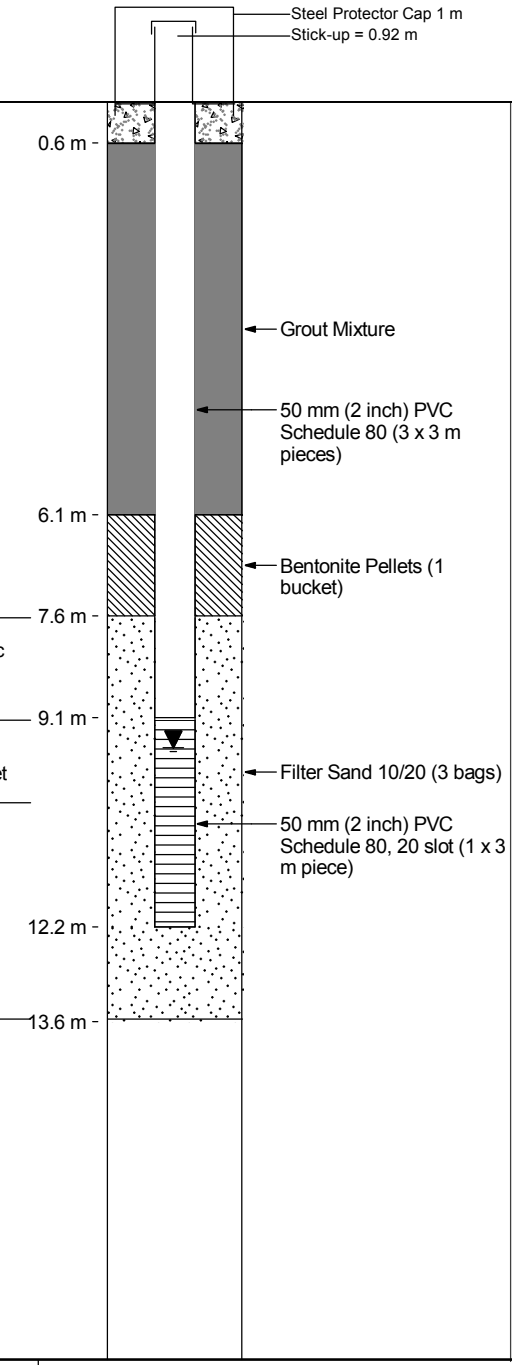
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-01S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**22/03/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**13.56 m**	Date Installation:	**22/03/2012**
Coordinates:	**5,899,360 N , 374,658 E (UTM NAD 83)**	Elevation:	**1302 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			GRAVELLY SILT Gravelly SILT, subangular, fine to coarse, low to medium plasticity, brown, very stiff to hard, massive, moist to dry.
1297	5		
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, light grey/brown, very dense, massive, moist to dry
			COMPLETELY WEATHERED BEDROCK Sandy SILT, some gravel, angular to subangular, fine to coarse, low to medium plasticity, dark greenish brown, hard, moist to wet
1292	10		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1287	15		



NOTES

Water Level measured at 9.45 mbgs on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-01S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.3	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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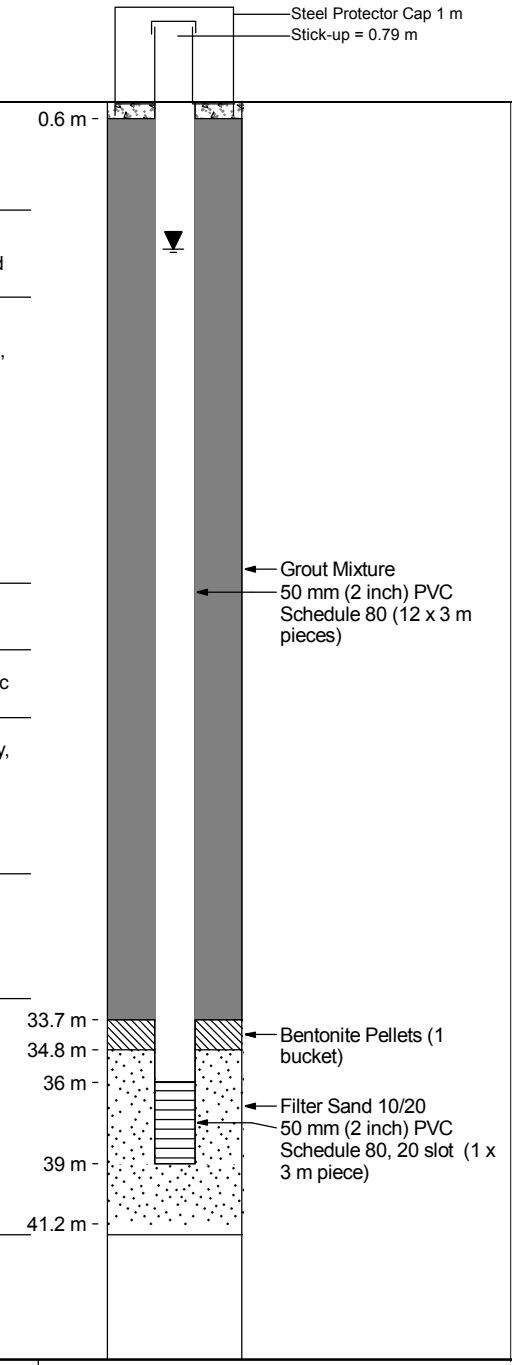
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/04/2012**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**41.61 m**	Date Installation:	**04/05/2012**
Coordinates:	**5,894,670 N , 374,690 E (UTM NAD 83)**	Elevation:	**1406 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.
1401	5		SANDY SILT Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.
			SILTY SAND Silty SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, non plastic, brown, dense to very dense, massive, dry.
1396	10		
1391	15		
			SILT SILT, some to trace sand, fine to coarse, low to medium plasticity, brown, very stiff to hard, moist.
1386	20		SANDY GRAVEL AND SILT Sandy GRAVEL and SILT, subangular, fine to coarse, non plastic to low plasticity, very dense, brown, moist.
			CLAYEY SILT Clayey SILT, some sand, fine to coarse, low to medium plasticity, brown, hard, varved, friable, wet.
1381	25		
			GRAVELLY SILT Gravelly SILT, some sand, angular, fine to coarse, low plasticity, brown, very stiff to hard, fine fluvial sand lamination, moist.
1376	30		
			SILTY SAND Silty SAND, fine to coarse, low to medium plasticity, brown, compact to dense, massive, moist.
1371	35		
1366	40		
1361	45		



NOTES

Water Level measured at 5.14 mbgs on 14/04/2012

Water return at 35.1 m

Water bearing layer (35.05 m to 41.15 m) - 1 gal/min

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-02D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.4**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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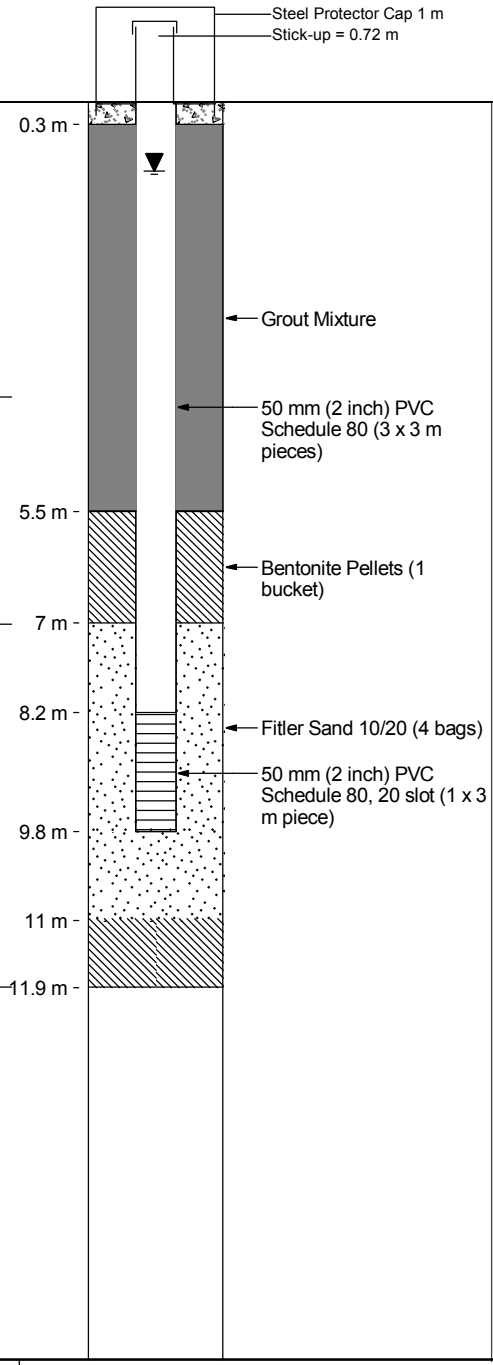
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-02S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/05/2012**
Location:	**Downslope Waste Dumps and Deposit**	Total Depth:	**11.89 m**	Date Installation:	**04/06/2012**
Coordinates:	**5,894,670 N , 374,704 E (UTM NAD 83)**	Elevation:	**1407 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, some cobbles, subangular to subrounded, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, dry.
1402	5		**SANDY SILT** Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low to medium plasticity, brown, very stiff to hard, varved with fine sand lamination, moist.
			SILTY SAND Silty SAND, trace gravel, subrounded, fine to coarse, low plasticity, greyish brown, dense to very dense, moist.
1397	10		
1392	15		



NOTES

Water Level measured at 0.83 mbgs on 14/04/2012

Water return at 8.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-02S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.5	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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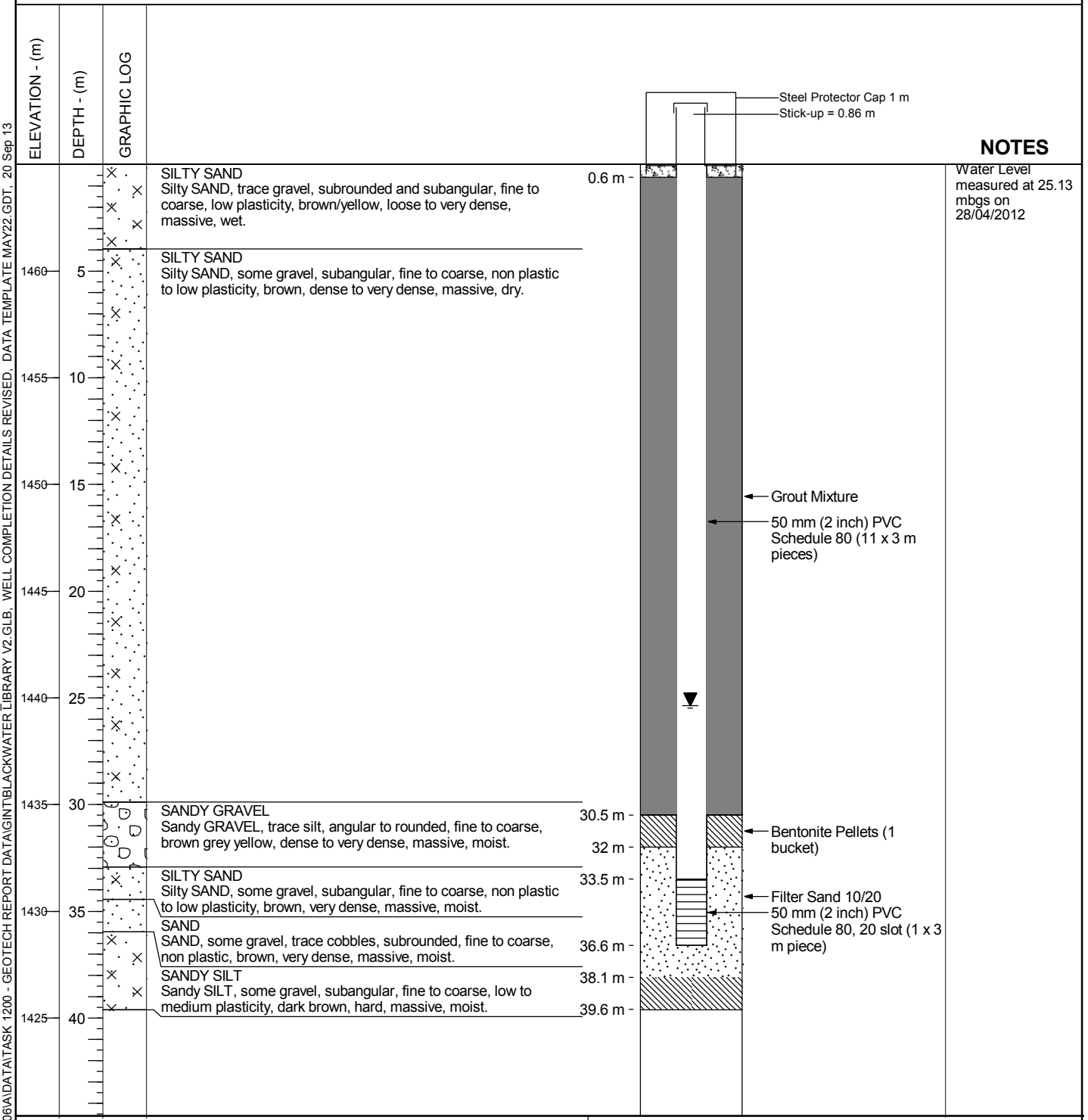
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**04/10/2012**
Location:	**Downslope of Deposit**	Total Depth:	**39.62 m**	Date Installation:	**04/12/2012**
Coordinates:	**5,893,860 N , 376,013 E (UTM NAD 83)**	Elevation:	**1465 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-03D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.6**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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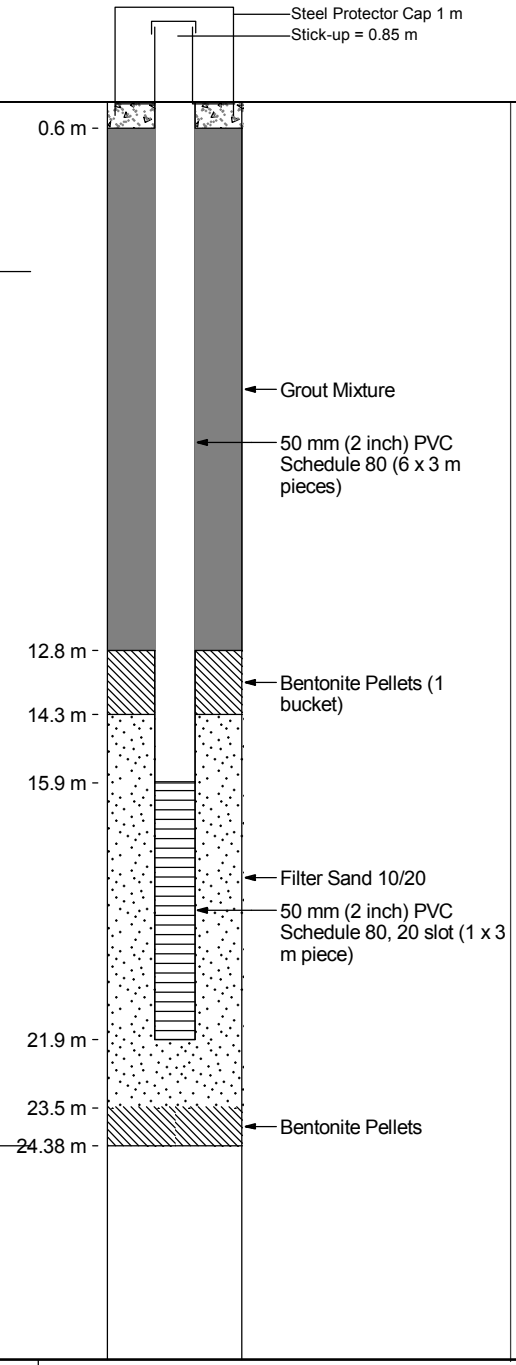
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-03S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**13/04/2012**
Location:	**Downslope of Deposit**	Total Depth:	**24.38 m**	Date Installation:	**13/04/2012**
Coordinates:	**5,893,860 N , 376,004 E (UTM NAD 83)**	Elevation:	**1465 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND Silty SAND, trace gravel, subrounded to subangular, fine to coarse, low plasticity, brown/yellow, compact, massive, moist.
1460	5		SILTY SAND Silty SAND, some gravel, subangular, fine to coarse, non plastic to low plasticity, brown, dense to very dense, massive, moist.
1455	10		
1450	15		
1445	20		
1440	25		



NOTES

Well was dry on 04/04/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-03S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.7	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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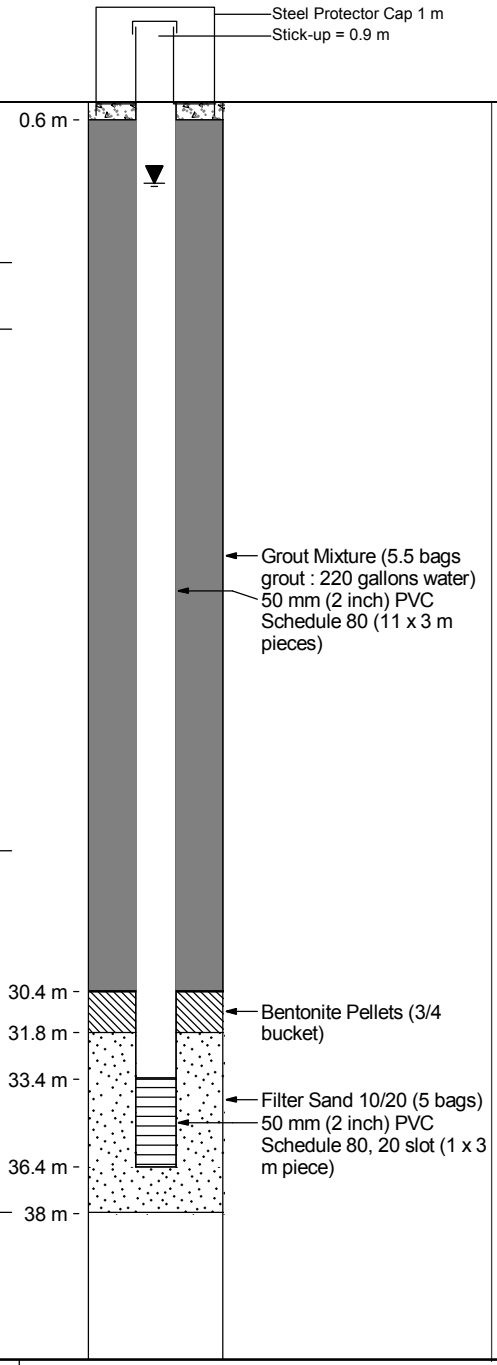
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**14/04/2012**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**37.95 m**	Date Installation:	**15/04/2012**
Coordinates:	**5,892,500 N , 374,110 E (UTM NAD 83)**	Elevation:	**1558 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			FILL Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.
1553	5		SAND AND GRAVEL SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry.
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, hard, massive, moist.
1548	10		
1543	15		
1538	20		
1533	25		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1528	30		
1523	35		
1518	40		



NOTES

Water Level measured at 2.53 mbgs on 28/04/2012

Water return at 3.4 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-04D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.8**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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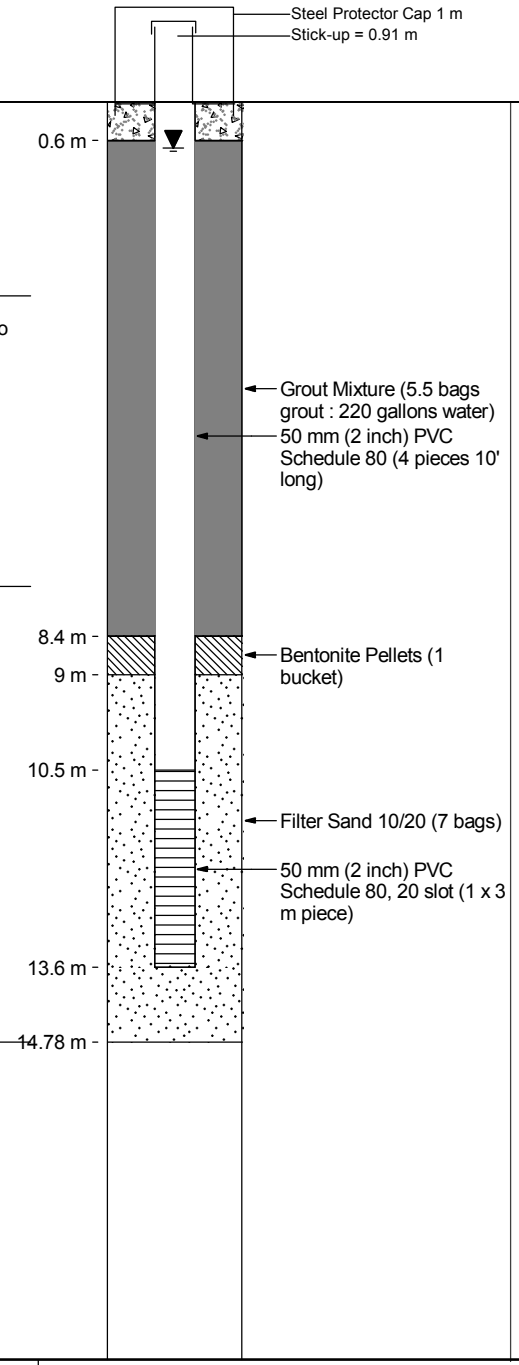
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-04S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**15/04/2012**
Location:	**Upslope of Deposit and Waste Dumps**	Total Depth:	**14.78 m**	Date Installation:	**15/04/2012**
Coordinates:	**5,892,500 N , 374,116 E (UTM NAD 83)**	Elevation:	**1558 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			FILL Sandy SILT, some gravel, subangular, fine to coarse, low plasticity, brown, stiff to very stiff, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subangular to subrounded, fine to coarse, brown, very dense, massive, dry to moist.
1553	5		
			SANDY SILT Sandy SILT, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff to hard, massive, moist.
1548	10		
1543	15		



NOTES

Water Level measured at 0.61 mbgs on 28/04/2012

Water return at 6.1 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-04S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.9**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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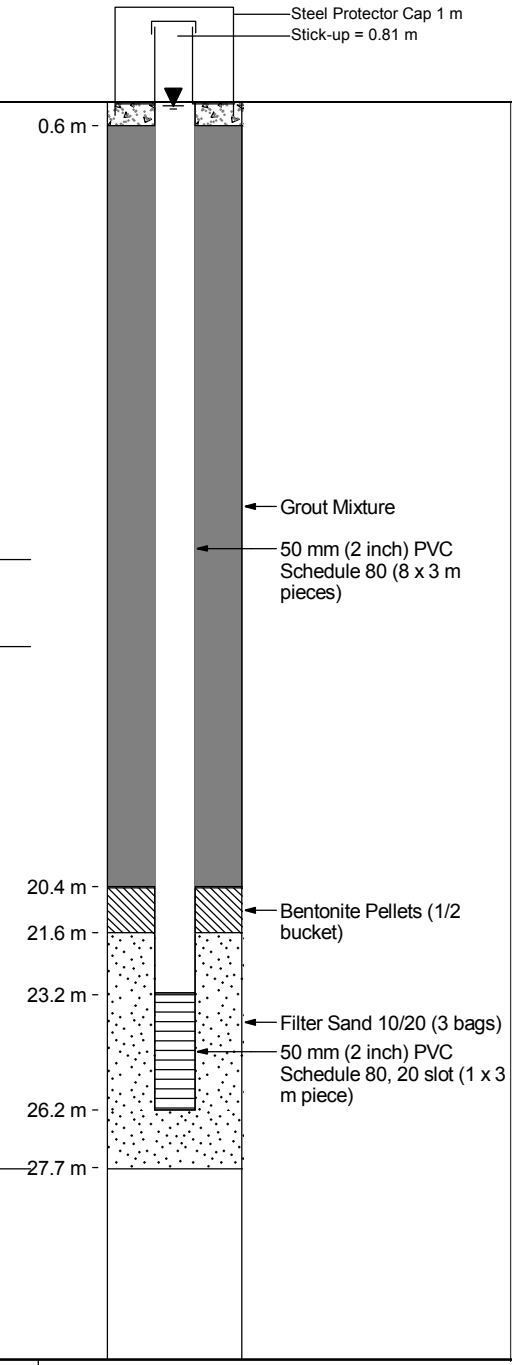
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**27/04/2012**
Location:	**South of TSF**	Total Depth:	**27.74 m**	Date Installation:	**27/04/2012**
Coordinates:	**5,896,210 N , 371,310 E (UTM NAD 83)**	Elevation:	**1373 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**120.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.
1368	5		
1363	10		Boulder
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist to wet.
1358	15		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered
1353	20		
1348	25		
1343	30		



NOTES

Water Level measured at 0.09 mags on 30/04/2012

Water return at 23.8 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-05D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.10	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-05S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**27/04/2012**
Location:	**South of TSF**	Total Depth:	**11.88 m**	Date Installation:	**28/04/2012**
Coordinates:	**5,896,210 N , 371,309 E (UTM NAD 83)**	Elevation:	**1373 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG		NOTES
			Steel Protector Cap 1 m Stick-up = 0.72 m	
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low to medium plasticity, brown and orange, very stiff to hard, massive, moist.	
			0.6 m	Water Level measured at 0.87 mbgs on 30/04/2012
			Grout Mixture	
			50 mm (2 inch) PVC Schedule 80 (3 x 3 m pieces)	
1368	5		4.6 m	
			Bentonite Pellets (1 bucket)	
			6.1 m	
			7.6 m	
			Filter Sand 10/20	
			50 mm (2 inch) PVC Schedule 80, 20 slot (1 x 3 m piece)	
1363	10		10.7 m	
			COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular to subangular, fine to coarse, low plasticity, purple brown and greeny grey, hard, massive, moist to wet.	
			11.88 m	
1358	15			

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-05S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.11	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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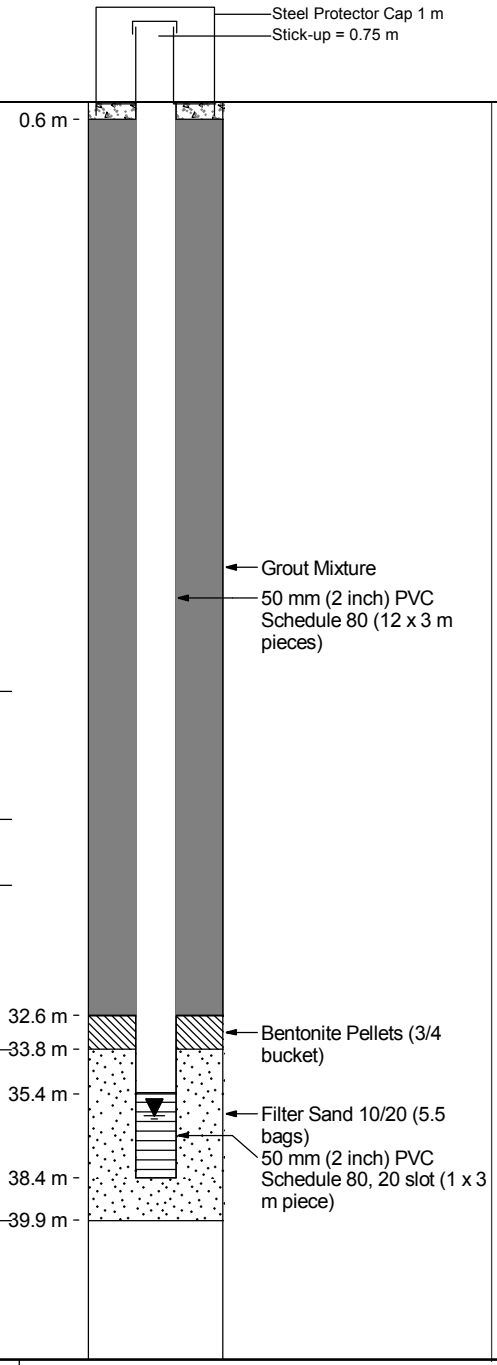
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**28/04/2012**
Location:	**Downstream of Site C Embankment**	Total Depth:	**39.93 m**	Date Installation:	**28/04/2012**
Coordinates:	**5,896,470 N , 374,807 E (UTM NAD 83)**	Elevation:	**1278 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.
1273	5		
1268	10		
1263	15		
1258	20		SILT SILT, trace sand, some cobbles, subrounded, fine to coarse, low plasticity, brown, hard, massive, moist to wet.
1253	25		SAND SAND, some gravel, trace silt, angular to subangular, fine to coarse, non-plastic, brown, very dense, massive, moist.
1248	30		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, angular to subangular, fine to coarse, non plastic to low plasticity, orange, very dense, massive, moist.
1243	35		SILT SILT, some sand, fine to coarse, uniformly graded, low to medium plasticity, orange brown, hard, massive, moist.
1238	40		



NOTES

Water Level measured at 35.94 mbgs on 30/04/2012

Water return at 19.5 m

Water return at 33.2 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-06D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.12	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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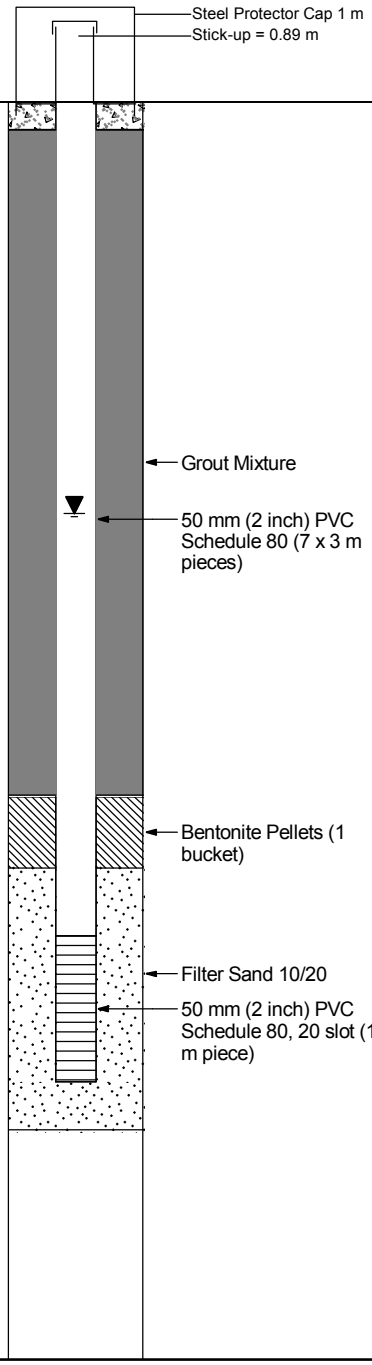
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-06S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**28/04/2012**
Location:	**Downstream of Site C Embankment**	Total Depth:	**22.55 m**	Date Installation:	**29/04/2012**
Coordinates:	**5,896,470 N , 374,804 E (UTM NAD 83)**	Elevation:	**1278 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG			NOTES
			SANDY SILT Sandy SILT, trace gravel, angular to subangular, fine to coarse, low plasticity, brown and orange, very stiff to hard, massive, moist.	0.6 m	Water Level measured at 8.88 mbgs on 30/04/2012
1273	5				
1268	10				
1263	15		GRAVELLY SILT Gravelly SILT, trace sand, subrounded, fine to coarse, low plasticity, dark brown, hard, massive, moist to wet.	15.2 m 16.8 m	
1258	20		SANDY SILT Sandy SILT, trace gravel, subangular to subrounded, fine to coarse, low plasticity, yellow to brown, hard, massive, moist.	18.3 m 21.5 m	Water return at 21.0 m - approximately 0.5 gal/min
1253	25			22.6 m	



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-06S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.13	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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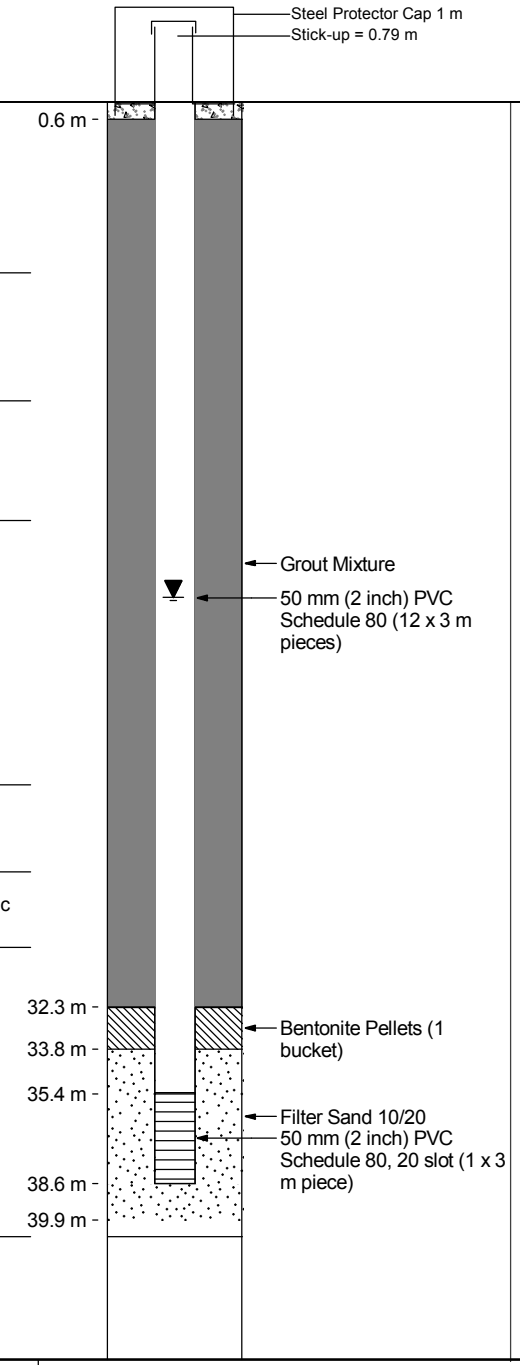
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**29/04/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**40.49 m**	Date Installation:	**30/04/2012**
Coordinates:	**5,899,440 N , 376,395 E (UTM NAD 83)**	Elevation:	**1221 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1216	5		**SAND AND SILT** SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, stiff to very stiff, dense to very dense, massive, moist to dry.
1211	10		**SAND AND GRAVEL** SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1206	15		**SAND** SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, brown, very dense, stratified, dry to moist.
1201	20		**SAND AND GRAVEL** SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, dense to very dense, massive, wet.
1196	25		**SILT AND SAND** SILT and SAND, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, very stiff to hard, dense to very dense, massive, wet.
1191	30		**SILTY SAND AND GRAVEL** Silty SAND and GRAVEL, subrounded, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1186	35		**SILTY SAND** Silty SAND, some gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very dense, massive, moist.
1181	40		



NOTES

Water Level measured at 17.44 mbgs on 06/06/2012

Water return at 18.0 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-07D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.14	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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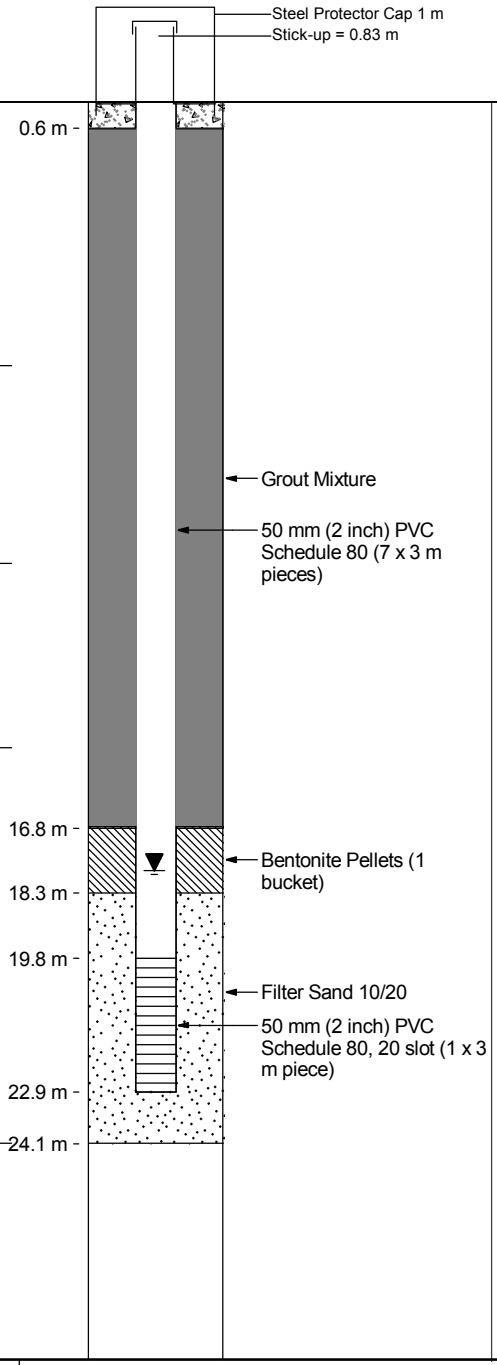
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-07S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**30/04/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**24.08 m**	Date Installation:	**30/04/2012**
Coordinates:	**5,899,440 N , 376,399 E (UTM NAD 83)**	Elevation:	**1221 m**	Supervised by:	**AL/HS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SAND AND SILT SAND and SILT, some gravel, angular and subrounded, fine to coarse, non plastic to low plasticity, brown and grey, firm to stiff, compact to dense, massive, moist to dry.
1216	5		SAND AND GRAVEL SAND and GRAVEL, subangular, fine to coarse, non plastic to low plasticity, brown, very dense, massive, moist.
1211	10		SAND SAND, trace silt and gravel, subangular to subrounded, fine to coarse sand, fine gravel, non plastic, cohesive, brown, dense to very dense, stratified, dry to moist.
1206	15		SAND AND GRAVEL SAND and GRAVEL, trace silt, rounded to angular, fine to coarse, non plastic, brown, very dense, massive, wet.
1201	20		
1196	25		



NOTES

Water Level measured at 17.63 mbgs on 05/06/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-07S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.15	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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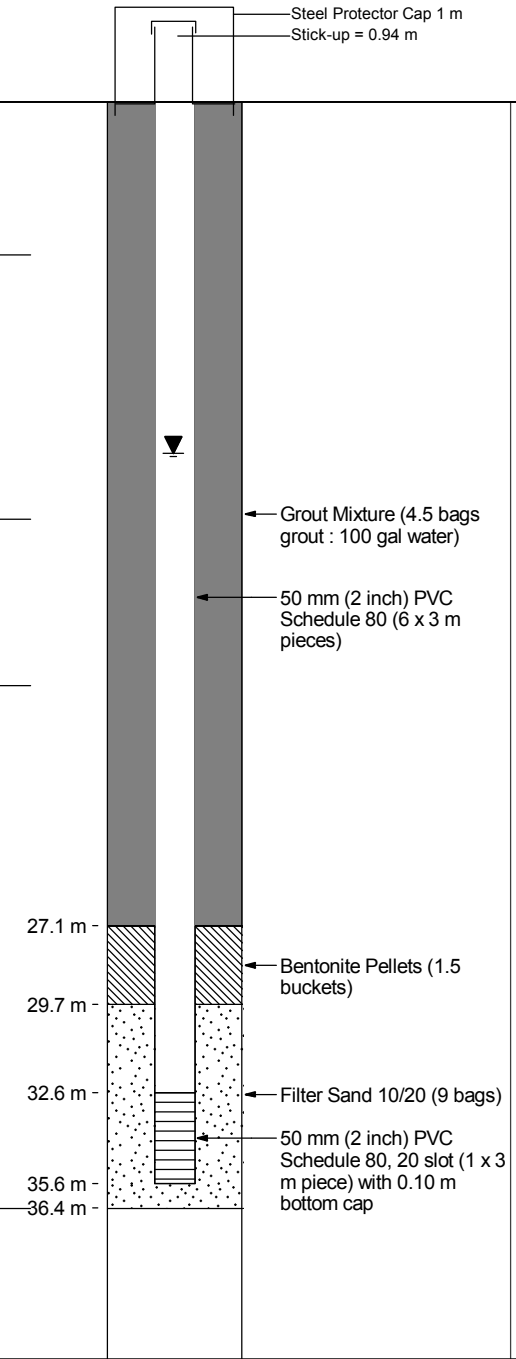
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**08/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**36.42 m**	Date Installation:	**09/08/2012**
Coordinates:	**5,899,192 N , 377,889 E (UTM NAD 83)**	Elevation:	**1181 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1176	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.
			SANDY SILT Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.
1171	10		
			SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1166	15		
			SAND AND GRAVEL SAND and GRAVEL, some silt and clay, subangular to subrounded, fine to coarse, brown yellow, dense to very dense, massive, moist.
1161	20		
1156	25		
1151	30		
1146	35		
1141	40		



NOTES

Water Level measured at 11.33 mbgs on 19/08/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-08D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.16	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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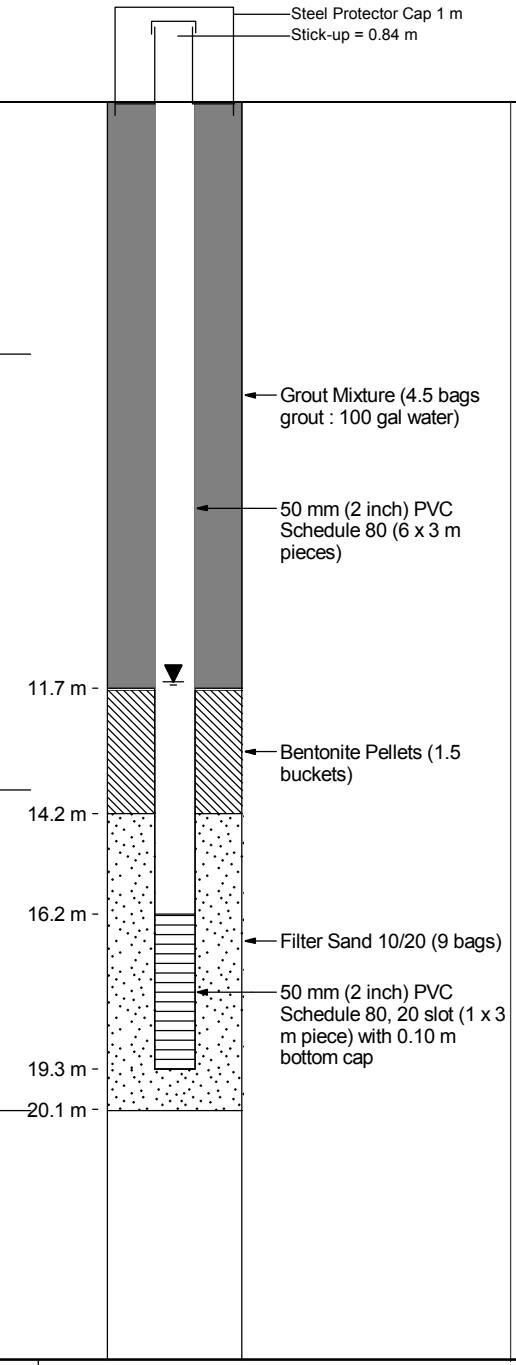
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-08S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**10/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**20.12 m**	Date Installation:	**11/08/2012**
Coordinates:	**5,899,198 N , 377,899 E (UTM NAD 83)**	Elevation:	**1181 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, brown, compact to dense, massive, dry.
1176	5		SANDY SILT Sandy SILT, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, dark brown, very stiff to hard, massive, moist.
1171	10		
			SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1166	15		
1161	20		



NOTES

Water Level measured at 11.43 mbgs on 19/08/2012

Moisture at and below 4.5 m

Water return on startup at 8.8 m

Water return on startup at 10.4 m

Water return on startup at 14.3 m

~3-5 gal/min at 15.3 m

~20 gal/min at 16.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-08S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.17**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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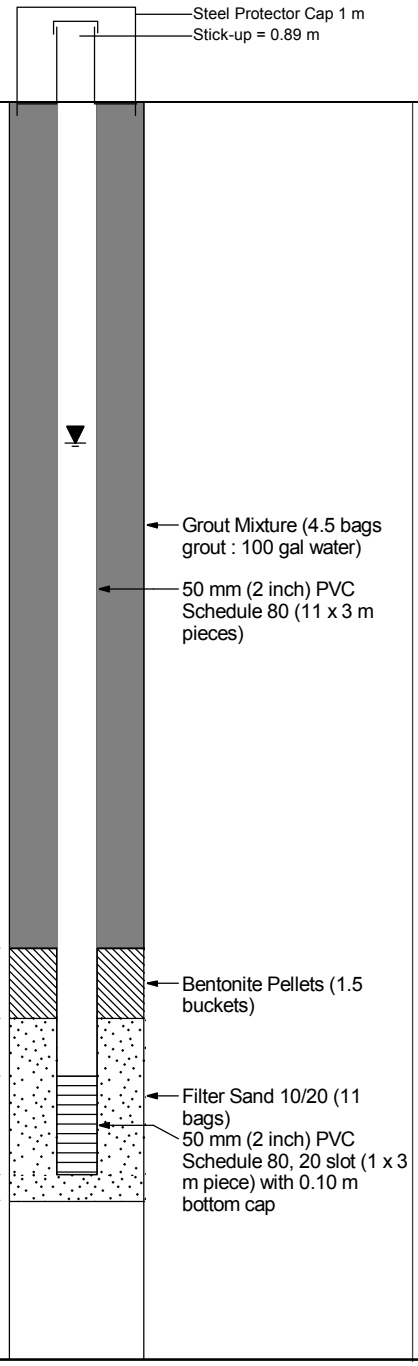
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**11/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**34.44 m**	Date Installation:	**12/08/2012**
Coordinates:	**5,899,688 N , 378,334 E (UTM NAD 83)**	Elevation:	**1167 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1162	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.
			SILT SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.
			SILT AND SAND SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.
1157	10		SILT SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1152	15		
			SILT AND SAND SILT and SAND, trace clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, moist.
1147	20		
1142	25		
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1137	30		
1132	35		SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.



NOTES

- Water Level measured at 10.47 mbgs on 19/08/2012
- ~3 gal/min 13 m to 15 m
- No water return on start up at 18 m
- ~0.5 gal/min on startup at 24.38m
- ~1-2 gal/min at 29 to 31.69 m
- ~ 3-5 gal/min at 32 to 34 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-09D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.18	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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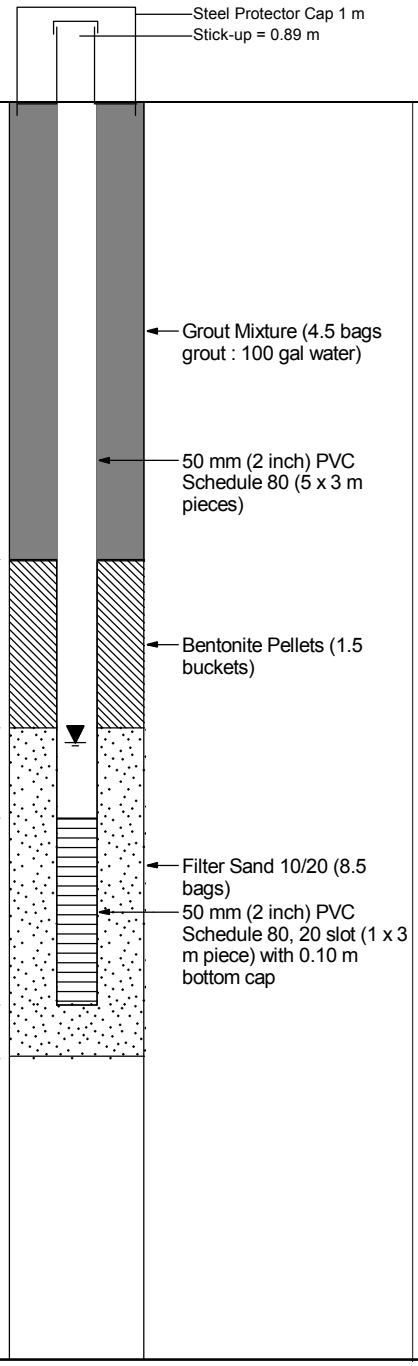
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-09S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**12/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.85 m**	Date Installation:	**13/08/2012**
Coordinates:	**5,899,687 N , 378,324 E (UTM NAD 83)**	Elevation:	**1167 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobbles, subrounded, fine to coarse, light brown, compact to dense, massive, dry.
1162	5		SILT SILT, some sand and gravel, subrounded, fine to coarse, low plasticity, grey, stiff to very stiff, massive, dry.
			SILT AND SAND SILT and SAND, some gravel, trace clay, subrounded, fine to coarse, brown, very stiff, dense, massive, moist.
1157	10		SILT SILT, some clay, trace sand, fine to coarse, low plasticity, dark grey, very stiff to hard, massive, moist.
			SAND AND GRAVEL SAND and GRAVEL, trace silt, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1152	15		
1147	20		



NOTES

Water Level measured at 10.53 mbgs on 19/08/2012

~3 gal/min 13 m to 15 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-09S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.19**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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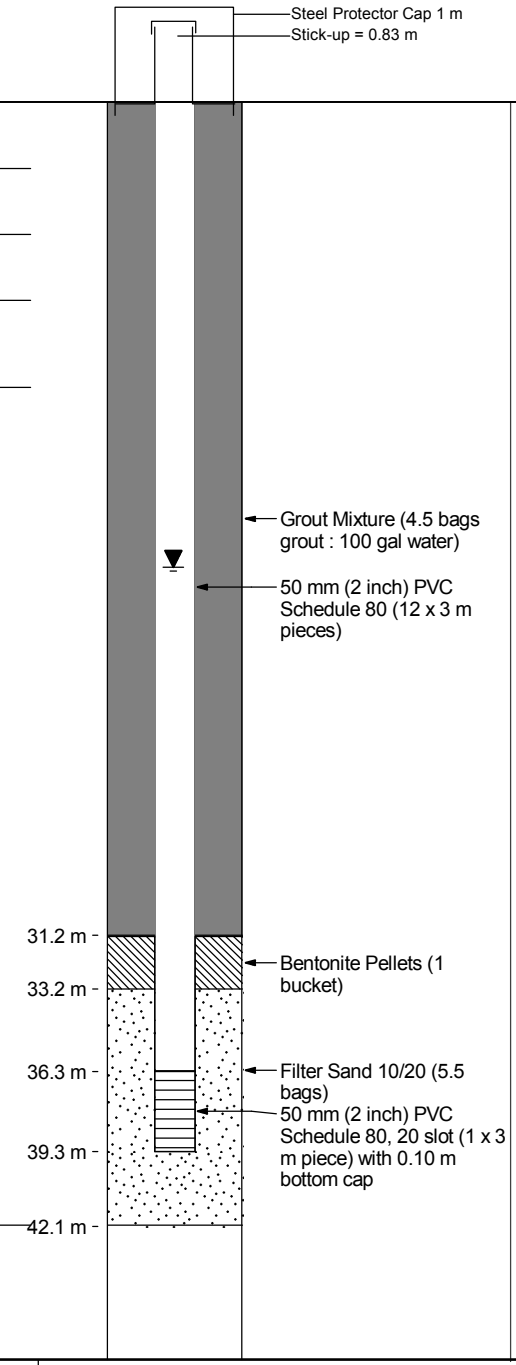
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**17/08/2012**
Location:	**Upslope West of Deposit**	Total Depth:	**42.06 m**	Date Installation:	**17/08/2012**
Coordinates:	**5,892,263 N , 375,045 E (UTM NAD 83)**	Elevation:	**1677 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.
			SILT AND SAND SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, dense, massive, moist to dry.
1672	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.
			COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.
1667	10		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1662	15		
1657	20		
1652	25		
1647	30		
1642	35		
1637	40		
1632	45		



NOTES

Water Level measured at 17.17 mbgs on 08/10/2012

Well was dry on 20/08/12

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-10D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	**1**
FIGURE. **C1.20**	REV. **0**

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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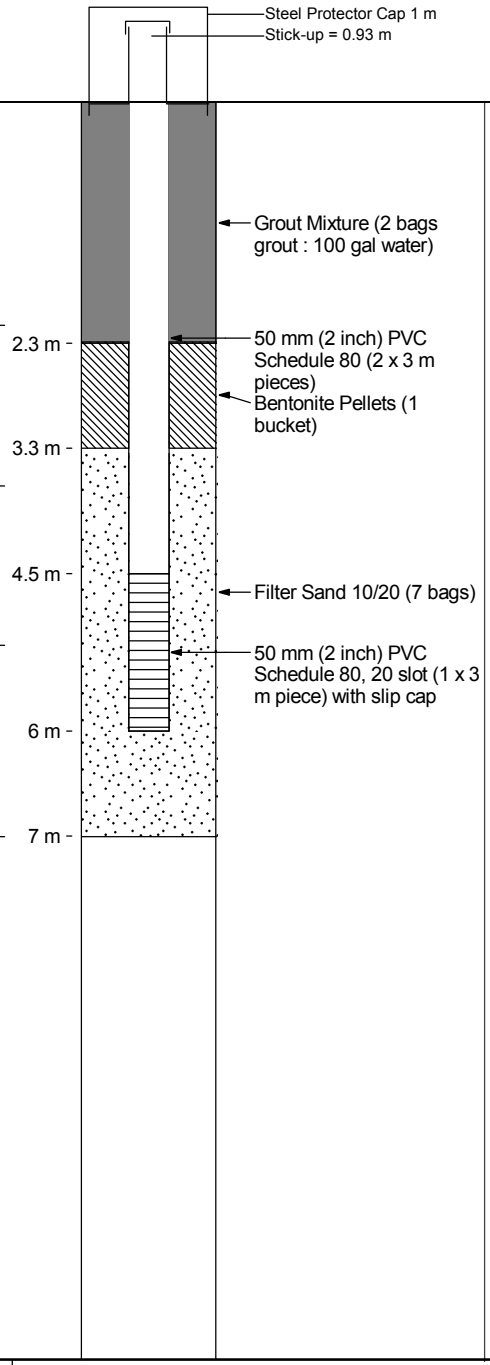
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-10S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**18/08/2012**
Location:	**Upslope West of Deposit**	Total Depth:	**7.01 m**	Date Installation:	**18/08/2012**
Coordinates:	**5,892,260 N , 375,037 E (UTM NAD 83)**	Elevation:	**1677 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, dry.
			SILT AND SAND SILT and SAND, trace clay, subangular, fine to coarse, brown, stiff to very stiff, compact to dense, massive, moist to dry.
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace clay, subangular, fine to coarse, brown, dense to very dense, massive, moist.
1672	5		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, purple brown and greenish grey, stiff to very stiff, massive, moist to wet.
1667	10		



NOTES

Well was dry on 20/08/2012

No observations of water return

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-10S

Knight Piésold CONSULTING

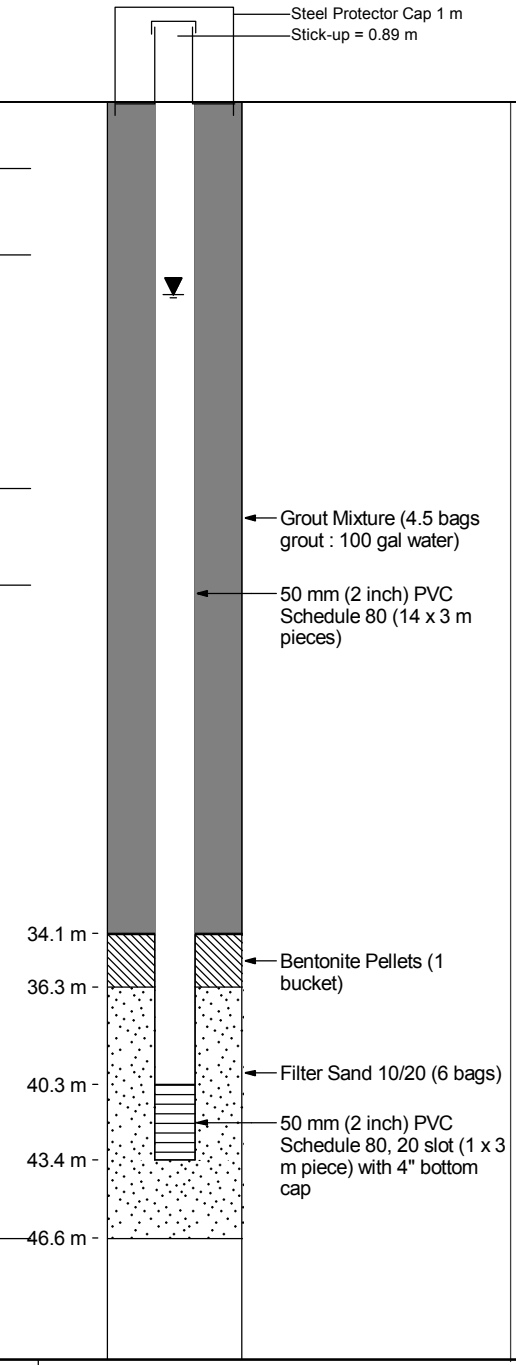
PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.21	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\AIDAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\AIDAT\ATASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, WELL COMPLETION DETAILS REVISED, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**18/08/2012**
Location:	**Upslope East of Deposit**	Total Depth:	**46.63 m**	Date Installation:	**19/08/2012**
Coordinates:	**5,892,168 N , 375,773 E (UTM NAD 83)**	Elevation:	**1688 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
1683	5		SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
1678	10		
1673	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.
1668	20		MODERATELY WEATHERED ANDESITE Fine-grained, porphyritic, dark grey to reddish brown, medium strong, moderately weathered.
1663	25		
1658	30		
1653	35		
1648	40		
1643	45		
1638	50		



NOTES

Water Level measured at 7.61 mbgs on 20/08/2012

~2 gal/min water return 15.3 m to 19.8 m

~1 gal/min water return at 42.5 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-11D

Knight Piésold CONSULTING

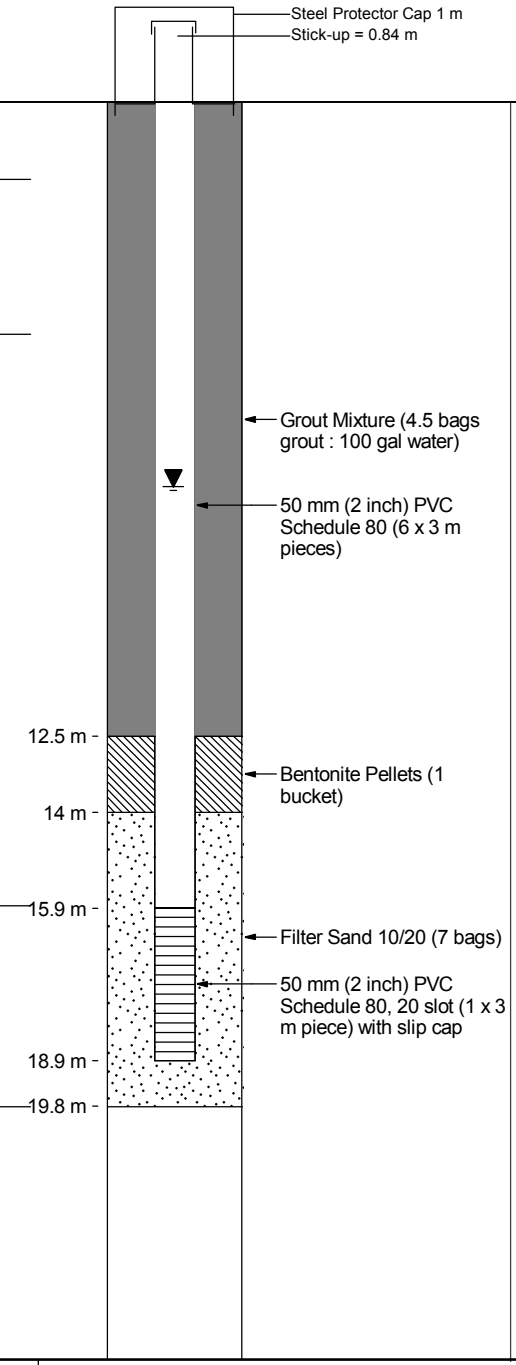
PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.22	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, WELL COMPLETION DETAILS REVISED, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-11S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**20/08/2012**
Location:	**Upslope East of Deposit**	Total Depth:	**19.81 m**	Date Installation:	**20/08/2012**
Coordinates:	**5,892,171 N , 375,782 E (UTM NAD 83)**	Elevation:	**1688 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**114.3mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
			SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular to subrounded, fine to coarse, low plasticity, brown, very stiff, dense, massive, moist.
1683	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, subangular, fine to coarse, brown, dense to very dense, massive, moist.
1678	10		
1673	15		COMPLETELY WEATHERED BEDROCK Sandy, Clayey SILT, some gravel, angular, fine to coarse, low to medium plasticity, dark green grey, stiff to very stiff, massive, moist to wet.
1668	20		



NOTES

Water Level measured at 7.45 mbgs on 21/08/2012

~2 gal/min water return 15.3 m to EOH

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-11S

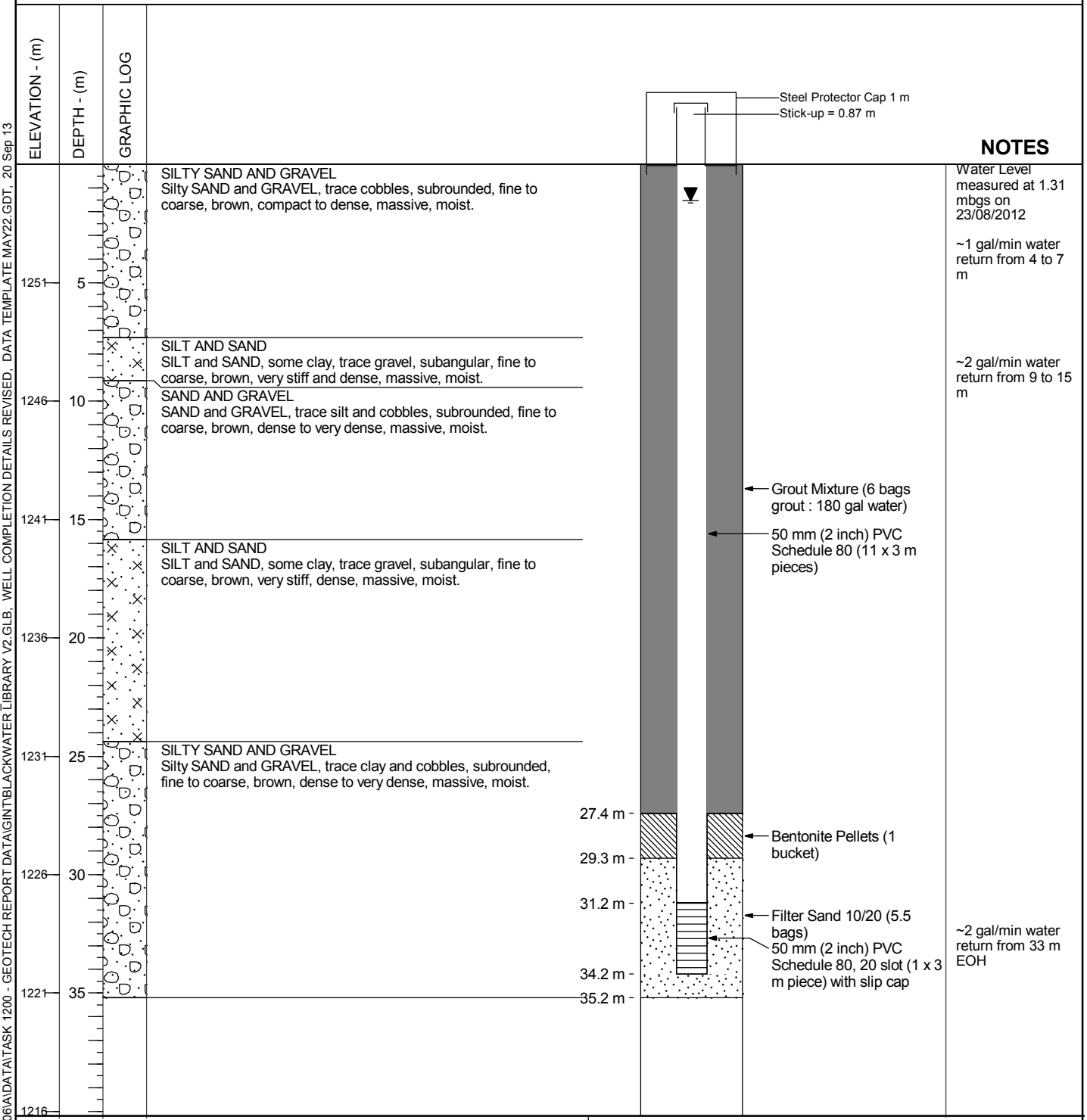
Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.23	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\AIDAT\ATASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\AIDAT\ATASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, WELL COMPLETION DETAILS REVISED, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**21/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**35.2 m**	Date Installation:	**22/08/2012**
Coordinates:	**5,896,260 N , 378,485 E (UTM NAD 83)**	Elevation:	**1256 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**



GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-12D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.24	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

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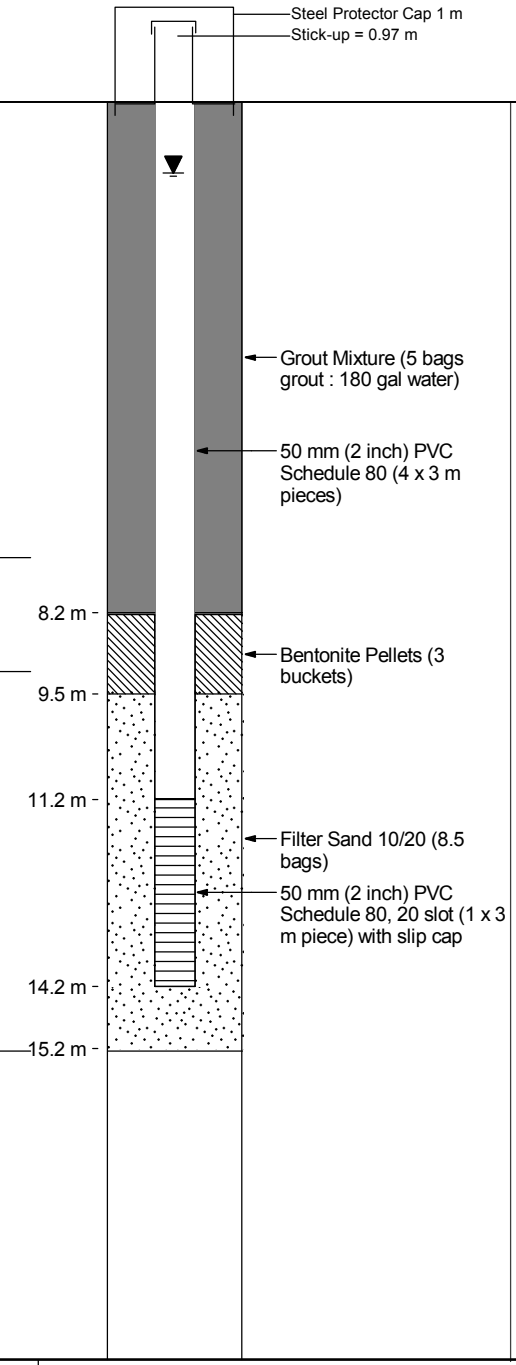
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-12S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**23/08/2012**
Location:	**Downstream of Site D Embankment**	Total Depth:	**15.24 m**	Date Installation:	**23/08/2012**
Coordinates:	**5,896,256 N , 378,493 E (UTM NAD 83)**	Elevation:	**1256 m**	Supervised by:	**DMW**
Drilling Method:	**ODEX**	Hole Diameter:	**139.7mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1251	5		SILTY SAND AND GRAVEL Silty SAND and GRAVEL, trace cobble, subrounded, fine to coarse, brown, compact to dense, massive, moist.
			SILT AND SAND SILT and SAND, some clay, trace gravel, subangular, fine to coarse, brown, very stiff, dense, massive, moist.
1246	10		SAND AND GRAVEL SAND and GRAVEL, trace silt and cobbles, subrounded, fine to coarse, brown, dense to very dense, massive, moist.
1241	15		
1236	20		



NOTES

Water Level measured at 1.03 mbgs on 23/08/2012

~1 gal/min water return from 4 to 7 m

~2 gal/min water return from 9 to EOH

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-12S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.25	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\DATA\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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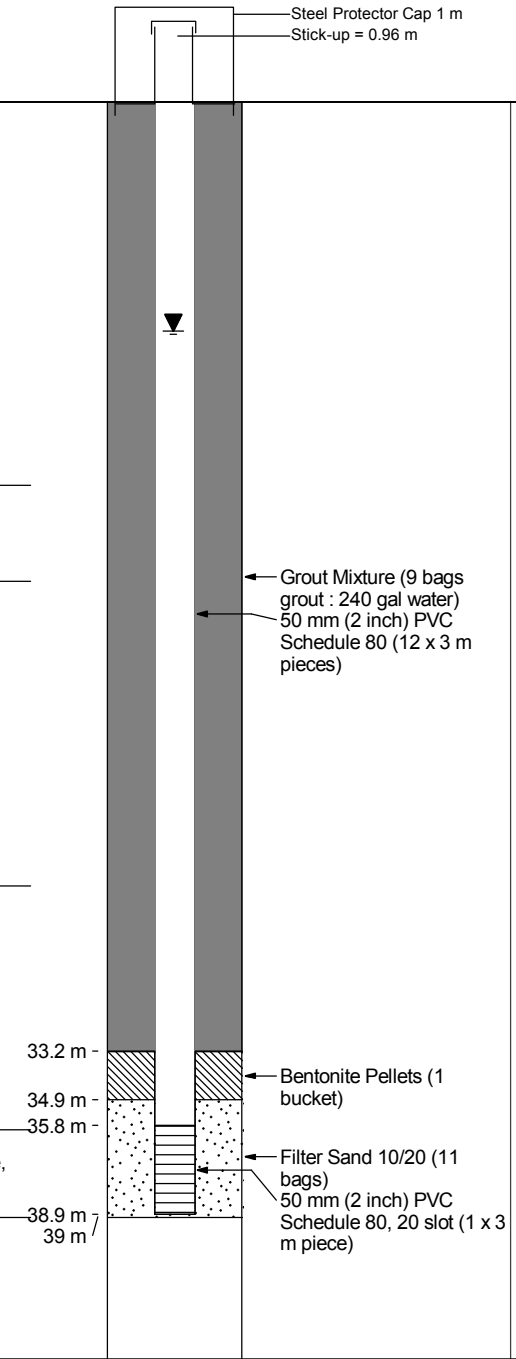
Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13D**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**24/08/2012**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**39.01 m**	Date Installation:	**24/08/2012**
Coordinates:	**5,893,844 N , 370,815 E (UTM NAD 83)**	Elevation:	**1364 m**	Supervised by:	**JS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m)	DEPTH - (m)	GRAPHIC LOG	
1359	5		SAND AND GRAVEL SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.
1354	10		
1349	15		SILTY SAND Silty SAND, trace gravel, subangular to subrounded, fine to coarse, low plasticity, grey, dense, massive, wet.
1344	20		SANDY GRAVELLY SILT Sandy Gravelly SILT, trace clay, subangular to subrounded, fine to coarse, low plasticity, grey, very stiff to hard, massive, moist.
1339	25		
1334	30		SILT SILT, some clay, trace sand and gravel, subangular to subrounded, fine to coarse, low plasticity, grey, firm to very stiff, massive, moist.
1329	35		GRAVELLY SILT Gravelly SILT, some sand, trace clay, subangular, fine to coarse, low plasticity, brown, very stiff to hard, massive, wet.
1324	40		



NOTES

Water Level measured at 7.77 mbgs on 12/09/2012

Water return at 36.0 m

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-13D

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.26	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

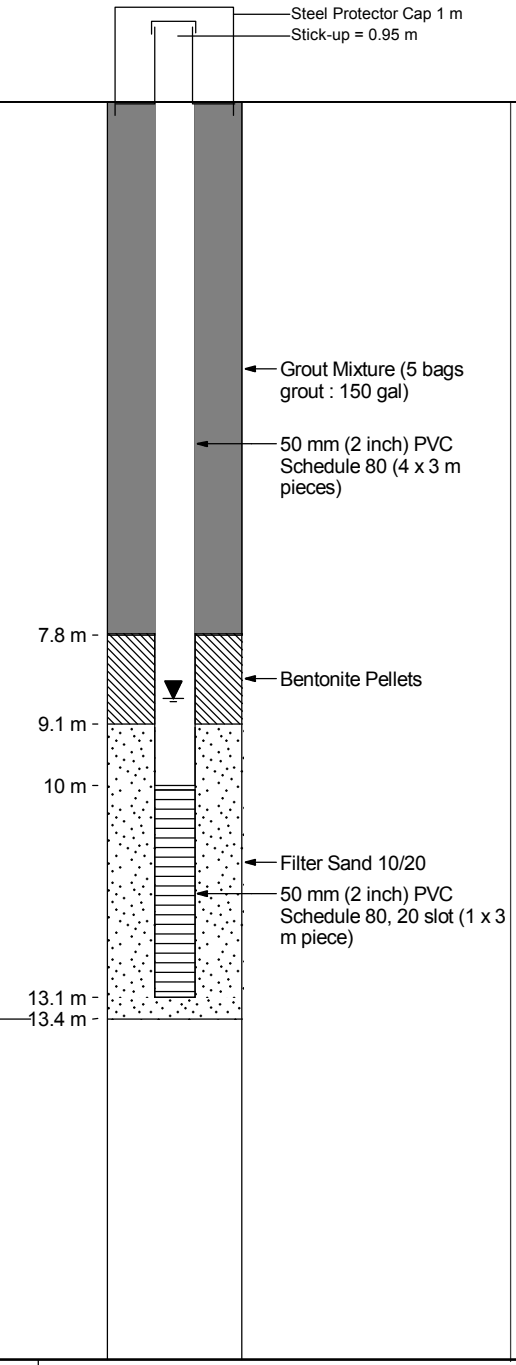
File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
Library: M:\101\00457\06\A\DAT\A\TASK 1200 - GEOTECH REPORT DATA\GINT\BLACKWATER LIBRARY V2.GLB, WELL COMPLETION DETAILS REVISED, DATA TEMPLATE MAY22.GDT, 20 Sep 13

Project:	**BLACKWATER GOLD PROJECT**	Drill Hole No.	**MW12-13S**	**PAGE**	1 of 1
Contractor:	**Westech Drilling Corp.**	Sample Type:	**Cuttings**	Drilling Started:	**24/08/2012**
Location:	**Downstream of West Saddle Dam**	Total Depth:	**13.41 m**	Date Installation:	**24/08/2012**
Coordinates:	**5,893,841 N , 370,809 E (UTM NAD 83)**	Elevation:	**1365 m**	Supervised by:	**JS**
Drilling Method:	**ODEX**	Hole Diameter:	**152.4mm**	Reviewed by:	**JS**

ELEVATION - (m) | DEPTH - (m) | GRAPHIC LOG

1360 — 5
1355 — 10
1350 — 15

SAND AND GRAVEL
SAND and GRAVEL, some silt, trace clay, subangular to subrounded, fine to coarse, brown, compact to dense, massive, dry becoming wet.



NOTES

Water Level measured at 8.62 mbgs on 12/09/2012

GENERAL REMARKS:

Rev 1 - Coordinates and elevation updated with survey information. Drillhole is dry with no observations of water return.

REV. 0 - Issued for Report

NEW GOLD INC.
BLACKWATER GOLD PROJECT
MONITORING WELL DETAILS FOR MW12-13S

Knight Piésold CONSULTING

PROJECT/ASSIGNMENT NO.	REF. NO.
101-457/6	1
FIGURE. C1.27	REV. 0

Logging conducted according to the Canadian Foundation Engineering Manual, 4th Edition, 2006.

File:M:\101\00457\04\A\DAT\A\TASK 0400 - SITE INVESTIGATIONS\GINT\BLACKWATER TSF SI 2012 - REVC.GPJ
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APPENDIX C2

LUGEON TESTING

(Pages C2-1 to C2-41)

TABLE C2.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
LUGEON HYDRAULIC CONDUCTIVITY TESTING SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Test #	Depth (m)		k (m/s)	Lugeon Value	Flow Type	Packer System
		From	To				
GT12-01	1	75.9	82.2	1.E-09	0.01	No Take	IPI
	2	81.99	88.32	9.E-09	0.09	Turbulent	IPI
GT12-02	1	94.13	100.43	1.E-07	1.1	Turbulent	IPI
	2	100.23	106.53	6.E-09	0.06	Turbulent	IPI
GT12-03	1	61.97	68.28	8.E-09	0.1	Laminar	IPI
	2	68.07	74.37	4.E-07	4.3	Turbulent	IPI
GT12-04	1	79.2	85.5	2.E-08	0.2	Dilation	IPI
	2	85.29	91.59	1.E-07	1.4	Wash-out	IPI
GT12-05	1	89.41	95.71	2.E-07	2	Dilation	IPI
	2	95.5	101.8	4.E-07	3.8	Turbulent	Nitrogen
	3	101.6	107.9	9.E-07	8.7	Laminar	Nitrogen
	4	107.69	114	5.E-08	0.5	Dilation	Nitrogen
	5	113.79	120.09	1.E-07	1.3	Dilation	Nitrogen
GT12-06	1	54.66	60.96	6.E-09	0.1	Void Filling	IPI
	2	60.76	67.06	1.E-08	0.1	Dilation	IPI
GT12-07	1	17.93	24.23	8.E-08	0.8	Laminar	IPI
	2	24.03	30.33	3.E-08	0.3	Turbulent	Nitrogen
	3	30.12	36.42	1.E-07	1.1	Void Filling	Nitrogen
GT12-08	1	8.79	15.09	8.E-09	0.1	Laminar	IPI
	2	14.88	21.18	1.E-07	1.2	Laminar	IPI
	3	20.98	25.76	1.E-09	0.01	No Take	IPI
	4	25.55	30.33	1.E-07	1	Void Filling	IPI
GT12-09	1	112.57	118.87	2.E-09	0.02	Laminar	IPI
	2	118.67	124.97	1.E-08	0.1	Laminar	Nitrogen
GT12-10	1	33.32	39.62	1.E-08	0.1	Laminar	Nitrogen
	2	39.42	45.72	4.E-07	3.6	Laminar	Nitrogen
GT12-11	1	7.42	13.72	4.E-07	4.5	Dilation	Nitrogen
	2	13.51	19.81	8.E-07	8.2	Void Filling	Nitrogen
	3	19.61	25.91	7.E-07	6.6	Wash-out	Nitrogen
	4	25.7	32	4.E-06	38.3	Wash-out	Nitrogen
	5	31.8	38.1	3.E-07	2.6	Laminar	Nitrogen
	6	37.9	44.2	1.E-06	13.7	Turbulent	Nitrogen
	7	43.99	50.29	3.E-06	29.5	Turbulent	Nitrogen
	8	50.09	56.39	1.E-06	14.8	Wash-out	Nitrogen
	9	56.18	62.48	4.E-07	3.9	Void Filling	Nitrogen
	10	62.28	68.58	7.E-08	0.7	Void Filling	Nitrogen
GT12-12	1	27.23	33.53	6.E-08	0.6	Laminar	IPI
	2	33.32	39.62	2.E-08	0.2	Laminar	IPI
GT12-28	1	14.9	21.6	3.E-08	0.3	Void Filling	IPI
	2	21.6	27.7	8.E-08	0.8	Void Filling	IPI

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	11SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	26JUL'13	ISSUED WITH REPORT	JS	BB	KJB

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

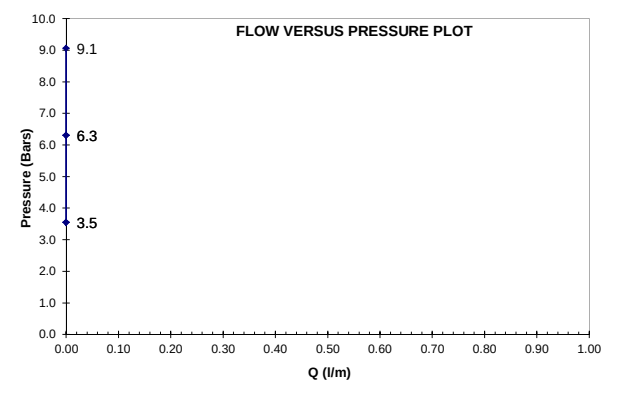
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-01

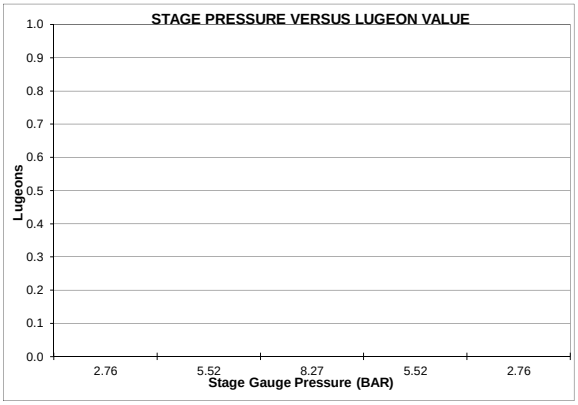
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 ° (FROM HORIZONTAL) | DEPTH GROUNDWATER: 6.8 m | TOP OF TEST INTERVAL: 249.0 ft (DOWN HOLE) / 75.9 m (DOWN HOLE)

DATE: 13-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 269.7 ft (DOWN HOLE) / 82.2 m (DOWN HOLE)

GAUGE P (BAR)											FLOW	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	0.0	0.0	0.0	0.0	0.0	0.0			litres/min	
	Take	litres		0.00	0.00	0.00	0.00	0.00				
2.76	Average Take	l/m									0.00	
GAUGE P (BAR)											FLOW	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	0.0	0.0	0.0	0.0	0.0	0.0			litres/min	
	Take	litres		0.00	0.00	0.00	0.00	0.00				
5.52	Average Take	l/m									0.00	
GAUGE P (BAR)											FLOW	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	0.0	0.0	0.0	0.0	0.0	0.0			litres/min	
	Take	litres		0.00	0.00	0.00	0.00	0.00				
8.27	Average Take	l/m									0.00	
GAUGE P (BAR)											FLOW	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	0.0	0.0	0.0	0.0	0.0	0.0			litres/min	
	Take	litres		0.00	0.00	0.00	0.00	0.00				
5.52	Average Take	l/m									0.00	
GAUGE P (BAR)											FLOW	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	0.0	0.0	0.0	0.0	0.0	0.0			litres/min	
	Take	litres		0.00	0.00	0.00	0.00	0.00				
2.76	Average Take	l/m									0.00	





Lu = 0.01 | K (cm/s) = 1E-07

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Field notes indicate no take during test, flowmeter values not recorded.

Hydraulic conductivity value is based on an estimate of the lowest value that can be reliably measured using the packer tool.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY: CS

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REV	DATE	DESCRIPTION	PREPD	CHK'D	APP'D
0	20JUN'13	ISSUED WITH REPORT	AL	CS	KJB

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

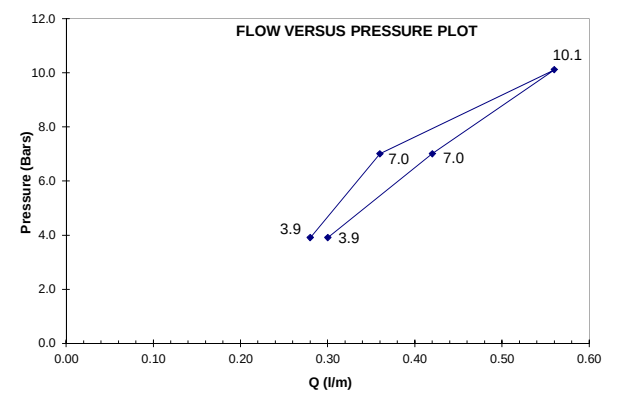
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-01

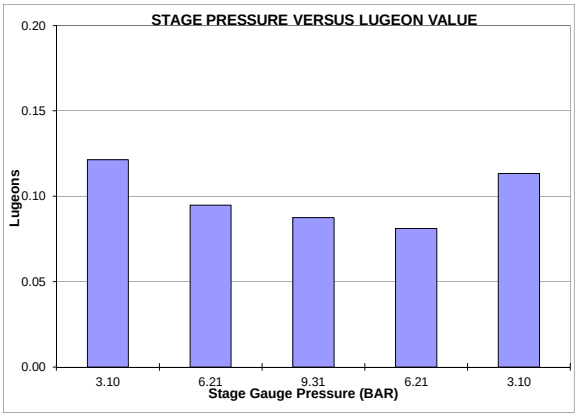
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 7.0 m | TOP OF TEST INTERVAL: 269.0 ft (DOWN HOLE) / 82.0 m (DOWN HOLE)

DATE: 13-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 289.8 ft (DOWN HOLE) / 88.3 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	149.0	149.4	149.5	149.8	150.2	150.5				
	Take	litres		0.40	0.10	0.30	0.40	0.30				
3.10	Average Take	l/m		0.40	0.10	0.30	0.40	0.30			0.30	0.12
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	151.2	151.8	152.3	152.7	153.0	153.3				
	Take	litres		0.60	0.50	0.40	0.30	0.30				
6.21	Average Take	l/m		0.60	0.50	0.40	0.30	0.30			0.42	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	155.0	155.2	155.8	156.5	157.2	157.8				
	Take	litres		0.20	0.60	0.70	0.70	0.60				
9.31	Average Take	l/m		0.20	0.60	0.70	0.70	0.60			0.56	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	158.2	158.5	158.9	159.2	159.6	160.0				
	Take	litres		0.30	0.40	0.30	0.40	0.40				
6.21	Average Take	l/m		0.30	0.40	0.30	0.40	0.40			0.36	0.08
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	160.1	160.5	160.8	161.0	161.0	161.5				
	Take	litres		0.40	0.30	0.20	0.00	0.50				
3.10	Average Take	l/m		0.40	0.30	0.20	0.00	0.50			0.28	0.11





Lu = 0.09 | K (cm/s) = 9E-07

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY: CS

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	20JUN'13	ISSUED WITH <Doc and Cont. No. or P/A>	AL	CS	KJB

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

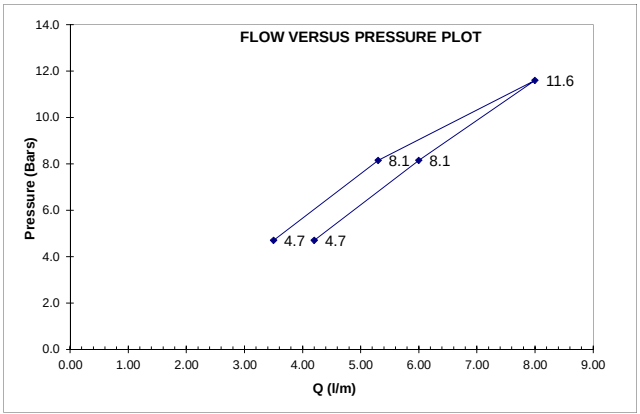
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-02

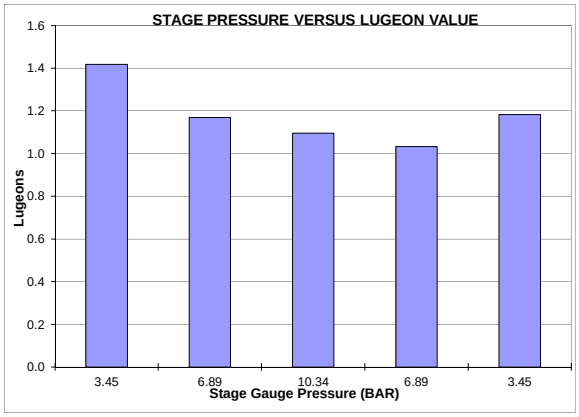
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 11.4 mbgs | TOP OF TEST INTERVAL: 308.8 ft (DOWN HOLE) / 94.2 m (DOWN HOLE)

DATE: 18-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 329.5 ft (DOWN HOLE) / 100.5 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1094.0	1098.0	1102.0	1107.0	1110.5	1115.0				
	Take	litres		4.00	4.00	5.00	3.50	4.50				
3.45	Average Take	l/m		4.00	4.00	5.00	3.50	4.50			4.20	1.42
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1122.0	1128.5	1134.0	1140.5	1146.0	1152.0				
	Take	litres		6.50	5.50	6.50	5.50	6.00				
6.89	Average Take	l/m		6.50	5.50	6.50	5.50	6.00			6.00	1.17
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1160.0	1168.5	1176.5	1186.0	1192.0	1200.0				
	Take	litres		8.50	8.00	9.50	6.00	8.00				
10.34	Average Take	l/m		8.50	8.00	9.50	6.00	8.00			8.00	1.10
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1205.0	1210.0	1215.5	1221.0	1226.0	1231.5				
	Take	litres		5.00	5.50	5.50	5.00	5.50				
6.89	Average Take	l/m		5.00	5.50	5.50	5.00	5.50			5.30	1.03
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1234.0	1237.0	1240.5	1245.0	1248.0	1251.5				
	Take	litres		3.00	3.50	4.50	3.00	3.50				
3.45	Average Take	l/m		3.00	3.50	4.50	3.00	3.50			3.50	1.18





Lu= 1.1 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS, AL | REVIEWED BY:

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SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

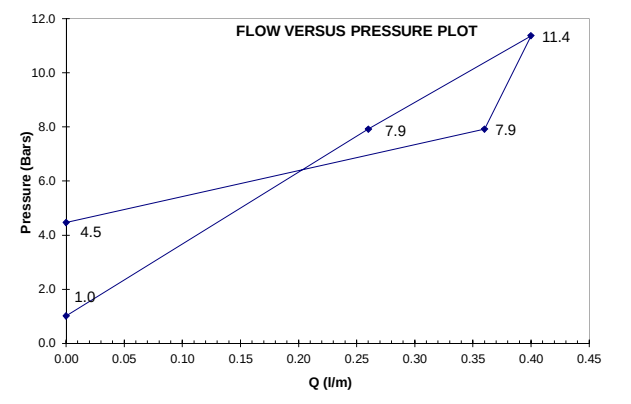
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-02

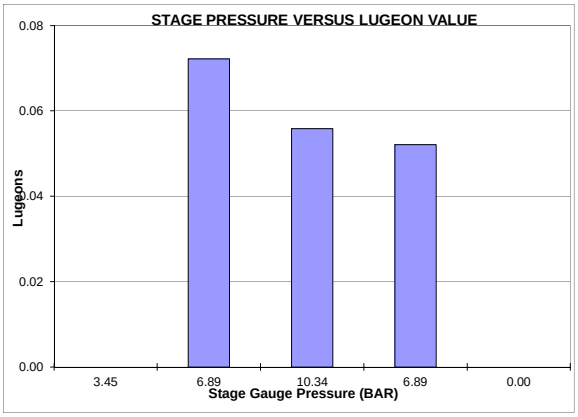
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 9.1 mbgs | TOP OF TEST INTERVAL: 328.8 ft (DOWN HOLE) / 100.3 m (DOWN HOLE)

DATE: 18-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 349.5 ft (DOWN HOLE) / 106.6 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1253.0	1253.0	1253.1	1253.1	1253.1	1253.1				
	Take	litres		0.00	0.10	0.00	0.00	0.00				
3.45	Average Take	l/m		0.00	0.10	0.00	0.00	0.00			0.00	0.00
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1254.0	1254.5	1254.8	1255.0	1255.3	1255.8				
	Take	litres		0.50	0.30	0.20	0.30	0.50				
6.89	Average Take	l/m		0.50	0.30	0.20	0.30	0.50			0.36	0.07
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1256.0	1256.3	1256.8	1257.2	1257.8	1258.0				
	Take	litres		0.30	0.50	0.40	0.60	0.20				
10.34	Average Take	l/m		0.30	0.50	0.40	0.60	0.20			0.40	0.06
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1258.0	1258.2	1258.5	1258.8	1259.0	1259.3				
	Take	litres		0.20	0.30	0.30	0.20	0.30				
6.89	Average Take	l/m		0.20	0.30	0.30	0.20	0.30			0.26	0.05
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										





Lu= 0.06 | K (cm/s) = 6E-07

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Bladder seal lost while changing pressure from 6.89 bar (100 psi) to 3.45 bar (50 psi), final pressure stage not performed.
Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.
IPI system used.

TEST BY: HS, AL | REVIEWED BY:

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

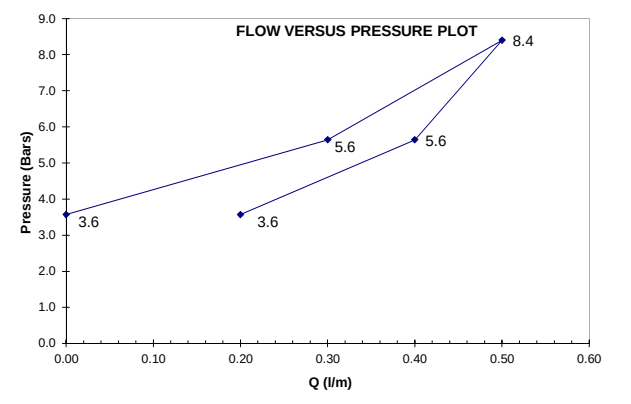
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-03

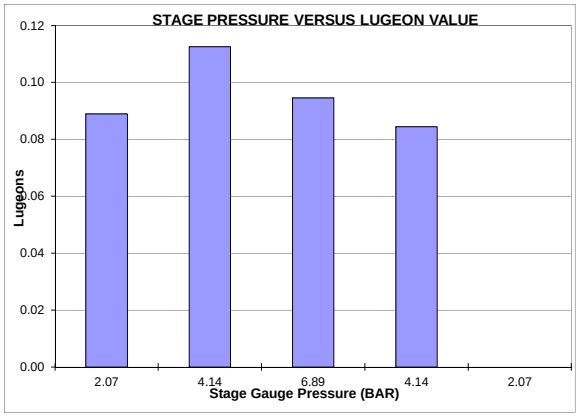
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 14.0 m | TOP OF TEST INTERVAL: 203.3 ft (DOWN HOLE) / 62.0 m (DOWN HOLE)

DATE: 20-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.0 m | BOTTOM OF TEST INTERVAL: 224.0 ft (DOWN HOLE) / 68.3 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1329.0	1330.0	1330.0	1330.0	1330.0	1330.0				
	Take	litres		1.00	0.00	0.00	0.00	0.00				
2.07	Average Take	l/m		1.00	0.00	0.00	0.00	0.00			0.20	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1330.0	1331.0	1331.0	1332.0	1332.0	1332.0				
	Take	litres		1.00	0.00	1.00	0.00	0.00				
4.14	Average Take	l/m		1.00	0.00	1.00	0.00	0.00			0.40	0.11
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1333.5	1334.5	1335.0	1335.0	1335.5	1336.0				
	Take	litres		1.00	0.50	0.00	0.50	0.50				
6.89	Average Take	l/m		1.00	0.50	0.00	0.50	0.50			0.50	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1336.0	1336.0	1336.5	1337.0	1337.0	1337.5				
	Take	litres		0.00	0.50	0.50	0.00	0.50				
4.14	Average Take	l/m		0.00	0.50	0.50	0.00	0.50			0.30	0.08
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
2.07	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	0.00





Lu = 0.1 | K (cm/s) = 8E-07

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Initial water level dropping at time of measurement. Rate of decrease not documented.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

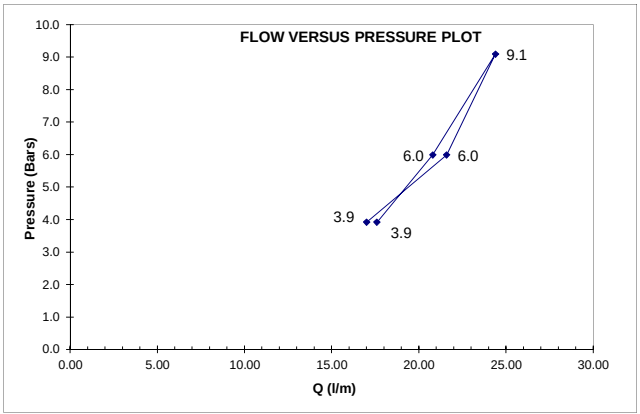
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-03

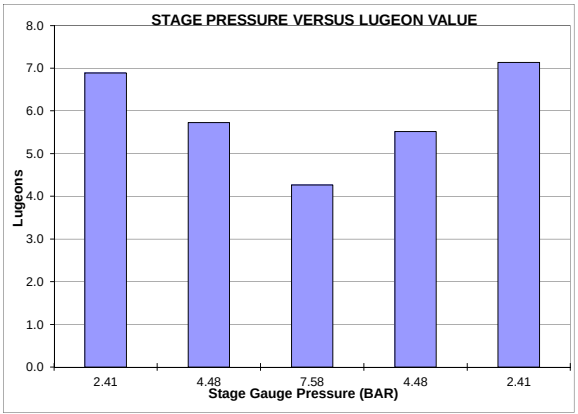
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 14.0 m | TOP OF TEST INTERVAL: 223.3 ft (DOWN HOLE) / 68.1 m (DOWN HOLE)

DATE: 20-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.0 m | BOTTOM OF TEST INTERVAL: 244.0 ft (DOWN HOLE) / 74.4 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1470.0	1490.0	1507.0	1524.0	1540.0	1555.0				
	Take	litres		20.00	17.00	17.00	16.00	15.00				
2.41	Average Take	l/m		20.00	17.00	17.00	16.00	15.00			17.00	6.89
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1610.0	1633.0	1655.0	1676.0	1697.0	1718.0				
	Take	litres		23.00	22.00	21.00	21.00	21.00				
4.48	Average Take	l/m		23.00	22.00	21.00	21.00	21.00			21.60	5.73
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1778.0	1799.0	1824.0	1849.0	1875.0	1900.0				
	Take	litres		21.00	25.00	25.00	26.00	25.00				
7.58	Average Take	l/m		21.00	25.00	25.00	26.00	25.00			24.40	4.26
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	1930.0	1951.0	1972.0	1993.0	2013.0	2034.0				
	Take	litres		21.00	21.00	21.00	20.00	21.00				
4.48	Average Take	l/m		21.00	21.00	21.00	20.00	21.00			20.80	5.52
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2056.0	2073.5	2091.0	2108.5	2125.5	2144.0				
	Take	litres		17.50	17.50	17.50	17.00	18.50				
2.41	Average Take	l/m		17.50	17.50	17.50	17.00	18.50			17.60	7.13





Lu = 4.3 | K (cm/s) = 4E-05

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Initial water level dropping at time of measurement. Rate of decrease not documented.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

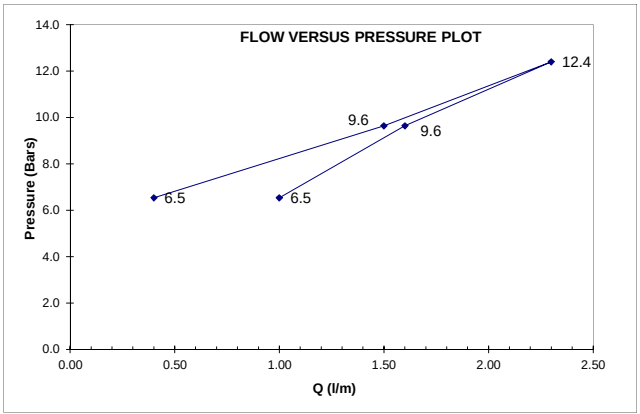
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-04

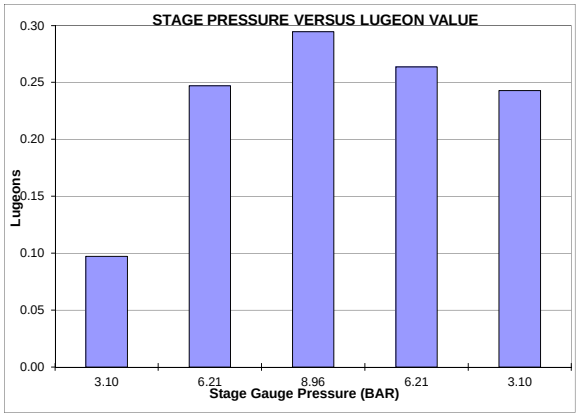
AREA: TSF, SOUTH STARTER DAM | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 33.0 m | TOP OF TEST INTERVAL: 259.8 ft (DOWN HOLE) / 79.2 m (DOWN HOLE)

DATE: 26-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.3 m | BOTTOM OF TEST INTERVAL: 280.5 ft (DOWN HOLE) / 85.5 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2161.0	2161.0	2161.0	2162.0	2162.5	2163.0				
	Take	litres		0.00	0.00	1.00	0.50	0.50				
3.10	Average Take	l/m		0.00	0.00	1.00	0.50	0.50			0.40	0.10
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	2165.0	2166.5	2168.0	2169.0	2171.0	2172.5				
	Take	litres		1.50	1.50	1.00	2.00	1.50				
6.21	Average Take	l/m		1.50	1.50	1.00	2.00	1.50			1.50	0.25
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	2174.5	2177.0	2179.5	2181.5	2184.0	2186.0				
	Take	litres		2.50	2.50	2.00	2.50	2.00				
8.96	Average Take	l/m		2.50	2.50	2.00	2.50	2.00			2.30	0.29
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	2188.0	2189.5	2191.0	2192.5	2194.0	2196.0				
	Take	litres		1.50	1.50	1.50	1.50	2.00				
6.21	Average Take	l/m		1.50	1.50	1.50	1.50	2.00			1.60	0.26
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	2197.0	2197.5	2198.5	2200.0	2201.0	2202.0				
	Take	litres		0.50	1.00	1.50	1.00	1.00				
3.10	Average Take	l/m		0.50	1.00	1.50	1.00	1.00			1.00	0.24





Lu = 0.2 | K (cm/s) = 2E-06

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Initial water level dropping fast at time of measurement.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

M:\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\Geotech Drillholes\Hydrogeological Tests\Lugeon Tests\[GT12-04 Lugeon Packer Testing Sheet.xlsx]1

# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	- PREP'D	- CHK'D	- APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

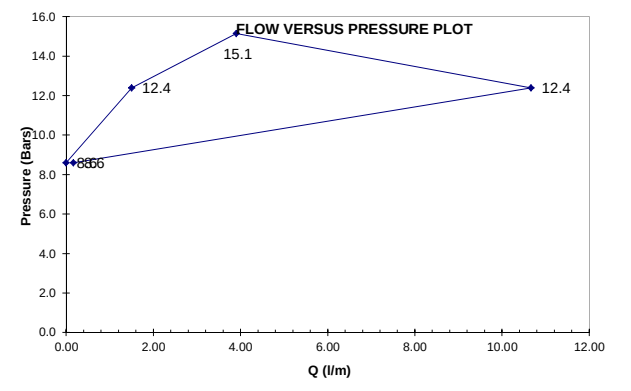
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/4 | DRILLHOLE: GT12-04

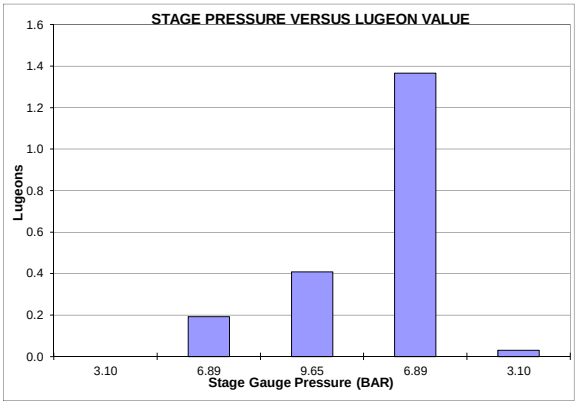
AREA: TSF, SOUTH STARTER DAM | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 53.6 m | TOP OF TEST INTERVAL: 279.8 ft (DOWN HOLE) / 85.3 m (DOWN HOLE)

DATE: 26-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 1.3 m | BOTTOM OF TEST INTERVAL: 300.5 ft (DOWN HOLE) / 91.6 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2201.0	2201.0	2201.0	2201.0	2201.0	2201.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
3.10	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	0.00
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2201.5	2202.0	2204.0	2205.0	2207.0	2209.0				
	Take	litres		0.50	2.00	1.00	2.00	2.00				
6.89	Average Take	l/m		0.50	2.00	1.00	2.00	2.00			1.50	0.19
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2212.0	2214.0	2217.0	2220.5	2220.5	2231.5				
	Take	litres		2.00	3.00	3.50	0.00	11.00				
9.65	Average Take	l/m		2.00	3.00	3.50	0.00	11.00			3.90	0.41
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2239.0	2244.0	2250.5	2260.5	2270.5	2282.5				
	Take	litres		5.00	6.50	10.00	10.00	12.00				
6.89	Average Take	l/m		5.00	6.50	10.00	10.00	12.00			10.67	1.37
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2300.0	2318.0	2321.0	2321.5	2321.5	2321.5				
	Take	litres		18.00	3.00	0.50	0.00	0.00				
3.10	Average Take	l/m		18.00	3.00	0.50	0.00	0.00			0.17	0.03





Lu = 1.4 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	YES
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

M:\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\Geotech Drillholes\Hydrogeological Tests\Lugeon Tests\[GT12-04 Lugeon Packer Testing Sheet.xlsx]2

# REV	DDMMMYY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	- PREPD	- CHK'D	- APP'D

SHEET 1 OF 5

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

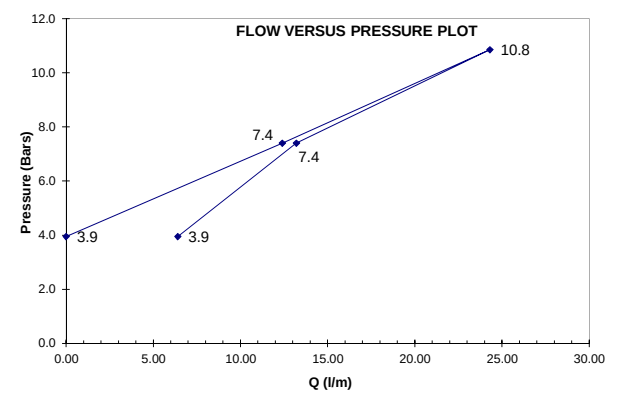
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-05

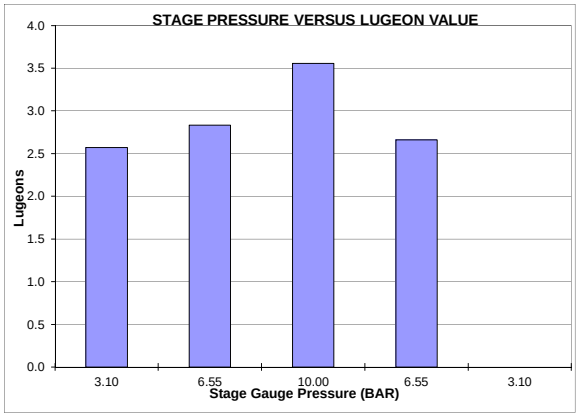
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 7.6 m | TOP OF TEST INTERVAL: 293.3 ft (DOWN HOLE) / 89.4 m (DOWN HOLE)

DATE: 31-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 0.9 m | BOTTOM OF TEST INTERVAL: 314.0 ft (DOWN HOLE) / 95.7 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2535.0	2541.0	2547.5	2555.0	2561.5	2567.0				
	Take	litres		6.00	6.50	7.50	6.50	5.50				
3.10	Average Take	l/m		6.00	6.50	7.50	6.50	5.50			6.40	2.57
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2580.0	2595.0	2609.0	2622.3	2634.5	2646.0				
	Take	litres		15.00	14.00	13.30	12.20	11.50				
6.55	Average Take	l/m		15.00	14.00	13.30	12.20	11.50			13.20	2.83
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2680.0	2706.5	2731.5	2755.0	2778.5	2801.5				
	Take	litres		26.50	25.00	23.50	23.50	23.00				
10.00	Average Take	l/m		26.50	25.00	23.50	23.50	23.00			24.30	3.56
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	2828.0	2841.5	2853.0	2866.0	2877.5	2890.0				
	Take	litres		13.50	11.50	13.00	11.50	12.50				
6.55	Average Take	l/m		13.50	11.50	13.00	11.50	12.50			12.40	2.66
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres										
	Take	litres										
3.10	Average Take	l/m										





Lu = 2.0 | K (cm/s) = 2E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Bladder deflated while changing pressure from 6.55 bar (95 psi) to 3.10 bar (45 psi), final pressure stage not performed.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used. Artesian conditions exist at 25.9 m (85 ft) depth.

TEST BY: AL | REVIEWED BY:

SHEET 2 OF 5

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

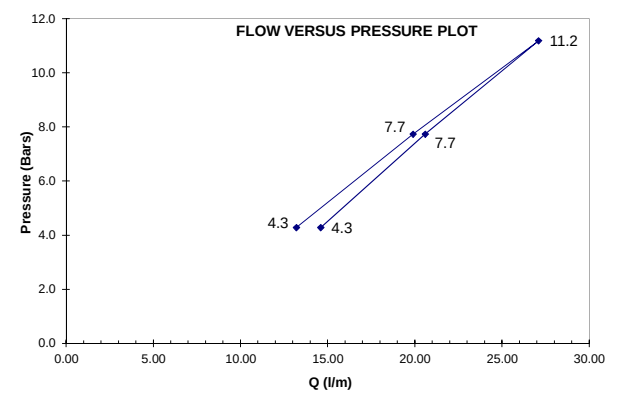
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-05

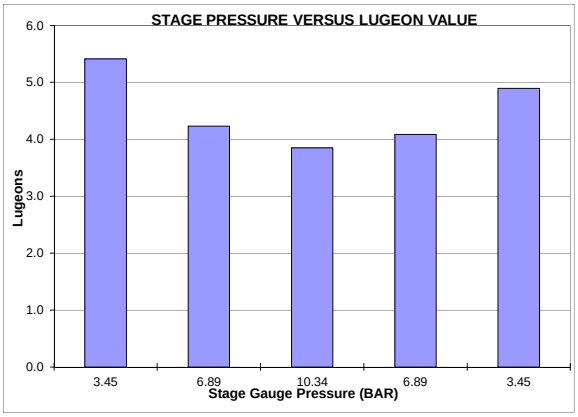
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 7.6 m | TOP OF TEST INTERVAL: 313.3 ft (DOWN HOLE) / 95.5 m (DOWN HOLE)

DATE: 31-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 0.7 m | BOTTOM OF TEST INTERVAL: 334.0 ft (DOWN HOLE) / 101.8 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	3250.0	3265.0	3280.0	3295.0	3309.0	3323.0				
	Take	litres		15.00	15.00	15.00	14.00	14.00				
3.45	Average Take	l/m		15.00	15.00	15.00	14.00	14.00			14.60	5.41
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	3336.0	3357.0	3378.0	3398.5	3419.0	3439.0				
	Take	litres		21.00	21.00	20.50	20.50	20.00				
6.89	Average Take	l/m		21.00	21.00	20.50	20.50	20.00			20.60	4.23
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	3465.0	3494.0	3520.0	3547.0	3574.0	3600.5				
	Take	litres		29.00	26.00	27.00	27.00	26.50				
10.34	Average Take	l/m		29.00	26.00	27.00	27.00	26.50			27.10	3.85
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	3620.0	3640.0	3660.5	3680.5	3700.5	3719.5				
	Take	litres		20.00	20.50	20.00	20.00	19.00				
6.89	Average Take	l/m		20.00	20.50	20.00	20.00	19.00			19.90	4.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	3742.0	3755.5	3769.0	3782.0	3795.0	3808.0				
	Take	litres		13.50	13.50	13.00	13.00	13.00				
3.45	Average Take	l/m		13.50	13.50	13.00	13.00	13.00			13.20	4.89





Lu = 3.8 | K (cm/s) = 4E-05

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3
Leakage at a rate of 0.5 L/min
Water level was not recorded, estimated water level was based on Lugeon test #1.
Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.
Pneumatic system used.

TEST BY: HS | REVIEWED BY:

SHEET 3 OF 5

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

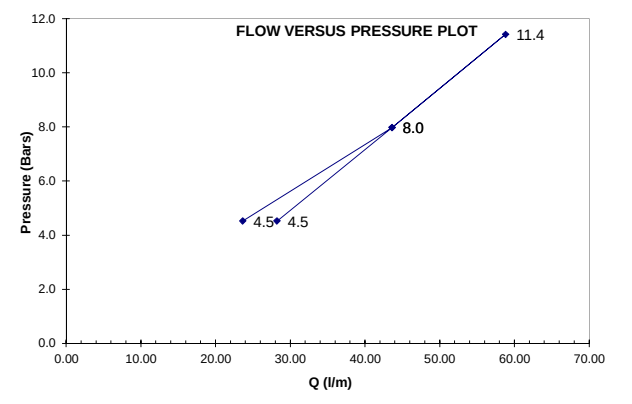
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-05

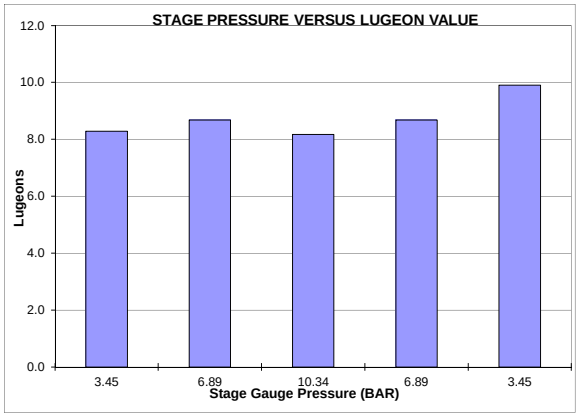
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 3

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 10.0 mbgs | TOP OF TEST INTERVAL: 333.3 ft (DOWN HOLE) / 101.6 m (DOWN HOLE)

DATE: 31-Mar-12 | GAUGE HEIGHT ABOVE GROUND: 0.7 m | BOTTOM OF TEST INTERVAL: 354.0 ft (DOWN HOLE) / 107.9 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	4100.0	4124.0	4148.0	4171.5	4195.0	4218.0				
	Take	litres		24.00	24.00	23.50	23.50	23.00				
3.45	Average Take	l/m		24.00	24.00	23.50	23.50	23.00			23.60	8.28
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	4267.0	4312.5	4355.0	4398.5	4441.5	4485.0				
	Take	litres		45.50	42.50	43.50	43.00	43.50				
6.89	Average Take	l/m		45.50	42.50	43.50	43.00	43.50			43.60	8.68
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	4590.0	4648.0	4706.0	4767.0	4825.0	4884.0				
	Take	litres		58.00	58.00	61.00	58.00	59.00				
10.34	Average Take	l/m		58.00	58.00	61.00	58.00	59.00			58.80	8.17
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	4925.0	4968.0	5013.0	5065.0	5100.0	5143.0				
	Take	litres		43.00	45.00	52.00	35.00	43.00				
6.89	Average Take	l/m		43.00	45.00	52.00	35.00	43.00			43.60	8.68
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5165.0	5193.0	5221.0	5250.0	5275.0	5306.0				
	Take	litres		28.00	28.00	29.00	25.00	31.00				
3.45	Average Take	l/m		28.00	28.00	29.00	25.00	31.00			28.20	9.90





Lu = 8.7 | K (cm/s) = 9E-05

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Leakage out of stuffing box at a rate of 0.5 L/min and around casing through ground at a rate of 2.5 L/min under third pressure stage.
Water level was not recorded. Estimated water level was based on Lugeon test #4.
Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.
Pneumatic system used.

TEST BY: HS | REVIEWED BY:

SHEET 4 OF 5

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

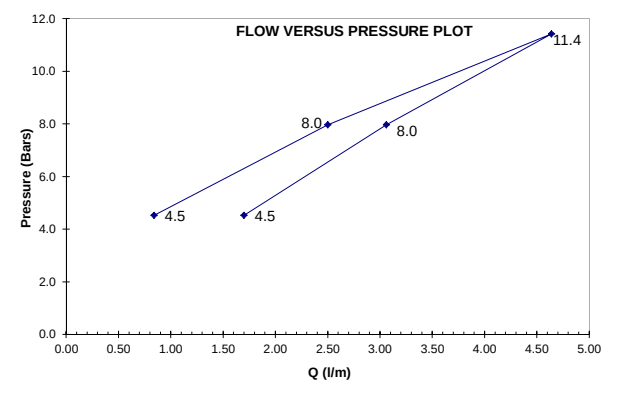
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-05

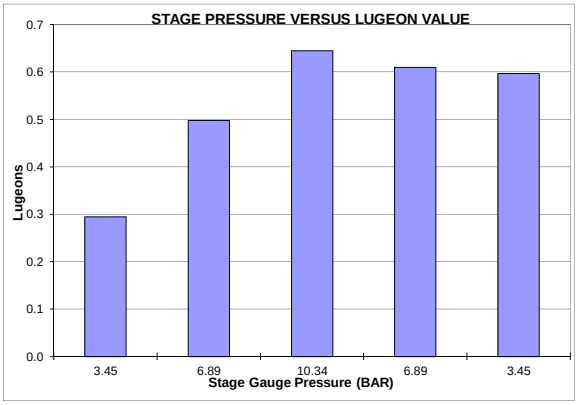
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 4

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 10.0 mbgs | TOP OF TEST INTERVAL: 353.3 ft (DOWN HOLE) / 107.7 m (DOWN HOLE)

DATE: 01-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 374.0 ft (DOWN HOLE) / 114.0 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5333.0	5333.8	5334.6	5335.5	5336.6	5337.2				
	Take	litres		0.80	0.80	0.90	1.10	0.60				
3.45	Average Take	l/m		0.80	0.80	0.90	1.10	0.60			0.84	0.29
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5340.0	5342.5	5344.8	5347.0	5350.0	5352.5				
	Take	litres		2.50	2.30	2.20	3.00	2.50				
6.89	Average Take	l/m		2.50	2.30	2.20	3.00	2.50			2.50	0.50
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5358.0	5363.0	5367.2	5370.0	5376.8	5381.2				
	Take	litres		5.00	4.20	2.80	6.80	4.40				
10.34	Average Take	l/m		5.00	4.20	2.80	6.80	4.40			4.64	0.65
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5387.0	5390.0	5393.5	5396.0	5399.5	5402.3				
	Take	litres		3.00	3.50	2.50	3.50	2.80				
6.89	Average Take	l/m		3.00	3.50	2.50	3.50	2.80			3.06	0.61
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5406.0	5407.5	5409.3	5410.8	5412.6	5414.5				
	Take	litres		1.50	1.80	1.50	1.80	1.90				
3.45	Average Take	l/m		1.50	1.80	1.50	1.80	1.90			1.70	0.60





Lu = 0.5 | K (cm/s) = 5E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

M:\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\Geotech Drillholes\Hydrogeological Tests\Lugeon Tests\[GT12-05 Lugeon Packer Testing Sheet.xlsx]4

# REV	DDMMMYY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	- PREP'D	- CHK'D	- APP'D

SHEET 5 OF 5

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

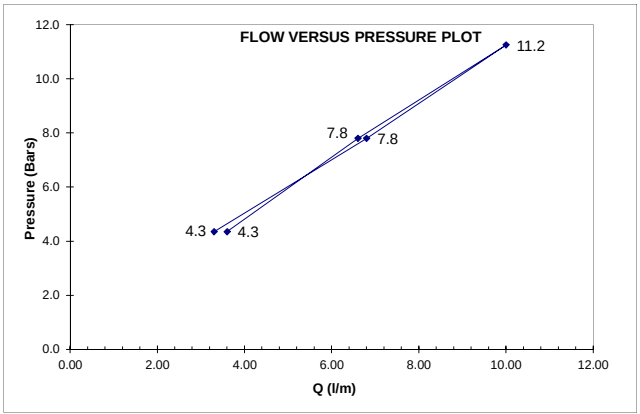
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-05

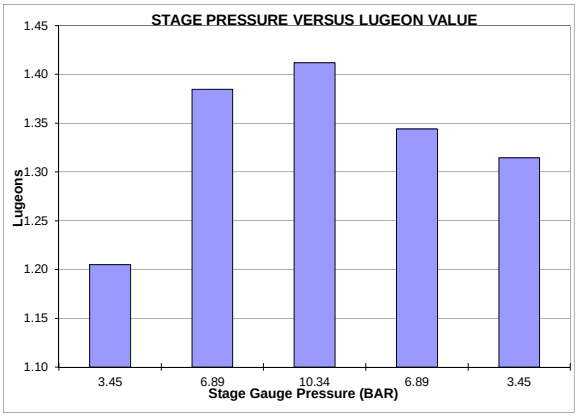
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 5

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 8.2 mbgs | TOP OF TEST INTERVAL: 373.3 ft (DOWN HOLE) / 113.8 m (DOWN HOLE)

DATE: 01-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 394.0 ft (DOWN HOLE) / 120.1 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5681.0	5684.5	5688.0	5691.2	5694.0	5697.5				
	Take	litres		3.50	3.50	3.20	2.80	3.50				
3.45	Average Take	l/m		3.50	3.50	3.20	2.80	3.50			3.30	1.21
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5702.0	5709.0	5716.0	5723.0	5729.5	5736.0				
	Take	litres		7.00	7.00	7.00	6.50	6.50				
6.89	Average Take	l/m		7.00	7.00	7.00	6.50	6.50			6.80	1.38
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5742.0	5752.5	5763.0	5773.0	5782.5	5792.0				
	Take	litres		10.50	10.50	10.00	9.50	9.50				
10.34	Average Take	l/m		10.50	10.50	10.00	9.50	9.50			10.00	1.41
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5797.0	5804.0	5810.5	5817.5	5823.5	5830.0				
	Take	litres		7.00	6.50	7.00	6.00	6.50				
6.89	Average Take	l/m		7.00	6.50	7.00	6.00	6.50			6.60	1.34
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5834.0	5837.5	5841.2	5845.0	5848.5	5852.0				
	Take	litres		3.50	3.70	3.80	3.50	3.50				
3.45	Average Take	l/m		3.50	3.70	3.80	3.50	3.50			3.60	1.31





Lu = 1.3 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

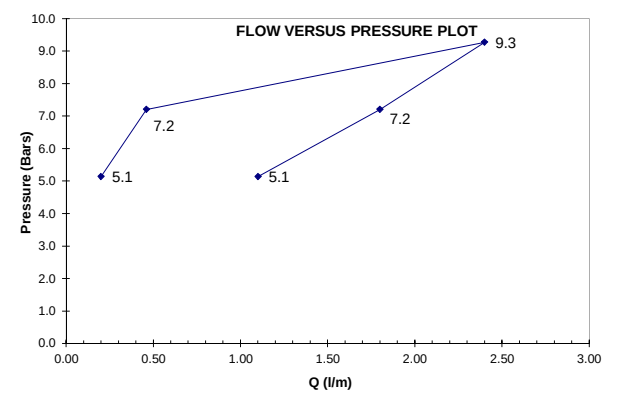
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-06

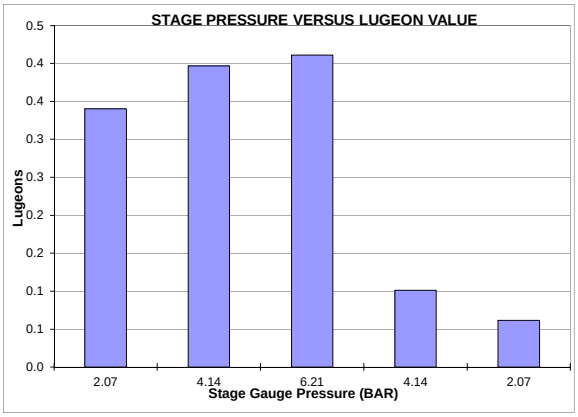
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 29.6 m | TOP OF TEST INTERVAL: 179.3 ft (DOWN HOLE) / 54.7 m (DOWN HOLE)

DATE: 03-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 200.0 ft (DOWN HOLE) / 61.0 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5965.0	5966.5	5967.5	5969.0	5969.5	5970.5				
	Take	litres		1.50	1.00	1.50	0.50	1.00				
2.07	Average Take	l/m		1.50	1.00	1.50	0.50	1.00			1.10	0.34
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5974.0	5976.5	5978.0	5980.0	5981.5	5983.0				
	Take	litres		2.50	1.50	2.00	1.50	1.50				
4.14	Average Take	l/m		2.50	1.50	2.00	1.50	1.50			1.80	0.40
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5986.5	5989.5	5992.0	5994.0	5996.0	5998.5				
	Take	litres		3.00	2.50	2.00	2.00	2.50				
6.21	Average Take	l/m		3.00	2.50	2.00	2.00	2.50			2.40	0.41
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	5998.0	5998.5	6000.0	6000.1	6000.2	6000.3				
	Take	litres		0.50	1.50	0.10	0.10	0.10				
4.14	Average Take	l/m		0.50	1.50	0.10	0.10	0.10			0.46	0.10
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6003.5	6003.5	6003.5	6003.5	6004.0	6004.5				
	Take	litres		0.00	0.00	0.00	0.50	0.50				
2.07	Average Take	l/m		0.00	0.00	0.00	0.50	0.50			0.20	0.06





Lu = 0.1 | K (cm/s) = 6E-07

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Water level was not recorded during test. Estimated water level was based on Lugeon test #2.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

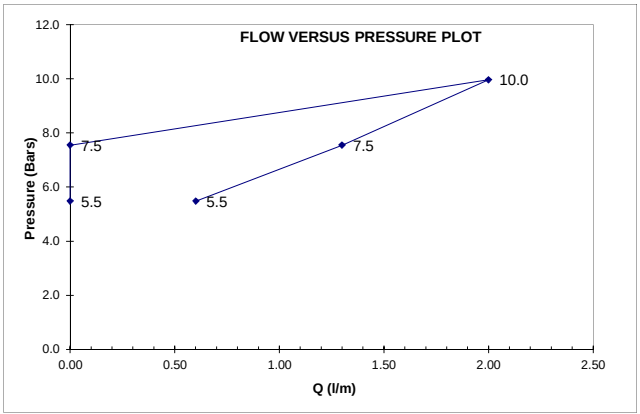
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-06

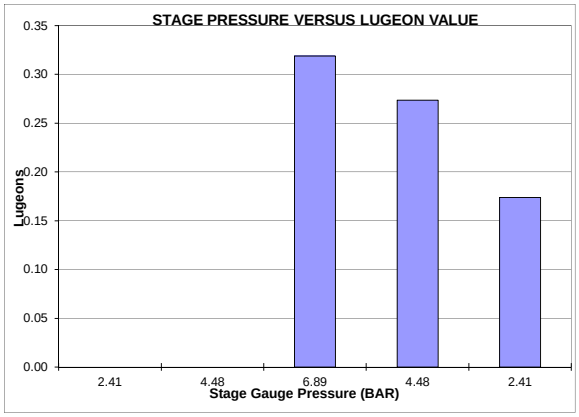
AREA: TSF, SOUTHERN STARTER DAM | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 29.6 m | TOP OF TEST INTERVAL: 199.3 ft (DOWN HOLE) / 60.8 m (DOWN HOLE)

DATE: 03-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 220.0 ft (DOWN HOLE) / 67.1 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6017.0	6017.0	6017.0	6017.0	6017.0	6017.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
2.41	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	0.00
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6017.0	6017.0	6017.0	6017.0	6017.0	6017.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
4.48	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	0.00
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6017.0	6019.0	6021.0	6023.0	6025.0	6027.0				
	Take	litres		2.00	2.00	2.00	2.00	2.00				
6.89	Average Take	l/m		2.00	2.00	2.00	2.00	2.00			2.00	0.32
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6027.5	6029.0	6030.0	6031.5	6032.5	6034.0				
	Take	litres		1.50	1.00	1.50	1.00	1.50				
4.48	Average Take	l/m		1.50	1.00	1.50	1.00	1.50			1.30	0.27
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6035.5	6036.0	6036.0	6037.0	6037.5	6038.5				
	Take	litres		0.50	0.00	1.00	0.50	1.00				
2.41	Average Take	l/m		0.50	0.00	1.00	0.50	1.00			0.60	0.17





Lu = 0.1 | K (cm/s) = 1E-06

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Hydraulic conductivity value is based on an estimate of the lowest value that can be reliably measured using the packer tool.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: HS | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 3

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

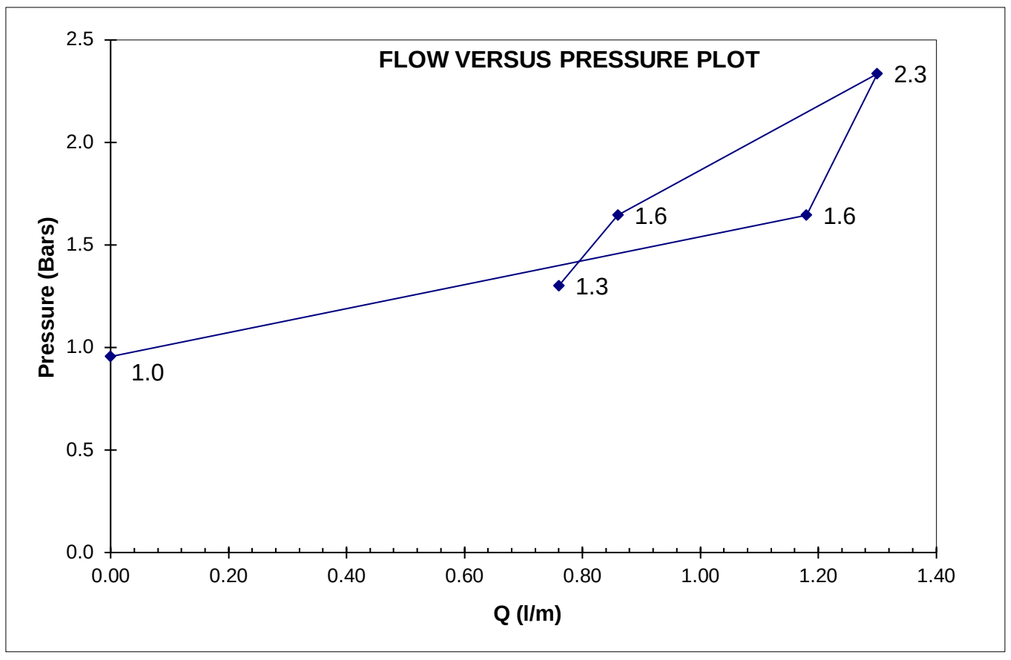
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-07

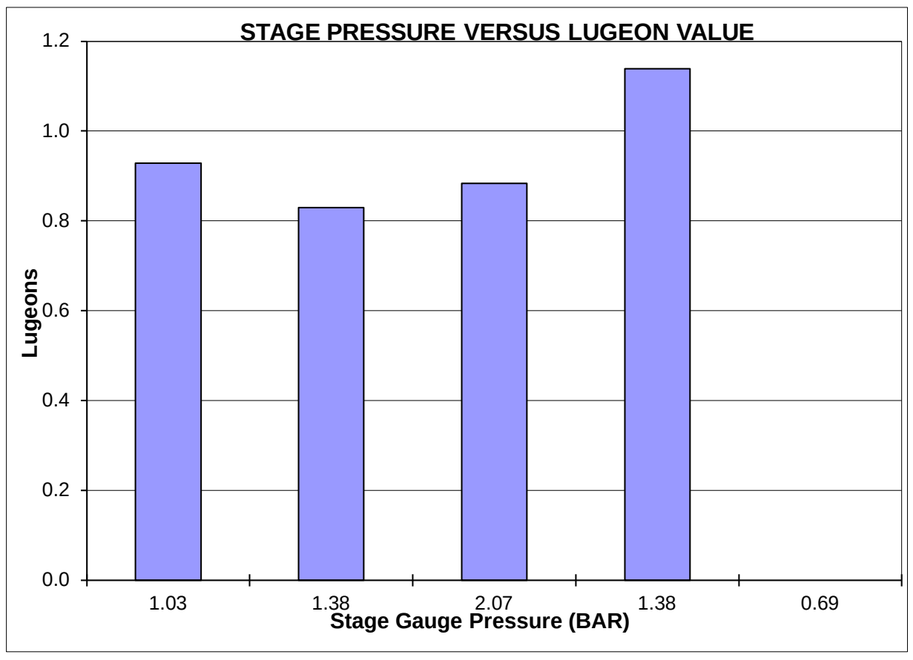
AREA: PRIMARY CRUSHER | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 1.8 m | TOP OF TEST INTERVAL: 58.8 ft (DOWN HOLE) / 17.9 m (DOWN HOLE)

DATE: 07-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 79.5 ft (DOWN HOLE) / 24.2 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6948.0	6948.3	6949.2	6950.0	6950.9	6951.8			
	Take	litres		0.30	0.90	0.80	0.90	0.90			
1.03	Average Take	l/m		0.30	0.90	0.80	0.90	0.90		0.76	0.93
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6953.0	6953.9	6954.9	6955.5	6956.5	6957.3			
	Take	litres		0.90	1.00	0.60	1.00	0.80			
1.38	Average Take	l/m		0.90	1.00	0.60	1.00	0.80		0.86	0.83
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6959.0	6960.2	6961.3	6962.5	6963.8	6965.5			
	Take	litres		1.20	1.10	1.20	1.30	1.70			
2.07	Average Take	l/m		1.20	1.10	1.20	1.30	1.70		1.30	0.88
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6966.0	6967.1	6968.1	6969.0	6970.2	6971.9			
	Take	litres		1.10	1.00	0.90	1.20	1.70			
1.38	Average Take	l/m		1.10	1.00	0.90	1.20	1.70		1.18	1.14
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres									
	Take	litres									
0.69	Average Take	l/m									





Lu = 0.8 | K (cm/s) = 8E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Bladder lost seal while changing pressure to final stage. Final pressure stage not performed.

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 3

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

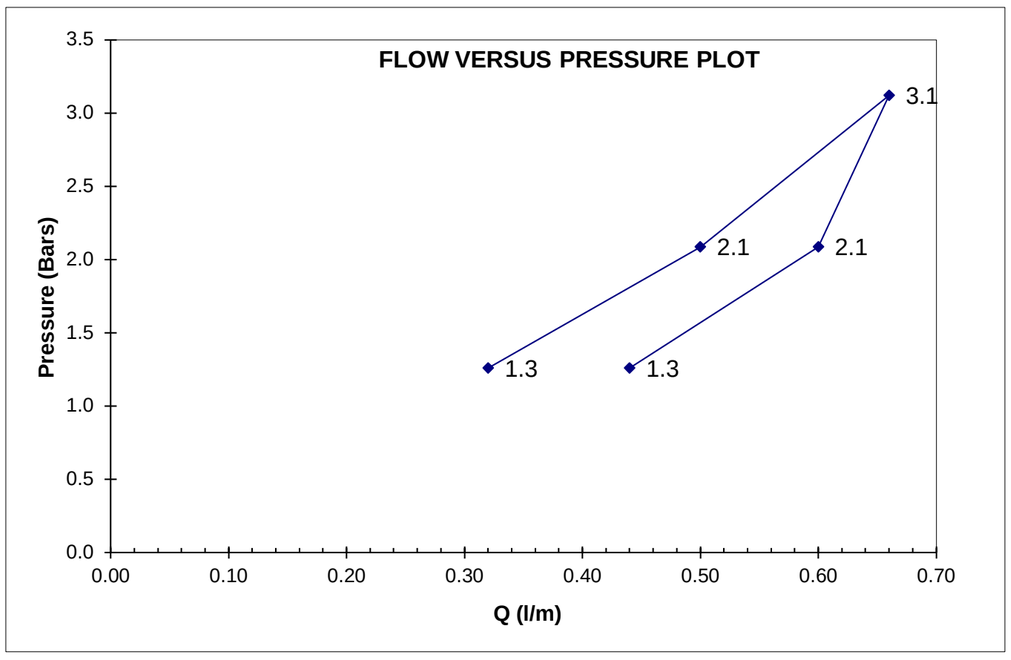
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-07

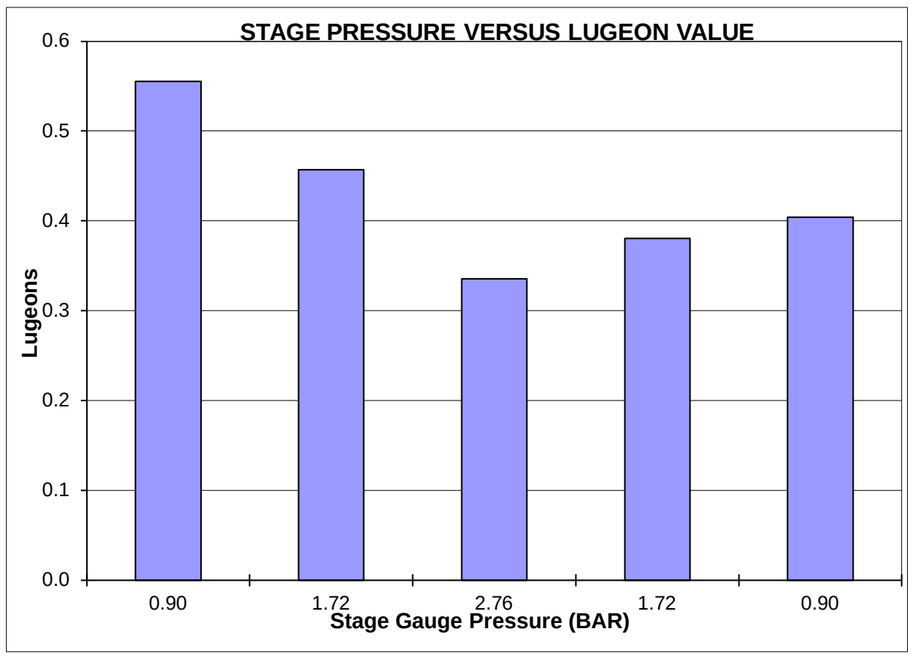
AREA: PRIMARY CRUSHER | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.8 m | TOP OF TEST INTERVAL: 78.8 ft (DOWN HOLE) / 24.0 m (DOWN HOLE)

DATE: 08-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 99.5 ft (DOWN HOLE) / 30.3 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6015.0	6015.5	6016.0	6016.5	6018.0	6017.2			
	Take	litres		0.50	0.50	0.50	1.50	-0.80			
0.90	Average Take	l/m		0.50	0.50	0.50	1.50	-0.80		0.44	0.56
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6019.0	6019.6	6020.2	6020.8	6021.2	6022.0			
	Take	litres		0.60	0.60	0.60	0.40	0.80			
1.72	Average Take	l/m		0.60	0.60	0.60	0.40	0.80		0.60	0.46
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6023.0	6023.8	6024.5	6025.0	6025.8	6026.3			
	Take	litres		0.80	0.70	0.50	0.80	0.50			
2.76	Average Take	l/m		0.80	0.70	0.50	0.80	0.50		0.66	0.34
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6027.0	6027.5	6028.1	6028.5	6029.0	6029.5			
	Take	litres		0.50	0.60	0.40	0.50	0.50			
1.72	Average Take	l/m		0.50	0.60	0.40	0.50	0.50		0.50	0.38
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6030.0	6030.2	6030.5	6030.8	6031.0	6031.6			
	Take	litres		0.20	0.30	0.30	0.20	0.60			
0.90	Average Take	l/m		0.20	0.30	0.30	0.20	0.60		0.32	0.40





Lu = 0.3 | K (cm/s) = 3E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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#	DDMMM'YY	ISSUED WITH <Doc and Cont. No. or P/A>	-	-	-
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 3 OF 3

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

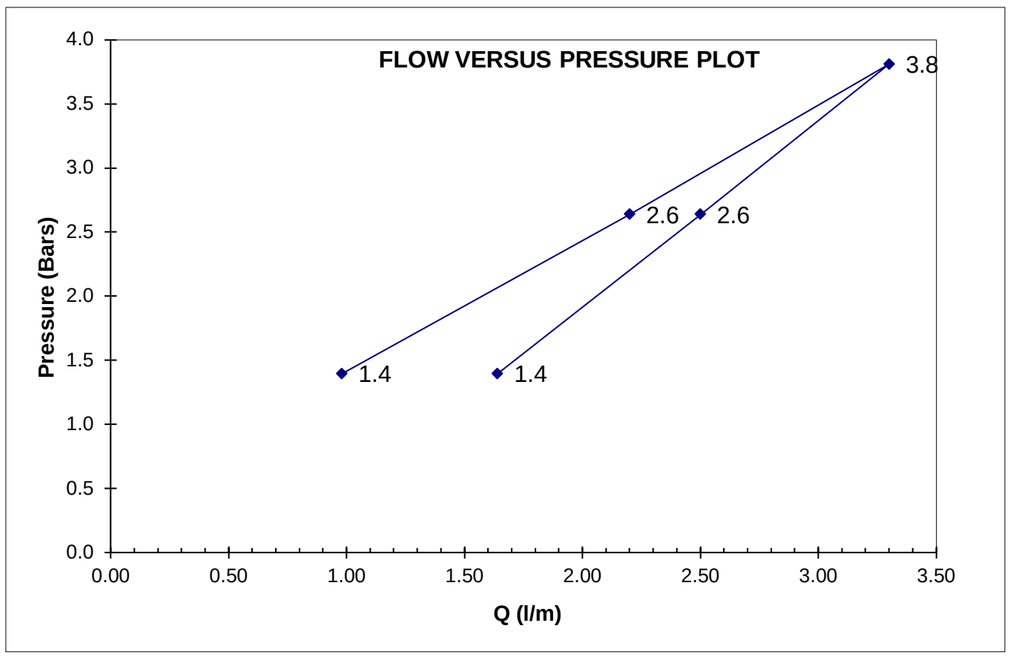
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-07

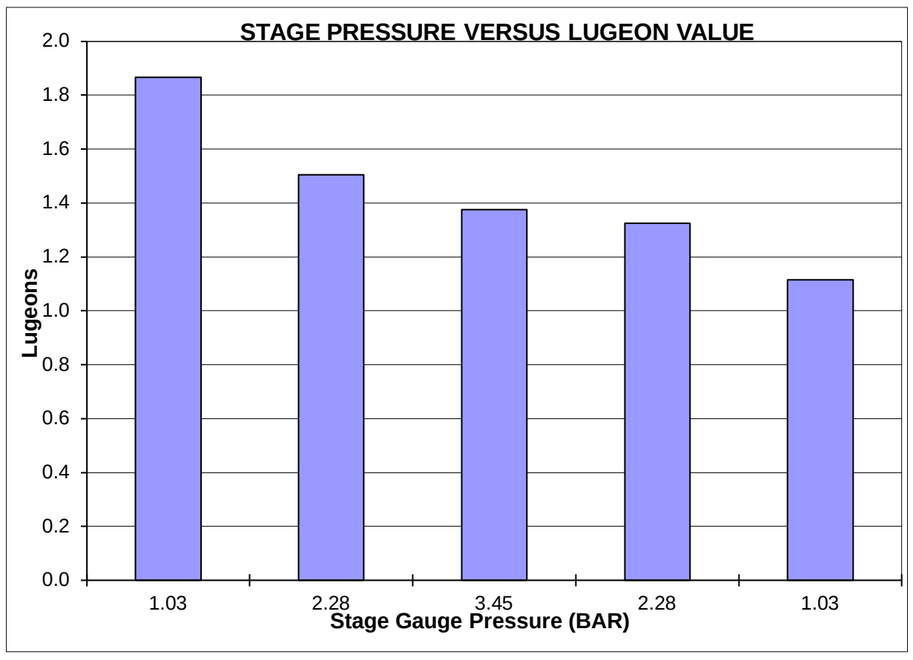
AREA: PRIMARY CRUSHER | TEST NO: 3

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.8 m | TOP OF TEST INTERVAL: 98.8 ft (DOWN HOLE) / 30.1 m (DOWN HOLE)

DATE: 08-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 119.5 ft (DOWN HOLE) / 36.4 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6053.0	6055.0	6056.5	6058.2	6059.5	6061.2			
	Take	litres		2.00	1.50	1.70	1.30	1.70			
1.03	Average Take	l/m		2.00	1.50	1.70	1.30	1.70		1.64	1.87
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6065.0	6067.5	6070.5	6073.2	6075.5	6077.5			
	Take	litres		2.50	3.00	2.70	2.30	2.00			
2.28	Average Take	l/m		2.50	3.00	2.70	2.30	2.00		2.50	1.51
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6084.0	6087.5	6090.8	6094.0	6097.5	6100.5			
	Take	litres		3.50	3.30	3.20	3.50	3.00			
3.45	Average Take	l/m		3.50	3.30	3.20	3.50	3.00		3.30	1.38
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6102.0	6104.3	6106.6	6108.7	6110.9	6113.0			
	Take	litres		2.30	2.30	2.10	2.20	2.10			
2.28	Average Take	l/m		2.30	2.30	2.10	2.20	2.10		2.20	1.32
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6114.0	6114.8	6115.5	6116.8	6117.5	6118.9			
	Take	litres		0.80	0.70	1.30	0.70	1.40			
1.03	Average Take	l/m		0.80	0.70	1.30	0.70	1.40		0.98	1.11





Lu = 1.1 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 4

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

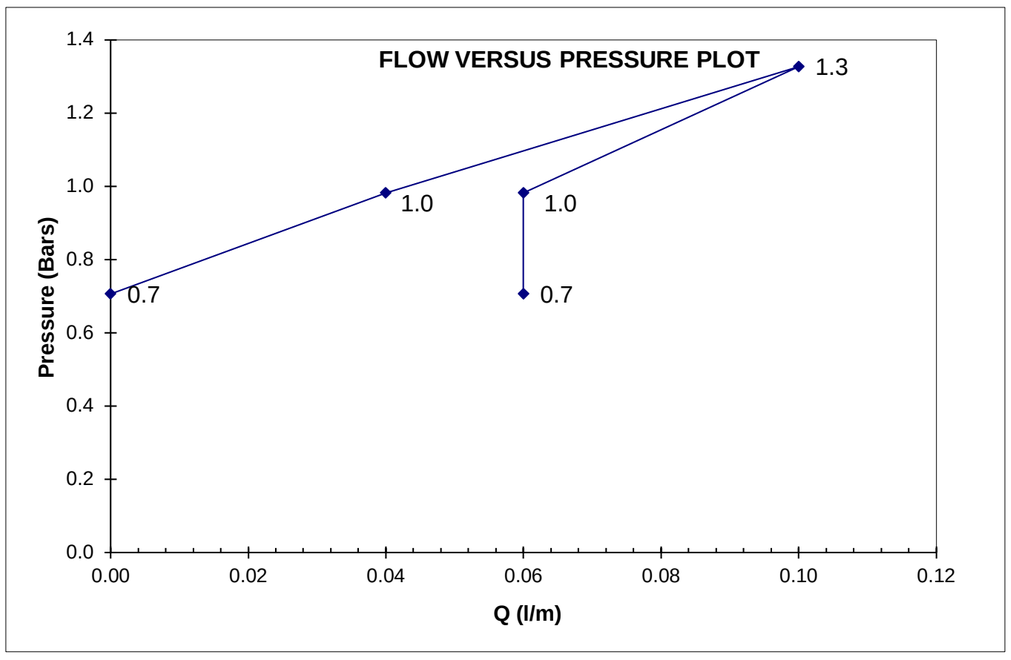
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-08

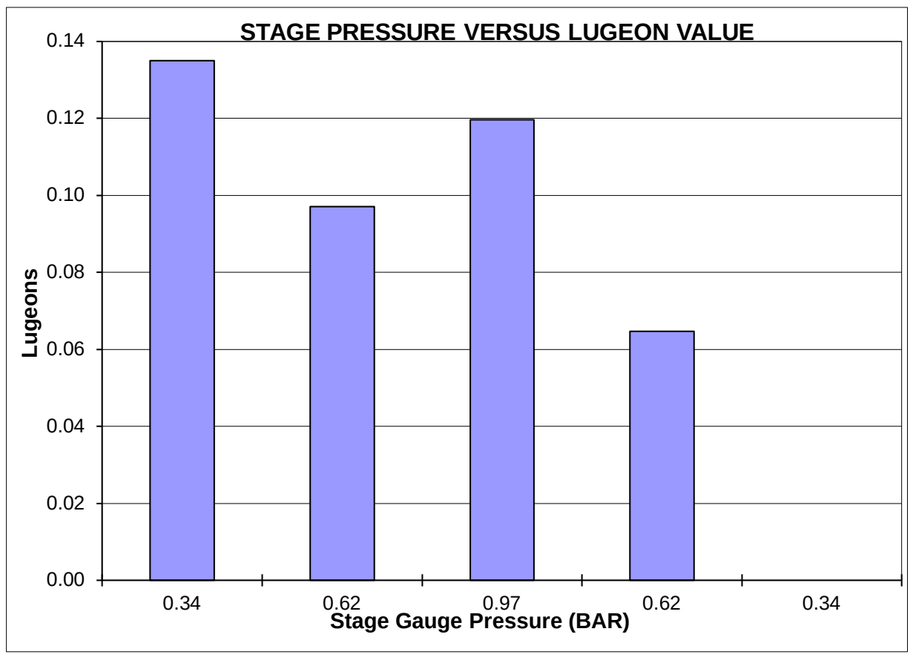
AREA: PLANT SITE / TELUS TOWER | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.7 m | TOP OF TEST INTERVAL: 28.8 ft (DOWN HOLE) / 8.8 m (DOWN HOLE)

DATE: 09-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.9 m | BOTTOM OF TEST INTERVAL: 49.5 ft (DOWN HOLE) / 15.1 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6131.0	6131.1	6131.2	6131.3	6131.3	6131.3			
	Take	litres		0.10	0.10	0.10	0.00	0.00			
0.34	Average Take	l/m		0.10	0.10	0.10	0.00	0.00		0.06	0.13
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6131.5	6131.5	6131.7	6131.8	6131.8	6131.8			
	Take	litres		0.00	0.20	0.10	0.00	0.00			
0.62	Average Take	l/m		0.00	0.20	0.10	0.00	0.00		0.06	0.10
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6132.0	6132.2	6132.3	6132.5	6132.5	6132.5			
	Take	litres		0.20	0.10	0.20	0.00	0.00			
0.97	Average Take	l/m		0.20	0.10	0.20	0.00	0.00		0.10	0.12
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6132.5	6132.6	6132.6	6132.7	6132.7	6132.7			
	Take	litres		0.10	0.00	0.10	0.00	0.00			
0.62	Average Take	l/m		0.10	0.00	0.10	0.00	0.00		0.04	0.06
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6133.0	6133.0	6133.0	6133.0	6133.0	6133.0			
	Take	litres		0.00	0.00	0.00	0.00	0.00			
0.34	Average Take	l/m		0.00	0.00	0.00	0.00	0.00		0.00	0.00





Lu = 0.1 | K (cm/s) = 8E-07

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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SHEET 2 OF 4

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

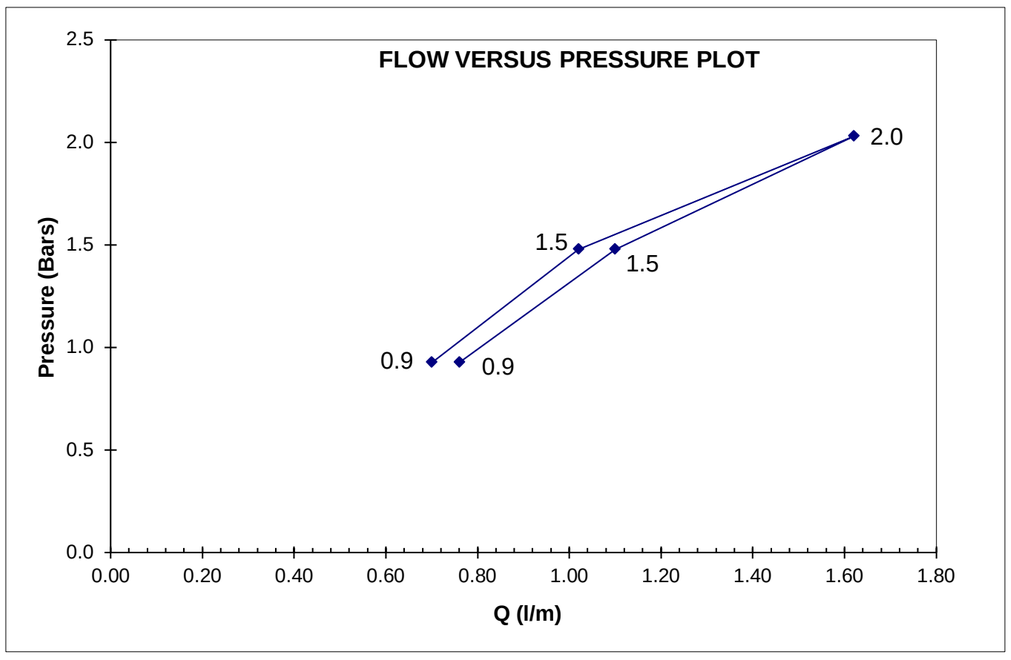
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-08

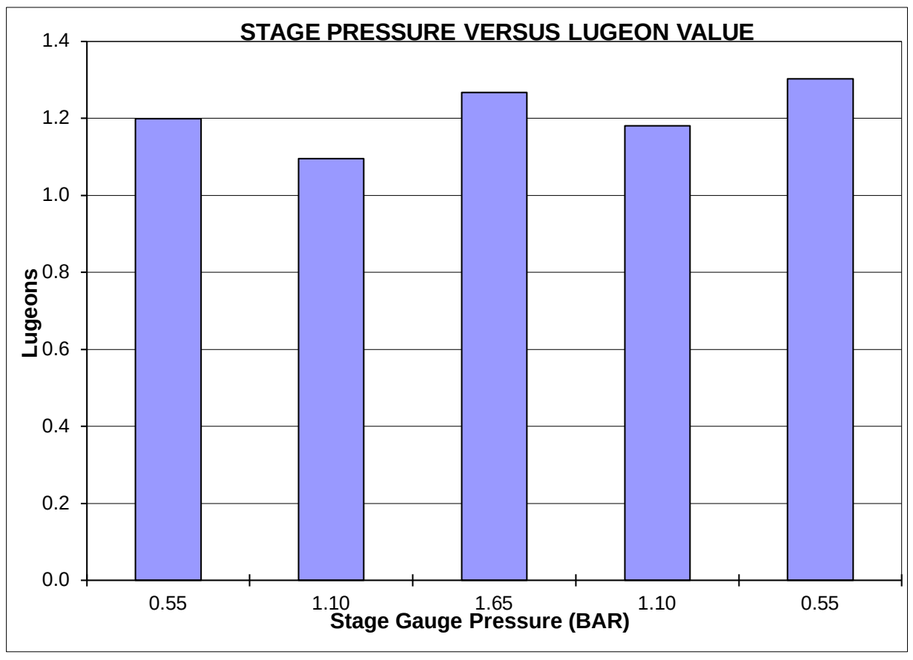
AREA: PLANT SITE / TELUS TOWER | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.9 m | TOP OF TEST INTERVAL: 48.8 ft (DOWN HOLE) / 14.9 m (DOWN HOLE)

DATE: 09-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.9 m | BOTTOM OF TEST INTERVAL: 69.5 ft (DOWN HOLE) / 21.2 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6135.0	6135.5	6136.2	6137.0	6137.8	6138.5			
	Take	litres		0.50	0.70	0.80	0.80	0.70			
0.55	Average Take	l/m		0.50	0.70	0.80	0.80	0.70		0.70	1.20
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6140.0	6141.1	6142.1	6143.1	6144.0	6145.1			
	Take	litres		1.10	1.00	1.00	0.90	1.10			
1.10	Average Take	l/m		1.10	1.00	1.00	0.90	1.10		1.02	1.10
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6147.0	6148.8	6150.2	6152.0	6153.5	6155.1			
	Take	litres		1.80	1.40	1.80	1.50	1.60			
1.65	Average Take	l/m		1.80	1.40	1.80	1.50	1.60		1.62	1.27
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6156.0	6157.0	6158.1	6159.2	6160.2	6161.5			
	Take	litres		1.00	1.10	1.10	1.00	1.30			
1.10	Average Take	l/m		1.00	1.10	1.10	1.00	1.30		1.10	1.18
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6162.0	6162.8	6163.5	6164.1	6164.8	6165.8			
	Take	litres		0.80	0.70	0.60	0.70	1.00			
0.55	Average Take	l/m		0.80	0.70	0.60	0.70	1.00		0.76	1.30





Lu = 1.2 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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SHEET 3 OF 4

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

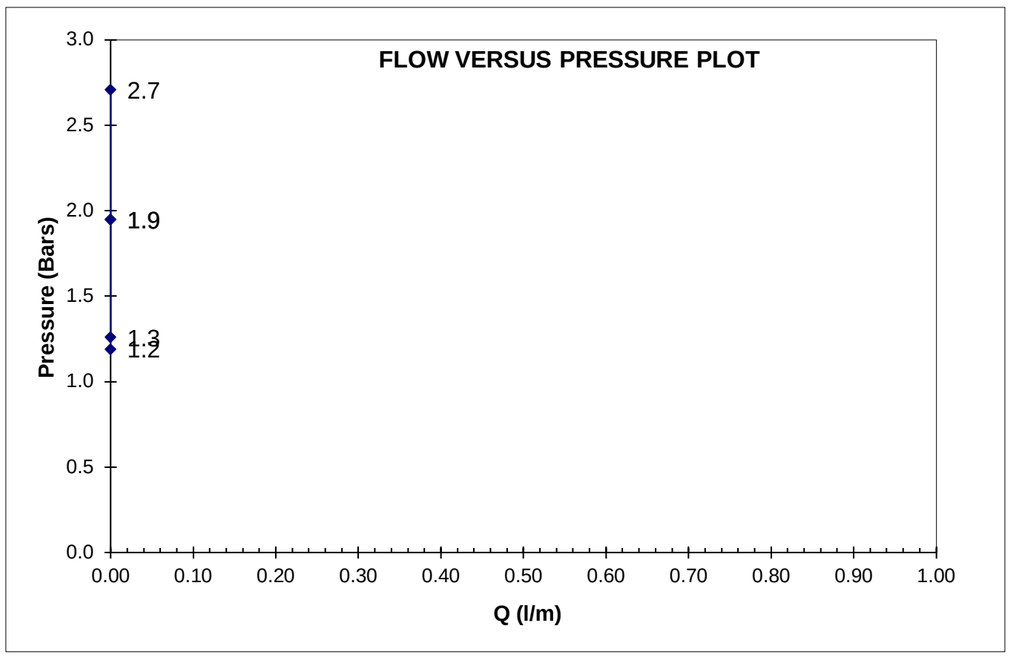
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-08

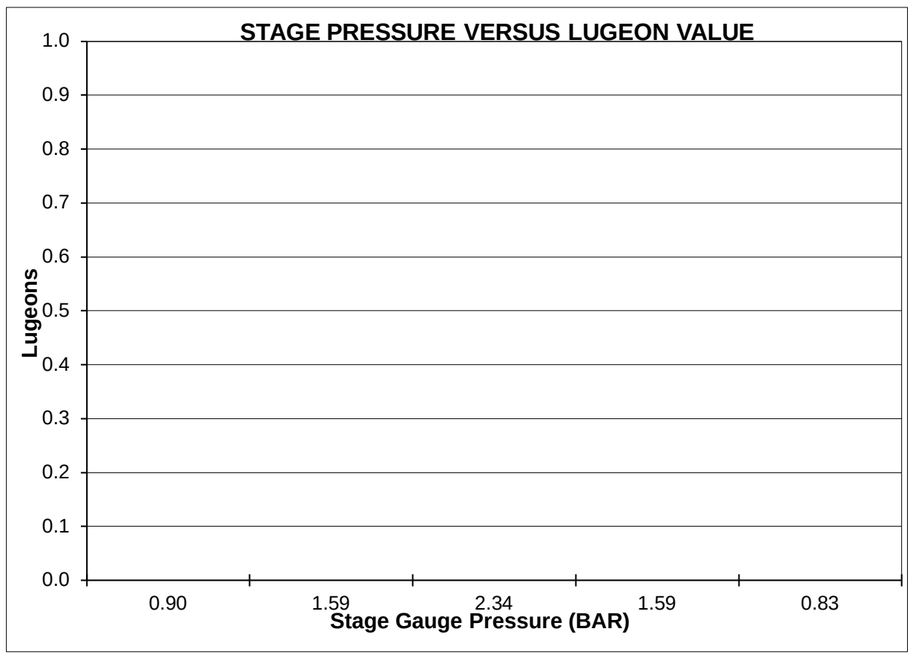
AREA: PLANT SITE / TELUS TOWER | TEST NO: 3

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.7 m | TOP OF TEST INTERVAL: 68.8 ft (DOWN HOLE) / 21.0 m (DOWN HOLE)

DATE: 10-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.9 m | BOTTOM OF TEST INTERVAL: 84.5 ft (DOWN HOLE) / 25.8 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6166.0	6166.0	6166.0	6166.0	6166.0	6166.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
0.90	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6167.0	6167.0	6167.0	6167.0	6167.0	6167.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
1.59	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6176.2	6176.2	6176.2	6176.2	6176.2	6176.2				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
2.34	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6176.2	6176.2	6176.2	6176.2	6176.2	6176.2				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
1.59	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6176.2	6176.2	6176.2	6176.2	6176.2	6176.2				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
0.83	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	





Lu = 0.01 | K (cm/s) = 1E-07

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Hydraulic conductivity value is based on an estimate of the lowest value that can be reliably measured using the packer tool.

IPI system used.

TEST BY: AL | REVIEWED BY:

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SHEET 4 OF 4

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

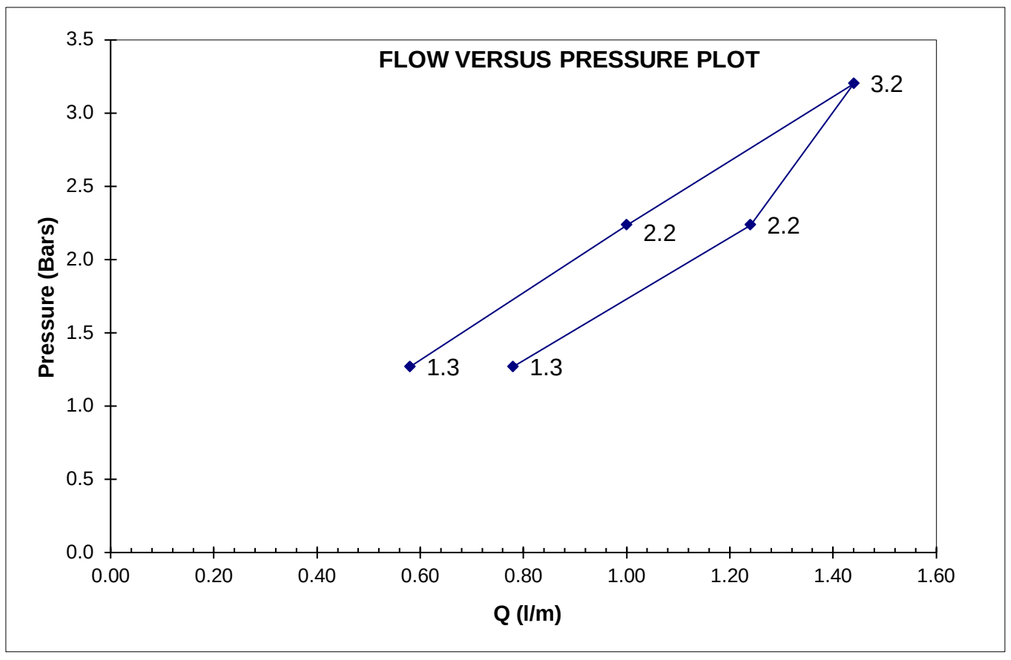
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-08

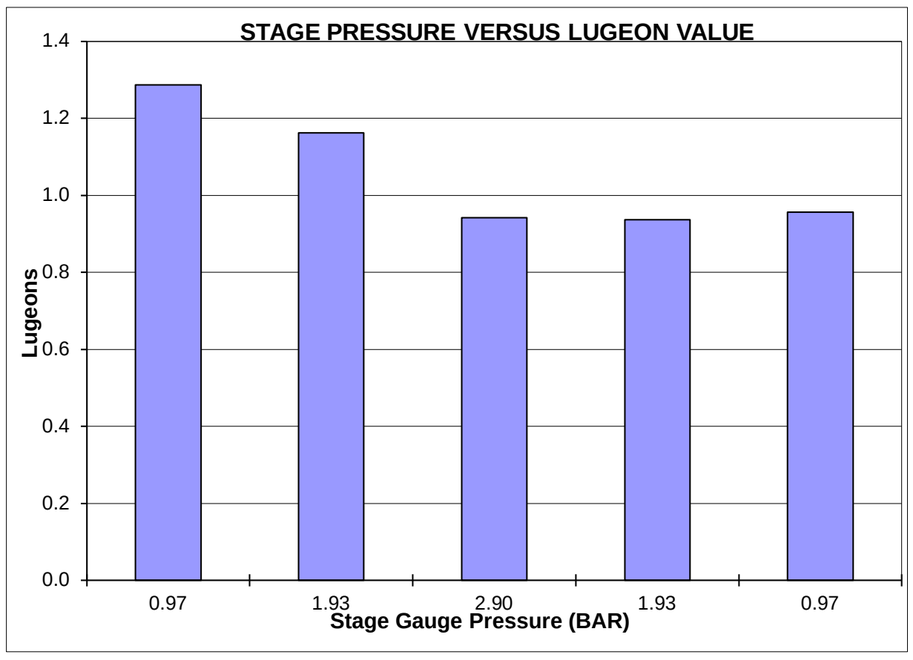
AREA: PLANT SITE / TELUS TOWER | TEST NO: 4

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.1 m | TOP OF TEST INTERVAL: 83.8 ft (DOWN HOLE) / 25.6 m (DOWN HOLE)

DATE: 10-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.9 m | BOTTOM OF TEST INTERVAL: 99.5 ft (DOWN HOLE) / 30.3 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6169.0	6169.9	6170.7	6171.5	6172.1	6172.9			
	Take	litres		0.90	0.80	0.80	0.60	0.80			
0.97	Average Take	l/m		0.90	0.80	0.80	0.60	0.80		0.78	1.29
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6175.0	6176.0	6177.5	6178.5	6180.0	6181.2			
	Take	litres		1.00	1.50	1.00	1.50	1.20			
1.93	Average Take	l/m		1.00	1.50	1.00	1.50	1.20		1.24	1.16
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6187.0	6188.5	6189.8	6191.2	6193.0	6194.2			
	Take	litres		1.50	1.30	1.40	1.80	1.20			
2.90	Average Take	l/m		1.50	1.30	1.40	1.80	1.20		1.44	0.94
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6195.0	6195.9	6197.0	6198.0	6199.0	6200.0			
	Take	litres		0.90	1.10	1.00	1.00	1.00			
1.93	Average Take	l/m		0.90	1.10	1.00	1.00	1.00		1.00	0.94
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	6201.0	6201.5	6202.0	6202.5	6203.2	6203.9			
	Take	litres		0.50	0.50	0.50	0.70	0.70			
0.97	Average Take	l/m		0.50	0.50	0.50	0.70	0.70		0.58	0.96





Lu = 1.0 | K (cm/s) = 1E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

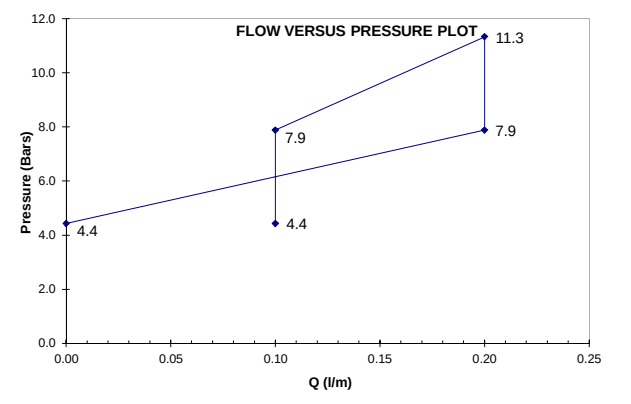
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-09

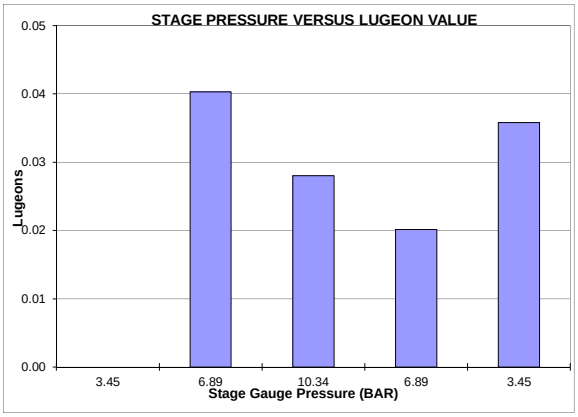
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 8.9 m | TOP OF TEST INTERVAL: 369.3 ft (DOWN HOLE) / 112.6 m (DOWN HOLE)

DATE: 22-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 1.0 m | BOTTOM OF TEST INTERVAL: 390.0 ft (DOWN HOLE) / 118.9 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6206.0	6206.0	6206.0	6206.0	6206.0	6206.0				
	Take	litres		0.00	0.00	0.00	0.00	0.00				
3.45	Average Take	l/m		0.00	0.00	0.00	0.00	0.00			0.00	0.00
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6206.0	6206.2	6206.5	6206.8	6206.8	6207.0				
	Take	litres		0.20	0.30	0.30	0.00	0.20				
6.89	Average Take	l/m		0.20	0.30	0.30	0.00	0.20			0.20	0.04
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6208.0	6208.2	6208.2	6208.8	6208.8	6209.0				
	Take	litres		0.20	0.00	0.60	0.00	0.20				
10.34	Average Take	l/m		0.20	0.00	0.60	0.00	0.20			0.20	0.03
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6209.0	6209.2	6209.2	6209.2	6209.5	6209.5				
	Take	litres		0.20	0.00	0.00	0.30	0.00				
6.89	Average Take	l/m		0.20	0.00	0.00	0.30	0.00			0.10	0.02
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6210.0	6210.0	6210.2	6210.2	6210.2	6210.5				
	Take	litres		0.00	0.20	0.00	0.00	0.30				
3.45	Average Take	l/m		0.00	0.20	0.00	0.00	0.30			0.10	0.04





Lu = 0.02 | K (cm/s) = 2E-07

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

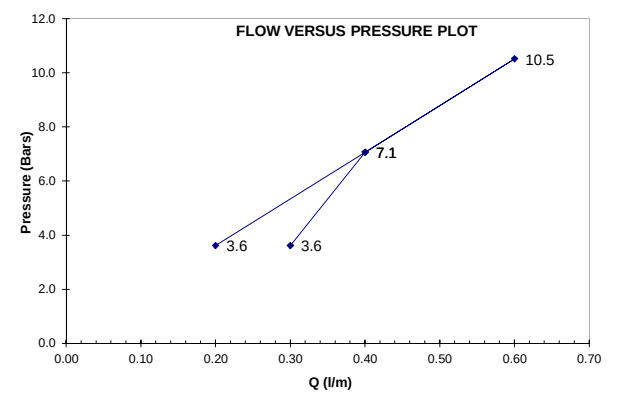
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-09

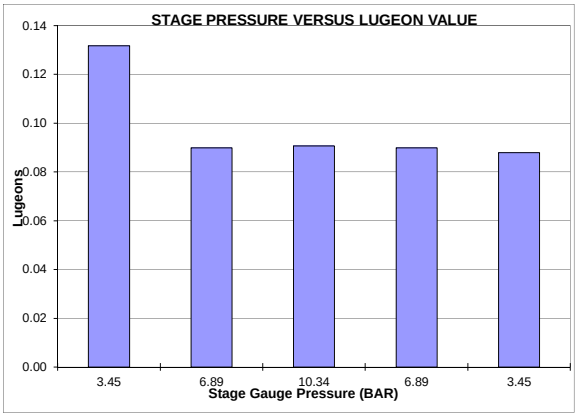
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 0.7 m | TOP OF TEST INTERVAL: 389.3 ft (DOWN HOLE) / 118.7 m (DOWN HOLE)

DATE: 22-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 1.0 m | BOTTOM OF TEST INTERVAL: 410.0 ft (DOWN HOLE) / 125.0 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6339.0	6339.5	6339.5	6340.0	6340.0	6340.5				
	Take	litres		0.50	0.00	0.50	0.00	0.50				
3.45	Average Take	l/m		0.50	0.00	0.50	0.00	0.50			0.30	0.13
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6341.0	6341.5	6342.0	6342.5	6343.0	6343.0				
	Take	litres		0.50	0.50	0.50	0.50	0.00				
6.89	Average Take	l/m		0.50	0.50	0.50	0.50	0.00			0.40	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6344.0	6344.5	6345.0	6346.0	6346.0	6347.0				
	Take	litres		0.50	0.50	1.00	0.00	1.00				
10.34	Average Take	l/m		0.50	0.50	1.00	0.00	1.00			0.60	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6347.0	6347.5	6348.0	6348.0	6348.5	6349.0				
	Take	litres		0.50	0.50	0.00	0.50	0.50				
6.89	Average Take	l/m		0.50	0.50	0.00	0.50	0.50			0.40	0.09
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6349.0	6349.5	6349.5	6350.0	6350.0	6350.0				
	Take	litres		0.50	0.00	0.50	0.00	0.00				
3.45	Average Take	l/m		0.50	0.00	0.50	0.00	0.00			0.20	0.09





Lu = 0.1 | K (cm/s) = 1E-06

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

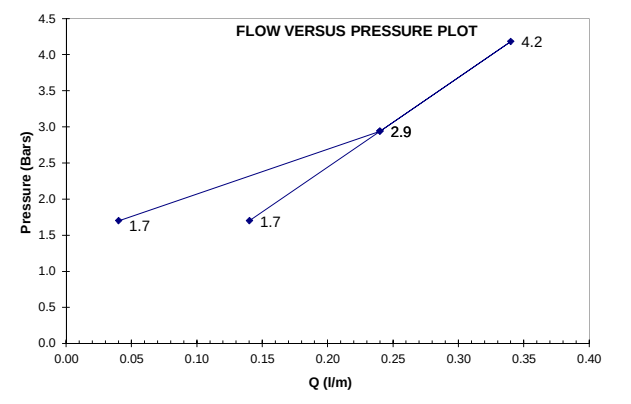
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-10

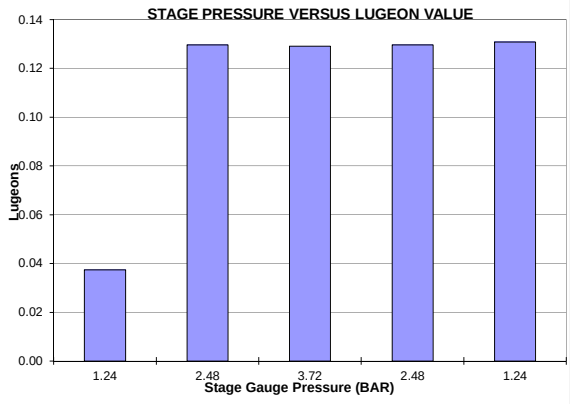
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 3.9 m | TOP OF TEST INTERVAL: 109.3 ft (DOWN HOLE) / 33.3 m (DOWN HOLE)

DATE: 24-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.7 m | BOTTOM OF TEST INTERVAL: 130.0 ft (DOWN HOLE) / 39.6 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6455.0	6455.2	6455.2	6455.2	6455.2	6455.2				
	Take	litres		0.20	0.00	0.00	0.00	0.00				
1.24	Average Take	l/m		0.20	0.00	0.00	0.00	0.00			0.04	0.04
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	6456.0	6456.3	6456.7	6456.9	6457.1	6457.2				
	Take	litres		0.30	0.40	0.20	0.20	0.10				
2.48	Average Take	l/m		0.30	0.40	0.20	0.20	0.10			0.24	0.13
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	6458.0	6458.3	6458.7	6459.0	6459.3	6459.7				
	Take	litres		0.30	0.40	0.30	0.30	0.40				
3.72	Average Take	l/m		0.30	0.40	0.30	0.30	0.40			0.34	0.13
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	6460.0	6460.2	6460.5	6460.8	6461.0	6461.2				
	Take	litres		0.20	0.30	0.30	0.20	0.20				
2.48	Average Take	l/m		0.20	0.30	0.30	0.20	0.20			0.24	0.13
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	6461.5	6461.5	6461.7	6461.8	6462.0	6462.2				
	Take	litres		0.00	0.20	0.10	0.20	0.20				
1.24	Average Take	l/m		0.00	0.20	0.10	0.20	0.20			0.14	0.13





Lu = 0.1 | K (cm/s) = 1E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

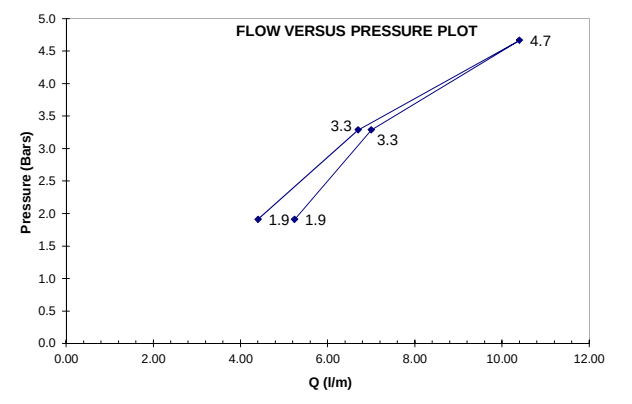
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-10

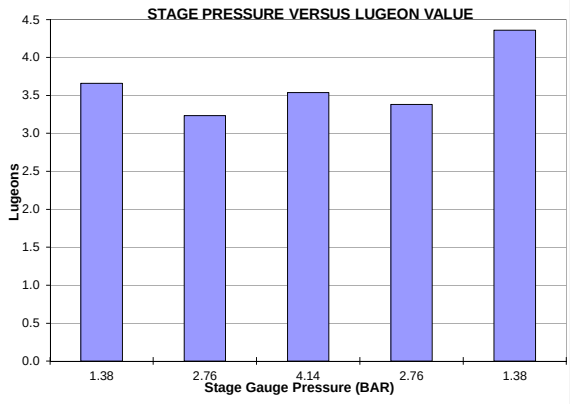
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.6 m | TOP OF TEST INTERVAL: 129.3 ft (DOWN HOLE) / 39.4 m (DOWN HOLE)

DATE: 24-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.7 m | BOTTOM OF TEST INTERVAL: 150.0 ft (DOWN HOLE) / 45.7 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6480.0	6484.6	6489.0	6493.5	6497.5	6502.0				
	Take	litres		4.60	4.40	4.50	4.00	4.50				
1.38	Average Take	l/m		4.60	4.40	4.50	4.00	4.50			4.40	3.66
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6512.0	6519.5	6526.5	6533.0	6539.0	6545.5				
	Take	litres		7.50	7.00	6.50	6.00	6.50				
2.76	Average Take	l/m		7.50	7.00	6.50	6.00	6.50			6.70	3.24
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6558.0	6569.0	6580.0	6590.0	6600.0	6610.0				
	Take	litres		11.00	11.00	10.00	10.00	10.00				
4.14	Average Take	l/m		11.00	11.00	10.00	10.00	10.00			10.40	3.54
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6616.0	6623.2	6630.5	6637.0	6644.0	6651.0				
	Take	litres		7.20	7.30	6.50	7.00	7.00				
2.76	Average Take	l/m		7.20	7.30	6.50	7.00	7.00			7.00	3.38
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6656.0	6661.5	6666.5	6672.0	6677.2	6682.2				
	Take	litres		5.50	5.00	5.50	5.20	5.00				
1.38	Average Take	l/m		5.50	5.00	5.50	5.20	5.00			5.24	4.36





Lu = 3.6 | K (cm/s) = 4E-05

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

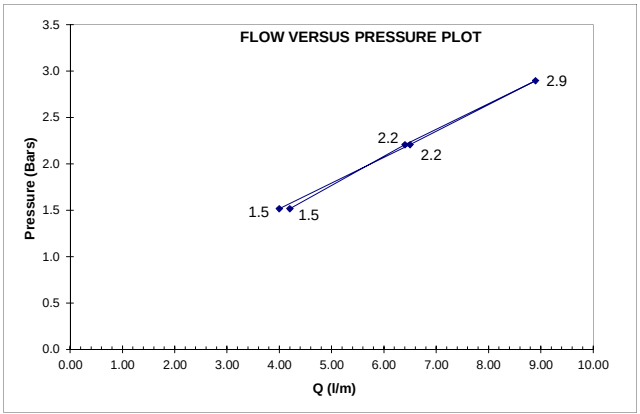
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

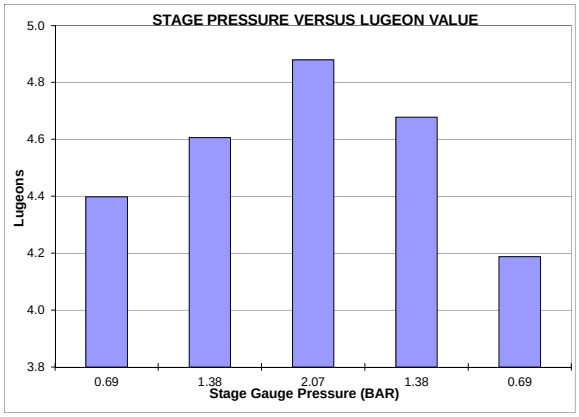
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 ° (FROM HORIZONTAL) | DEPTH GROUNDWATER: 7.5 m | TOP OF TEST INTERVAL: 24.3 ft (DOWN HOLE) / 7.4 m (DOWN HOLE)

DATE: 24-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 45.0 ft (DOWN HOLE) / 13.7 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6792.0	6796.0	6800.0	6804.5	6808.5	6813.0				
	Take	litres		4.00	4.00	4.50	4.00	4.50				
0.69	Average Take	l/m		4.00	4.00	4.50	4.00	4.50			4.20	4.40
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6819.0	6826.0	6832.0	6838.5	6844.5	6851.0				
	Take	litres		7.00	6.00	6.50	6.00	6.50				
1.38	Average Take	l/m		7.00	6.00	6.50	6.00	6.50			6.40	4.61
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6859.0	6868.0	6877.0	6886.0	6895.0	6903.5				
	Take	litres		9.00	9.00	9.00	9.00	8.50				
2.07	Average Take	l/m		9.00	9.00	9.00	9.00	8.50			8.90	4.88
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6909.0	6916.0	6922.0	6928.5	6935.0	6941.5				
	Take	litres		7.00	6.00	6.50	6.50	6.50				
1.38	Average Take	l/m		7.00	6.00	6.50	6.50	6.50			6.50	4.68
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6944.0	6947.5	6951.5	6955.5	6960.0	6964.0				
	Take	litres		3.50	4.00	4.00	4.50	4.00				
0.69	Average Take	l/m		3.50	4.00	4.00	4.50	4.00			4.00	4.19





Lu = 4.5 | K (cm/s) = 4E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

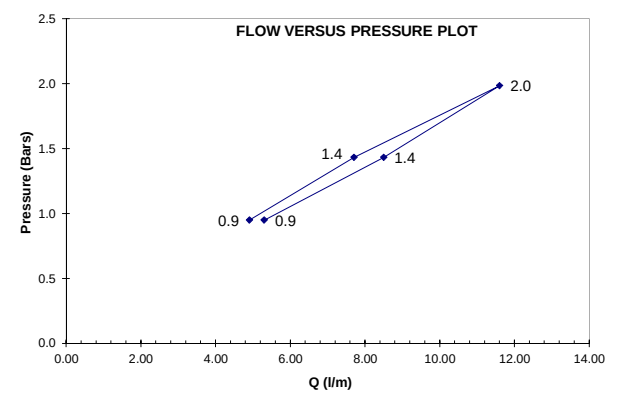
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

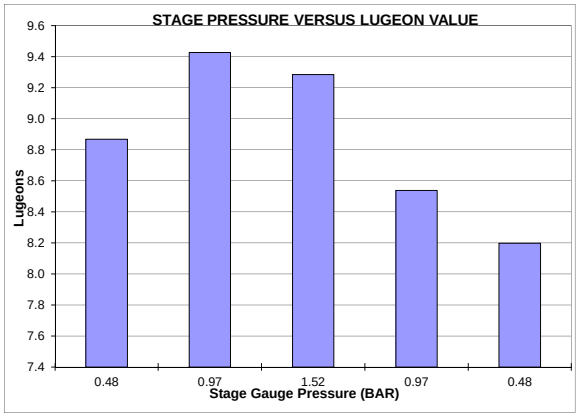
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 3.9 m | TOP OF TEST INTERVAL: 44.3 ft (DOWN HOLE) / 13.5 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 65.0 ft (DOWN HOLE) / 19.8 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	6958.0	6963.5	6969.0	6974.0	6979.5	6984.5				
	Take	litres		5.50	5.50	5.00	5.50	5.00				
0.48	Average Take	l/m		5.50	5.50	5.00	5.50	5.00			5.30	8.87
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7000.0	7008.5	7017.0	7026.0	7034.0	7042.5				
	Take	litres		8.50	8.50	9.00	8.00	8.50				
0.97	Average Take	l/m		8.50	8.50	9.00	8.00	8.50			8.50	9.43
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7062.0	7075.5	7087.0	7100.0	7110.0	7120.0				
	Take	litres		13.50	11.50	13.00	10.00	10.00				
1.52	Average Take	l/m		13.50	11.50	13.00	10.00	10.00			11.60	9.28
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7127.0	7134.0	7142.0	7150.0	7157.5	7165.5				
	Take	litres		7.00	8.00	8.00	7.50	8.00				
0.97	Average Take	l/m		7.00	8.00	8.00	7.50	8.00			7.70	8.54
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7168.0	7172.2	7177.2	7182.5	7187.5	7192.5				
	Take	litres		4.20	5.00	5.30	5.00	5.00				
0.48	Average Take	l/m		4.20	5.00	5.30	5.00	5.00			4.90	8.20





Lu = 8.2 | K (cm/s) = 8E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 3 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

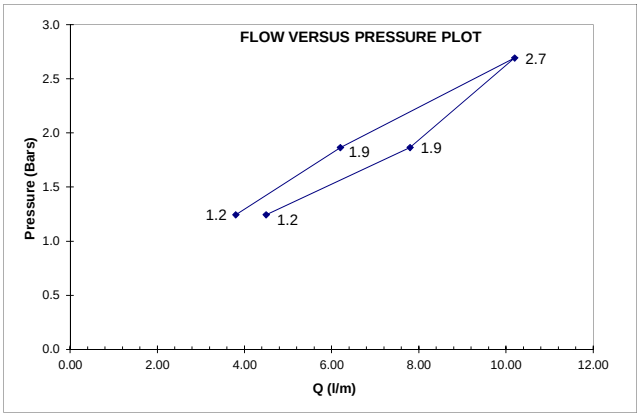
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

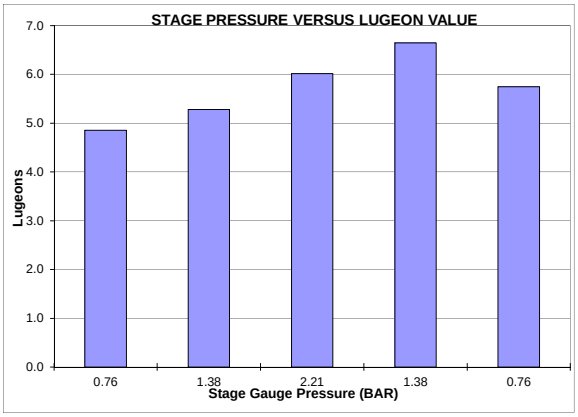
AREA: TSF, MAIN EMBANKMENT | TEST NO: 3

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.1 m | TOP OF TEST INTERVAL: 64.3 ft (DOWN HOLE) / 19.6 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 85.0 ft (DOWN HOLE) / 25.9 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7205.0	7209.0	7212.5	7216.5	7220.5	7224.0				
	Take	litres		4.00	3.50	4.00	4.00	3.50				
0.76	Average Take	l/m		4.00	3.50	4.00	4.00	3.50			3.80	4.85
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7237.0	7243.5	7249.5	7255.5	7262.0	7268.0				
	Take	litres		6.50	6.00	6.00	6.50	6.00				
1.38	Average Take	l/m		6.50	6.00	6.00	6.50	6.00			6.20	5.28
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7285.0	7295.0	7305.2	7315.0	7325.5	7336.0				
	Take	litres		10.00	10.20	9.80	10.50	10.50				
2.21	Average Take	l/m		10.00	10.20	9.80	10.50	10.50			10.20	6.02
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7347.0	7354.5	7362.0	7370.0	7378.0	7386.0				
	Take	litres		7.50	7.50	8.00	8.00	8.00				
1.38	Average Take	l/m		7.50	7.50	8.00	8.00	8.00			7.80	6.64
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7400.0	7404.0	7409.0	7413.5	7418.0	7422.5				
	Take	litres		4.00	5.00	4.50	4.50	4.50				
0.76	Average Take	l/m		4.00	5.00	4.50	4.50	4.50			4.50	5.74





Lu = 6.6 | K (cm/s) = 7E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	YES
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 4 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

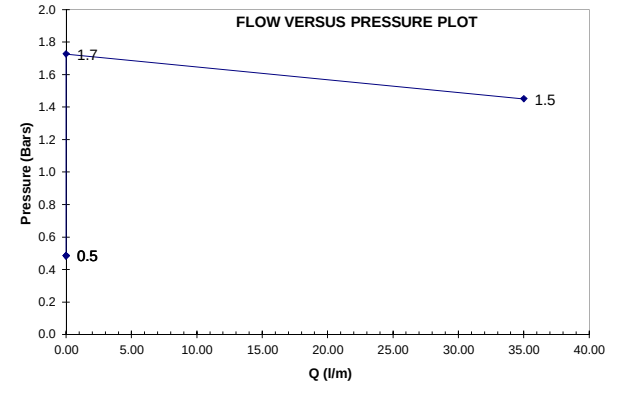
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

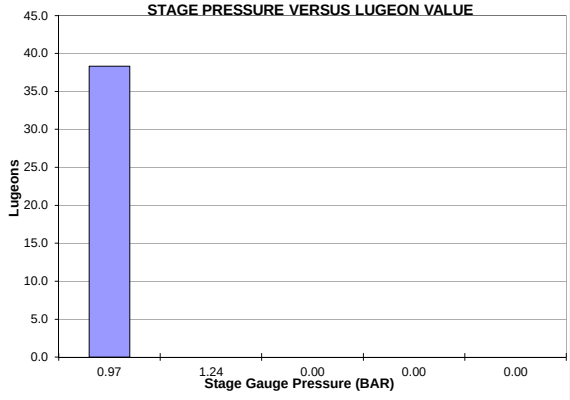
AREA: TSF, MAIN EMBANKMENT | TEST NO: 4

DIP: 90 ° (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.1 m | TOP OF TEST INTERVAL: 84.3 ft (DOWN HOLE) / 25.7 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 105.0 ft (DOWN HOLE) / 32.0 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	7800.0	7834.0	7870.0	7904.0	7939.0	7975.0				
	Take	litres		34.00	36.00	34.00	35.00	36.00				
0.97	Average Take	l/m		34.00	36.00	34.00	35.00	36.00			35.00	38.30
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres										
	Take	litres										
1.24	Average Take	l/m										
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										





Lu = 38.3 | K (cm/s) = 4E-04

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	YES
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Hydraulic conductivity value based on 1 pressure stage. Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV.	DDMMMYY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	- PREP'D	- CHK'D	- APP'D

SHEET 5 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

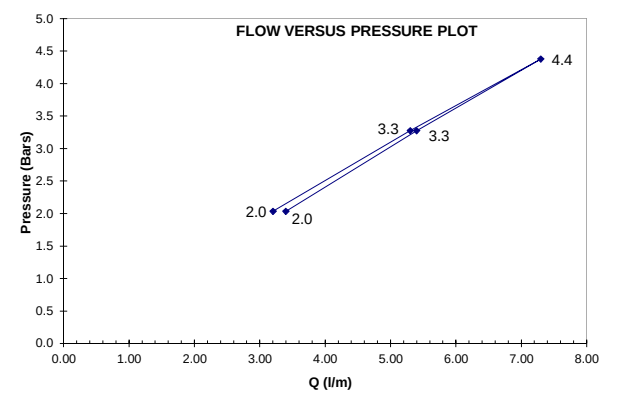
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

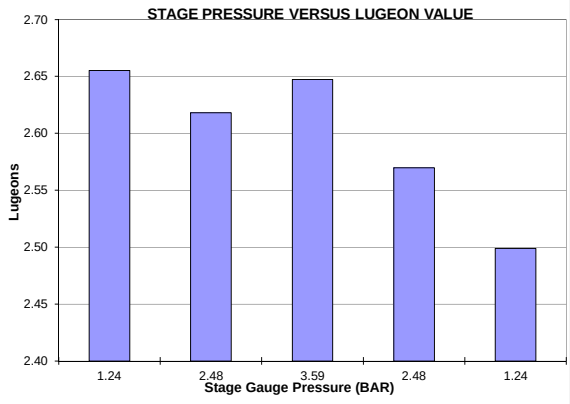
AREA: TSF, MAIN EMBANKMENT | TEST NO: 5

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 7.2 m | TOP OF TEST INTERVAL: 104.3 ft (DOWN HOLE) / 31.8 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 125.0 ft (DOWN HOLE) / 38.1 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	8265.0	8268.5	8272.0	8275.0	8278.5	8282.0				
	Take	litres		3.50	3.50	3.00	3.50	3.50				
1.24	Average Take	l/m		3.50	3.50	3.00	3.50	3.50			3.40	2.66
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	8290.5	8296.0	8302.0	8307.0	8312.0	8317.5				
	Take	litres		5.50	6.00	5.00	5.00	5.50				
2.48	Average Take	l/m		5.50	6.00	5.00	5.00	5.50			5.40	2.62
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	8322.0	8330.0	8337.0	8344.5	8351.5	8358.5				
	Take	litres		8.00	7.00	7.50	7.00	7.00				
3.59	Average Take	l/m		8.00	7.00	7.50	7.00	7.00			7.30	2.65
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	8365.0	8370.5	8376.0	8381.0	8386.0	8391.5				
	Take	litres		5.50	5.50	5.00	5.00	5.50				
2.48	Average Take	l/m		5.50	5.50	5.00	5.00	5.50			5.30	2.57
GAUGE P (BAR)	Time	min	0	1	2	3	4	5			FLOW litres/min	LUGEON
	Flowmeter	litres	8394.0	8397.0	8400.5	8404.0	8407.5	8410.0				
	Take	litres		3.00	3.50	3.50	3.50	2.50				
1.24	Average Take	l/m		3.00	3.50	3.50	3.50	2.50			3.20	2.50





Lu = 2.6 | K (cm/s) = 3E-05

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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SHEET 6 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

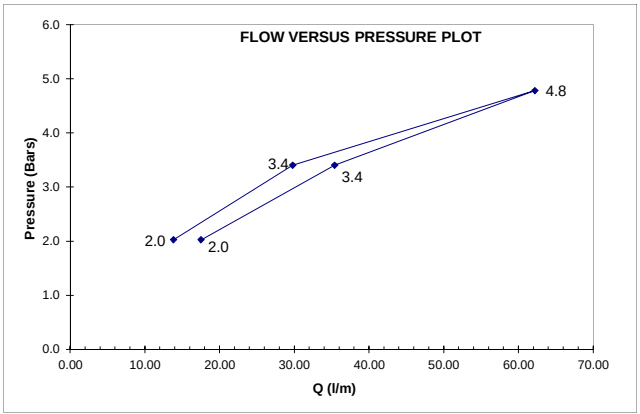
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

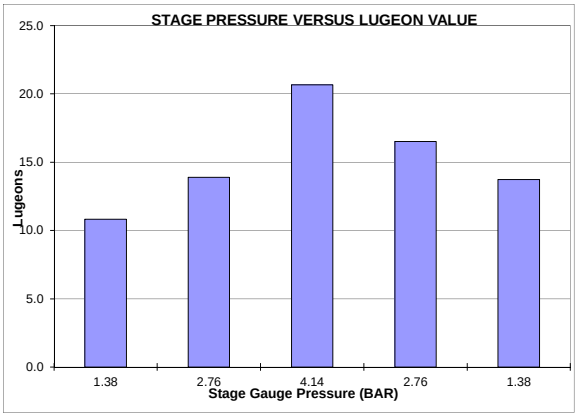
AREA: TSF, MAIN EMBANKMENT | TEST NO: 6

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 5.7 m | TOP OF TEST INTERVAL: 124.3 ft (DOWN HOLE) / 37.9 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 145.0 ft (DOWN HOLE) / 44.2 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	8436.0	8451.0	8465.0	8478.5	8491.5	8505.0				
	Take	litres		15.00	14.00	13.50	13.00	13.50				
1.38	Average Take	l/m		15.00	14.00	13.50	13.00	13.50			13.80	10.83
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	8541.0	8571.0	8601.0	8631.0	8661.0	8690.0				
	Take	litres		30.00	30.00	30.00	30.00	29.00				
2.76	Average Take	l/m		30.00	30.00	30.00	30.00	29.00			29.80	13.90
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	8730.0	8792.0	8854.0	8917.0	8979.0	9041.0				
	Take	litres		62.00	62.00	63.00	62.00	62.00				
4.14	Average Take	l/m		62.00	62.00	63.00	62.00	62.00			62.20	20.65
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	9082.0	9115.0	9150.0	9187.0	9223.0	9259.0				
	Take	litres		33.00	35.00	37.00	36.00	36.00				
2.76	Average Take	l/m		33.00	35.00	37.00	36.00	36.00			35.40	16.51
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	9259.0	9272.5	9290.0	9308.0	9322.0	9346.5				
	Take	litres		13.50	17.50	18.00	14.00	24.50				
1.38	Average Take	l/m		13.50	17.50	18.00	14.00	24.50			17.50	13.73





Lu = 13.7 | K (cm/s) = 1E-04

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	YES
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 7 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

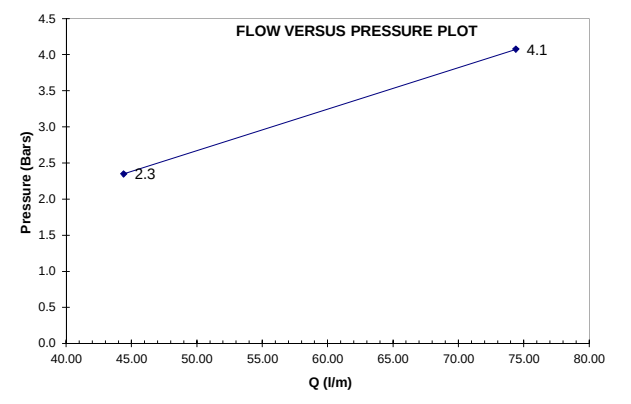
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

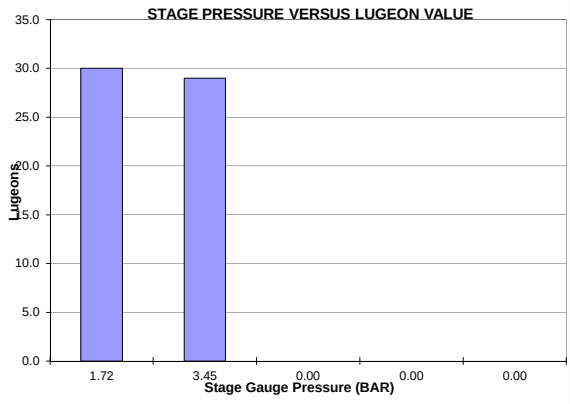
AREA: TSF, MAIN EMBANKMENT | TEST NO: 7

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 5.5 m | TOP OF TEST INTERVAL: 144.3 ft (DOWN HOLE) / 44.0 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 165.0 ft (DOWN HOLE) / 50.3 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	9440.0	9485.0	9529.0	9574.0	9618.0	9662.0				
	Take	litres		45.00	44.00	45.00	44.00	44.00				
1.72	Average Take	l/m		45.00	44.00	45.00	44.00	44.00			44.40	29.99
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	9785.0	9859.0	9934.0	10008.0	10082.0	10157.0				
	Take	litres		74.00	75.00	74.00	74.00	75.00				
3.45	Average Take	l/m		74.00	75.00	74.00	74.00	75.00			74.40	28.99
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres										
	Take	litres										
	Average Take	l/m										





Lu = 29.5 | K (cm/s) = 3E-04

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	YES
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pump could not reach pressure above stage P2, remaining stages not performed.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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#	DDMMM'YY	ISSUED WITH <Doc and Cont. No. or P/A>	-	-	-
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 8 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

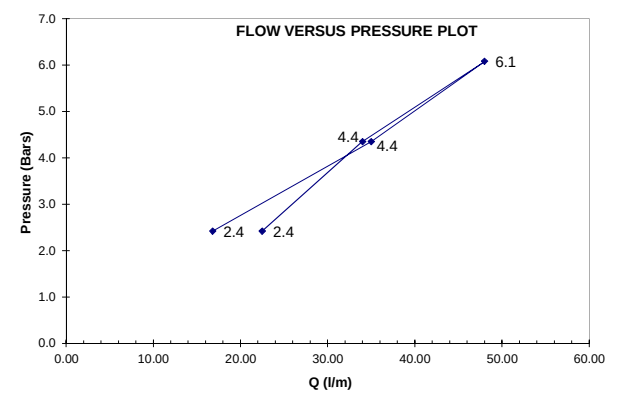
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

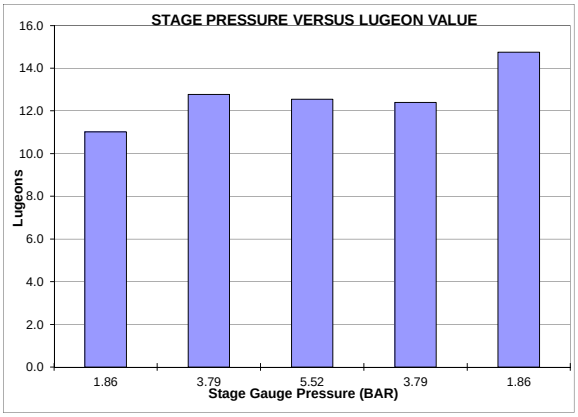
AREA: TSF, MAIN EMBANKMENT | TEST NO: 8

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.8 m | TOP OF TEST INTERVAL: 164.3 ft (DOWN HOLE) / 50.1 m (DOWN HOLE)

DATE: 25-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 185.0 ft (DOWN HOLE) / 56.4 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	10280.0	10289.5	10302.0	10321.0	10342.5	10364.0				
	Take	litres		9.50	12.50	19.00	21.50	21.50				
1.86	Average Take	l/m		9.50	12.50	19.00	21.50	21.50			16.80	11.01
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	10390.0	10431.0	10474.0	10502.0	10533.0	10565.0				
	Take	litres		41.00	43.00	28.00	31.00	32.00				
3.79	Average Take	l/m		41.00	43.00	28.00	31.00	32.00			35.00	12.77
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	10595.0	10643.0	10691.0	10738.0	10786.0	10835.0				
	Take	litres		48.00	48.00	47.00	48.00	49.00				
5.52	Average Take	l/m		48.00	48.00	47.00	48.00	49.00			48.00	12.54
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	10870.0	10904.0	10937.0	10971.0	11006.0	11040.0				
	Take	litres		34.00	33.00	34.00	35.00	34.00				
3.79	Average Take	l/m		34.00	33.00	34.00	35.00	34.00			34.00	12.40
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11052.0	11073.5	11096.0	11118.5	11141.0	11164.5				
	Take	litres		21.50	22.50	22.50	22.50	23.50				
1.86	Average Take	l/m		21.50	22.50	22.50	22.50	23.50			22.50	14.75





AVG Lu= 14.8 AVG k= 1E-04

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	YES
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 9 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

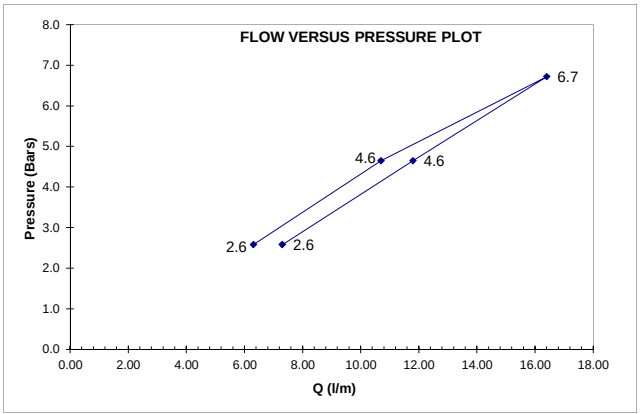
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

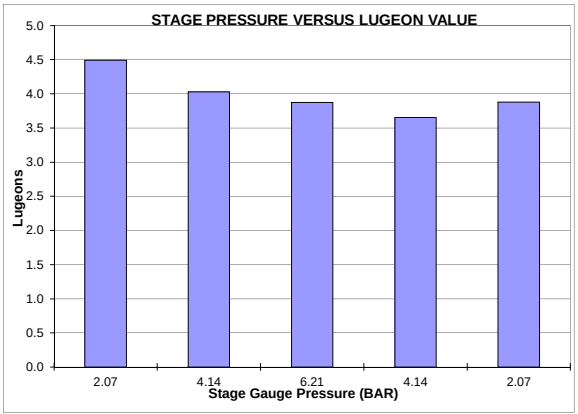
AREA: TSF, MAIN EMBANKMENT | TEST NO: 9

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.3 m | TOP OF TEST INTERVAL: 184.3 ft (DOWN HOLE) / 56.2 m (DOWN HOLE)

DATE: 26-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 205.0 ft (DOWN HOLE) / 62.5 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11137.0	11144.5	11152.0	11159.0	11166.0	11173.5				
	Take	litres		7.50	7.50	7.00	7.00	7.50				
2.07	Average Take	l/m		7.50	7.50	7.00	7.00	7.50			7.30	4.49
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11200.0	11212.0	11223.5	11235.0	11247.0	11259.0				
	Take	litres		12.00	11.50	11.50	12.00	12.00				
4.14	Average Take	l/m		12.00	11.50	11.50	12.00	12.00			11.80	4.03
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11285.0	11301.5	11320.0	11335.0	11350.5	11367.0				
	Take	litres		16.50	18.50	15.00	15.50	16.50				
6.21	Average Take	l/m		16.50	18.50	15.00	15.50	16.50			16.40	3.88
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11382.0	11392.0	11402.5	11414.0	11424.5	11435.5				
	Take	litres		10.00	10.50	11.50	10.50	11.00				
4.14	Average Take	l/m		10.00	10.50	11.50	10.50	11.00			10.70	3.65
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11445.0	11450.5	11456.5	11463.0	11469.5	11476.5				
	Take	litres		5.50	6.00	6.50	6.50	7.00				
2.07	Average Take	l/m		5.50	6.00	6.50	6.50	7.00			6.30	3.88





Lu = 3.9 | K (cm/s) = 4E-05

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

M:\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\Geotech Drillholes\Hydrogeological Tests\Lugeon Tests\[GT12-11 Lugeon Packer Testing Sheet.xlsx]9

# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 10 OF 10

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

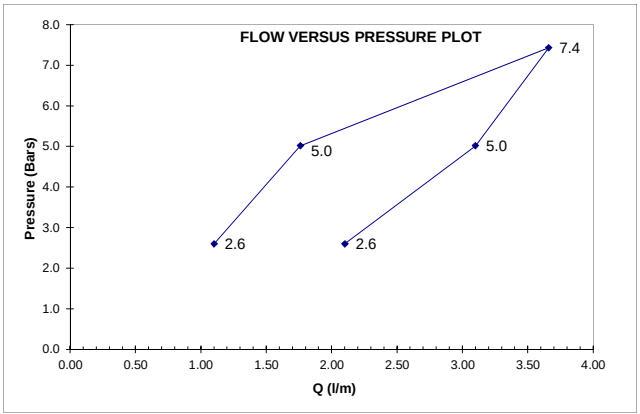
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-11

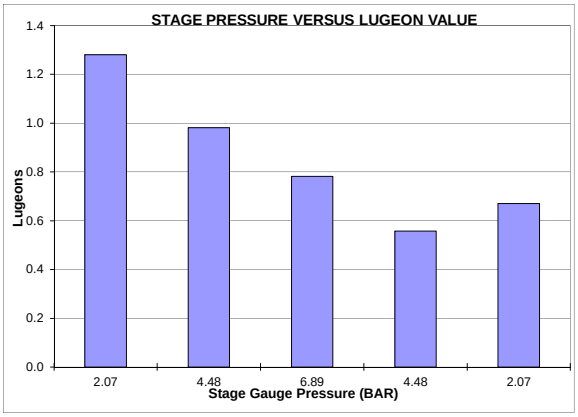
AREA: TSF, MAIN EMBANKMENT | TEST NO: 10

DIP: 90 ° (FROM HORIZONTAL) | DEPTH GROUNDWATER: 4.6 m | TOP OF TEST INTERVAL: 204.3 ft (DOWN HOLE) / 62.3 m (DOWN HOLE)

DATE: 26-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 225.0 ft (DOWN HOLE) / 68.6 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11526.0	11528.3	11530.0	11532.3	11534.5	11536.5				
	Take	litres		2.30	1.70	2.30	2.20	2.00				
2.07	Average Take	l/m		2.30	1.70	2.30	2.20	2.00			2.10	1.28
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11540.0	11543.5	11546.8	11550.0	11552.8	11555.5				
	Take	litres		3.50	3.30	3.20	2.80	2.70				
4.48	Average Take	l/m		3.50	3.30	3.20	2.80	2.70			3.10	0.98
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11564.0	11568.2	11572.0	11575.5	11579.0	11582.3				
	Take	litres		4.20	3.80	3.50	3.50	3.30				
6.89	Average Take	l/m		4.20	3.80	3.50	3.50	3.30			3.66	0.78
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11585.0	11586.8	11588.5	11590.0	11592.0	11593.8				
	Take	litres		1.80	1.70	1.50	2.00	1.80				
4.48	Average Take	l/m		1.80	1.70	1.50	2.00	1.80			1.76	0.56
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11595.0	11596.0	11597.2	11598.1	11599.3	11600.5				
	Take	litres		1.00	1.20	0.90	1.20	1.20				
2.07	Average Take	l/m		1.00	1.20	0.90	1.20	1.20			1.10	0.67





Lu = 0.7 | K (cm/s) = 7E-06

INTERPRETATION TYPE OF FLOW:

1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

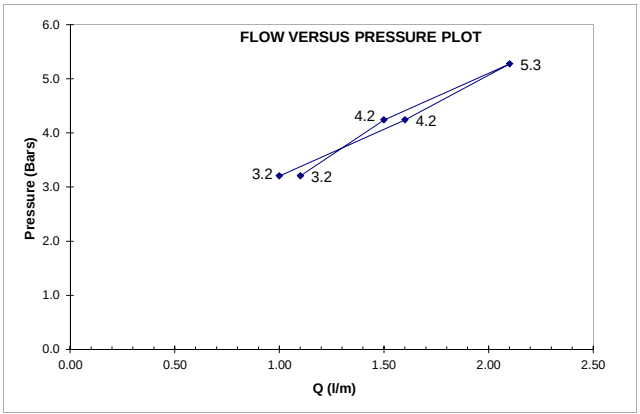
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-12

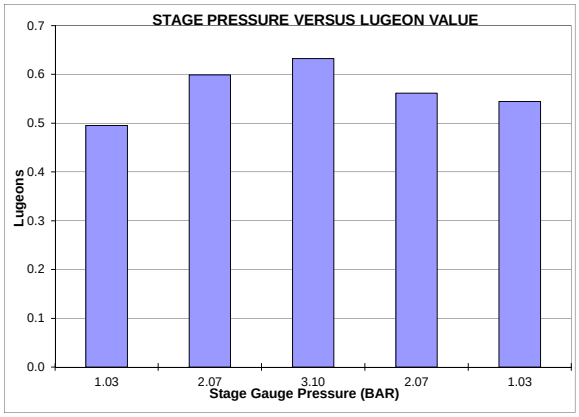
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 21.0 m | TOP OF TEST INTERVAL: 89.3 ft (DOWN HOLE) / 27.2 m (DOWN HOLE)

DATE: 26-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 110.0 ft (DOWN HOLE) / 33.5 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11615.0	11616.0	11617.0	11618.0	11619.0	11620.0				
	Take	litres		1.00	1.00	1.00	1.00	1.00				
1.03	Average Take	l/m		1.00	1.00	1.00	1.00	1.00			1.00	0.50
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11621.0	11622.5	11624.5	11626.0	11627.5	11629.0				
	Take	litres		1.50	2.00	1.50	1.50	1.50				
2.07	Average Take	l/m		1.50	2.00	1.50	1.50	1.50			1.60	0.60
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11630.5	11633.0	11635.5	11637.0	11639.0	11641.0				
	Take	litres		2.50	2.50	1.50	2.00	2.00				
3.10	Average Take	l/m		2.50	2.50	1.50	2.00	2.00			2.10	0.63
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11641.5	11643.5	11645.0	11646.0	11647.5	11649.0				
	Take	litres		2.00	1.50	1.00	1.50	1.50				
2.07	Average Take	l/m		2.00	1.50	1.00	1.50	1.50			1.50	0.56
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11649.5	11650.5	11652.0	11653.0	11654.0	11655.0				
	Take	litres		1.00	1.50	1.00	1.00	1.00				
1.03	Average Take	l/m		1.00	1.50	1.00	1.00	1.00			1.10	0.54





Lu = 0.6 | K (cm/s) = 6E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Water level was measured approximately 2 hours after test.

Pneumatic system used.

TEST BY: HS | REVIEWED BY:

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#	DDMMM'YY	ISSUED WITH <Doc and Cont. No. or P/A>	-	-	-
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

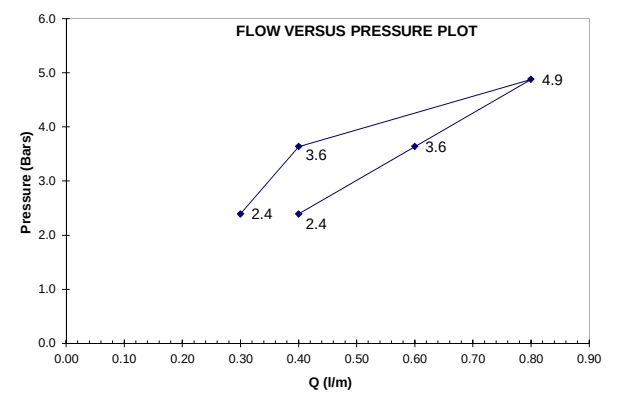
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-12

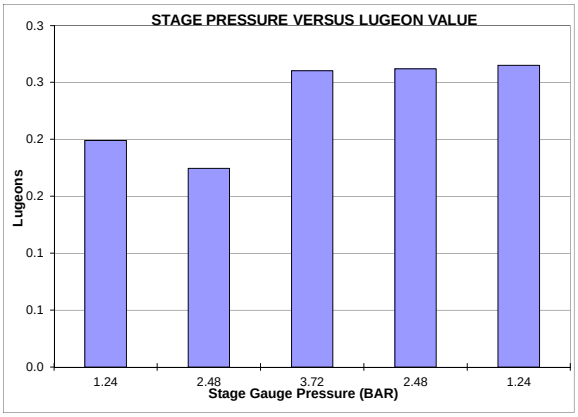
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 10.8 m | TOP OF TEST INTERVAL: 109.3 ft (DOWN HOLE) / 33.3 m (DOWN HOLE)

DATE: 26-Apr-12 | GAUGE HEIGHT ABOVE GROUND: 0.8 m | BOTTOM OF TEST INTERVAL: 130.0 ft (DOWN HOLE) / 39.6 m (DOWN HOLE)

GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11663.0	11663.2	11663.5	11663.8	11664.2	11664.5				
	Take	litres		0.20	0.30	0.30	0.40	0.30				
1.24	Average Take	l/m		0.20	0.30	0.30	0.40	0.30			0.30	0.20
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11666.0	11666.3	11666.8	11667.0	11667.5	11668.0				
	Take	litres		0.30	0.50	0.20	0.50	0.50				
2.48	Average Take	l/m		0.30	0.50	0.20	0.50	0.50			0.40	0.17
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11669.0	11670.0	11670.8	11671.3	11672.1	11673.0				
	Take	litres		1.00	0.80	0.50	0.80	0.90				
3.72	Average Take	l/m		1.00	0.80	0.50	0.80	0.90			0.80	0.26
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11674.0	11674.5	11675.2	11675.8	11676.2	11677.0				
	Take	litres		0.50	0.70	0.60	0.40	0.80				
2.48	Average Take	l/m		0.50	0.70	0.60	0.40	0.80			0.60	0.26
GAUGE P (BAR)											FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5				
	Flowmeter	litres	11678.0	11678.3	11678.8	11679.1	11679.5	11680.0				
	Take	litres		0.30	0.50	0.30	0.40	0.50				
1.24	Average Take	l/m		0.30	0.50	0.30	0.40	0.50			0.40	0.27





AVG Lu= 0.2 | AVG k= 2E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	YES
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	NO

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: AL | REVIEWED BY:

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# REV	DD/MM/YY DATE	ISSUED WITH <Doc and Cont. No. or P/A> DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 1 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

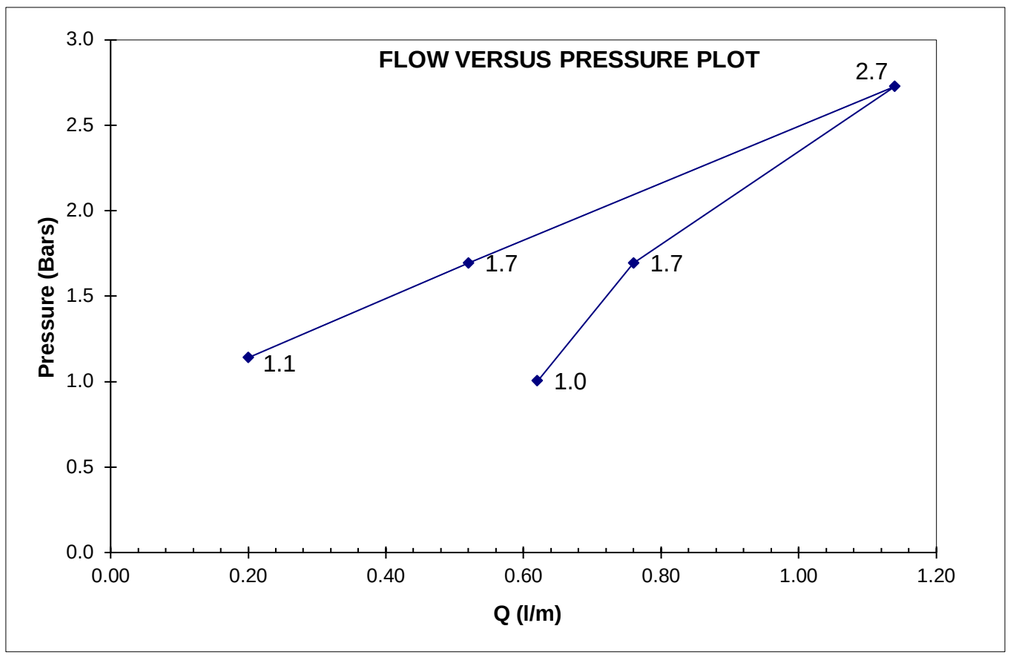
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-28

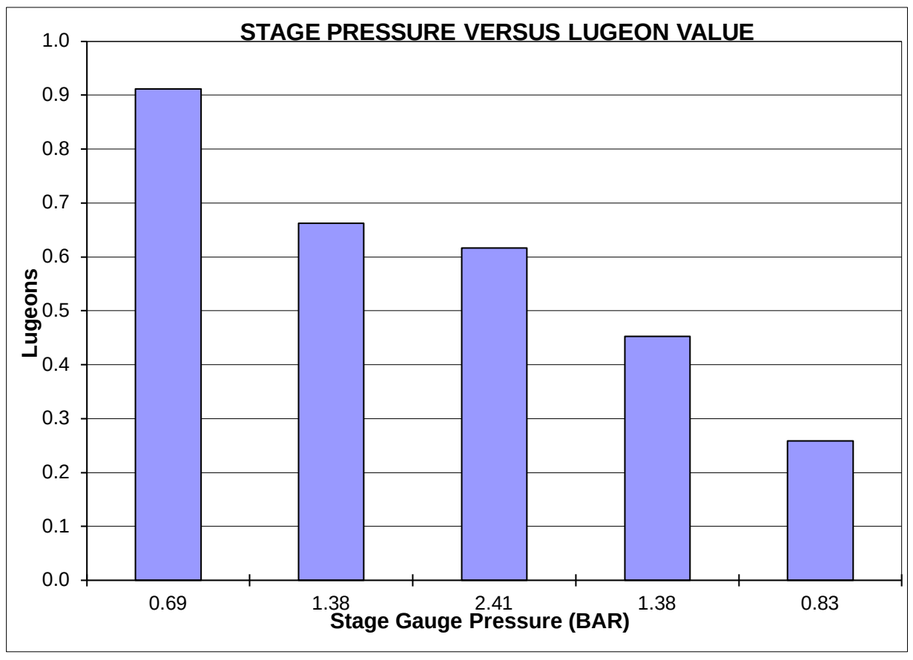
AREA: TSF, MAIN EMBANKMENT | TEST NO: 1

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.0 m | TOP OF TEST INTERVAL: 48.8 ft (DOWN HOLE) / 14.9 m (DOWN HOLE)

DATE: 26-Aug-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 71.0 ft (DOWN HOLE) / 21.6 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11780.0	11781.0	11781.2	11782.0	11783.1	11783.1			
	Take	litres		1.00	0.20	0.80	1.10	0.00			
0.69	Average Take	l/m		1.00	0.20	0.80	1.10	0.00		0.62	0.91
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11784.0	11785.0	11785.6	11786.2	11787.0	11787.8			
	Take	litres		1.00	0.60	0.60	0.80	0.80			
1.38	Average Take	l/m		1.00	0.60	0.60	0.80	0.80		0.76	0.66
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11788.5	11788.9	11791.0	11792.2	11793.1	11794.2			
	Take	litres		0.40	2.10	1.20	0.90	1.10			
2.41	Average Take	l/m		0.40	2.10	1.20	0.90	1.10		1.14	0.62
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11794.4	11795.0	11795.3	11796.0	11796.4	11797.0			
	Take	litres		0.60	0.30	0.70	0.40	0.60			
1.38	Average Take	l/m		0.60	0.30	0.70	0.40	0.60		0.52	0.45
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11797.4	11797.5	11797.6	11797.7	11798.1	11798.4			
	Take	litres		0.10	0.10	0.10	0.40	0.30			
0.83	Average Take	l/m		0.10	0.10	0.10	0.40	0.30		0.20	0.26





Lu = 0.3 | K (cm/s) = 3E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Water level was not recorded during test. Estimated water level was based on the water level reading record after piezometer installation .

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

Pneumatic system used.

TEST BY: JS | REVIEWED BY: JS

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#	DDMMM'YY	ISSUED WITH <Doc and Cont. No. or P/A>	-	-	-
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

SHEET 2 OF 2

LUGEON TEST FIELD DATA SHEET

Knight Piésold CONSULTING

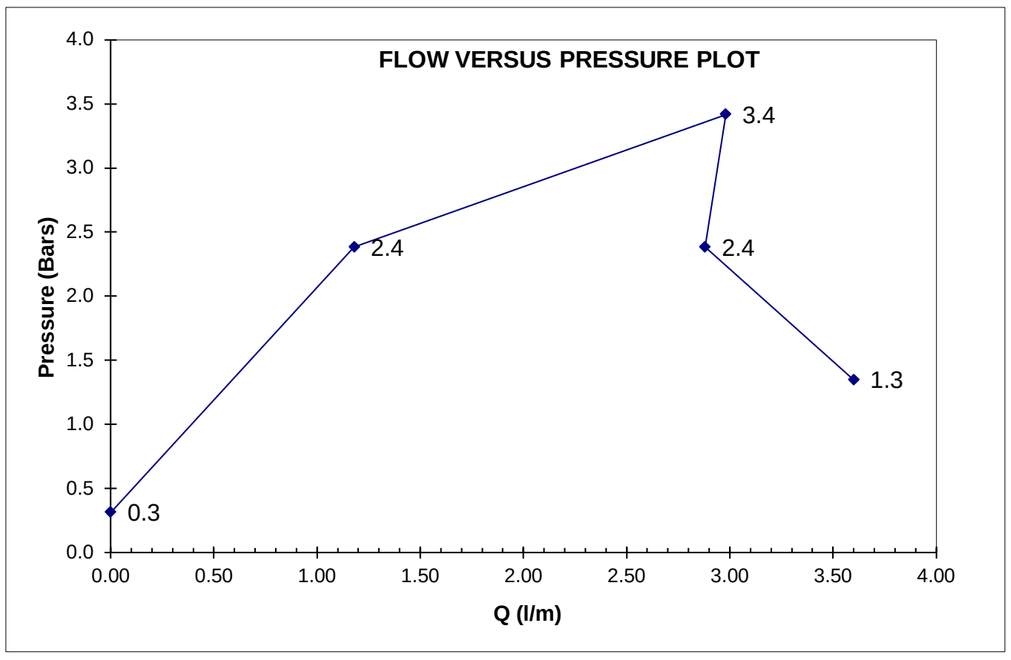
PROJECT: BLACKWATER GOLD PROJECT | PROJECT NO: VA101-457/04 | DRILLHOLE: GT12-28

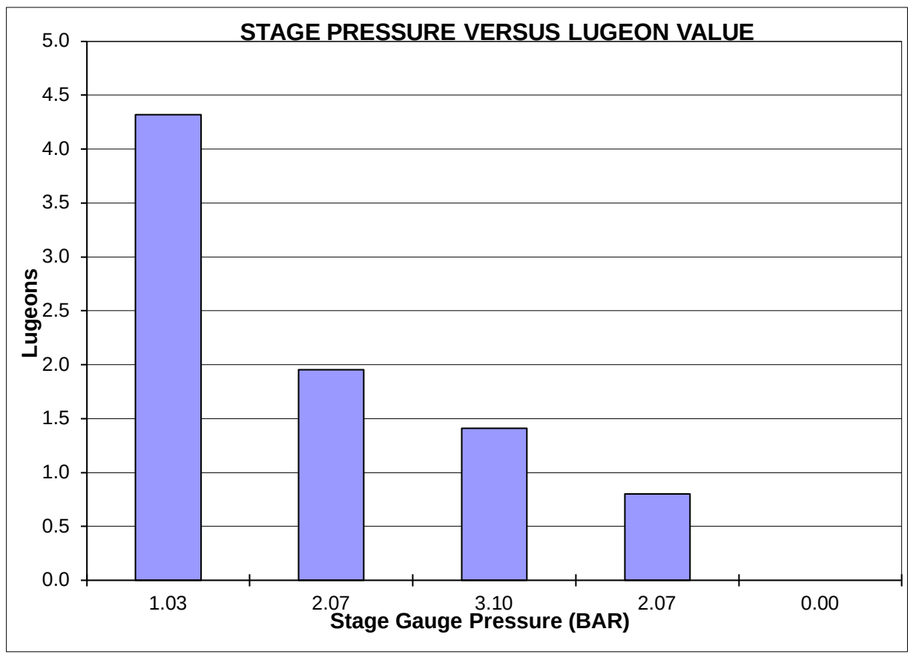
AREA: TSF, MAIN EMBANKMENT | TEST NO: 2

DIP: 90 o (FROM HORIZONTAL) | DEPTH GROUNDWATER: 2.0 m | TOP OF TEST INTERVAL: 70.7 ft (DOWN HOLE) / 21.6 m (DOWN HOLE)

DATE: 26-Aug-12 | GAUGE HEIGHT ABOVE GROUND: 1.1 m | BOTTOM OF TEST INTERVAL: 91.0 ft (DOWN HOLE) / 27.7 m (DOWN HOLE)

GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11712.0	11722.1	11724.2	11725.0	11729.3	11730.0			
	Take	litres		10.10	2.10	0.80	4.30	0.70			
1.03	Average Take	l/m		10.10	2.10	0.80	4.30	0.70		3.60	4.32
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11732.0	11736.0	11739.5	11742.2	11745.0	11746.4			
	Take	litres		4.00	3.50	2.70	2.80	1.40			
2.07	Average Take	l/m		4.00	3.50	2.70	2.80	1.40		2.88	1.96
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11752.1	11755.0	11758.0	11761.0	11764.0	11767.0			
	Take	litres		2.90	3.00	3.00	3.00	3.00			
3.10	Average Take	l/m		2.90	3.00	3.00	3.00	3.00		2.98	1.41
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres	11766.1	11778.0	11780.0	11771.0	11771.2	11772.0			
	Take	litres		11.90	2.00	-9.00	0.20	0.80			
2.07	Average Take	l/m		11.90	2.00	-9.00	0.20	0.80		1.18	0.80
GAUGE P (BAR)										FLOW litres/min	LUGEON
	Time	min	0	1	2	3	4	5			
	Flowmeter	litres									
	Take	litres									
	Average Take	l/m									





Lu = 0.8 | K (cm/s) = 8E-06

INTERPRETATION TYPE OF FLOW:		
1	LAMINAR	NO
2	TURBULENT	NO
3	DILATION	NO
4	WASH-OUT	NO
5	VOID FILLING	YES

DRILLING / TEST RESULTS COMMENTS:

Flowmeter units: m^3

Water level was not recorded during test. Estimated water level was based on water level reading recorded after piezometer installation .

Head loss not measured for the packer tool system or included in the analysis. For lower flows, head loss will be small and not affect the K value.

IPI system used.

TEST BY: JS | REVIEWED BY: JS

M:\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\Geotech Drillholes\Hydrogeological Tests\Lugeon Tests\[GT12-28 Lugeon Packer Testing Sheet.xlsx]2

#	DDMMM'YY	ISSUED WITH <Doc and Cont. No. or P/A>	-	-	-
REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

APPENDIX C3

RESPONSE TESTING (HVORSLEV METHOD)

(Pages C3-1 to C3-30)

Knight Piésold CONSULTING

TABLE C3.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
RESPONSE TESTING (HVORSLEV METHOD) SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Date	Test Interval (m)		Hydraulic Conductivity (m/s)
		From	To	
MW12-01D	18/07/2012	30.42	40.84	$<1E^{-08}$
MW12-02D	22/05/2012	34.75	39.01	6.E-06
MW12-02S	23/05/2012	7.01	11.89	9.E-06
MW12-03D	17/05/2012	32	38.1	4.E-05
MW12-05D	22/05/2012	21.64	27.74	4.E-06
MW12-05S	31/07/2012	6.1	11.89	$<1E^{-08}$
MW12-06D	06/10/2012	33.83	39.93	$<1E^{-08}$
MW12-06S	31/07/2012	16.76	22.55	8.E-06
MW12-07D	31/07/2012	33.83	40.49	7.E-04
MW12-07S	31/07/2012	18.29	24.08	4.E-04
MW12-08D	03/10/2012	29.7	36.42	2.E-06
MW12-08S	03/10/2012	14.17	20.12	9.E-05
MW12-09D	16/10/2012	28.65	34.44	6.E-06
MW12-12D	16/10/2012	29.26	35.2	1.E-07
MW12-12S	08/10/2012	9.45	15.24	6.E-04
MW12-13D	16/10/2012	35.81	38.86	1.E-04
MW12-13S	04/10/2012	9.14	13.41	$>1E^{-04}$

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	11SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	26JUL'13	ISSUED WITH REPORT	JS	BB	KJB

TABLE C3.1

NEW GOLD INC.
BLACKWATER GOLD PROJECT

2012 SITE INVESTIGATION REPORT
RESPONSE TESTING (HVORSLEV METHOD) SUMMARY

Print Sep/20/13 9:01:03

Drillhole Identification #	Date	Test Interval (m)		Hydraulic Conductivity (m/s)
		From	To	
MW12-01D	18/07/2012	30.42	40.84	$<1E^{-08}$
MW12-02D	22/05/2012	34.75	39.01	6.E-06
MW12-02S	23/05/2012	7.01	11.89	9.E-06
MW12-03D	17/05/2012	32	38.1	4.E-05
MW12-05D	22/05/2012	21.64	27.74	4.E-06
MW12-05S	31/07/2012	6.1	11.89	$<1E^{-08}$
MW12-06D	06/10/2012	33.83	39.93	$<1E^{-08}$
MW12-06S	31/07/2012	16.76	22.55	8.E-06
MW12-07D	31/07/2012	33.83	40.49	7.E-04
MW12-07S	31/07/2012	18.29	24.08	4.E-04
MW12-08D	03/10/2012	29.7	36.42	2.E-06
MW12-08S	03/10/2012	14.17	20.12	9.E-05
MW12-09D	16/10/2012	28.65	34.44	6.E-06
MW12-12D	16/10/2012	29.26	35.2	1.E-07
MW12-12S	08/10/2012	9.45	15.24	6.E-04
MW12-13D	16/10/2012	35.81	38.86	1.E-04
MW12-13S	04/10/2012	9.14	13.41	$>1E^{-04}$

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
1	11SEPT'13	ISSUED WITH REPORT	JS	BB	KJB
0	26JUL'13	ISSUED WITH REPORT	JS	BB	KJB

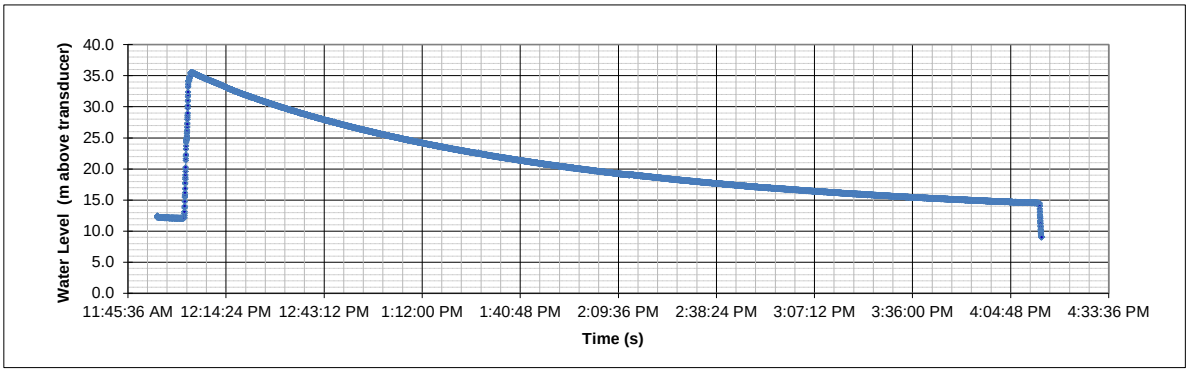
Knight Piésold CONSULTING

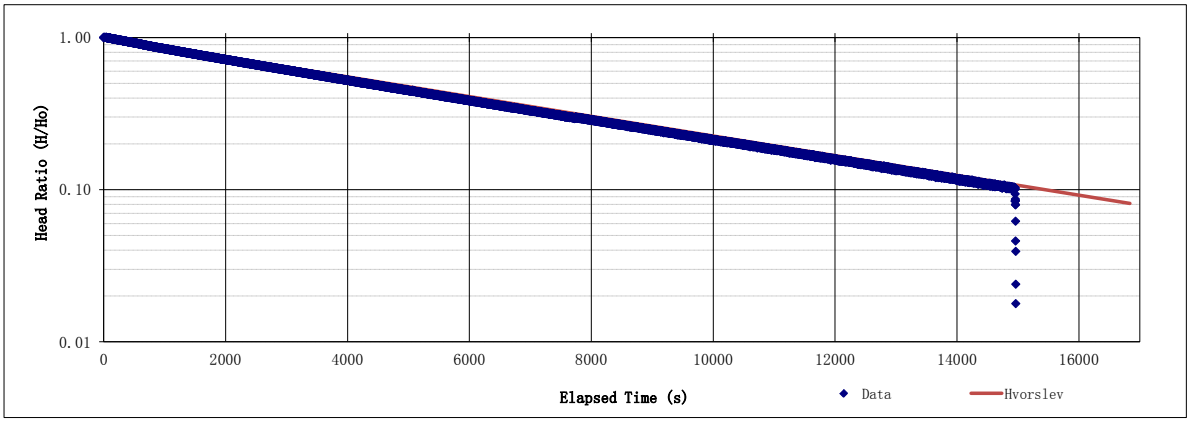
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

Print 01/08/10 14:19

Project No.	VA101-457/4		
Monitoring Well/Piezometer	GT12-01		
Monitoring Instrument Type	Transducer	**Field Technician**	AL
Slug Type	23.33 m x 1" water	**Analyst**	AL
Test Date	04-Apr-12		
Test Time	12:04:02 PM		
Drill-hole diameter, D	0.096 **m**		
Effective diameter of PVC riser pipe, d_e	0.027 **m**		
Top of screen	68.58 **m**		
Bottom of screen	71.63 **m**		
Test Length, L	3.05 **m**		
PVC type	Schedule 40		
Slot size	20 Slot		
Transmissivity, T	5.5E-08 **m^2/s**		
Hydraulic Conductivity, K	1.8E-08 **m/s**	**Intercept**	1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

\\VAN11\Prj_file\1\01\00457\04\A\Data\Task 0400 - Site Investigations\Blackwater SI 2012 Data\GT12-01\[GT12-01 Slug Testing_Piezometer.xlsx]GT12-01 - Hvorslev - Test 1

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	11MAY'12	ISSUED WITH REPORT	AL	-	-

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

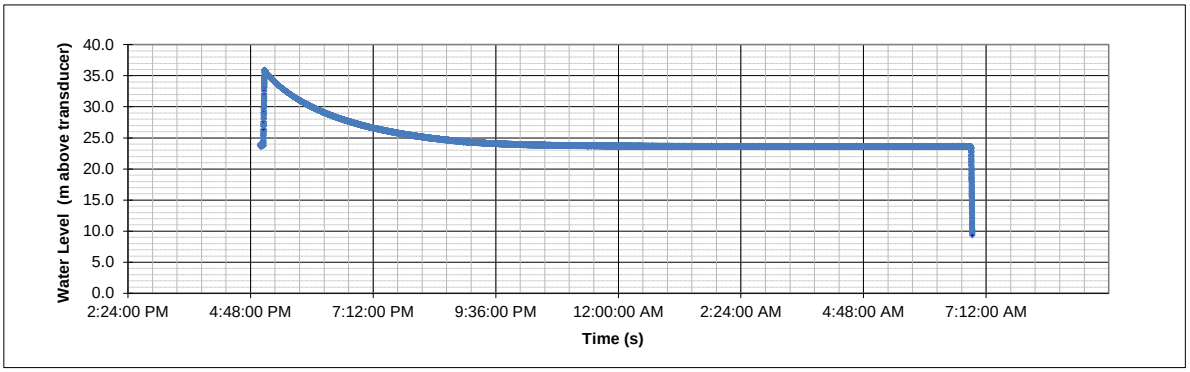
HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

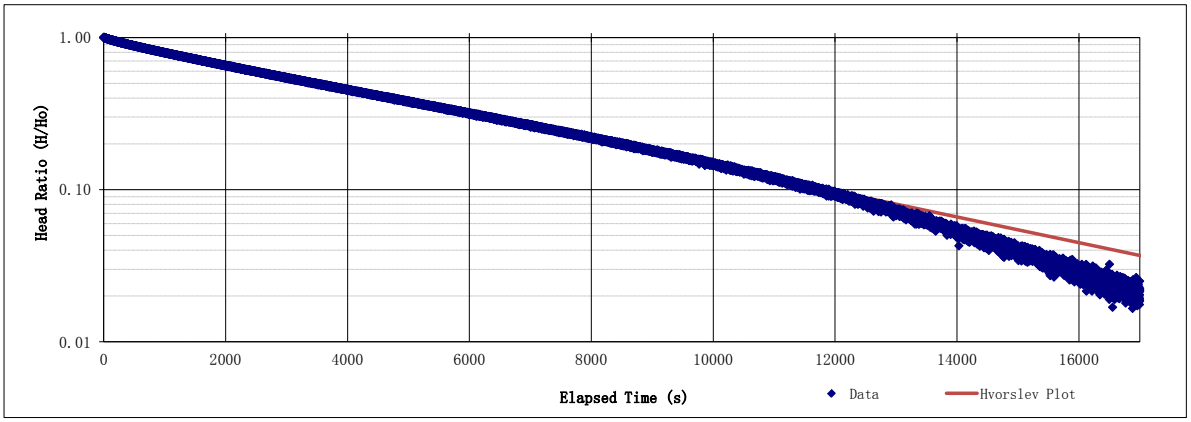
Print 01/08/10 14:19

Project No.	VA101-457/4
Monitoring Well/Piezometer	GT12-03
Monitoring Instrument Type	Transducer
Slug Type	12.183 m x 2" water
Test Date	04-Apr-12
Test Time	5:04:34 PM
Field Technician	AL
Analyst	AL

Drill-hole diameter, D	0.096	**m**
Effective diameter of PVC riser pipe, d_e	0.049	**m**
Top of screen	54.86	**m**
Bottom of screen	57.91	**m**
Test Length, L	3.05	**m**
PVC type	Schedule 80	
Slot size	20 Slot	

Transmissivity, T	2.4E-07	**m^2/s**	
Hydraulic Conductivity, K	8.0E-08	**m/s**	**Intercept** 1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
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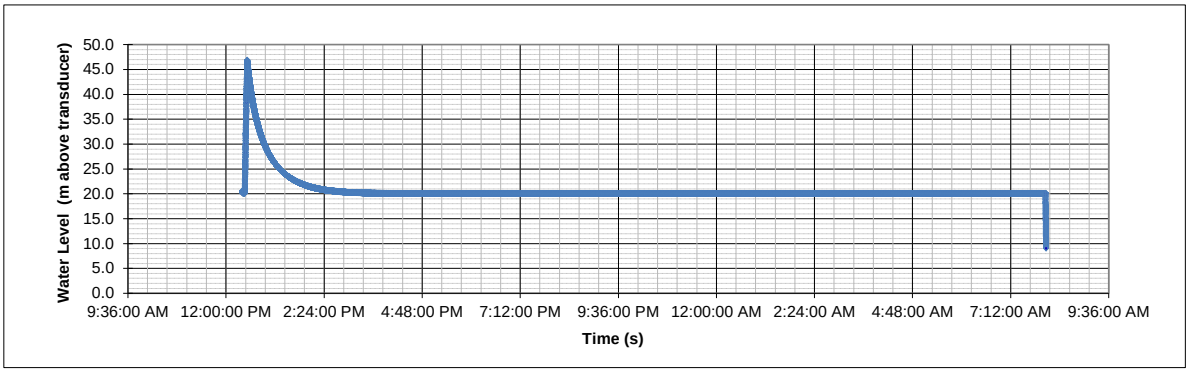
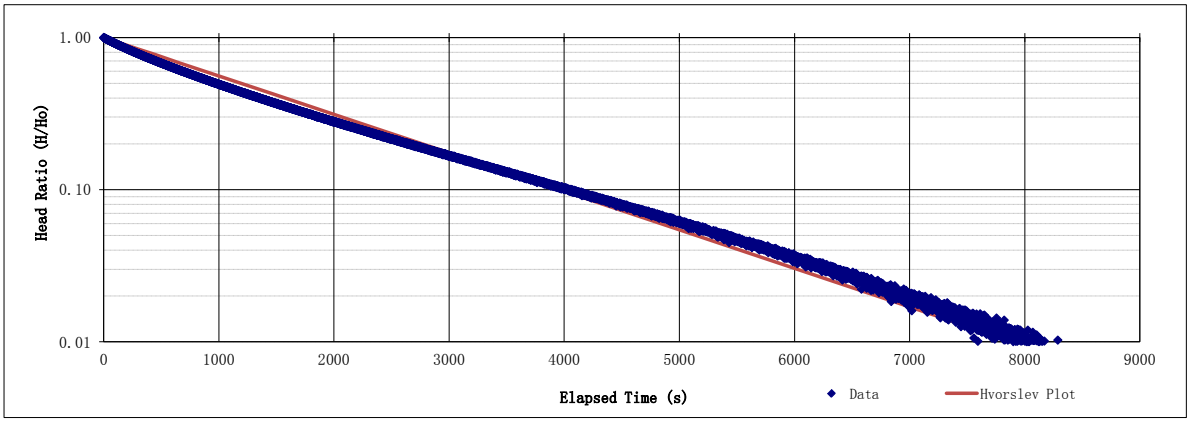
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

Print 01/08/10 14:19

Project No.	VA101-457/4		
Monitoring Well/Piezometer	GT12-04		
Monitoring Instrument Type	Transducer	**Field Technician**	AL
Slug Type	26.724 m x 2" water	**Analyst**	AL
Test Date	12-Apr-12		
Test Time	12:31:17 PM		
Drill-hole diameter, D	0.096 **m**		
Effective diameter of PVC riser pipe, d_e	0.049 **m**		
Top of screen	70.41 **m**		
Bottom of screen	73.46 **m**		
Test Length, L	3.05 **m**		
PVC type	Schedule 80		
Slot size	20 Slot		
Transmissivity, T	7.3E-07 **m^2/s**		
Hydraulic Conductivity, K	2.4E-07 **m/s**	**Intercept**	1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
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NEW GOLD INC.
BLACKWATER GOLD PROJECT

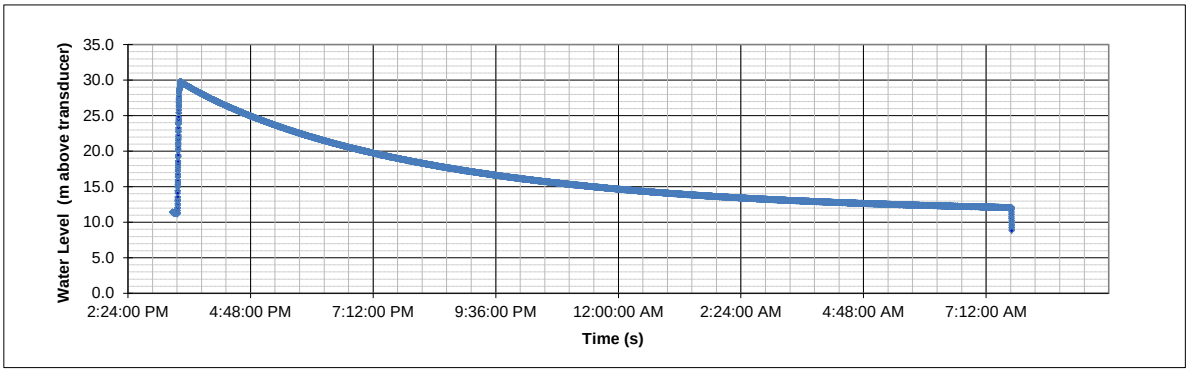
HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

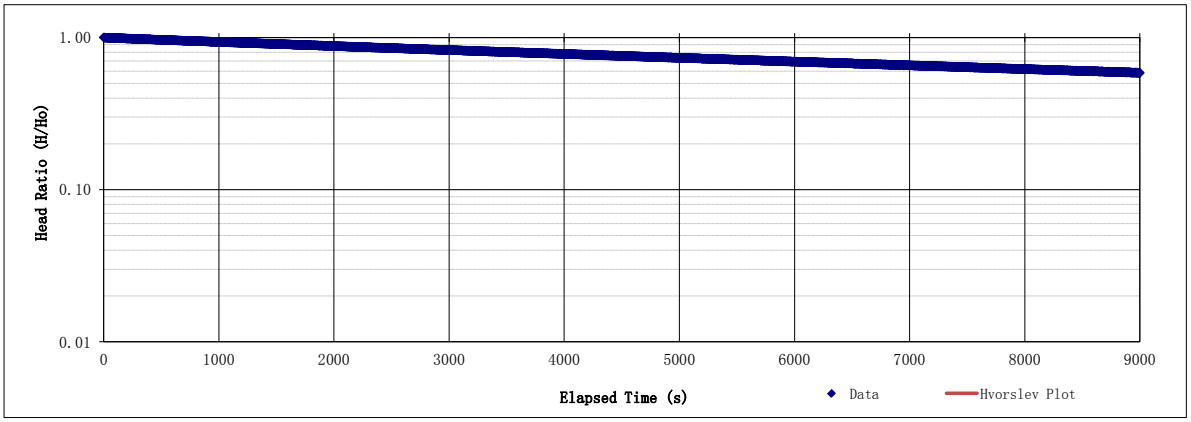
Print 01/08/10 14:19

Project No.	VA101-457/4
Monitoring Well/Piezometer	GT12-06
Monitoring Instrument Type	Transducer
Slug Type	17.493 m x 2" water
Test Date	11-Apr-12
Test Time	3:25:25 PM
Field Technician	AL
Analyst	AL

Drill-hole diameter, D	0.096	**m**
Effective diameter of PVC riser pipe, d_e	0.049	**m**
Top of screen	47.24	**m**
Bottom of screen	50.29	**m**
Test Length, L	3.05	**m**
PVC type	Schedule 80	
Slot size	20 Slot	

Transmissivity, T	7.6E-08	**m^2/s**	
Hydraulic Conductivity, K	2.5E-08	**m/s**	**Intercept** 1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	11MAY'12	ISSUED WITH REPORT	AL	-	-

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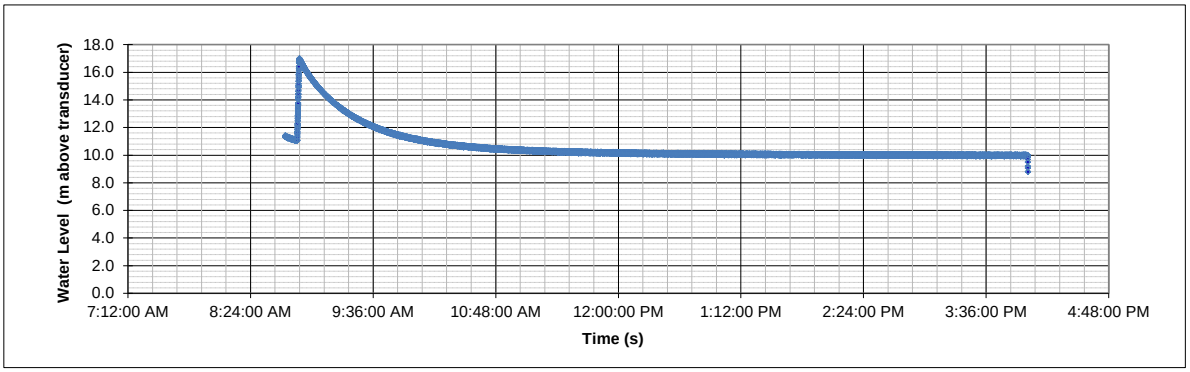
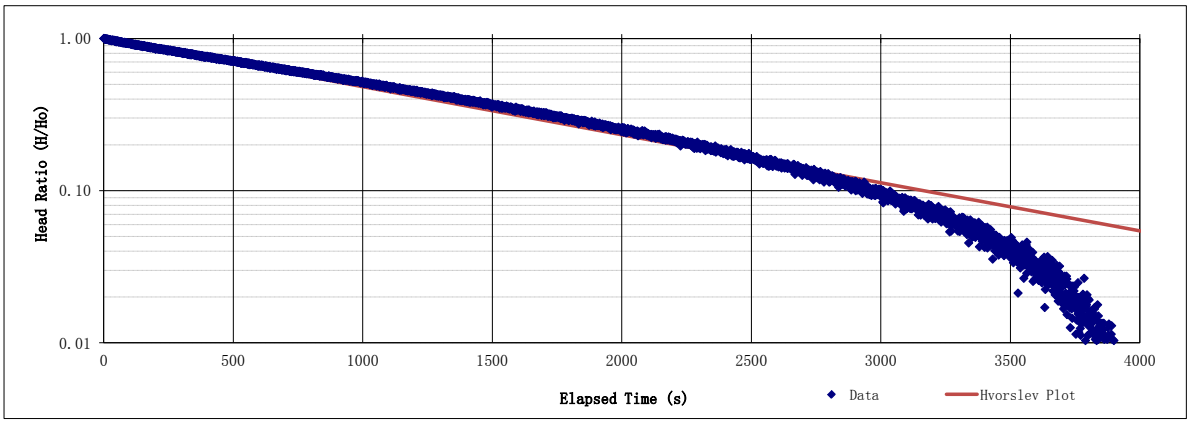
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

Print 01/08/10 14:19

Project No.	VA101-457/4		
Monitoring Well/Piezometer	GT12-07		
Monitoring Instrument Type	Transducer	**Field Technician**	AL
Slug Type	5.806 m x 2" water	**Analyst**	AL
Test Date	09-Apr-12		
Test Time	8:52:49 AM		
Drill-hole diameter, D	0.096 **m**		
Effective diameter of PVC riser pipe, d_e	0.049 **m**		
Top of screen	15.24 **m**		
Bottom of screen	18.29 **m**		
Test Length, L	3.05 **m**		
PVC type	Schedule 80		
Slot size	20 Slot		
Transmissivity, T	9.1E-07 **m^2/s**		
Hydraulic Conductivity, K	3.0E-07 **m/s**	**Intercept**	1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	11MAY'12	ISSUED WITH REPORT	AL	-	-

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

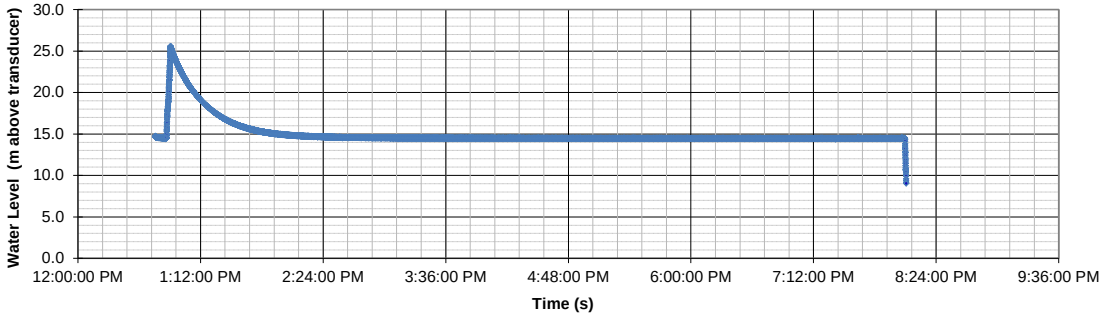
Print 01/08/10 14:19

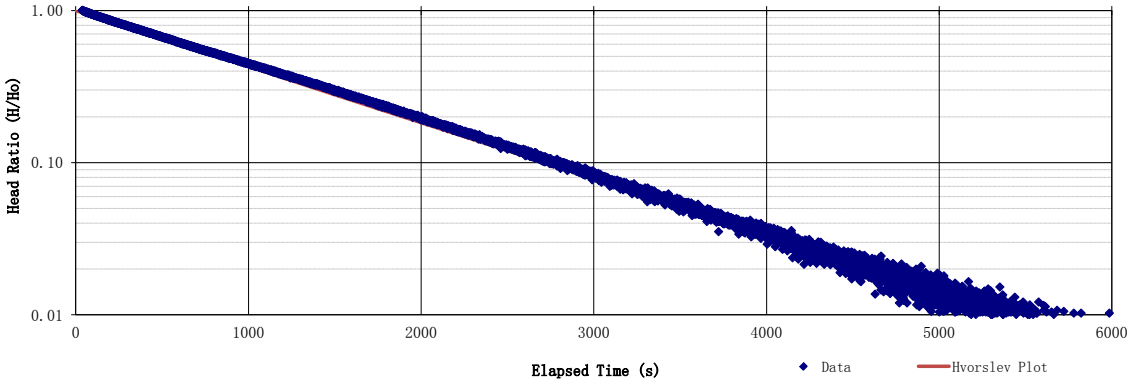
Project No.	VA101-457/4
Monitoring Well/Piezometer	GT12-10
Monitoring Instrument Type	Transducer
Slug Type	11.036 m x 2" water
Test Date	27-Apr-12
Test Time	12:54:25 PM
Field Technician	AL
Analyst	AL

Drill-hole diameter, D	0.096	**m**
Effective diameter of PVC riser pipe, d_e	0.049	**m**
Top of screen	28.35	**m**
Bottom of screen	31.39	**m**
Test Length, L	3.05	**m**
PVC type	Schedule 80	
Slot size	20 Slot	

Transmissivity, T	1.1E-06	**m^2/s**
Hydraulic Conductivity, K	3.5E-07	**m/s**

Intercept 1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	11MAY'12	ISSUED WITH REPORT	AL	-	-

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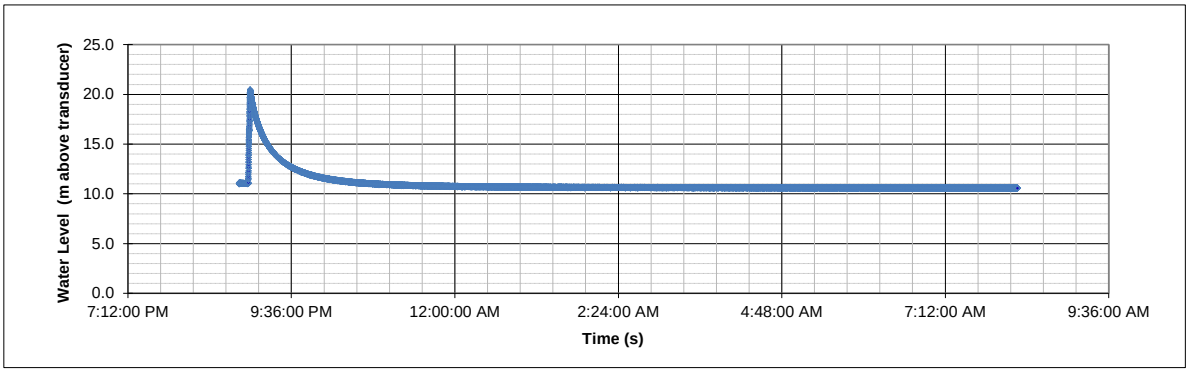
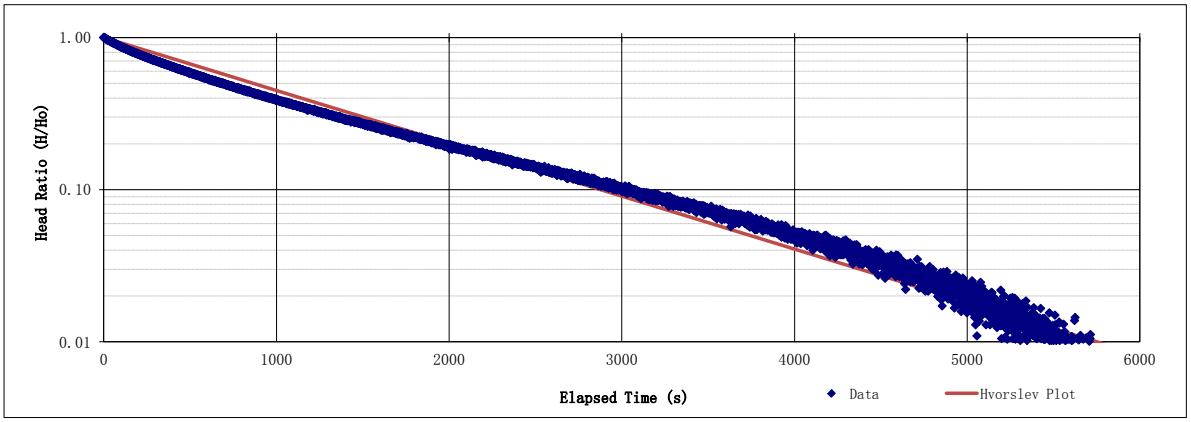
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING HVORSLEV (1951) METHOD

Print 01/08/10 14:19

Project No.	VA101-457/4		
Monitoring Well/Piezometer	GT12-11		
Monitoring Instrument Type	Transducer	**Field Technician**	HS
Slug Type	9.426 m x 2" water	**Analyst**	AL
Test Date	27-Apr-12		
Test Time	8:59:43 PM		
Drill-hole diameter, D	0.096 **m**		
Effective diameter of PVC riser pipe, d_e	0.049 **m**		
Top of screen	11.58 **m**		
Bottom of screen	14.63 **m**		
Test Length, L	3.05 **m**		
PVC type	Schedule 80		
Slot size	20 Slot		
Transmissivity, T	1.0E-06 **m^2/s**		
Hydraulic Conductivity, K	3.3E-07 **m/s**	**Intercept**	1.00





TEST COMMENTS:

(1) Completion zone in weathered bedrock.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
0	11MAY'12	ISSUED WITH REPORT	AL	-	-

Knight Piésold CONSULTING

NEW GOLD INC.
BLACKWATER GOLD PROJECT

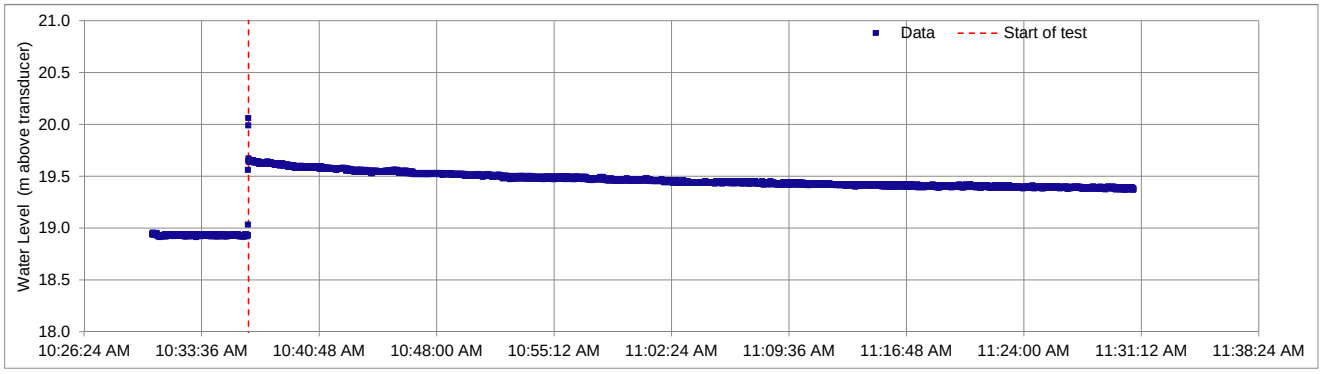
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

17/01/2013 15:14

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-01D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	18-Jul-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	10:36:28 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	18.92	**m above transducer**
Top of test zone	36.58	**m**	**Water level after slug**	19.65	**m above transducer**
Bottom of test zone	39.62	**m**	**Change In Water Level, H_o**	0.73	**m**
Test Length, L	3.04	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	<3E-08	**m^2/s**		
Hydraulic Conductivity, K	< 1E-08	**m/s**	**Storativity, S**	-



TEST COMMENTS: The water level recovery was monitored for one hour. The hydraulic conductivity was estimated at < 1E-08 m/s.

M:\1\01\00457\04\A\Data\Task 0800 - 2012 Baseline Data\Hydrogeology\Hydraulic Testing\Response tests\Analysis Completed\[MW12-01D.xlsx]Cooper et al.

REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN.13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

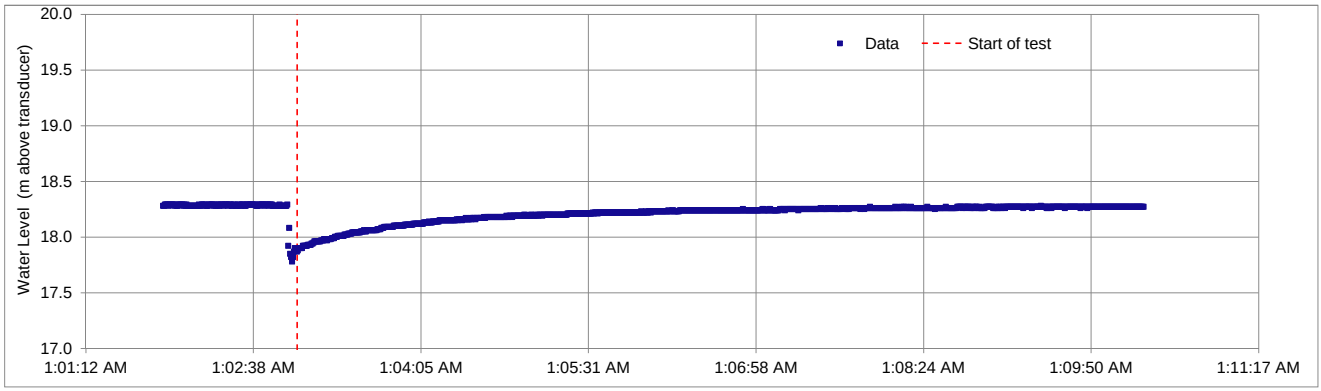
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

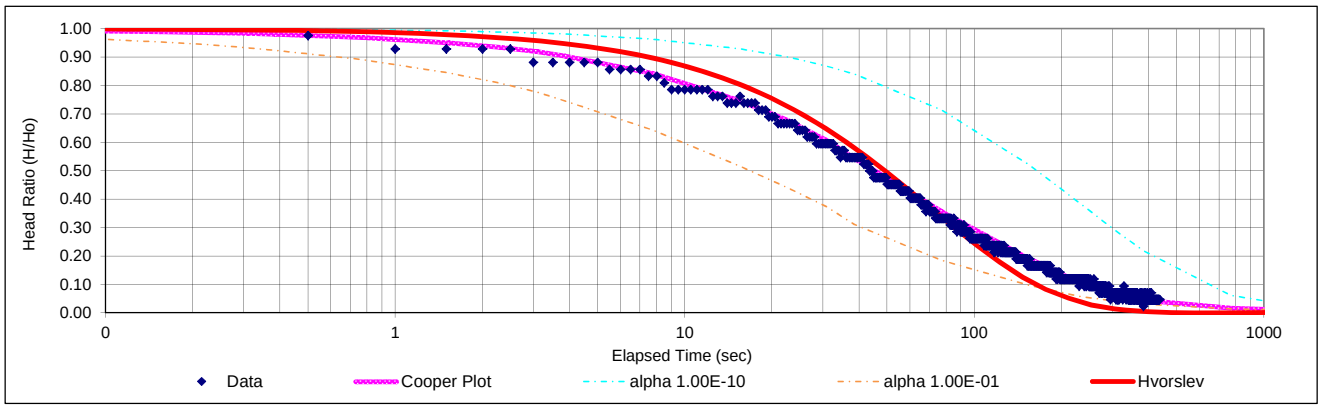
17/01/2013 15:32

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-02D**
Field Technician	BF	**Test**	1 Slug Removal
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	22-May-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	1:03:01 AM	
Effective diameter of PVC riser pipe, d_e	0.053	**m**	**Initial water level**	18.29	**m above transducer**
Top of test zone	35.97	**m**	**Water level after slug**	17.87	**m above transducer**
Bottom of test zone	39.01	**m**	**Change In Water Level, H_o**	-0.42	**m**
Test Length, L	3.04	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	2E-05	**m^2/s**				
Hydraulic Conductivity, K	6E-06	**m/s**	**Storativity, S**	4E-04	**Alpha**	3.31E-03





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

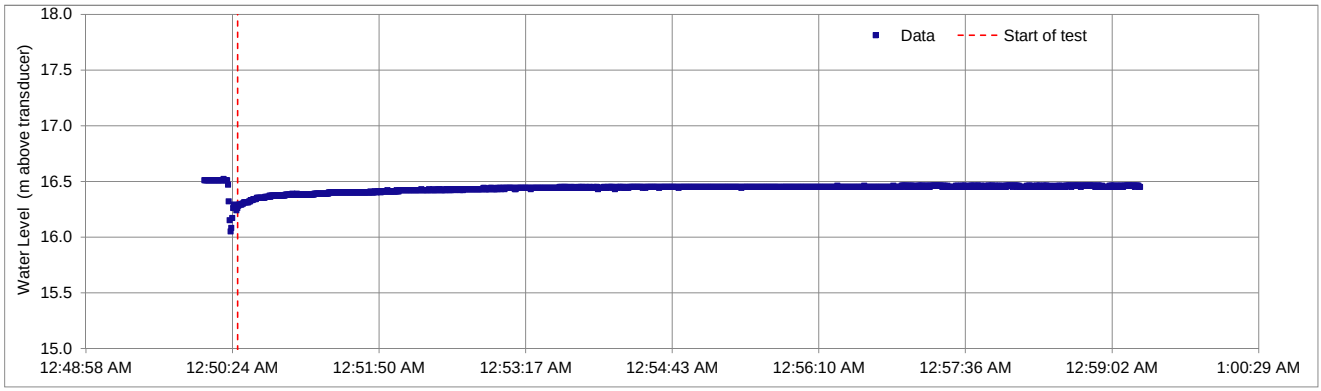
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

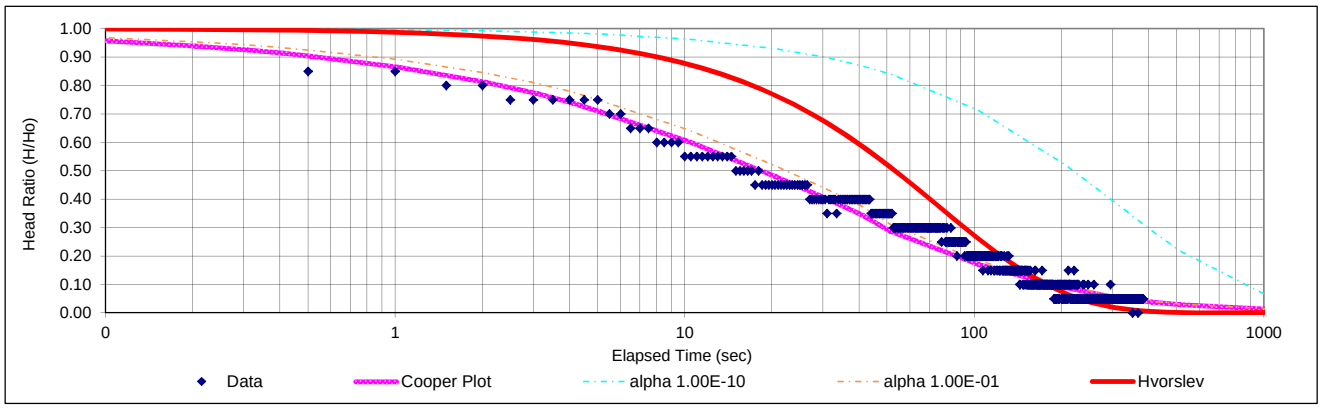
17/01/2013 15:34

Project No.	V402-0009/8	**Monitoring Well/Piezometer**	**MW12-02S**
Field Technician	BF	**Test**	1 Slug Removal
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	1 m x 1" Waterra tubing		
Test Date	23-May-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	12:50:27 AM	
Effective diameter of PVC riser pipe, d_e	0.053	**m**	**Initial water level**	16.46	**m above transducer**
Top of test zone	8.23	**m**	**Water level after slug**	16.26	**m above transducer**
Bottom of test zone	9.75	**m**	**Change In Water Level, H_o**	-0.20	**m**
Test Length, L	1.52	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	1.E-05	**m^2/s**			
Hydraulic Conductivity, K	9.E-06	**m/s**	**Storativity, S**	3.E-02	**Alpha** 2.48E-01





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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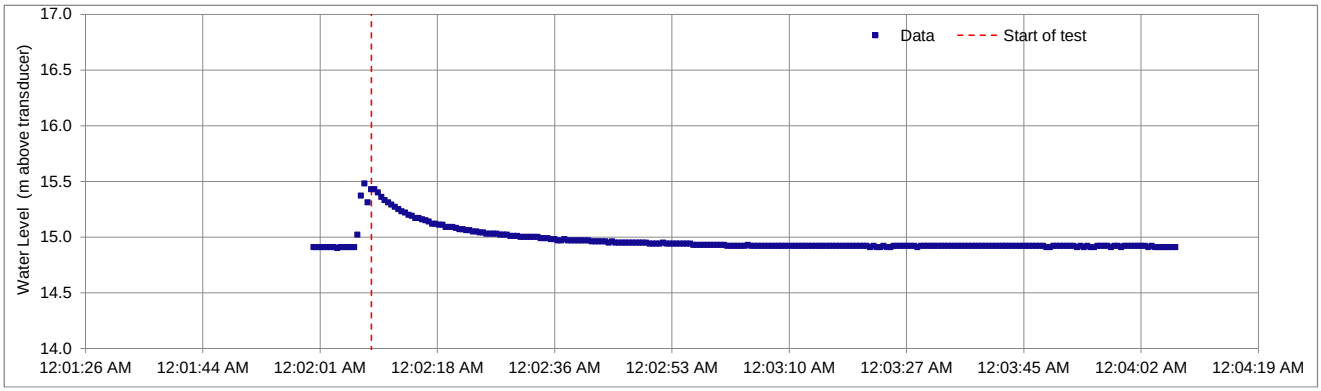
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

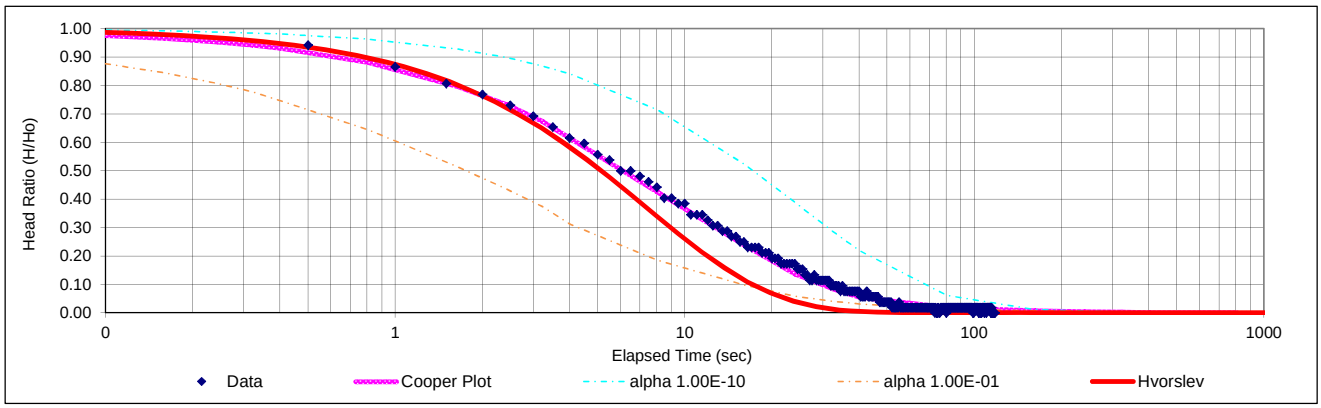
17/01/2013 15:36

Project No.	V402-0009/8	**Monitoring Well/Piezometer**	**MW12-03D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	17-May-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	12:02:08 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	14.91	**m above transducer**
Top of test zone	33.53	**m**	**Water level after slug**	15.43	**m above transducer**
Bottom of test zone	36.58	**m**	**Change In Water Level, H_o**	0.52	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	1.E-04	**m^2/s**			
Hydraulic Conductivity, K	4.E-05	**m/s**	**Storativity, S**	5.E-05	**Alpha** 5.37E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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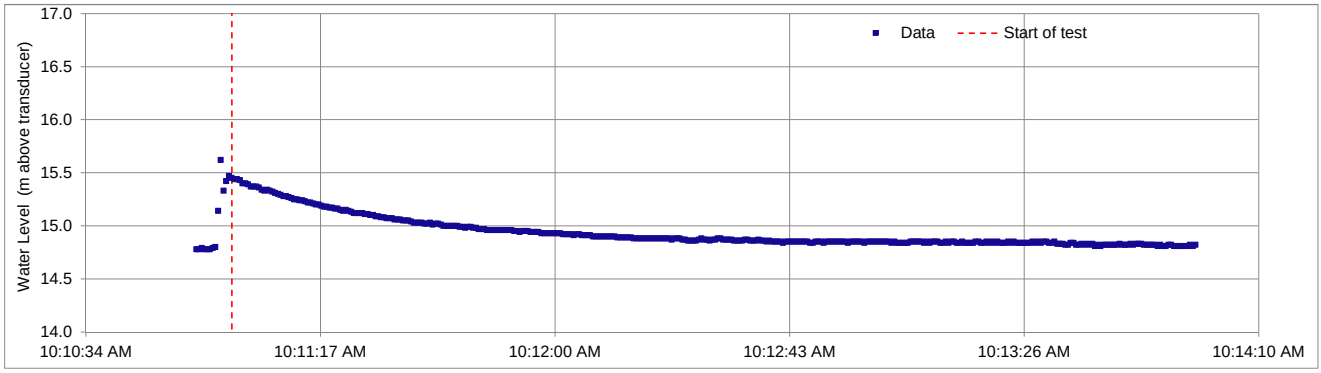
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

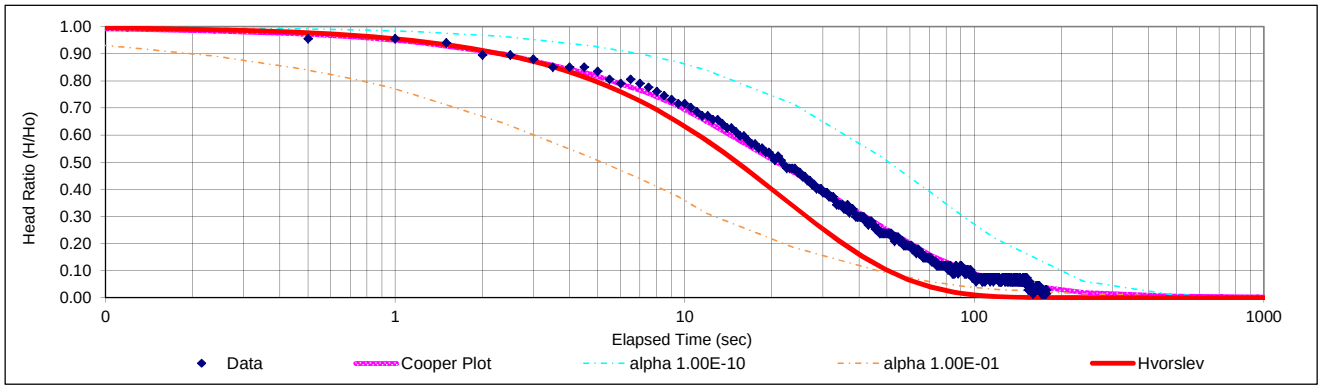
17/01/2013 15:37

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-04D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	04-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	10:11:00 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	14.80	**m above transducer**
Top of test zone	33.38	**m**	**Water level after slug**	15.47	**m above transducer**
Bottom of test zone	36.42	**m**	**Change In Water Level, H_o**	0.67	**m**
Test Length, L	3.04	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	5.E-05	**m^2/s**			
Hydraulic Conductivity, K	2.E-05	**m/s**	**Storativity, S**	1.E-05	**Alpha** 1.07E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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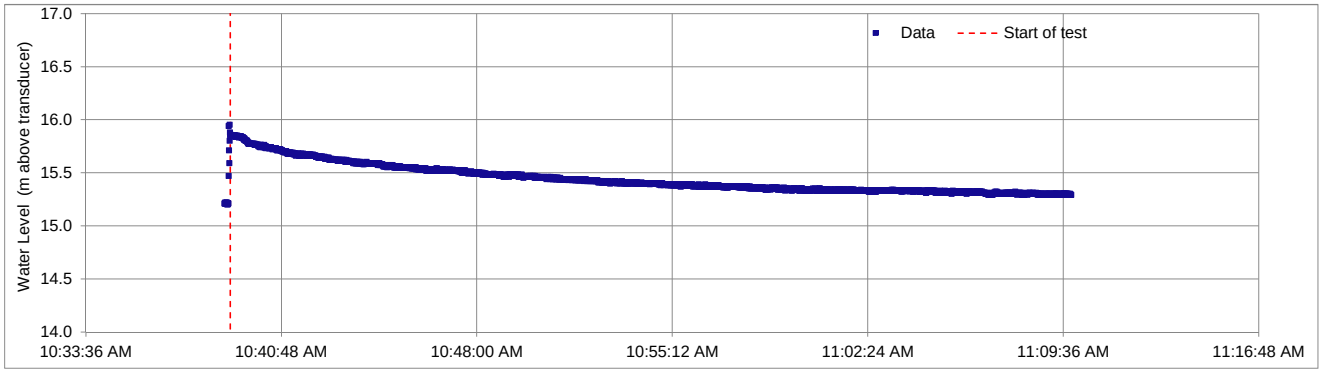
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

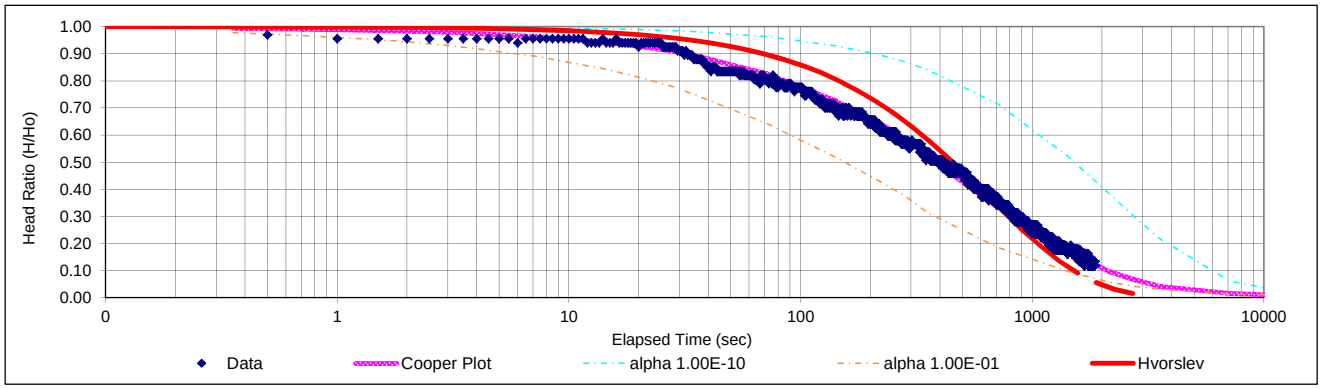
17/01/2013 15:38

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-04S**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	04-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	10:38:55 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	15.21	**m above transducer**
Top of test zone	10.52	**m**	**Water level after slug**	15.88	**m above transducer**
Bottom of test zone	13.56	**m**	**Change In Water Level, H_o**	0.67	**m**
Test Length, L	3.04	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	2.E-06	**m^2/s**			
Hydraulic Conductivity, K	5.E-07	**m/s**	**Storativity, S**	5.E-04	**Alpha** 5.37E-03





TEST COMMENTS: A static water level was present before the test. The water level data recorded by the transducer immediately before the test is noisy and has not been included on this plot.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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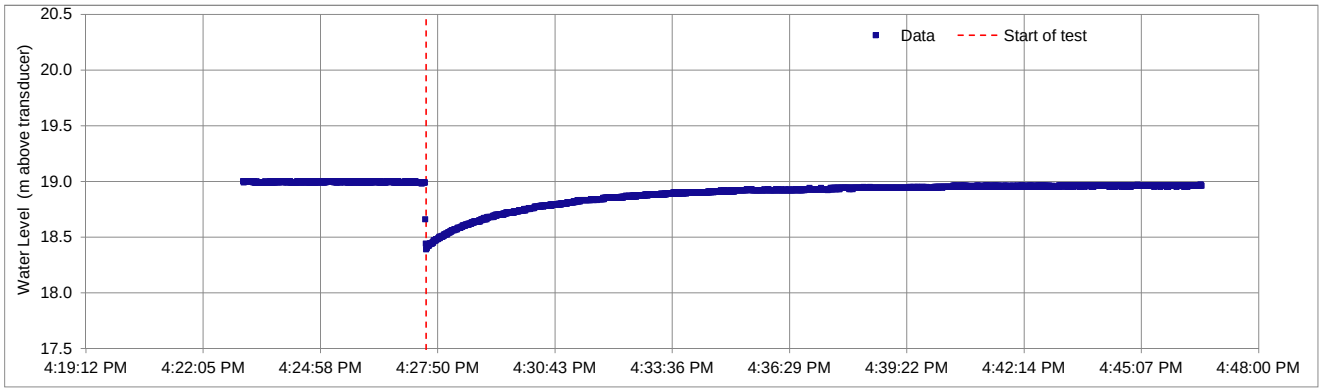
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

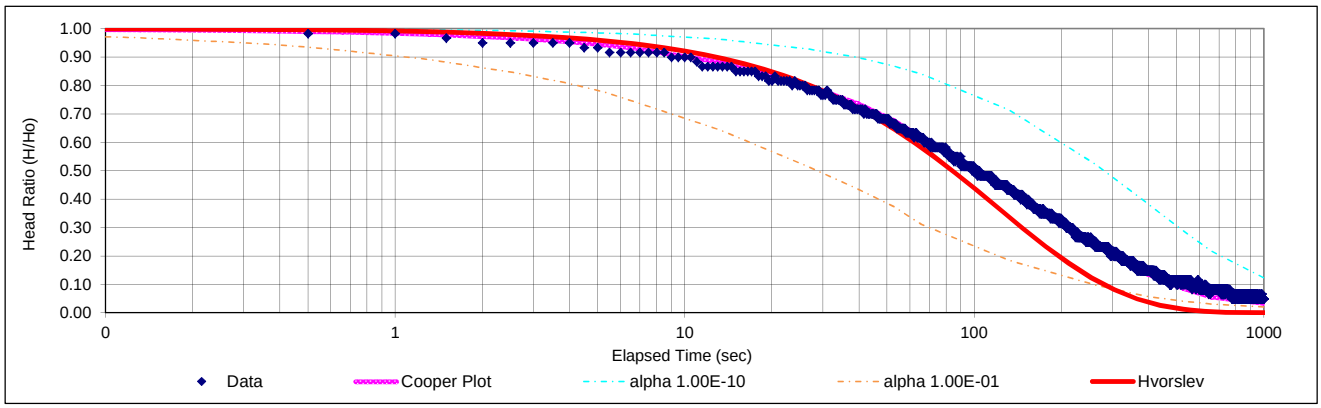
17/01/2013 15:39

Project No.	V402-0009/8	**Monitoring Well/Piezometer**	**MW12-05D**
Field Technician	BF	**Test**	1 Slug Removal
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	22-May-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	4:27:33 PM	
Effective diameter of PVC riser pipe, d_e	0.053	**m**	**Initial water level**	18.99	**m above transducer**
Top of test zone	23.16	**m**	**Water level after slug**	18.39	**m above transducer**
Bottom of test zone	26.21	**m**	**Change In Water Level, H_o**	-0.60	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	1.E-05	**m^2/s**			
Hydraulic Conductivity, K	4.E-06	**m/s**	**Storativity, S**	6.E-05	**Alpha** 4.96E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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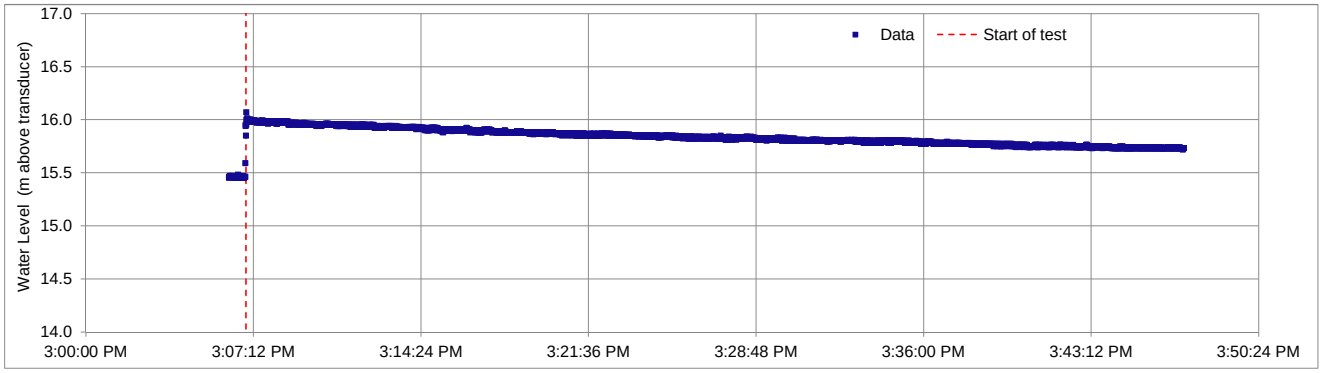
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

17/01/2013 15:40

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-05S**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	1.5 m x 1" Waterra tubing		
Test Date	31-Jul-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	3:06:53 PM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	15.46	**m above transducer**
Top of test zone	7.62	**m**	**Water level after slug**	16.00	**m above transducer**
Bottom of test zone	10.67	**m**	**Change In Water Level, H_o**	0.54	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	<3E-08	**m^2/s**		
Hydraulic Conductivity, K	< 1E-08	**m/s**	**Storativity, S**	-



TEST COMMENTS: Water level recovery was monitored for 40 minutes. The charge in water level is considered sufficient for the analysis. Hydraulic conductivity is estimated to be < 1E-08 m/s.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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BLACKWATER GOLD PROJECT

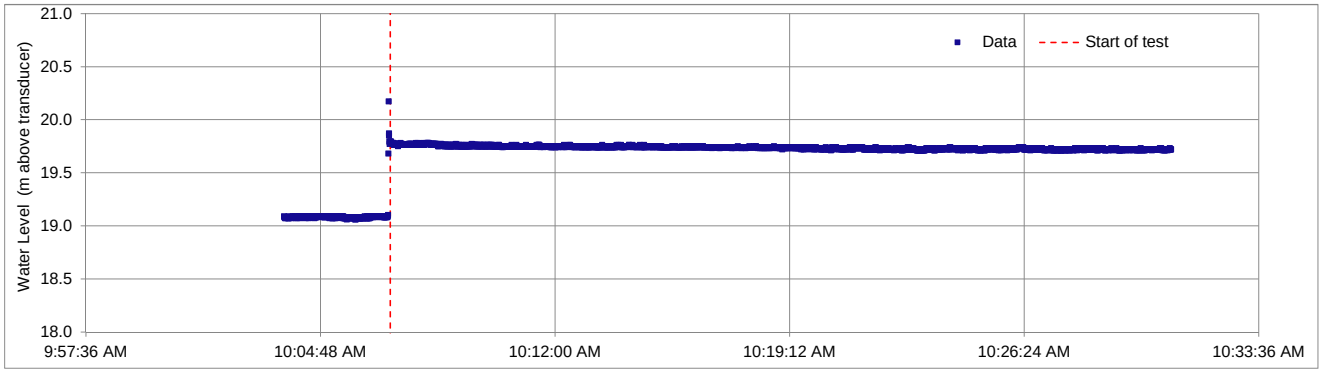
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

17/01/2013 15:42

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-06D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	06-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	10:06:56 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	19.09	**m above transducer**
Top of test zone	35.36	**m**	**Water level after slug**	19.79	**m above transducer**
Bottom of test zone	38.40	**m**	**Change In Water Level, H_o**	0.70	**m**
Test Length, L	3.04	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	<3E-08	**m^2/s**		
Hydraulic Conductivity, K	< 1E-08	**m/s**	**Storativity, S**	-



TEST COMMENTS: Water level recovery after 25 minutes was only 5 cm. The hydraulic conductivity was estimated to be <1E-08 m/s.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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BLACKWATER GOLD PROJECT

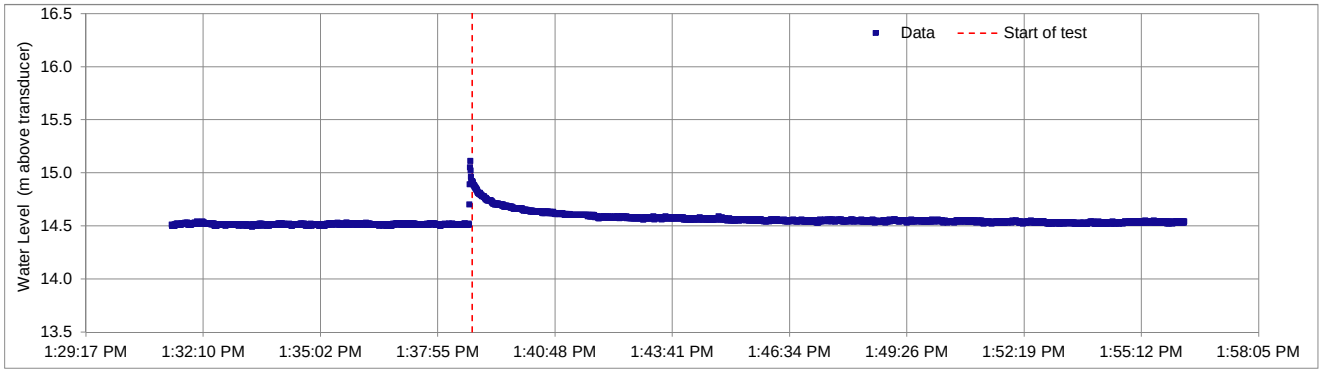
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

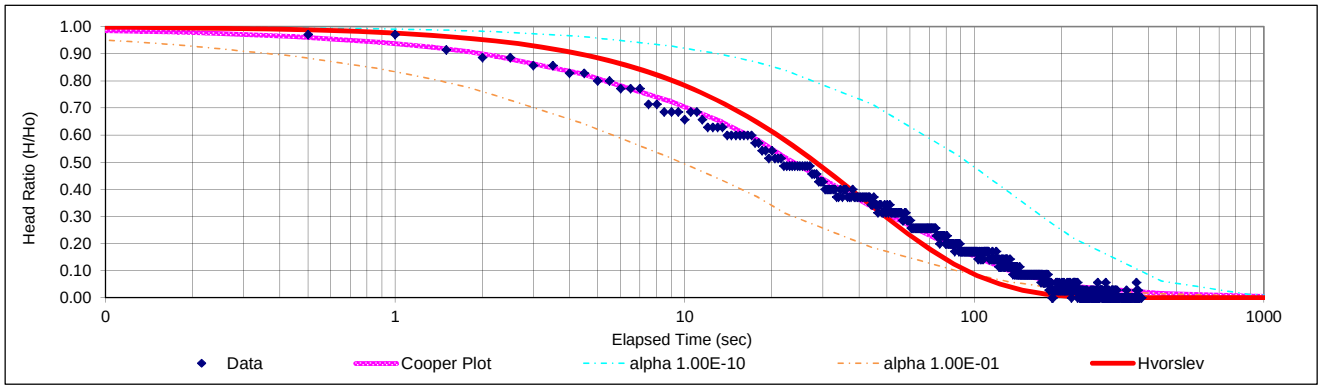
17/01/2013 15:43

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-06S**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	31-Jul-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	1:38:46 PM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	14.57	**m above transducer**
Top of test zone	18.29	**m**	**Water level after slug**	14.92	**m above transducer**
Bottom of test zone	21.34	**m**	**Change In Water Level, H_o**	0.35	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	2.E-05	**m^2/s**			
Hydraulic Conductivity, K	8.E-06	**m/s**	**Storativity, S**	5.E-04	**Alpha** 5.37E-03





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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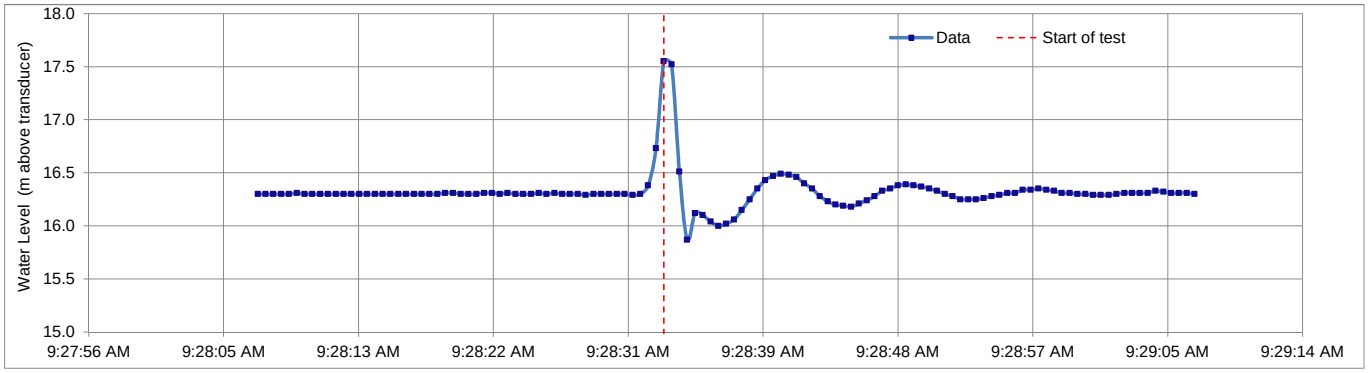
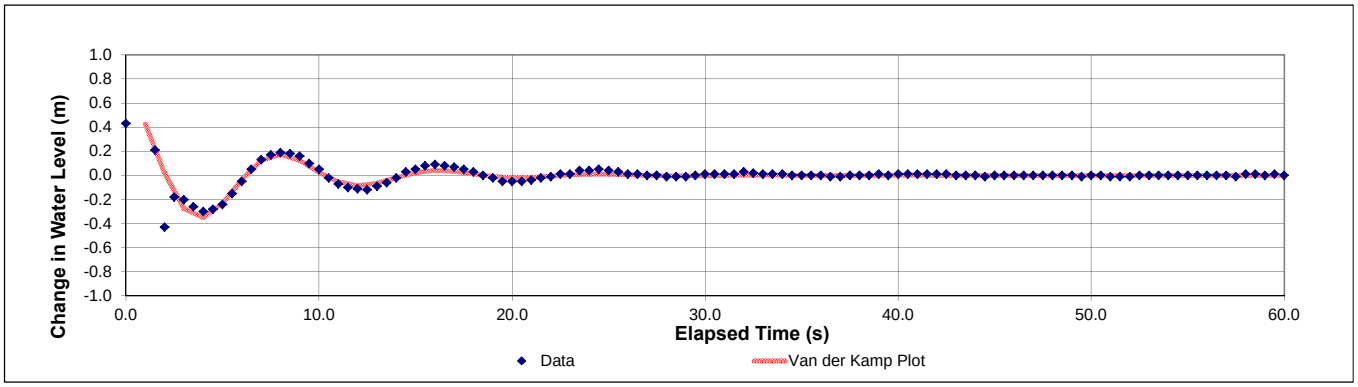
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING VAN DER KAMP (1976) METHOD

17/01/2013 15:44

Project No.	VA101-457/4		**Monitoring Well/Piezometer**	**MW12-07D**	
Field Technician	BF		**Test**	1 Slug Insertion	
Analyst	EJH		**Slug Injected, Time = 0**	9:28:32 AM	
Monitoring Instrument Type	Transducer				
Slug Dimensions and Type	2 m x 1" Waterra tubing				
Test Date	31-Jul-12		**Pre-test water level**	16.3	**mbgs**
			Pre-test water level	17.6	**m above transducer**
Drill-hole diameter, D	0.152	**m**	**Predicted length of water column, L**	22.1	**m**
Effective diameter of PVC riser pipe, d_e	0.053	**m**	**Height of water predicted**	16.0	**m**
Top of test zone	35.36	**m**			
Bottom of test zone	38.40	**m**	**d**	0.22	
Test Length, L	3.04	**m**	**Angular frequency (per second), ω**	0.76	**s^{-1}**
PVC type	Schedule 80		**Damping constant, ϒ**	0.17	**s^{-1}**
Slot size	20 Slot		**Initial amplitude**	0.70	
Hydraulic Conductivity, K	7.E-04	**m/s**	**Transmissivity, T**	2.E-03	**m^2/s**
Storage, S	5.E-04				





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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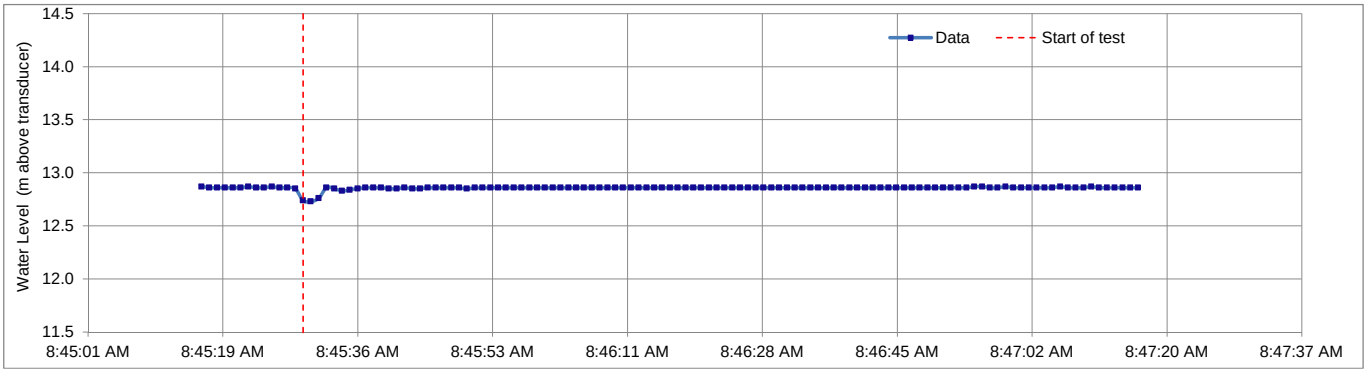
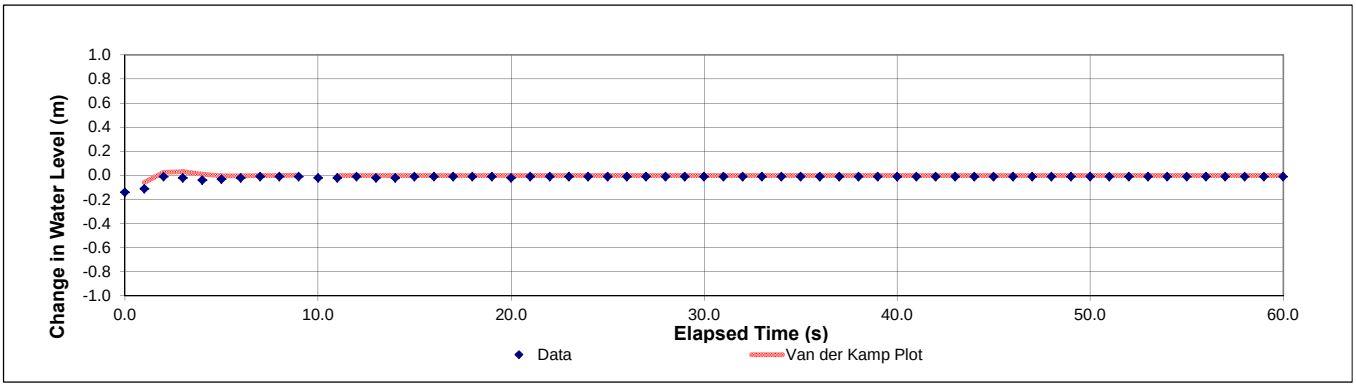
HYDRAULIC CONDUCTIVITY CALCULATION
USING VAN DER KAMP (1976) METHOD

17/01/2013 15:44

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-07S**
Field Technician	BF	**Test**	1 Slug Removal
Analyst	EJH	**Slug Injected, Time = 0**	8:45:30 AM
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	3 m x 1" Waterra tubing		
Test Date	31-Jul-12		
		Pre-test water level	12.87 mbgs
		Pre-test water level	12.73 m above transducer
Drill-hole diameter, D	0.152 m	**Measured length of water column, L**	10.0 mbgs
Effective diameter of PVC riser pipe, d_e	0.053 m	**Height of water predicted**	7.0 m
Top of test zone	19.81 m		
Bottom of test zone	22.86 m	**d**	0.52
Test Length, L	3.05 m	**Angular frequency (per second), ω**	1.01 s^{-1}
PVC type	Schedule 80	**Damping constant, ϒ**	0.62 s^{-1}
Slot size	20 Slot	**Initial amplitude**	0.20
Hydraulic Conductivity, K	4.E-04 m/s	**Transmissivity, T**	1.E-03 m^2/s
Storage, S	5.E-04		





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

Knight Piésold CONSULTING

NEW GOLD INC.
BLACKWATER GOLD PROJECT

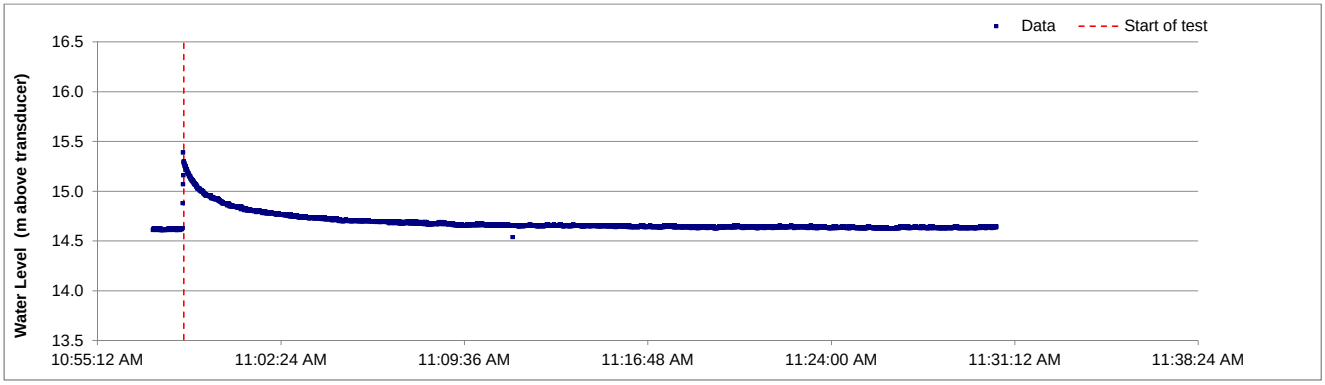
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

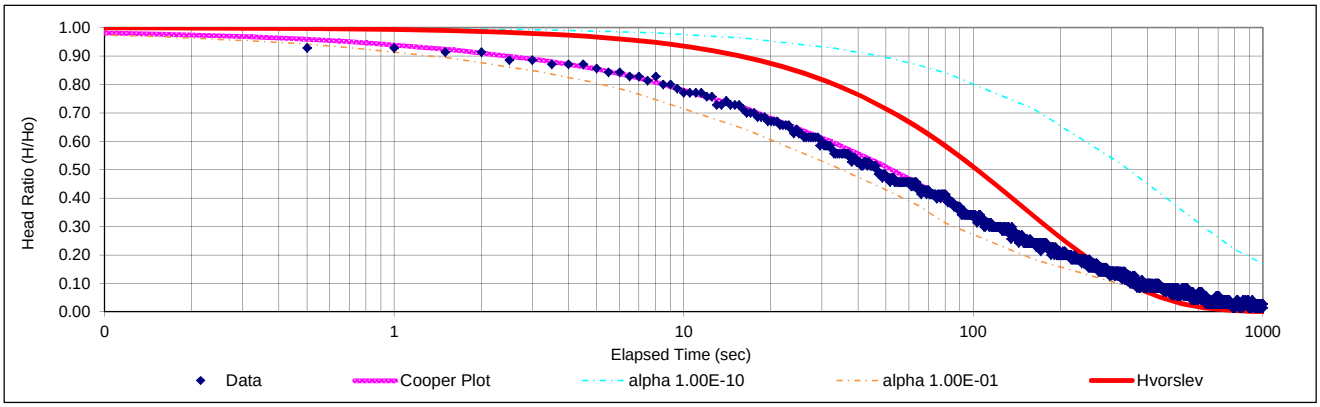
17/01/2013 15:45

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-08D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	03-Oct-12		

Drill-hole diameter, D	0.152	m	**Slug Injected, Time = 0**	10:58:35 AM	
Effective diameter of PVC riser pipe, d_e	0.047	m	**Initial water level**	14.64	m above transducer
Top of test zone	32.61	m	**Water level after slug**	15.34	m above transducer
Bottom of test zone	35.66	m	**Change In Water Level, H_o**	0.70	m
Test Length, L	3.05	m			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	7.E-06	m^2/s			
Hydraulic Conductivity, K	2.E-06	m/s	**Storativity, S**	5.E-03	**Alpha** 5.37E-02





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

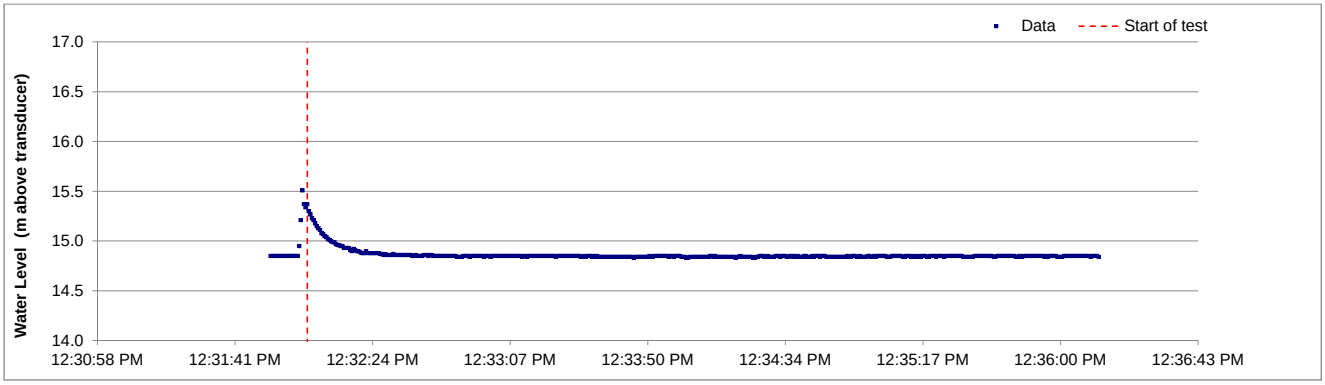
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

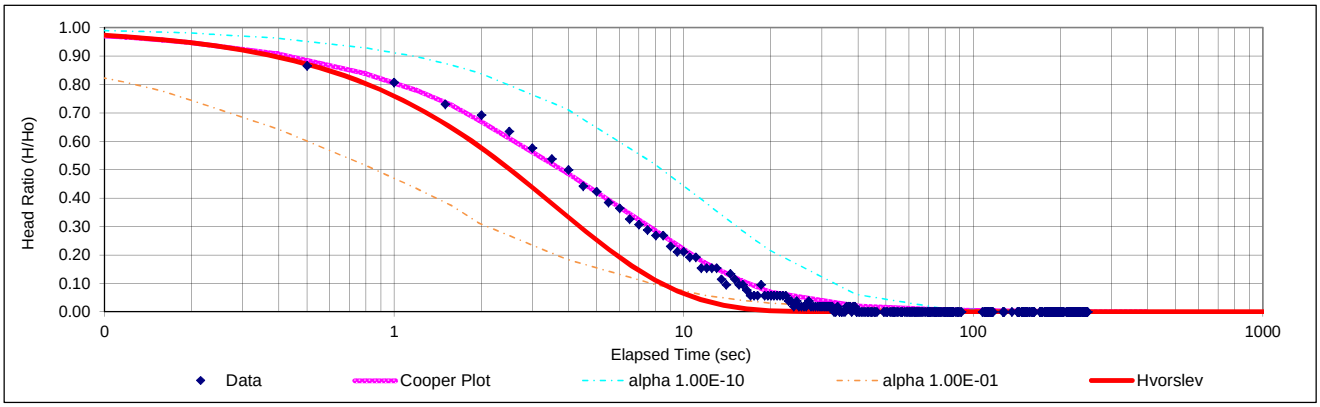
17/01/2013 15:47

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-08S**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	03-Oct-12		

Drill-hole diameter, D	0.152	m	**Slug Injected, Time = 0**	12:32:03 PM	
Effective diameter of PVC riser pipe, d_e	0.047	m	**Initial water level**	14.85	m above transducer
Top of test zone	16.24	m	**Water level after slug**	15.37	m above transducer
Bottom of test zone	19.29	m	**Change In Water Level, H_o**	0.52	m
Test Length, L	3.05	m			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	3.E-04	m^2/s			
Hydraulic Conductivity, K	9.E-05	m/s	**Storativity, S**	6.E-06	**Alpha** 6.44E-05





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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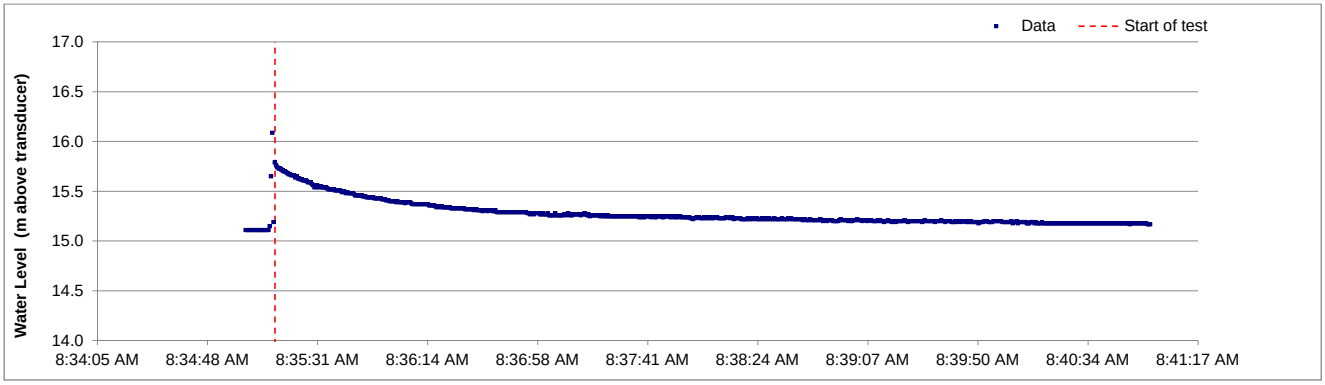
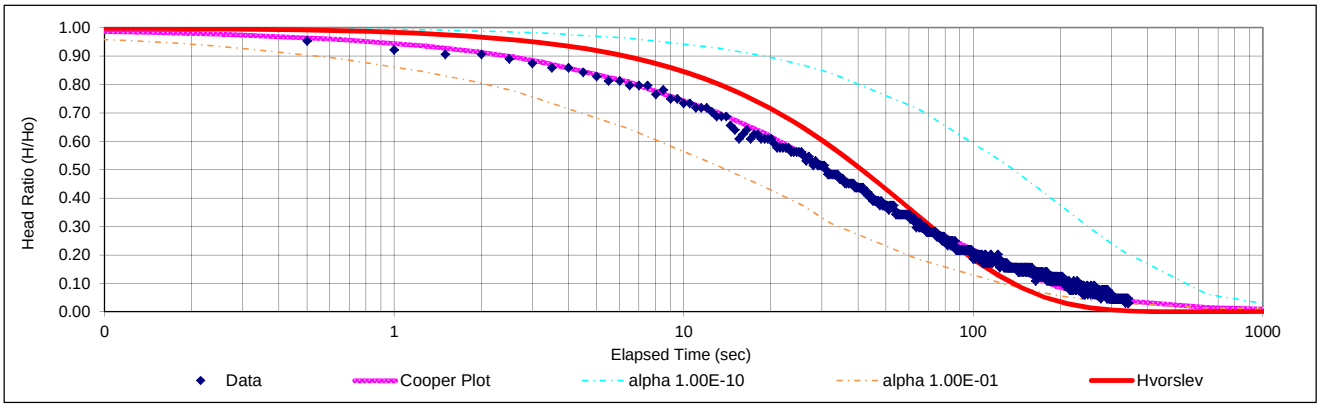
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

17/01/2013 15:48

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-09D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	16-Oct-12		
Drill-hole diameter, D	0.152 m	**Slug Injected, Time = 0**	8:35:14 AM
Effective diameter of PVC riser pipe, d_e	0.047 m	**Initial water level**	15.15 m above transducer
Top of test zone	30.53 m	**Water level after slug**	15.79 m above transducer
Bottom of test zone	33.58 m	**Change In Water Level, H_o**	0.64 m
Test Length, L	3.05 m		
PVC type	Schedule 80		
Slot size	20 Slot		
Transmissivity, T	2.E-05 m^2/s		
Hydraulic Conductivity, K	6.E-06 m/s	**Storativity, S** 7.E-04	**Alpha** 7.51E-03





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

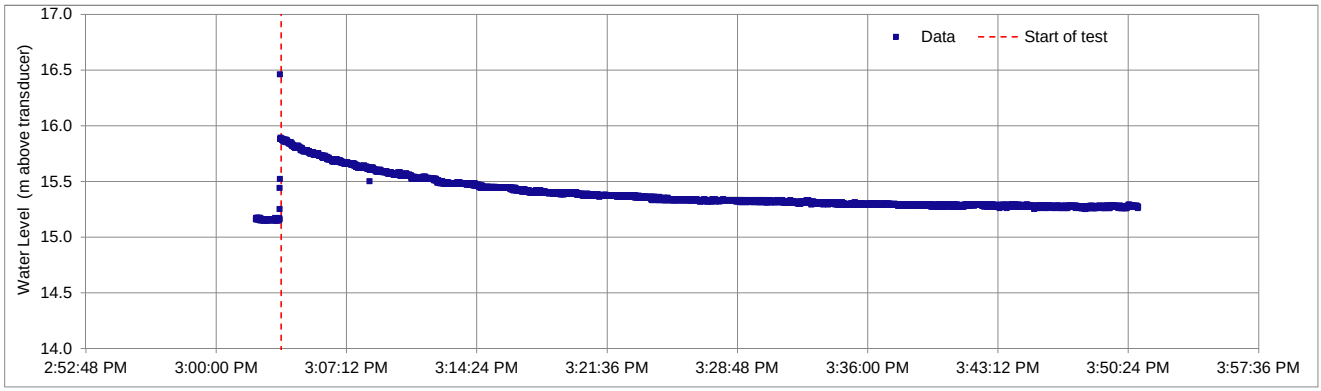
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

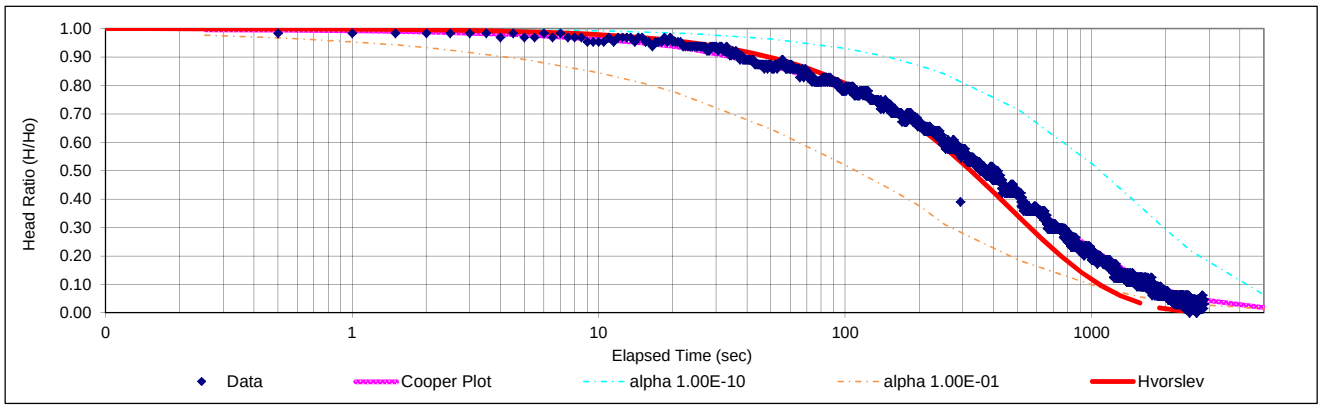
17/01/2013 15:49

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-11D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	03-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	3:03:35 PM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	15.25	**m above transducer**
Top of test zone	40.36	**m**	**Water level after slug**	15.89	**m above transducer**
Bottom of test zone	43.41	**m**	**Change In Water Level, H_o**	0.64	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	2.E-06	**m^2/s**			
Hydraulic Conductivity, K	7.E-07	**m/s**	**Storativity, S**	7.E-05	**Alpha** 7.51E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

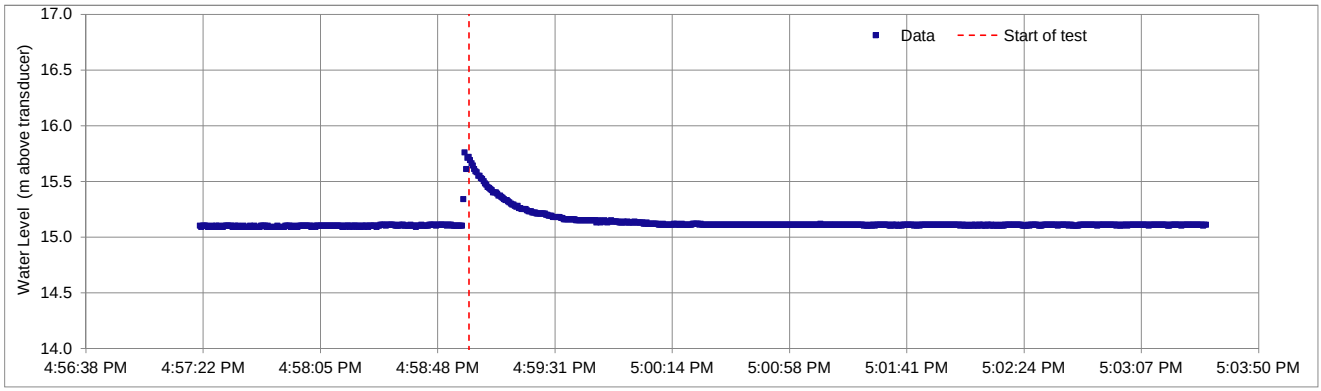
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

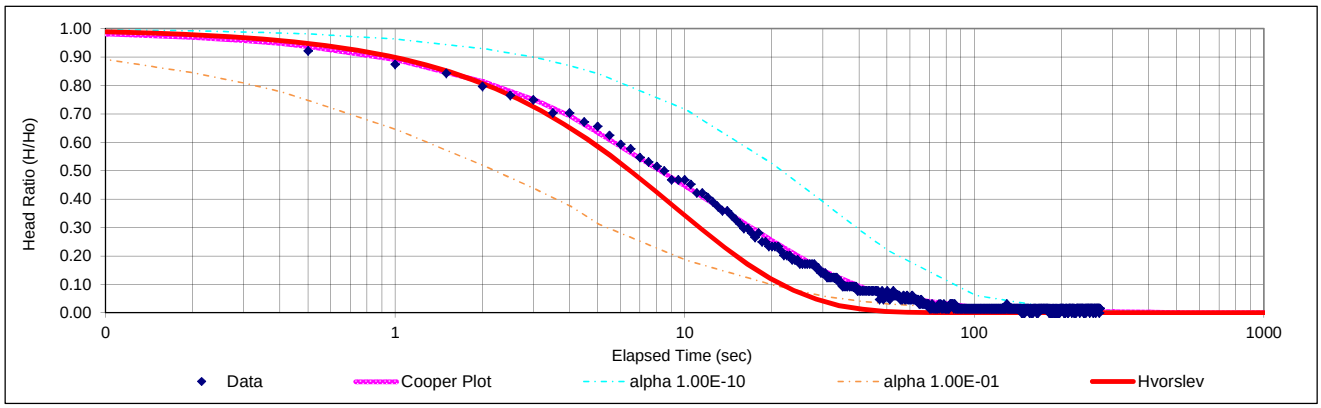
17/01/2013 15:50

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-11S**
Field Technician	BF	**Test**	1 Slug Inserted
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	03-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	4:59:00 PM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	15.10	**m above transducer**
Top of test zone	31.19	**m**	**Water level after slug**	15.74	**m above transducer**
Bottom of test zone	34.24	**m**	**Change In Water Level, H_o**	0.64	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	1.E-04	**m^2/s**			
Hydraulic Conductivity, K	4.E-05	**m/s**	**Storativity, S**	3.E-05	**Alpha** 3.22E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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BLACKWATER GOLD PROJECT

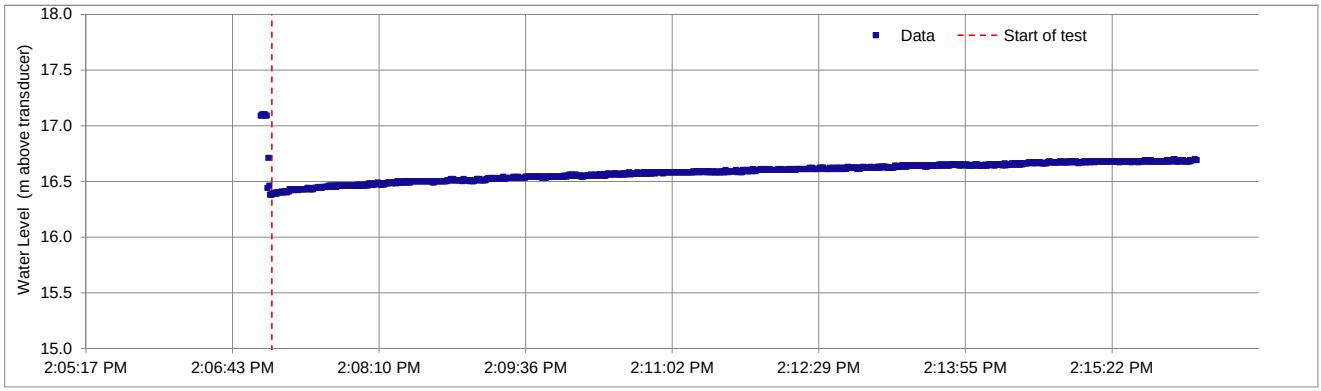
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

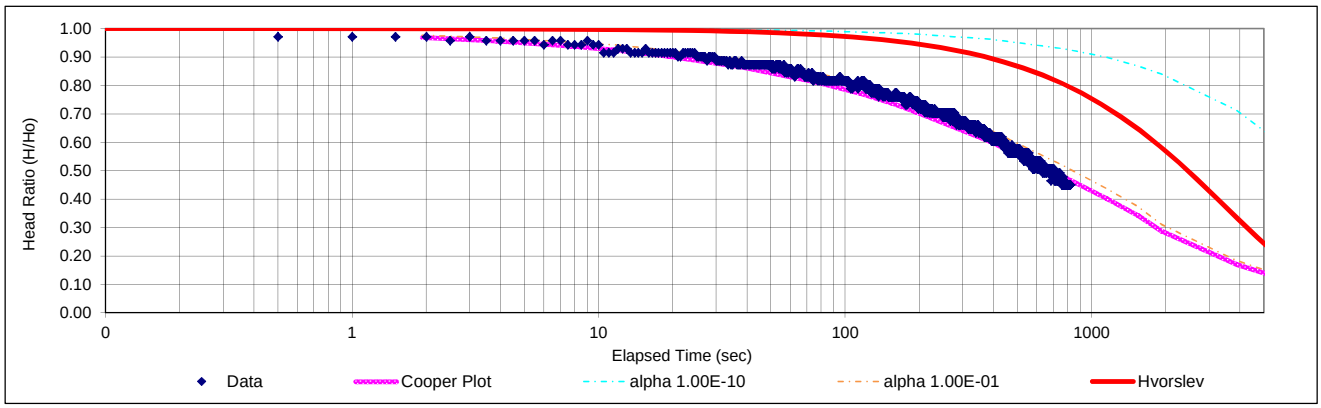
17/01/2013 15:51

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-12D**
Field Technician	BF	**Test**	1 Slug Removal
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	16-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	2:07:07 PM
Effective diameter of PVC riser pipe, d_e	0.053	**m**	**Initial water level**	17.08 **m above transducer**
Top of test zone	31.19	**m**	**Water level after slug**	16.37 **m above transducer**
Bottom of test zone	34.23	**m**	**Change In Water Level, H_o**	-0.71 **m**
Test Length, L	3.04	**m**		
PVC type	Schedule 80			
Slot size	20 Slot			

Transmissivity, T	4.E-07	**m^2/s**		
Hydraulic Conductivity, K	1.E-07	**m/s**	**Storativity, S** 3.E-02	**Alpha** 2.48E-01





TEST COMMENTS: Initial water level was affected by previous test. Static water level estimated to be 17.08 m above transducer.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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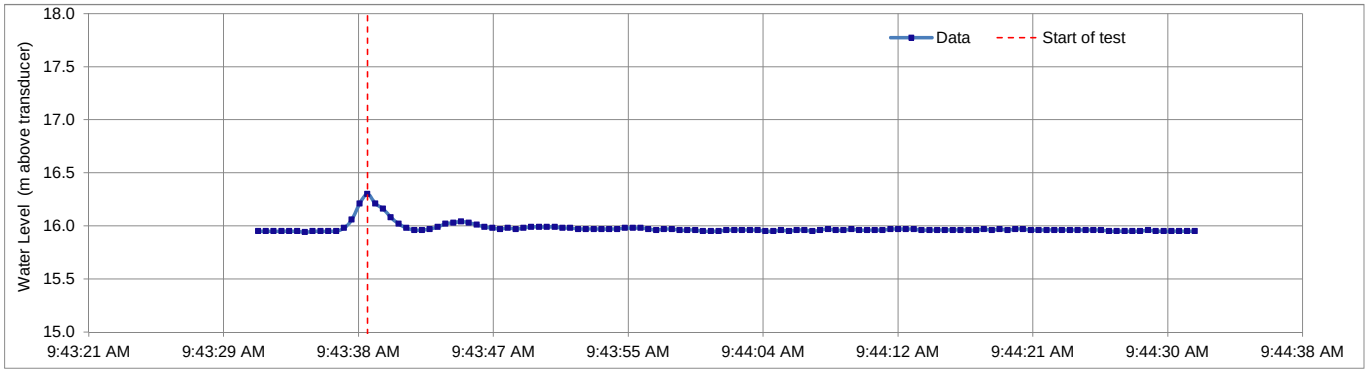
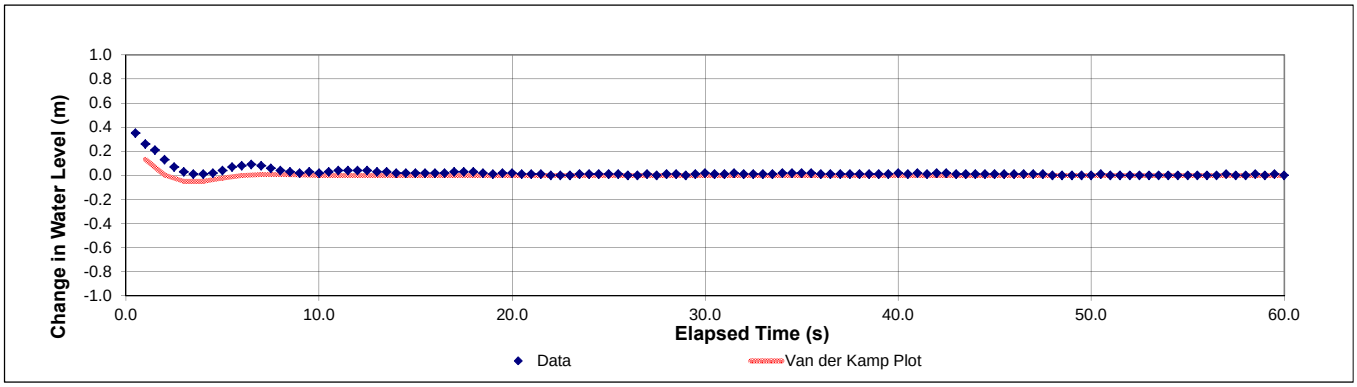
NEW GOLD INC.
BLACKWATER GOLD PROJECT

HYDRAULIC CONDUCTIVITY CALCULATION
USING VAN DER KAMP (1976) METHOD

17/01/2013 15:51

Project No.	VA101-457/4		**Monitoring Well/Piezometer**	**MW12-12S**	
Field Technician	BF		**Test**	1 Slug Insertion	
Analyst	EJH		**Slug Injected, Time = 0**	9:43:38 AM	
Monitoring Instrument Type	Transducer				
Slug Dimensions and Type	3 m x 1" Waterra tubing				
Test Date	31-Jul-12		**Pre-test water level**	2.00	mbgs
			Pre-test water level	16.30	m above transducer
Drill-hole diameter, D	0.152	m	**Effective length of water column, L**	12.2	mbgs
Effective diameter of PVC riser pipe, d_e	0.053	m	**Height of water predicted**	12.0	m
Top of test zone	11.18	m			
Bottom of test zone	14.23	m	**d**	0.52	
Test Length, L	3.05	m	**Angular frequency (per second), ω**	0.77	s^{-1}
PVC type	Schedule 80		**Damping constant, ϒ**	0.47	s^{-1}
Slot size	20 Slot		**Initial amplitude**	0.30	
Hydraulic Conductivity, K	7.E-04	m/s	**Transmissivity, T**	2.E-03	m^2/s
Storage, S	1.E-06				





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

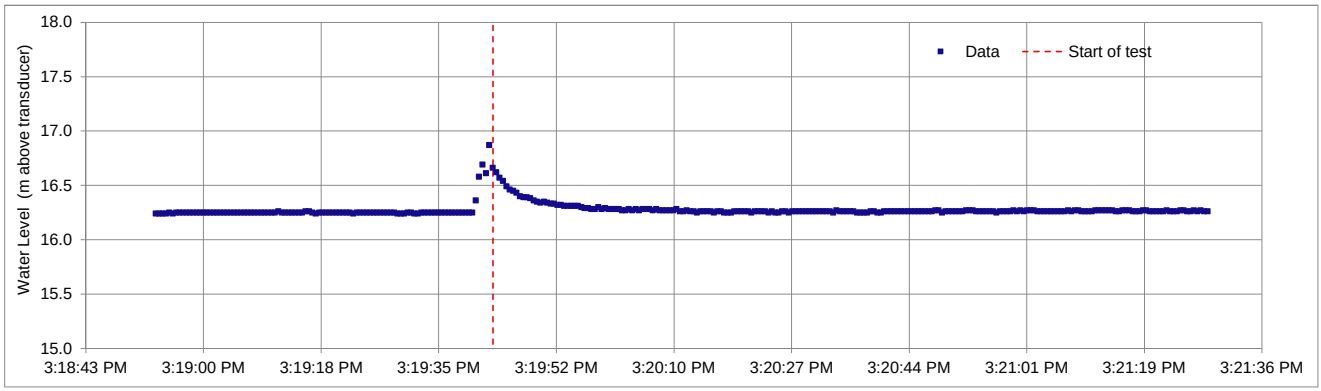
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

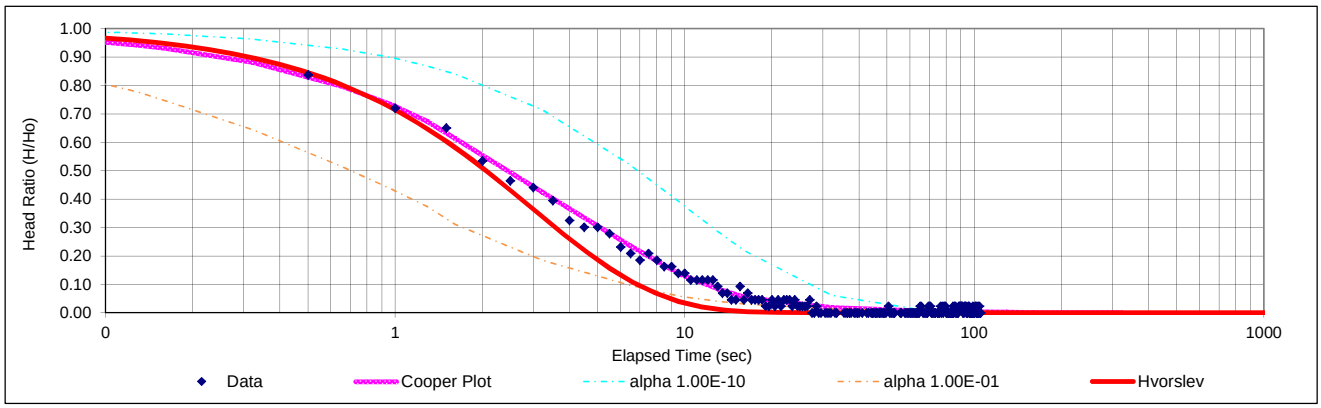
17/01/2013 15:52

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-13D**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	16-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	3:19:43 PM
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	16.26 **m above transducer**
Top of test zone	35.81	**m**	**Water level after slug**	16.69 **m above transducer**
Bottom of test zone	38.86	**m**	**Change In Water Level, H_o**	0.43 **m**
Test Length, L	3.05	**m**		
PVC type	Schedule 80			
Slot size	20 Slot			

Transmissivity, T	3.E-04	**m^2/s**			
Hydraulic Conductivity, K	1.E-04	**m/s**	**Storativity, S**	5.E-05	**Alpha** 5.37E-04





TEST COMMENTS:

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

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NEW GOLD INC.
BLACKWATER GOLD PROJECT

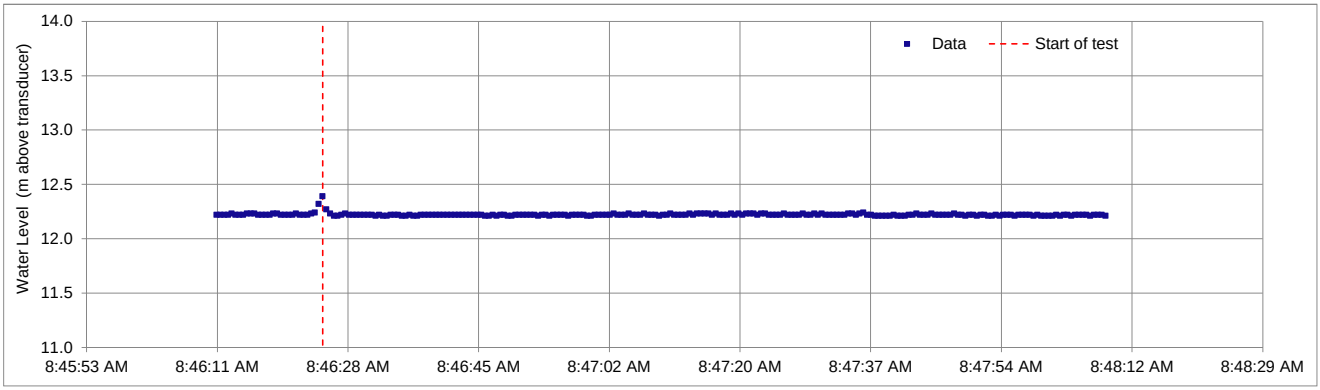
HYDRAULIC CONDUCTIVITY CALCULATION
USING COOPER, BREDEHOEFT AND PAPADOPULOS (1967)

17/01/2013 15:53

Project No.	VA101-457/4	**Monitoring Well/Piezometer**	**MW12-13S**
Field Technician	BF	**Test**	1 Slug Insertion
Analyst	EJH		
Monitoring Instrument Type	Transducer		
Slug Dimensions and Type	2 m x 1" Waterra tubing		
Test Date	04-Oct-12		

Drill-hole diameter, D	0.152	**m**	**Slug Injected, Time = 0**	8:46:24 AM	
Effective diameter of PVC riser pipe, d_e	0.047	**m**	**Initial water level**	12.22	**m above transducer**
Top of test zone	10.05	**m**	**Water level after slug**	12.39	**m above transducer**
Bottom of test zone	13.10	**m**	**Change In Water Level, H_o**	0.17	**m**
Test Length, L	3.05	**m**			
PVC type	Schedule 80				
Slot size	20 Slot				

Transmissivity, T	>3E-04	**m^2/s**		
Hydraulic Conductivity, K	>1E-04	**m/s**	**Storativity, S**	-



TEST COMMENTS: Water level recovery is too rapid to analyze. Hydraulic conductivity is estimated to be >1-04 m/s.

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REV	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D
A	17JAN'13	ISSUED WITH LETTER VA12-02061	EJH	CAS	KJB

APPENDIX D

LAB TESTING RESULTS

Appendix D1 Index Testing
Appendix D2 Engineering Properties Testing
Appendix D3 Rock Testing

APPENDIX D1

INDEX TESTING

(Pages D1-1 to D1-332)

Knight Piésold CONSULTING

TABLE D.1

NEW GOLD INC
BLACKWATER GOLD PROJECT

2012 GEOTECHNICAL SITE INVESTIGATION PROGRAM
INDEX TESTING RESULTS SUMMARY

Drillhole / Test Pit	Depth (m)		Sample #	Classification	Grain Size				Atterberg Limits** %				Plasticity	MC	Dry Density (t/m3)
	From	To			% Gravel	% Sand	% Fines		PL	LL	PI	LI		%	
GT12-13	9.75	9.95	1	GRAVEL, some silt and sand, trace clay	67.6	18.8	10.1	3.5	12	19	7	-0.6	Low	8.0	
GT12-13	18.15	18.30	2	SILT AND SAND, some clay, trace gravel	0.2	36.3	49.3	14.2	15	23	8	-0.1	Low	14.4	
GT12-13	45.13	45.30	3	Gravelly SAND, some clay and silt	30.0	34.7	22.6	12.7	14	28	14	-0.4	Low	9.1	
GT12-13	54.73	54.90	4	SILT AND SAND, some clay and gravel	14.4	49.1	36.5	0.0	13	29	16	-0.1	Low	10.8	
GT12-14	36.00	36.20	1	Sandy SILT, some clay and gravel	18.5	31.2	33.6	16.7	14	33	19	-0.1	Medium	12.5	
GT12-14	45.00	45.20	2	SILT, some clay, sand and gravel	6.3	13.9	60.6	19.2	20	34	14	0.0	Medium	19.4	106.70
GT12-14	51.00	51.20	3	SAND, some clay, silt and gravel	18.7	52.6	17.8	10.9	17	36	19	-0.3	Medium	12.2	
GT12-15	5.40	5.60	1	SILT AND GRAVEL, some clay, trace sand	44.3	5.9	38.0	11.8	19	32	13	-0.3	Medium	14.9	
GT12-15	11.20	11.40	2	Sandy GRAVEL some silt, trace clay	55.2	32.0	10.0	2.8	13	15	2		Low		
GT12-15	18.11	18.31	3	SAND AND GRAVEL, trace silt and clay	52.2	40.1	5.7	2.0	NP	NV	NP				
GT12-15	26.60	26.80	5	Silty Gravelly SAND, some clay	20.7	47.3	20.9	11.1	16	27	11		Low		
GT12-15	32.50	32.70	7	Gravelly SAND, some silt, trace clay	32.5	43.8	16.1	7.6	16	28	12		Low		
GT12-15	37.20	37.40	9	Sandy SILT, some clay	0.0	23.8	63.5	12.7	21	28	7	0.1	Low	22.0	
GT12-15	52.35	52.55	10	Silty SAND, some clay, trace gravel	3.1	58.0	26.1	12.8	20	29	9	0.0	Low	20.0	
GT12-15	53.10	53.30	11	Silty SAND, some gravel, trace clay	16.6	52.7	21.9	8.8	21	28	7	-1.0	Low	14.0	
GT12-15	63.00	63.20	14	Gravelly SAND, some silt, trace clay	29.7	40.9	18.9	10.5	20	30	10	0.6	Low/Medium	26.0	
GT12-15	66.65	66.85	15	SAND, some silt and gravel, trace clay	12.3	64.3	15.3	8.1	NP	NP	NP		None		
GT12-15	68.60	68.80	17	Silty SAND, some clay and gravel	10.1	50.0	27.3	12.7	21	34	13	-0.5	Medium	14.0	
GT12-15	76.48	76.68	19	Clayey Sandy SILT, trace gravel	0.4	21.7	52.8	25.1	31	47	16	-0.3	Medium	27.0	
GT12-15	81.00	81.20	22	Silty SAND, some clay, trace gravel	2.0	52.6	30.3	15.0	NP	NP	NP				
GT12-15	86.12	86.32	24	Gravelly SAND, some silt and clay	26.3	45.6	14.1	14.0	16	36	20	-0.8	Medium	-0.7	
GT12-15	90.60	90.80	26	Silty SAND, trace clay and gravel	8.0	56.9	26.1	9.0	NP	NP	NP		None		
GT12-16	1.90	2.10	2	Silty Gravelly SAND, trace clay	25.3	38.8	30.5	5.5	14	16	2	-4.0	Low	6.0	
GT12-16	6.75	6.95	4	SAND AND GRAVEL, some silt, trace clay	39.8	36.7	15.9	7.5	14	22	8	-1.1	Low	5.0	
GT12-16	10.00	10.20	6	SAND AND GRAVEL, trace silt and clay	39.5	48.6	5.6	7.2	15	24	9	-1.0	Low	6.0	
GT12-16	17.80	18.00	9	Sandy SILT, some gravel, trace clay	12.4	30.9	52.0	4.8	18	20	2	-2.5	Low	13.0	
GT12-16	35.83	36.03	16	SILT, some clay and sand, trace gravel	5.0	13.5	67.2	14.3	25	36	11	-0.5	Medium	20.0	
GT12-16	51.58	51.78	22	SILT, some clay and sand, trace gravel	0.3	22.8	53.7	23.2	20	28	8	-0.4	Low	17.0	
GT12-16	54.29	54.49	24	Silty Gravelly SAND, some clay	27.5	37.6	22.1	12.5	NP	NP	NP				
GT12-16	59.32	59.52	26	Siltly Gravelly SAND, trace clay	29.3	40.0	20.2	10.5	20	30	10	-0.8	Low/Medium	12.0	
GT12-16	67.46	67.66	31	Silty Gravelly SAND, some clay	23.9	40.5	25.3	10.3	23	33	10	-1.1	Medium	12.0	
GT12-16	69.50	69.70	32	Silty SAND, some clay and gravel	14.0	46.4	25.3	14.3	17	28	11	-0.5	Low	12.0	
GT12-16	77.50	77.70	35	Silty Gravelly SAND, trace clay	28.8	38.6	22.8	9.8	30	50	20	-0.3	Medium/High	24.0	
GT12-16	89.66	89.86	39	Gravelly SAND, some silt, trace clay	25.5	53.7	12.5	8.3	IS	IS	IS				
GT12-17	1.10	1.30	1	Gravelly SAND, some silt and clay	32.9	41.6	25.5	0.0							
GT12-17	5.33	5.53	3	SILT, some sand, trace clay and gravel	0.0	10.6	84.0	5.3	24	29	5	-0.2	Low	23.1	
GT12-17	25.46	25.66	10	Sandy SILT, some clay, trace gravel	1.3	23.8	63.5	11.5	20	24	4	-1.9	Low	12.6	
GT12-17	36.94	37.14	14	SAND AND GRAVEL, some silt, trace clay	37.6	41.9	14.9	5.6	16	21	5	-1.6	Low	8.0	
GT12-17	63.18	63.38	22	Silty SAND, some clay, trace gravel	3.2	46.9	32.7	17.1	20	29	9	-0.8	Low	13.0	
GT12-17	73.48	73.68	26	SAND, trace silt and clay	0.0	98.3	1.7	0.0							
GT12-17	80.70	80.90	29	Clayey SILT, some sand	0.0	12.8	54.5	32.7	33	54	21	-0.2	High	28.0	
GT12-17	93.85	94.05	33	Clayey SILT, some sand	0.0	10.5	68.4	21.1	38	50	12	-0.5	Medium/High	31.9	
GT12-17	104.77	104.97	37	SAND, some clay and silt, trace gravel	1.7	69.0	17.2	12.2	31	53	22	-0.7	High	15.4	
GT12-18	10.19	10.39	3	Silty Gravelly SAND, trace clay	29.3	34.3	27.2	9.2	15	21	6	-0.8	Low	10.0	
GT12-18	12.98	13.18	4	Silty SAND, some gravel, trace clay	19.3	37.6	33.4	9.7	16	21	5	-1.0	Low	11.0	
GT12-18	15.60	15.80	5	Silty SAND, some clay and gravel	16.4	38.4	30.5	14.7	11	26	15	0.2	Low	13.4	1.93
GT12-18	22.74	22.94	7	Sandy SILT, some clay, trace gravel	0.3	20.9	68.0	10.8	19	23	4	-1.1	Low	14.6	
GT12-18	25.13	25.23	8	Clayey SILT, trace sand	0.0	3.5	74.2	22.3	16	21	5	0.0	Low	15.8	1.88
GT12-18	32.95	33.15	10	Clayey SILT, trace sand	0.0	1.8	81.9	16.3	18	25	7	0.3	Low	19.9	1.89
GT12-18	35.75	35.95	11	Gravelly SAND, some clay and silt	30.4	39.1	16.5	14.0	15	32	17	-0.2	Medium	11.1	1.92
GT12-18	38.67	38.87	12	Clayey SILT, trace clay	0.0	7.9	68.4	23.7	29	39	10	-0.6	Medium	23.0	
GT12-18	51.49	51.69	16	Silty SAND, some clay, trace gravel	9.0	57.8	21.4	11.8	19	30	11	-0.5	Medium	14.0	
GT12-18	69.00	69.20	20	CLAY and SILT, some sand	0.0	12.7	50.8	36.5	32	56	24	-0.6	High	17.4	
GT12-19	5.45	5.65	2	Gravelly SAND, some silt, trace clay	25.1	58.8	11.0	5.1	17	24	7	-1.6	Low	5.6	
GT12-19	11.26	11.46	3	SAND, trace clay, silt and gravel	1.7	84.4	13.9	0.0							
GT12-19	22.04	22.24	6	Clayey SILT, trace sand and gravel	0.1	6.5	83.3	10.2	25	32	7	0.1	Medium	25.9	
GT12-19	31.03	31.23	7	Silty Gravelly SAND, trace clay	21.4	40.6	32.2	5.8	17	18	1	-3.0	Low	14.0	
GT12-20	5.14	5.34	2	Sandy GRAVEL, trace clay and silt	64.8	29.5	5.7	0.0							
GT12-20	9.96	10.16	3	Sandy SILT, trace clay	0.0	29.0	66.7	4.4							
GT12-20	20.20	20.40	4	Silty Gravelly SAND, trace clay	25.8	46.1	21.8	6.3	15	19	4	-1.8	Low	8.0	
GT12-21	5.40	5.60	2	SILT, some sand, trace clay	0.0	15.1	76.8	8.2	19	19	0		Low	16.0	
GT12-21	7.82	8.02	3	SILT, some sand, trace clay	0.0	19.1	76.7	4.3	NP	NP	NP			21.0	
GT12-21	14.70	14.90	4	SILT AND SAND, trace clay	0.0	46.8	48.7	4.6							
GT12-21	20.26	20.46	5	SAND, some silt, trace clay and gravel	9.5	68.9	15.0	6.6						-	
GT12-21	26.83	27.03	7	SILT, some clay, trace sand and gravel	0.3	8.0	81.1	10.6	24	33	9	0.0	Medium	24.0	
GT12-21	32.76	32.96	8	Silty SAND, some clay and gravel	11.4	52.4	25.8	10.4	15	25	10	-0.5	Low	10.0	
GT12-21	50.74	50.94	12	Sandy SILT, some clay	0.0	30.1	54.9	15.0	20	24	4	0.0	Low	20.0	
GT12-21	56.41	56.61	13	Sandy SILT, some clay	0.0	25.1	59.8	15.1	18	26	8	-0.3	Low	16.0	

TABLE D.1

NEW GOLD INC
BLACKWATER GOLD PROJECT

2012 GEOTECHNICAL SITE INVESTIGATION PROGRAM
INDEX TESTING RESULTS SUMMARY

Drillhole / Test Pit	Depth (m)		Sample #	Classification	Grain Size				Atterberg Limits** %				Plasticity	MC	Dry Density (t/m3)
	From	To			% Gravel	% Sand	% Fines		PL	LL	PI	LI		%	
GT12-21	59.52	59.72	14	Sandy SILT, some clay	0.0	30.9	54.3	14.8	20	28	8	0.0	Low	20.0	
GT12-22	1.58	1.78	1	Silty Gravelly SAND, some clay	25.5	33.8	26.6	14.1	16	22	6	-1.8	Low	5.0	
GT12-22	8.28	8.41	2	SILT, some clay	0.0	8.5	80.7	10.8	19	20	1	-10.0	Low	9.0	
GT12-22	14.26	14.46	3	SILT, some clay, trace sand and gravel	4.9	9.6	72.0	13.4	19	24	5	-0.6	Low	16.0	
GT12-22	33.78	33.98	7	Silty Gravelly SAND, trace clay	20.4	50.8	20.0	8.8	13	24	11	-0.8	Low	4.0	
GT12-22	38.51	38.71	8	Silty SAND, trace clay and gravel	1.1	67.1	24.5	7.3	NP	NP	NP			13.0	
GT12-22	44.80	45.00	9	Gravelly SAND, trace silt and clay	33.7	56.0	10.3	0.0						-	
GT12-22	51.19	51.39	10	SILT AND SAND, trace clay	0.0	48.7	46.2	5.2	22	18	NP	0.8	Low	19.0	
GT12-22	57.58	57.78	11	Silty SAND, some clay and gravel	11.7	54.8	20.7	12.8	19	35	16	-0.6	Medium	10.0	
GT12-23	4.64	4.84	2	Silty SAND	0.0	75.2	24.8	0.0	19	35	16	-0.6	Medium	10.0	
GT12-23	6.31	6.51	3	Silty Gravelly SAND, trace clay	33.0	35.3	24.6	7.1	14	21	7	-0.4	Low	11.0	
GT12-23	11.99	12.19	4	SAND AND GRAVEL, trace silt and clay	40.2	47.1	12.1	0.0						5.9	
GT12-23	14.25	14.45	5	Silty SAND, some gravel, trace clay	16.7	50.7	27.7	4.9	15	21	6	-1.0	Low	9.0	
GT12-23	34.89	35.09	9	Silty SAND, some clay and gravel	16.1	40.4	30.8	12.7	14	18	4	-0.5	Low	12.0	
GT12-24	16.17	16.42	BS1	SAND AND GRAVEL, some silt, trace clay	35.4	41.3	17.6	5.7	17	24	7	-1.1	Low	9.0	
GT12-24	22.59	22.86	BS2	Sandy SILT, trace clay and gravel	0.0	21.1	75.0	3.9	15	21	6	1.2	Low	22.0	
GT12-24	32.33	32.53	BS3	SAND AND GRAVEL, some silt, trace clay	36.6	41.8	16.6	5.0	18	23	5	-1.4	Low	10.9	
GT12-24	37.04	37.24	BS4	SILT AND SAND, some clay, trace gravel	1.5	39.2	49.3	10.1	17	19	2	0.0	Low	17.0	
GT12-24	43.75	44.00	BS5	Silty SAND, some clay and gravel	16.7	42.2	27.0	14.0	20	27	7	-0.9	Low	13.8	
GT12-25	8.30	8.49	BS2	Silty SAND, some gravel, trace clay	16.1	57.3	20.2	6.4	14	20	6	-0.8	Low	9.0	
GT12-25	22.26	22.57	BS3	Silty Gravelly SAND, trace clay	24.8	37.6	29.3	8.4	15	21	6	-0.8	Low	10.0	
GT12-25	43.25	43.40	BS5	Silty SAND AND GRAVEL, trace clay	38.3	36.7	20.9	4.1	16	21	5	-1.2	Low	10.0	
GT12-25	42.35	42.55	BS6	Silty SAND, trace clay and gravel	2.4	69.3	22.7	5.6						13.0	
GT12-26	8.31	8.51	BS1	Silty SAND, some gravel, trace clay	12.1	47.6	31.4	8.9	15	20	5	-1.0	Low	10.0	
GT12-27	4.90	5.06	BS1	SILT AND SAND, some gravel, trace clay	14.1	40.0	38.6	7.3	14	18	4	-1.5	Low	8.0	
GT12-27	14.33	14.48	BS2	Silty Gravelly SAND, trace clay	28.8	45.0	21.6	4.5	15	20	5	-1.6	Low	7.0	
GT12-27	26.83	27.00	BS3	Sandy GRAVEL, some silt, trace clay	59.9	29.9	8.2	2.1		16			Low	10.0	
GT12-27	45.06	45.32	BS5	SAND AND GRAVEL, some silt, trace clay	48.1	34.1	12.4	5.4	16	28	12	-0.6	Low	9.0	
GT12-28	23.00	25.00	4	SAND, some clay, silt and gravel	11.4	67.7	20.9	0.0						17.8	
GT12-29	5.73	5.89	BS1	Silty SAND, trace clay	0.0	69.7	26.9	3.4						15.6	
GT12-29	14.74	14.94	BS2	Sandy SILT, some clay	0.0	27.9	61.9	10.1		17			Low	18.0	
GT12-29	32.73	32.93	BS4	Sandy SILT, some clay	0.0	32.3	56.1	11.6	NP	NP	NP			17.0	
GT12-29	40.64	40.85	BS5	Silty SAND, some clay and gravel	17.9	45.6	22.4	14.2	19	31	12	-0.3	Medium	16.0	
GT12-31	4.57	4.87	1	Gravelly SAND, some silt, trace clay	34.9	46.4	14.4	4.3	14	17	3	-1.9	Low	8.4	
GT12-31	14.16	14.43	3	Silty Gravelly SAND, trace clay	31.8	33.1	26.2	8.9	12	22	10	-0.4	Low	8.4	
GT12-31	19.80	20.00	4	Sandy SILT, trace clay and gravel	4.8	33.8	52.2	9.2	16	19	3	-0.5	Low	14.5	
GT12-31	37.38	37.54	7	SILT, trace clay and sand	0.0	5.4	85.0	9.6	18	25	7	0.1	Low	18.9	
GT12-32	15.84	16.04	1	Silty Gravelly SAND, trace clay	32.0	34.9	26.6	6.5	13	17	4	-1.9	Low	5.6	126.20
GT12-32	24.38	24.58	2a *	Sandy GRAVEL, some silt, trace clay	49.0	34.2	12.9	3.9	15	29	14	-0.6	Low	6.1	139.90
GT12-32	39.63	39.83	2b *	Sandy GRAVEL, some silt, trace clay	45.1	28.8	19.1	7.0	14	22	8	-0.6	Low	8.9	133.10
GT12-32	49.08	49.28	4	Silty Gravelly SAND, trace clay	27.5	39.1	24.4	9.0	14	23	9	-0.8	Low	7.2	135.10
GT12-32	64.75	64.90	6		0.0	0.0	0.0	0.0	23	31	8	-1.2	Medium	13.7	128.20
GT12-33	4.60	4.80	1	Silty Gravelly SAND, some clay	21.4	35.4	30.6	12.6	12	28	16	-0.2	Low	9.4	132.40
GT12-33	33.40	33.54	3	Silty Gravelly SAND, trace clay	20.7	39.5	30.6	9.2	13	24	11	-0.4	Low	9.0	
GT12-33	40.03	40.23	4	Clayey SILT, trace sand and gravel	2.1	9.9	63.7	24.3	21	41	20	-0.1	Medium	19.6	109.30
GT12-34	3.45	3.70	1	Sandy SILT, some clay, trace gravel	3.3	27.9	57.6	11.2	15	20	5	0.2	Low	15.8	
GT12-34	17.45	17.60	3	Silty SAND, some gravel, trace clay	12.4	43.7	34.0	9.9	12	19	7	-0.5	Low	8.4	
GT12-34	42.07	42.27	4	Silty Sandy GRAVEL, trace clay	40.1	30.7	22.6	6.6	13	22	9	-0.5	Low	8.4	
GT12-34	52.22	52.37	5	SILT, some clay, trace sand and gravel	0.4	4.1	80.5	15.0	17	24	7	-0.1	Low	16.3	
GT12-35	6.90	7.10	1	Silty Gravelly SAND, trace clay	32.8	39.2	21.5	6.5	15	21	6	-1.1	Low	8.1	
GT12-35	36.65	36.85	3	SILT, some clay, trace sand and gravel	1.7	2.3	77.6	18.4	22	34	12	0.1	Medium	23.3	103.80
GT12-35	41.13	41.33	4	SAND AND SILT, some clay	0.0	38.6	42.0	19.4	27	46	19	-0.1	Medium	25.9	97.00
GT12-36	10.20	10.40	1	Silty Gravelly SAND, trace clay	28.7	42.4	23.5	5.4	12	17	5	-0.8	Low	8.2	
GT12-36	41.18	41.32	3	SAND AND GRAVEL, some silt, trace clay	39.3	35.1	17.3	8.3	14	26	12	-0.5	Low	7.9	
GT12-36	53.30	53.50	4	SILT, trace clay and sand	0.0	0.8	94.2	5.0	NP	NV	NP			22.6	
GT12-36	78.35	78.55	5	CLAY AND SILT, some sand	0.0	16.2	42.9	40.9	27	55	28	0.3	High	36.0	
GT12-37	3.75	3.90	1	Silty SAND, some gravel, trace clay	19.6	49.4	22.3	8.7	13	19	6	-0.7	Low	8.9	87.00
GT12-37	43.40	43.60	4	SAND, some clay, silt and gravel	17.3	46.6	19.5	16.6	15	19	4	-0.3	Low	13.7	115.50
GT12-38	8.60	8.75	1	Silty Gravelly SAND, some clay	26.9	41.1	22.0	10.0	12	22	10	-0.4	Low	7.8	136.00
GT12-38	15.65	15.83	2	Silty Gravelly SAND, trace clay	20.4	44.9	29.8	4.9	13	19	6	-0.5	Low	9.8	
GT12-39	16.60	16.75	2	SILT AND SAND, trace clay	0.0	43.3	47.8	8.9	NP	NV	NP		None	14.9	
GT12-39	59.30	59.45	4	Sandy GRAVEL, some silt, trace clay	48.3	33.6	13.5	4.6	14	28	14	-0.5	Low	7.6	
GT12-39	89.90	90.10	6	Clayey SILT, some sand	0.0	18.0	48.3	33.7	27	60	33	0.0	High	28.2	93.90
GT12-40	7.35	7.50	1	Clayey, Silty, Gravelly SAND	25.7	39.3	35.0	0.0	13	20	7	-0.5	Low	9.8	
GT12-40	19.75	19.90	3	Sandy SILT, some clay, trace gravel	4.6	26.4	53.4	15.6	15	26	11	0.1	Low	16.0	
GT12-40	24.40	24.60	4	SILT, some clay and sand, trace gravel	0.0	13.3	76.6	10.1	17	23	6	0.1	Low	17.7	
GT12-40	57.50	57.70	7	Silty SAND, some gravel, trace clay	23.3	40.7	26.4	9.6	19	31	12	0.0	Medium	18.7	
GT12-41	7.00	7.20	1	Silty Gravelly SAND, trace clay	31.1	41.9	20.1	6.9	13	22	9	-0.4	Low	9.3	

TABLE D.1

NEW GOLD INC
BLACKWATER GOLD PROJECT

2012 GEOTECHNICAL SITE INVESTIGATION PROGRAM
INDEX TESTING RESULTS SUMMARY

Drillhole / Test Pit	Depth (m)		Sample #	Classification	Grain Size				Atterberg Limits** %				Plasticity	MC	Dry Density (t/m3)
	From	To			% Gravel	% Sand	% Fines		PL	LL	PI	LI		%	
GT12-41	10.00	10.20	2	SAND AND GRAVEL, some silt, trace clay	39.0	38.2	15.7	7.1	13	24	11	-0.6	Low	6.4	
GT12-41	20.00	20.20	3	SAND AND GRAVEL, some silt, trace clay	44.1	38.6	12.5	4.8						8.0	
GT12-41	40.00	40.17	4	Silty SAND, some clay and gravel	17.6	40.6	27.7	14.1	15	25	10	-0.5	Low	10.3	
GT12-41	40.00	40.17	5	Silty SAND, some clay and gravel	10.5	48.2	27.5	13.8						12.8	
GT12-41	47.00	47.20	6	Silty Sandy GRAVEL, some clay	37.8	26.0	22.0	14.2	19	34	15	0.1	Medium	20.7	
GT12-41	50.00	50.20	7	Clayey Silty SAND	0.0	38.3	32.2	29.5	18	37	19	-0.1	Medium	17.1	
GT12-41	57.10	57.30	8	Sandy CLAY AND SILT, trace gravel	0.9	23.4	38.2	37.5	26	48	22	0.2	Medium	30.8	
GT12-41	73.00	73.19	9	SILT AND SAND, some clay	0.0	48.3	35.0	16.7	20	43	23	0.1	Medium	23.4	93.70
GT12-41	80.00	80.30	10	SAND, some silt, trace clay and gravel	7.5	65.2	17.6	9.7						12.7	
GT12-42	10.00	10.20	1	Silty Gravelly SAND, some clay	30.7	37.7	21.4	10.2						12.5	
GT12-43	9.80	10.00	1	Gravelly SAND, some silt, trace clay	34.3	45.1	14.0	6.6						8.3	
GT12-43	21.50	21.70	2	Silty Gravelly SAND, some clay	28.6	35.7	25.7	10.0						10.0	
GT12-43	25.00	25.20	3	Silty Gravelly SAND, trace clay	28.2	42.3	20.7	8.8	15	24	9	-0.7	Low	8.9	
GT12-43	30.00	30.20	4	SILT AND SAND, some clay, trace gravel	0.3	51.5	36.4	11.8	14	18	4	0.0	Low	14.1	
GT12-43	43.80	44.00	5	Clayey Sandy SILT	0.0	21.4	44.5	34.1						24.7	
GT12-43	50.00	50.20	6	Clayey Silty SAND, some gravel	10.5	38.0	30.6	20.9						17.5	
GT12-43	53.00	53.20	7	SILT AND SAND, some clay	0.0	40.2	43.1	16.7	20	28	8	0.4	Low	23.2	
GT12-43	55.00	55.20	8	Clayey Sandy SILT	0.0	23.7	48.7	27.6	18	34	16	0.3	Medium	23.3	
GT12-43	62.00	62.20	9	Silty Gravelly SAND, some clay	27.0	48.2	24.8	0.0						15.4	
GT12-44	7.14	7.24	1	SAND, trace clay, silt and gravel	5.2	86.3	8.5	0.0						17.4	
GT12-44	13.20	13.40	2	Silty SAND, trace clay and gravel	1.8	74.1	20.2	3.9						17.2	
GT12-44	15.60	15.80	3	Silty Gravelly SAND, some clay	29.2	34.2	26.4	10.2	13	25	12		Low		148.50
GT12-45	10.67	25.91	1, 2, 3	Silty Gravelly SAND, some clay	28.8	33.1	26.7	10.3	14	23	9		Low		
GT12-45	5.60	5.80	1	Silty Gravelly SAND, trace clay	31.8	42.1	21.0	5.1						10.7	
GT12-45	30.05	30.20	5	SILT, some clay, trace sand and gravel	0.8	8.7	79.3	11.2						22.3	
GT12-45	36.00	36.20	6	SILT, some sand and gravel, trace clay	13.1	14.6	62.8	9.5						17.1	118.90
GT12-45	43.50	43.70	8	Silty Gravelly SAND, some clay	25.5	34.8	28.6	11.1						6.1	
GT12-45	61.75	62.00	11	Silty Sandy GRAVEL, trace clay	33.4	27.9	28.8	9.9						8.2	133.20
GT12-45	67.10	67.30	12	SILT, some sand, trace clay and gravel	3.4	13.6	76.7	6.3						17.6	
GT12-45	73.55	73.70	13	Sandy Gravelly SILT, trace clay	21.9	27.6	48.0	2.5						13.8	132.00
GT12-45	14.55	14.75	21	SAND AND GRAVEL, some clay and silt	34.7	34.0	19.5	11.8						8.7	138.00
GT12-45	52.30	52.50	26	Sandy Gravelly SILT, some clay	24.6	25.6	39.1	10.7						11.6	125.20
GT12-45	81.00	81.20	31	Silty Gravelly SAND, some clay	22.7	40.6	25.9	10.8						15.9	
GT12-46	10.67	35.05	1, 2, 3	Silty SAND, some clay, trace gravel	8.5	48.8	30.7	12.0	13	23	10		Low	10.0	
GT12-46	6.66	6.87	3	Gravelly SAND, some silt, trace clay	33.1	44.0	17.0	5.9						8.8	
GT12-46	12.80	13.00	5	Gravelly SAND, some clay and silt	24.7	47.7	17.0	10.6						7.1	150.90
GT12-46	28.20	28.45	10	Sandy GRAVEL, some silt and clay	41.2	29.9	18.6	10.3						7.5	130.60
GT12-46	46.30	46.50	16	Silty Gravelly SAND, some clay	32.9	35.0	20.1	12.0						6.7	
GT12-47	0.00	0.00	1	Sandy GRAVEL, trace silt and clay	53.8	37.2	9.0	0.0	NP	NP	NP			9.2	
GT12-47	6.83	7.05	3	Silty Gravelly SAND, trace clay	21.1	40.3	31.6	7.0	13	22	9	-0.7	Low	6.9	141.50
GT12-47	12.90	13.10	5	Sandy SILT, some gravel, trace clay	12.3	24.0	54.1	9.6	17	29	12	-0.3	Low	12.9	
GT12-47	18.05	18.26	7	SILT AND SAND, trace clay and gravel	8.6	41.9	41.0	8.5						12.1	
GT12-47	23.50	23.75	9	SILT AND SAND, some gravel, trace clay	16.4	38.8	37.9	6.9						16.6	
GT12-47	34.33	34.53	14	Sandy Gravelly SILT, some clay	22.5	30.9	36.5	10.1	15	25	10	-0.3	Low	12.2	
GT12-47	43.30	43.50	18	Clayey SILT, some sand	0.0	12.9	52.9	34.2	24	67	43	0.1	High	27.4	
GT12-47	58.42	58.67	23	Clayey Sandy SILT, trace gravel	2.4	47.3	29.9	20.4						19.7	
GT12-47	64.80	64.97	25	Clayey Sandy SILT	0.0	20.9	47.5	31.6	31	57	26	0.0	High	31.0	
GT12-47	88.62	88.79	30	Sandy SILT, some clay	0.0	38.8	45.3	15.9						17.7	
TP12-31	4.00	4.20	S5	Gravelly SAND, some silt, trace clay	29.7	47.3	19.4	3.6							
TP12-40	5.00	5.20	S13	Silty SAND, some gravel, trace clay	12.1	64.2	21.1	2.7						13.0	
TP12-45	5.00	5.20	S14	Sandy GRAVEL, trace silt and clay	76.7	21.4	1.9	0.0						4.6	
TP12-48	4.75	4.95	S15	SILT, some clay, trace sand and gravel	0.6	8.3	80.7	10.4	20	21	1	-1.0	Low	19.0	
TP12-49	4.00	4.20	S16	SILT, trace clay, sand and gravel	0.0	2.3	88.9	8.8	21	21	0		Low	20.0	
TP12-55	6.00	6.20	S17	Gravelly SAND, trace silt and clay	30.7	63.1	4.2	2.1							
TP12-57	3.75	3.95	S18	Silty SAND, some gravel, trace clay	15.4	47.3	27.6	9.6	15	19	4	-1.5	Low	9.0	
TP12-61	2.50	2.70	S19	SILT AND SAND, some gravel, trace clay	12.4	35.3	47.1	5.3	24	25	1	7.0	Low	31.0	
TP12-62	3.00	3.20	S20	Silty SAND, some gravel, trace clay	11.1	47.5	34.8	6.6						10.0	
TP12-65	4.00	4.20	S21	Silty SAND, some gravel, trace clay	17.0	45.2	29.0	8.8	16	20	4	-2.0	Low	8.0	
TP12-67	3.50	3.70	S22	Silty SAND, some gravel, trace clay	12.4	48.7	32.9	5.9	18	20	2	-0.5	Low	17.0	
TP12-72	4.00	4.20	S23	Silty SAND, some gravel, trace clay	17.4	43.8	29.4	9.4	15	21	6	-1.2	Low	8.0	
TP12-77	4.50	4.70	S25	Silty Gravelly SAND, trace clay	29.0	38.4	30.3	2.4	19	15	NP	0.5		17.0	
TP12-85	5.50	5.70	S27	SAND AND GRAVEL, some silt, trace clay	35.6	40.6	19.5	4.3	15	18	3	-2.5	Low	7.6	
TP12-87	5.70	5.90	S28	SILT, trace clay, sand and gravel	1.5	6.9	90.3	1.4						20.0	
TP12-88	6.00	6.20	S29	SILT AND SAND, trace clay and gravel	1.1	41.7	55.1	2.0	22	20	NP	2.5		17.0	
TP12-89	3.00	3.20	S30	Gravelly Silty SAND, trace clay	31.6	43.6	22.2	2.5						7.3	
TP12-90	5.50	5.70	S31	SAND AND GRAVEL, some silt, trace clay	39.5	38.7	18.9	2.9	17	17	0		Low	9.0	

TABLE D.1

NEW GOLD INC
BLACKWATER GOLD PROJECT

2012 GEOTECHNICAL SITE INVESTIGATION PROGRAM
INDEX TESTING RESULTS SUMMARY

Drillhole / Test Pit	Depth (m)		Sample #	Classification	Grain Size				Atterberg Limits** %				Plasticity	MC	Dry Density (t/m3)
	From	To			% Gravel	% Sand	% Fines		PL	LL	PI	LI		%	
TP12-92	4.50	4.70	S32	SAND AND GRAVEL, trace silt and clay	37.5	44.0	18.5	0.0							
TP12-95	6.00	6.20	S33	SILT, some clay, trace sand and gravel	1.5	3.0	84.4	11.2	22	24	2	-4.5	Low	13.0	
TP12-96	7.00	7.20	S34	Silty SAND, some gravel, trace clay	18.6	48.1	31.8	1.4						10.0	
TP12-99	6.00	6.20	S35	SILT, some sand, trace clay and gravel	5.0	13.7	76.9	4.5						15.0	
TP12-102	5.50	5.70	S36	Silty SAND, some clay, trace gravel	6.6	52.2	28.2	13.0	13	20	7	-0.1	Low	12.0	
TP12-103	6.50	6.70	S37	SAND AND GRAVEL, trace silt and clay	46.8	46.7	6.5	0.0						5.4	
TP12-106	6.00	6.20	S38	SILT AND SAND, trace clay and gravel	0.3	54.6	42.8	2.4							
TP12-108	6.50	6.70	S39	SAND AND GRAVEL, trace silt and clay	38.0	46.6	15.4	0.0						4.7	
TP12-111	7.00	7.20	S40		0.0	0.0	0.0	0.0							
TP12-114	5.50	5.70	S41	Silty Gravelly SAND, trace clay	32.2	41.3	20.1	6.5	14	19	5	-1.0	Low	9.0	
TP12-117	6.00	6.20	S42	SAND AND GRAVEL, trace silt and clay	39.4	49.0	8.0	3.6	17	18	1	-9.0	Low	8.0	
TP12-121	5.50	5.70	36	Silty SAND, some clay and gravel	18.5	30.8	23.6	12.1						9.8	
TP12-122	5.00	5.20	37	GRAVEL, some sand, trace clay and silt	54.3	17.6	6.3	3.7						10.9	
TP12-123	4.00	4.20	38	Sandy GRAVEL, some silt and clay	40.7	34.8	24.5	0.0	15	23	8	-0.9	Low	8.2	
TP12-126	4.50	4.70	41	SAND ANS GRAVEL, trace clay and silt	46.5	46.8	4.6	2.1						8.3	
TP12-127	4.00	4.20	42	Sandy GRAVEL, some silt, trace clay	44.7	34.1	18.5	2.7						9.3	
TP12-130	3.00	3.20	28	Silty Gravelly SAND, trace clay and cobbles	27.3	29.3	29.0	6.8	16	22	6	-0.9	Low	10.7	
TP12-133	3.50	3.70	25	Sandy Gravelly SILT, some clay	20.1	30.3	34.2	15.4	14	26	12	-0.3	Low	10.9	
TP12-135	4.50	4.70	23	Sandy Gravelly SILT, some clay	20.8	32.1	32.4	14.7	13	25	12	-0.2	Low	11.0	
TP12-136	5.00	5.20	32	Gravelly SAND, some silt, trace clay	31.2	46.2	17.6	5.0	15	17	2	-4.1	Low	6.8	
TP12-138	5.00	5.20	12	SAND AND GRAVEL, trace silt and clay	51.5	37.8	9.5	1.2	NP	NV	NP			6.3	
TP12-139 (1)	2.00	2.20	13	Gravelly SAND, trace clay and silt	31.0	55.8	9.5	3.7						7.6	
TP12-139 (2)	4.00	4.20	0	Silty Gravelly SAND, trace clay	22.2	45.1	27.7	5.0	14	17	3	-0.7	Low	11.8	
TP12-142	4.00	4.20	22	Sandy Gravelly SILT, some clay	26.6	24.5	36.2	12.7	13	28	15	-0.2	Low	10.5	
TP12-144	4.00	4.20	17	Sandy Gravelly SILT, some clay	23.4	31.6	33.8	11.2						10.7	
TP12-146	4.50	4.70	19	Sandy Gravelly SILT, trace clay	25.6	25.7	41.0	7.7						8.1	
TP12-147	5.50	5.70	20	Silty Gravelly SAND, some clay	22.0	45.5	20.4	12.1						8.5	
TP12-150	3.00	3.20	8	Silty Gravelly SAND, trace clay	30.9	39.7	24.8	4.6	12	15	3	-1.5	Low	7.6	
TP12-151	5.00	5.20	9	SILT, trace clay, sand and gravel	0.9	2.5	87.0	9.6						24.7	
TP12-152	5.50	5.70	7	SAND AND GRAVEL, trace silt and clay	37.5	53.9	8.4	0.2						10.0	
TP12-155	5.00	5.20	3	SAND AND GRAVEL, trace silt and clay	37.5	52.5	8.4	1.6						7.8	

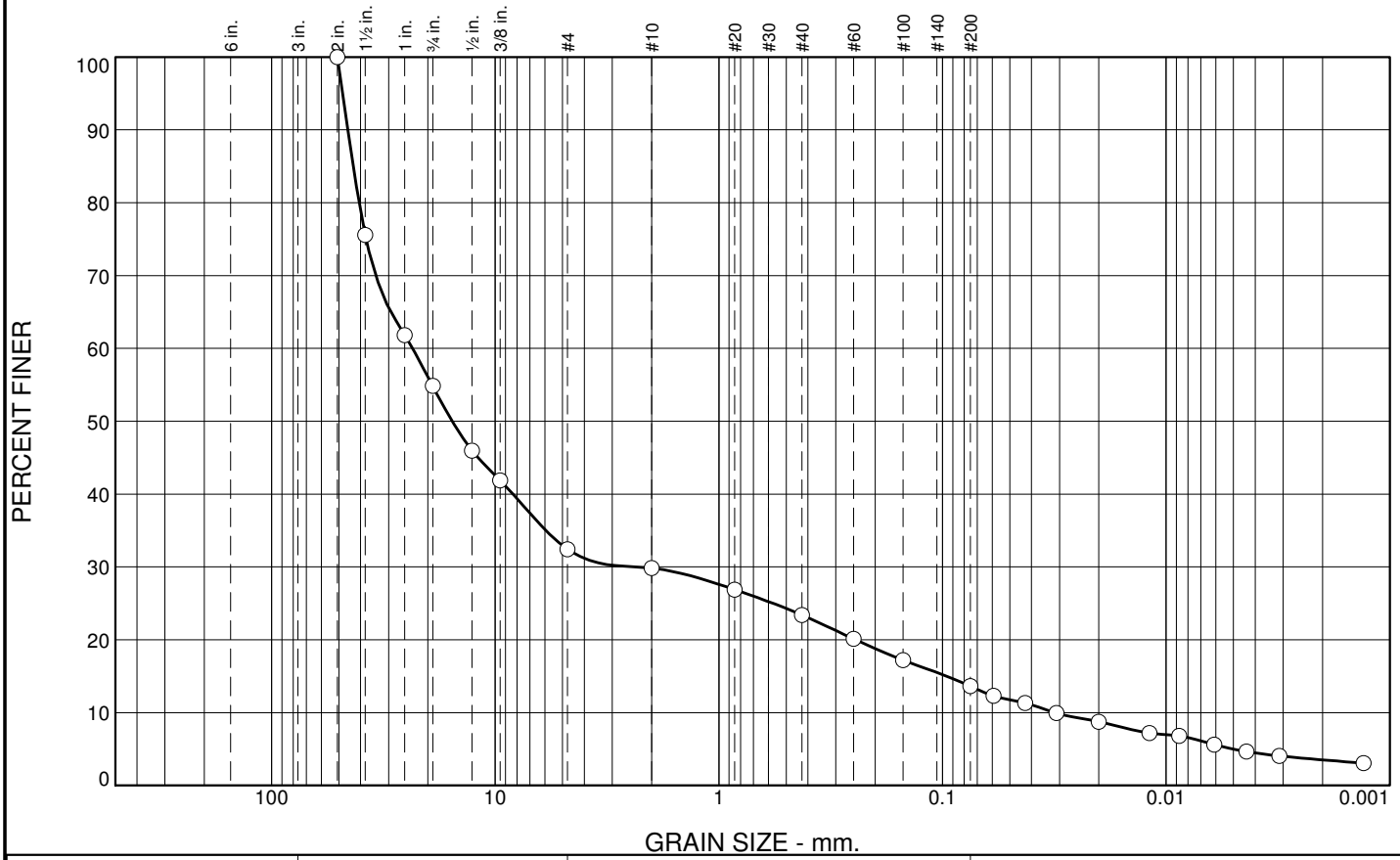
Note:

** Atterberg Limits: PL - Plastic Limit; LL - Liquid Limit; PI - Plasticity Index; LI - Liquidity Index

NP None Plastic

IS Insufficient Sample

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	45.2	22.4	2.6	6.4	9.8	10.1	3.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	75.6		
1	61.8		
.75	54.8		
.5	46.0		
.375	41.9		
#4	32.4		
#10	29.8		
#20	26.9		
#40	23.4		
#60	20.1		
#100	17.2		
#200	13.6		
0.0591 mm.	12.3		
0.0427 mm.	11.3		
0.0310 mm.	9.9		
0.0200 mm.	8.8		
0.0119 mm.	7.2		
0.0087 mm.	6.8		
0.0061 mm.	5.6		
0.0044 mm.	4.6		
0.0031 mm.	4.1		
0.0013 mm.	3.1		

* (no specification provided)

Soil Description

silty clayey GRAVEL with sand

Atterberg Limits

PL= 12 LL= 19 PI= 7

Coefficients

D_{90}= 45.6967 D_{85}= 43.1915 D_{60}= 23.4454
D_{50}= 15.5683 D_{30}= 2.3636 D_{15}= 0.0960
D_{10}= 0.0315 C_u= 745.03 C_c= 7.57

Classification

USCS= GC-GM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/8/12
Location: GT12-13 **Elev./Depth:** 9.75-9.95m

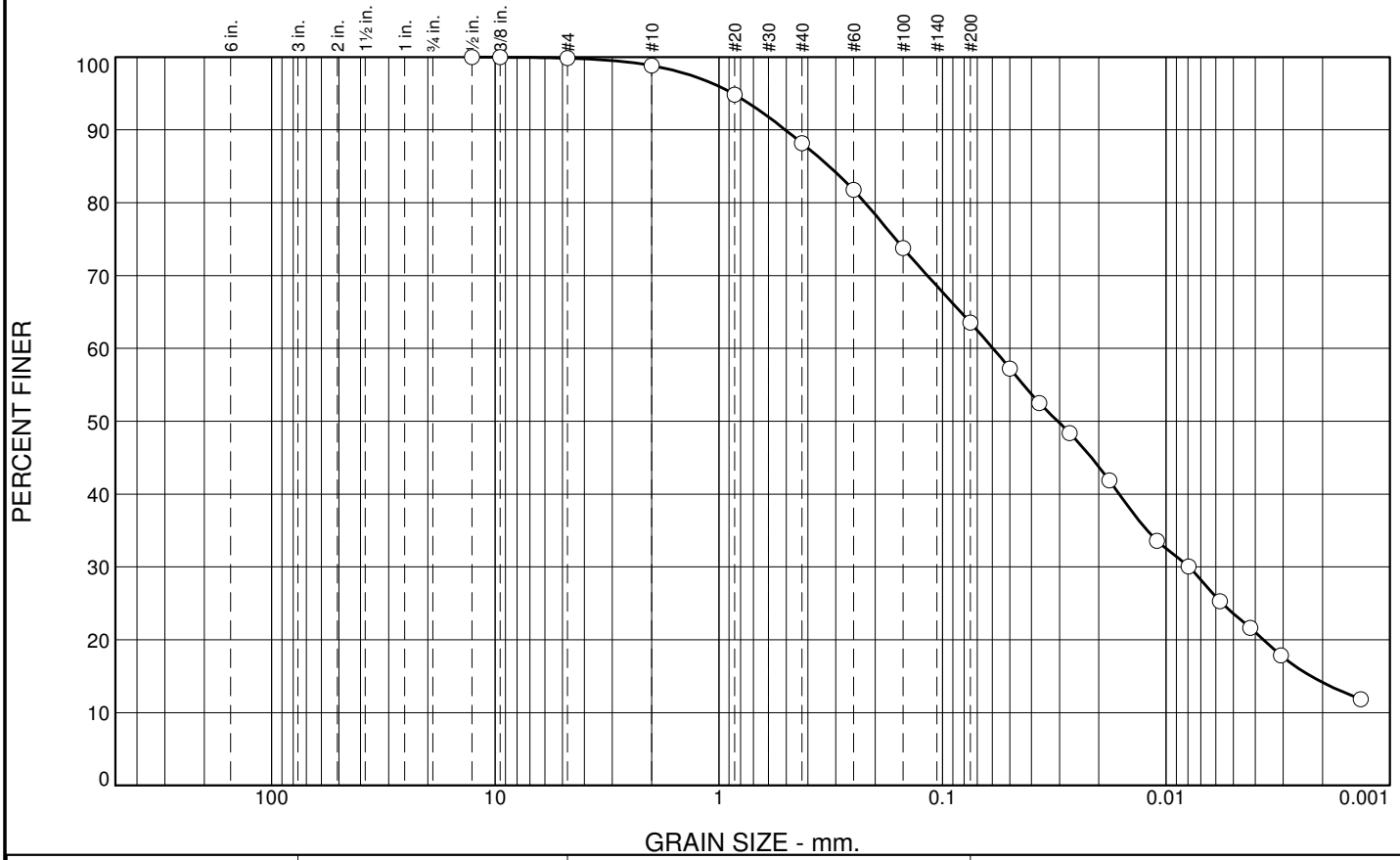
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	1.0	10.6	24.7	49.3	14.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5	100.0		
.375	100.0		
#4	99.8		
#10	98.8		
#20	94.8		
#40	88.2		
#60	81.8		
#100	73.8		
#200	63.5		
0.0500 mm.	57.2		
0.0369 mm.	52.5		
0.0270 mm.	48.4		
0.0180 mm.	41.9		
0.0110 mm.	33.6		
0.0079 mm.	30.1		
0.0057 mm.	25.3		
0.0042 mm.	21.6		
0.0031 mm.	17.9		
0.0014 mm.	11.8		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 15 LL= 23 PI= 8

Coefficients

D_{90}= 0.5050 D_{85}= 0.3212 D_{60}= 0.0595
D_{50}= 0.0305 D_{30}= 0.0079 D_{15}= 0.0022
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-4(2)

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/8/12
Location: GT12-13 **Elev./Depth:** 18.15-18.3m

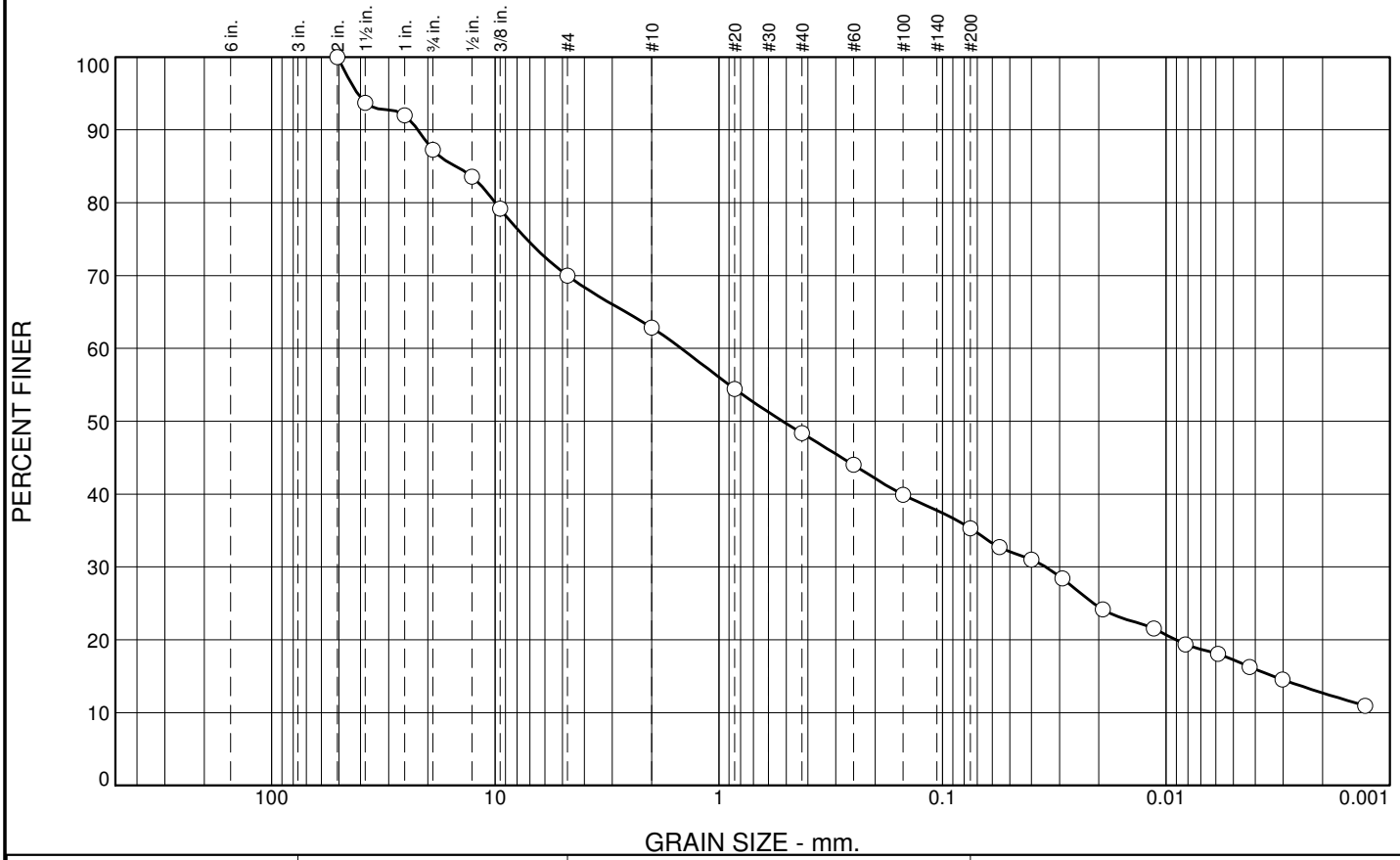
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.7	17.3	7.1	14.6	13.0	22.6	12.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	93.7		
1	92.0		
.75	87.3		
.5	83.6		
.375	79.2		
#4	70.0		
#10	62.9		
#20	54.4		
#40	48.3		
#60	44.0		
#100	39.9		
#200	35.3		
0.0557 mm.	32.7		
0.0401 mm.	31.0		
0.0291 mm.	28.4		
0.0192 mm.	24.2		
0.0114 mm.	21.5		
0.0082 mm.	19.4		
0.0059 mm.	18.1		
0.0042 mm.	16.3		
0.0030 mm.	14.5		
0.0013 mm.	10.9		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 14 LL= 28 PI= 14

Coefficients

D_{90}= 22.2386 D_{85}= 15.0219 D_{60}= 1.4743
D_{50}= 0.5186 D_{30}= 0.0346 D_{15}= 0.0033
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(1)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/8/12
Location: GT12-13 **Elev./Depth:** 45.13-45.3m

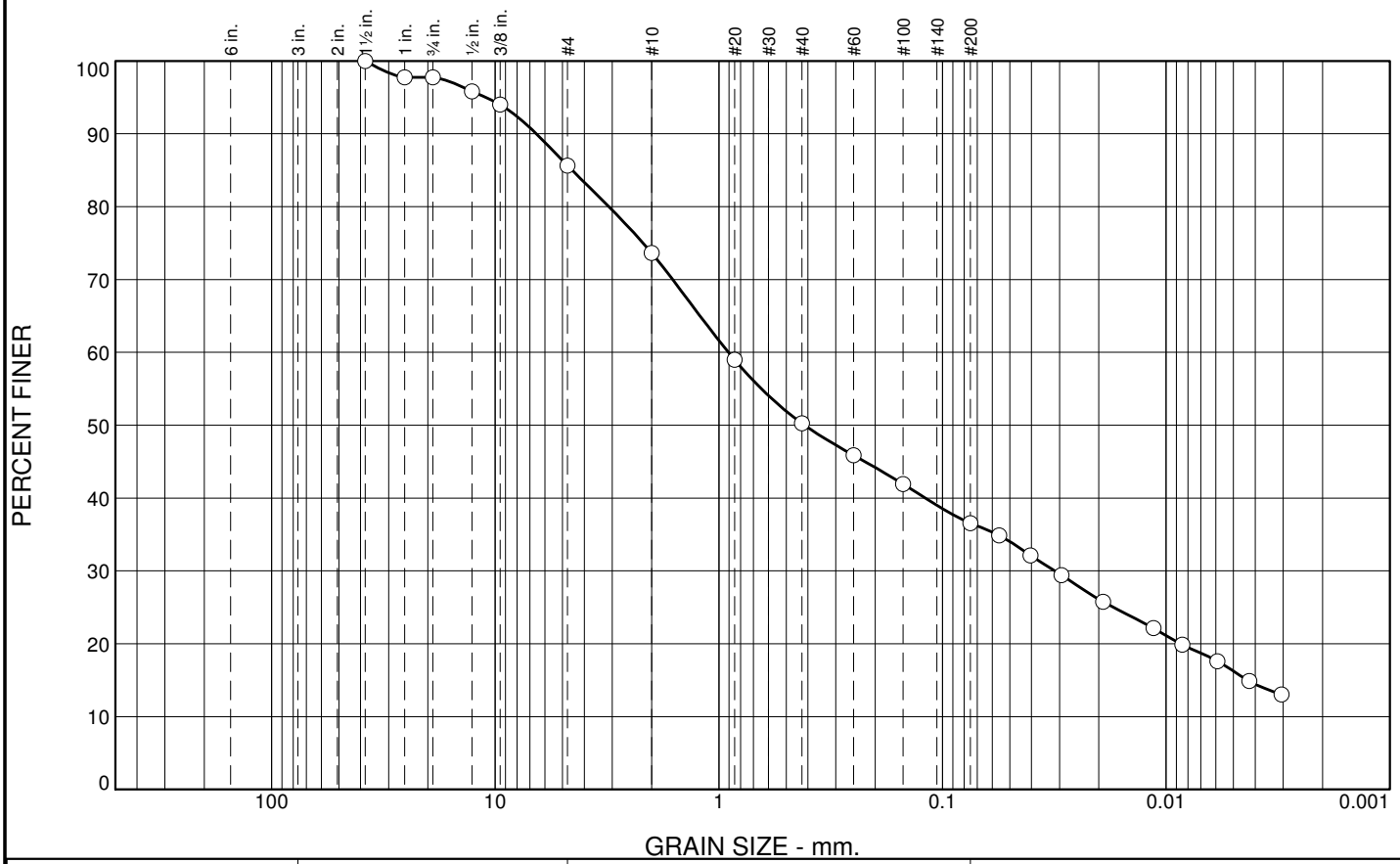
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.2	12.2	12.0	23.4	13.7	36.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.8		
.75	97.8		
.5	95.8		
.375	94.0		
#4	85.6		
#10	73.6		
#20	59.0		
#40	50.2		
#60	45.9		
#100	41.9		
#200	36.5		
0.0557 mm.	34.9		
0.0405 mm.	32.1		
0.0294 mm.	29.4		
0.0192 mm.	25.8		
0.0114 mm.	22.1		
0.0085 mm.	19.9		
0.0059 mm.	17.6		
0.0043 mm.	14.9		
0.0030 mm.	13.0		

* (no specification provided)

Soil Description

clayey SAND

Atterberg Limits

PL= 13 LL= 29 PI= 16

Coefficients

D_{90}= 6.5586 D_{85}= 4.5313 D_{60}= 0.9066
D_{50}= 0.4140 D_{30}= 0.0315 D_{15}= 0.0043
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(1)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/8/12
Location: GT12-13 **Elev./Depth:** 54.73-54.9m

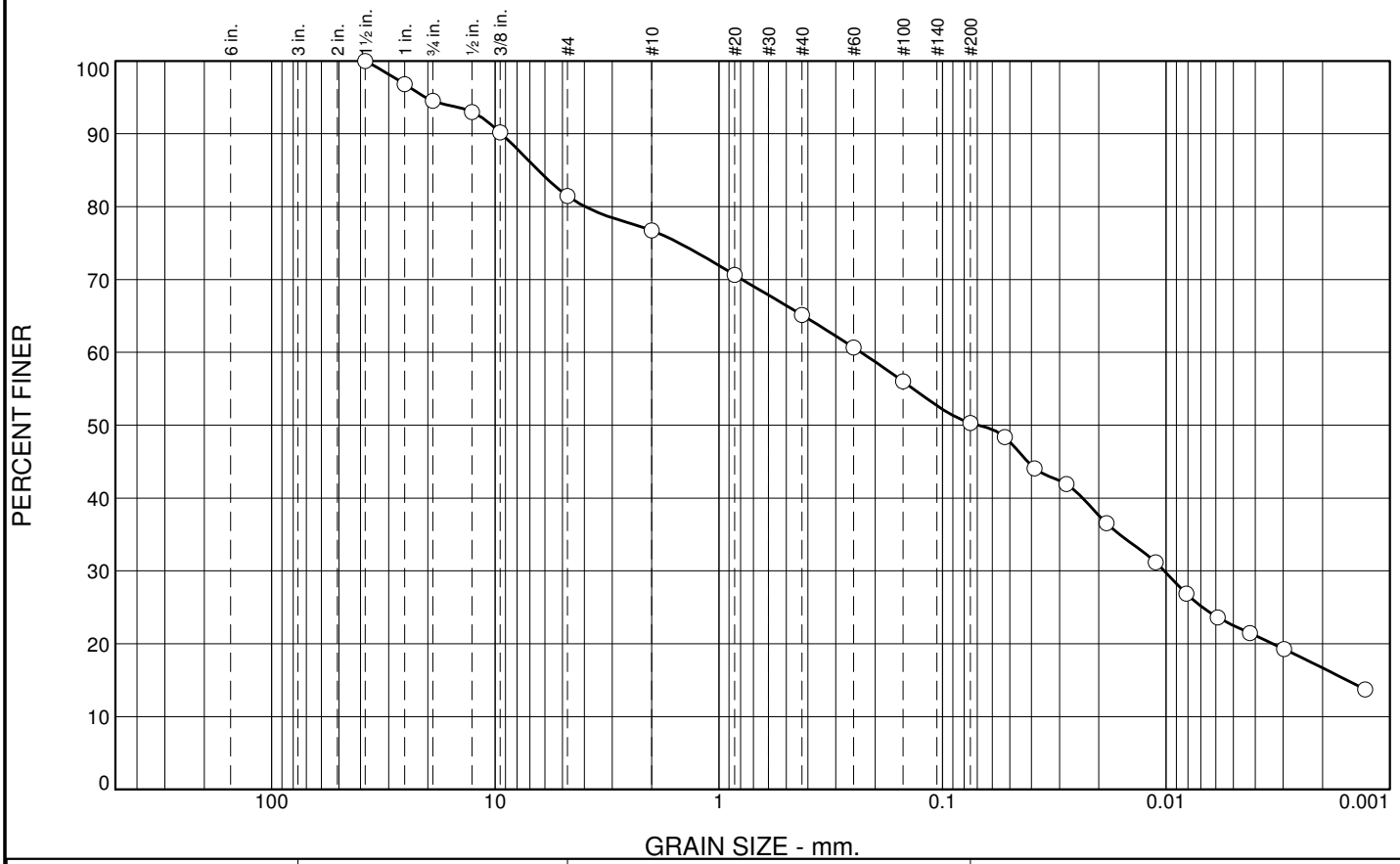
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.5	13.0	4.8	11.6	14.8	33.6	16.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	96.8		
.75	94.5		
.5	93.0		
.375	90.2		
#4	81.5		
#10	76.7		
#20	70.6		
#40	65.1		
#60	60.7		
#100	56.0		
#200	50.3		
0.0526 mm.	48.4		
0.0387 mm.	44.1		
0.0279 mm.	41.9		
0.0185 mm.	36.5		
0.0111 mm.	31.2		
0.0081 mm.	26.9		
0.0059 mm.	23.6		
0.0042 mm.	21.5		
0.0030 mm.	19.3		
0.0013 mm.	13.7		

* (no specification provided)

Soil Description

sandy lean CLAY with gravel

Atterberg Limits

PL= 14 LL= 33 PI= 19

Coefficients

D_{90}= 9.3839 D_{85}= 6.4336 D_{60}= 0.2313
D_{50}= 0.0691 D_{30}= 0.0102 D_{15}= 0.0016
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(6)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/9/12
Location: GT12-14 **Elev./Depth:** 36.0-36.2m

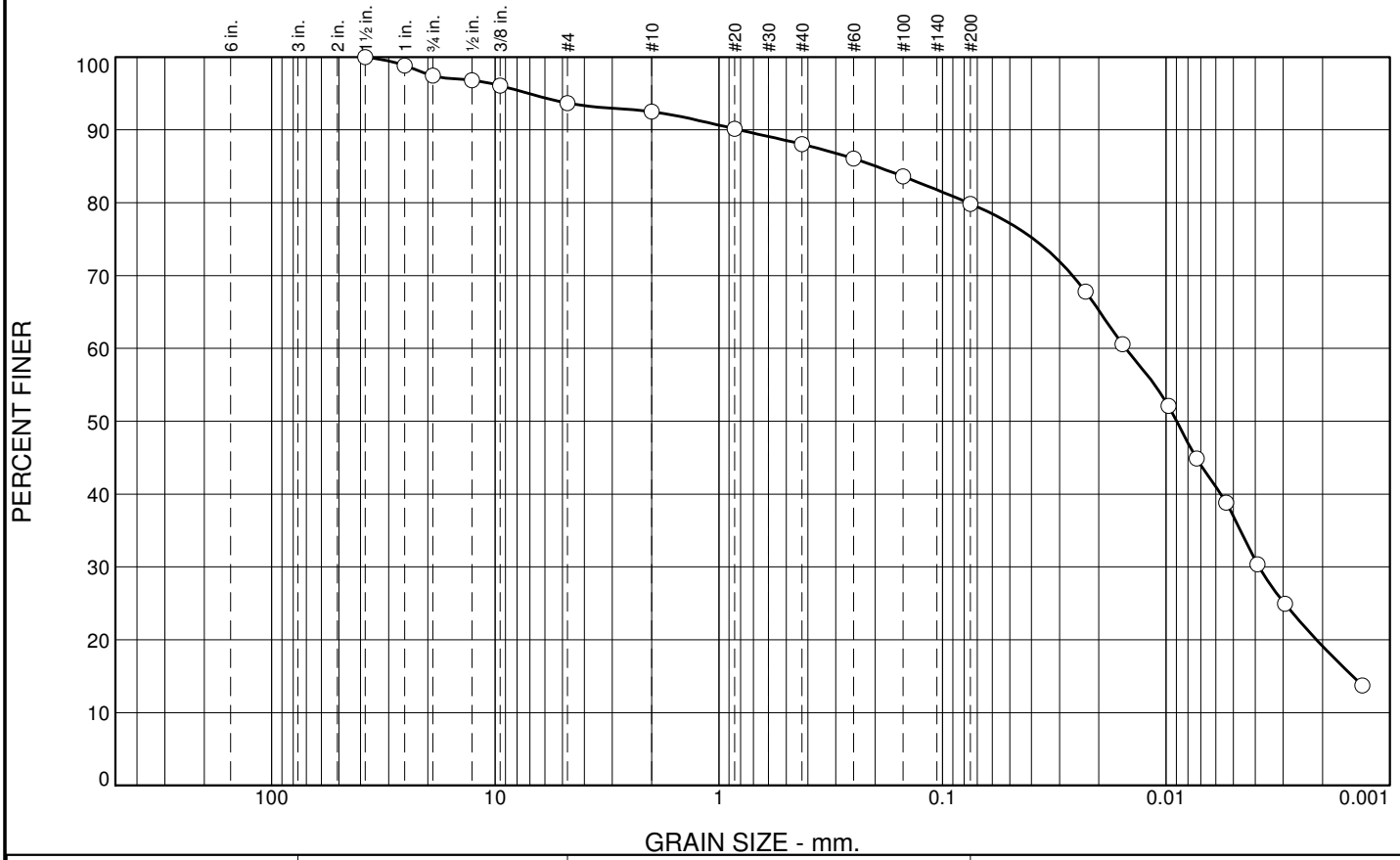
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.6	3.7	1.2	4.5	8.2	60.6	19.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.8		
.75	97.4		
.5	96.8		
.375	96.1		
#4	93.7		
#10	92.5		
#20	90.1		
#40	88.0		
#60	86.1		
#100	83.6		
#200	79.8		
0.0230 mm.	67.8		
0.0157 mm.	60.6		
0.0098 mm.	52.1		
0.0073 mm.	44.9		
0.0054 mm.	38.8		
0.0039 mm.	30.4		
0.0029 mm.	24.9		
0.0013 mm.	13.7		

* (no specification provided)

Soil Description

lean CLAY with sand

Atterberg Limits

PL= 20 LL= 34 PI= 14

Coefficients

D_{90}= 0.8137 D_{85}= 0.1988 D_{60}= 0.0152
D_{50}= 0.0090 D_{30}= 0.0038 D_{15}= 0.0015
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(10)

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/20/12
Location: GT12-14 **Elev./Depth:** 45.0-45.2m

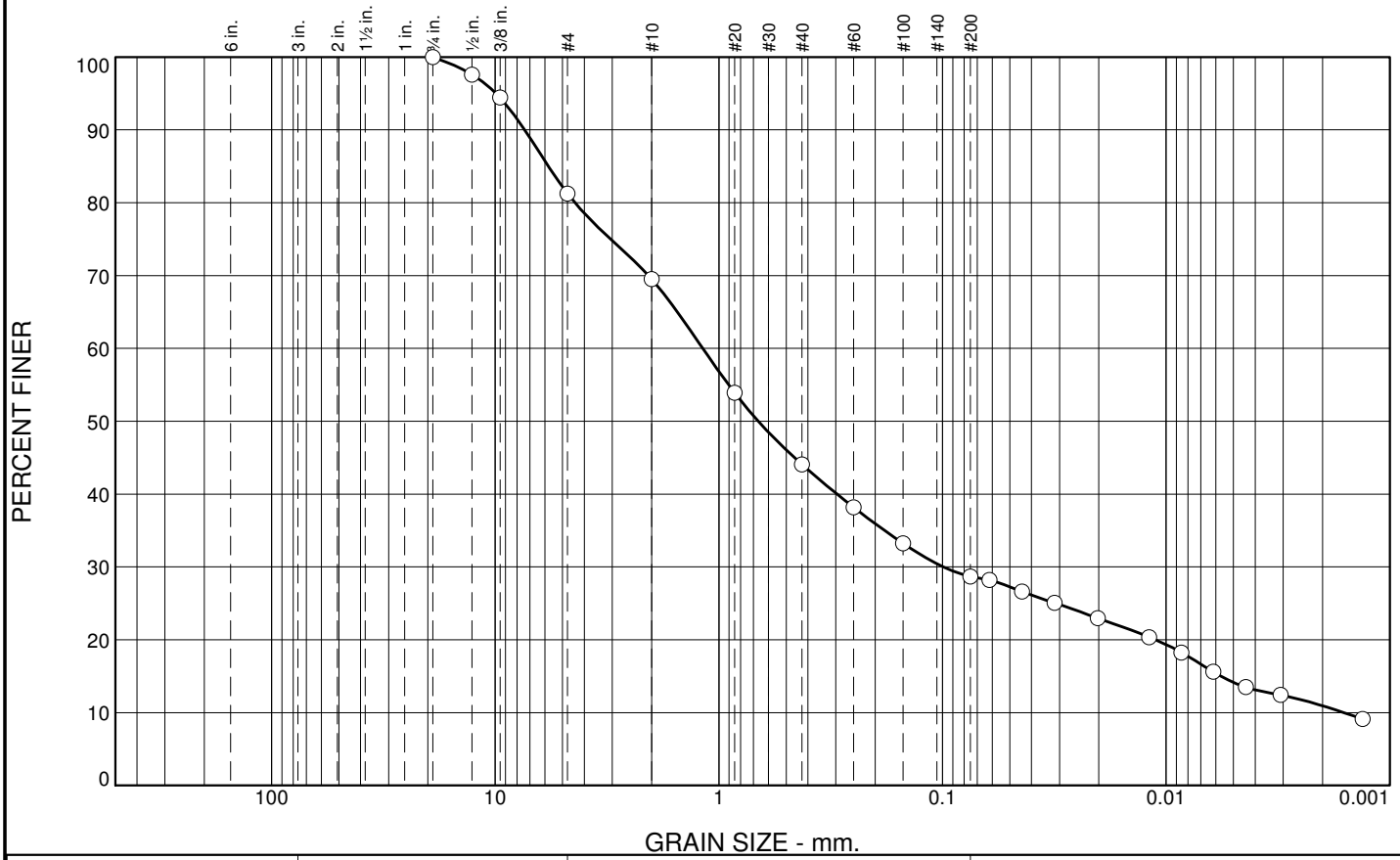
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	18.7	11.8	25.4	15.4	17.8	10.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	97.6		
.375	94.4		
#4	81.3		
#10	69.5		
#20	53.9		
#40	44.1		
#60	38.2		
#100	33.2		
#200	28.7		
0.0616 mm.	28.2		
0.0441 mm.	26.6		
0.0316 mm.	25.1		
0.0202 mm.	23.0		
0.0119 mm.	20.4		
0.0085 mm.	18.3		
0.0062 mm.	15.6		
0.0044 mm.	13.5		
0.0031 mm.	12.4		
0.0013 mm.	9.1		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 17 LL= 36 PI= 19

Coefficients

D_{90}= 7.4013 D_{85}= 5.7833 D_{60}= 1.1801
D_{50}= 0.6657 D_{30}= 0.0993 D_{15}= 0.0057
D_{10}= 0.0016 C_u= 736.34 C_c= 5.22

Classification

USCS= SC AASHTO= A-2-6(1)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/10/12
Location: GT12-14 **Elev./Depth:** 51.0-51.2m

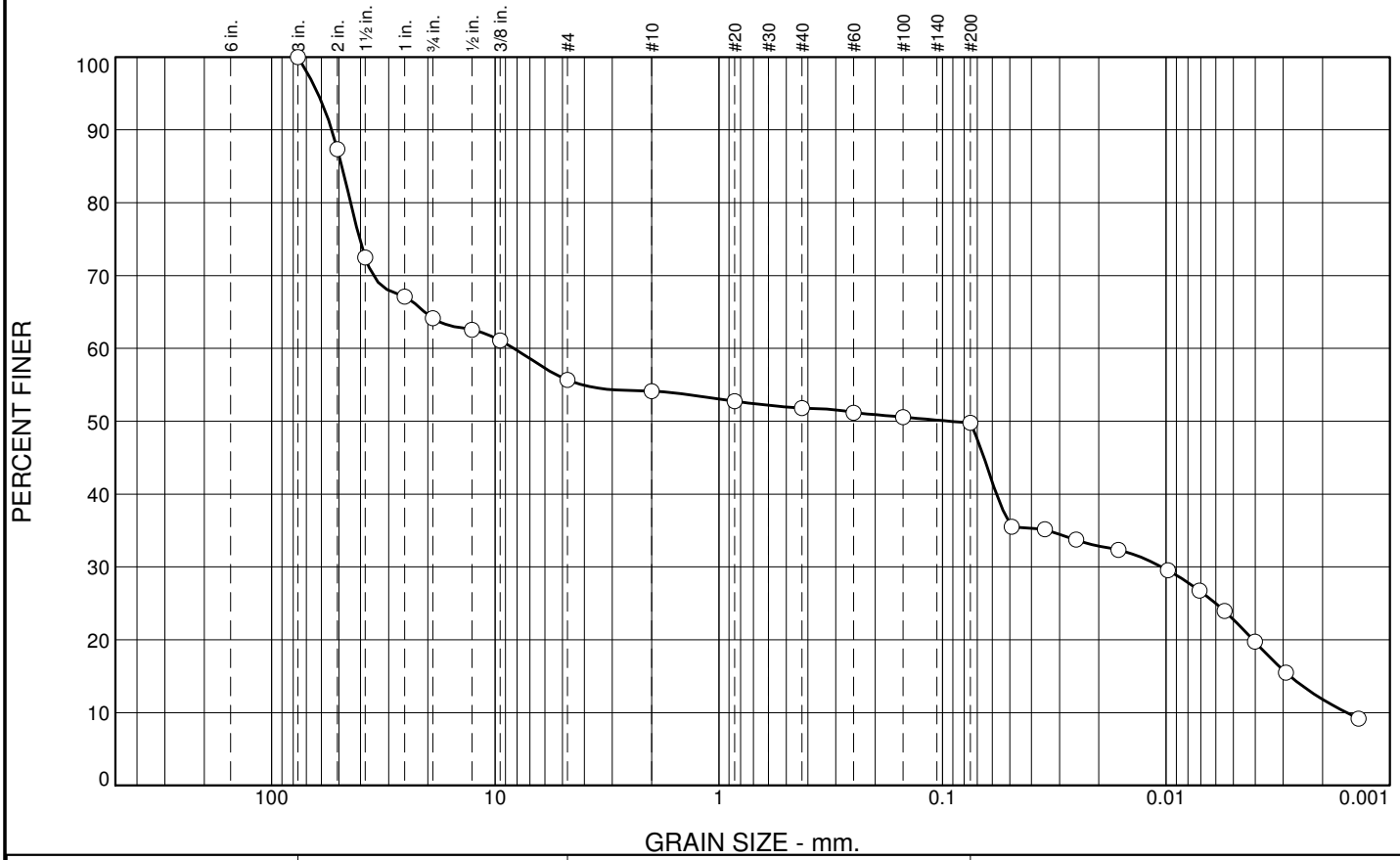
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	35.9	8.4	1.6	2.3	2.0	38.0	11.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	87.3		
1.5	72.5		
1	67.1		
.75	64.1		
.5	62.6		
.375	61.1		
#4	55.7		
#10	54.1		
#20	52.8		
#40	51.8		
#60	51.2		
#100	50.6		
#200	49.8		
0.0490 mm.	35.5		
0.0349 mm.	35.2		
0.0252 mm.	33.8		
0.0163 mm.	32.3		
0.0098 mm.	29.5		
0.0071 mm.	26.7		
0.0055 mm.	23.9		
0.0040 mm.	19.7		
0.0029 mm.	15.5		
0.0014 mm.	9.2		

* (no specification provided)

Soil Description

clayey GRAVEL

Atterberg Limits

PL= 19 LL= 32 PI= 13

Coefficients

D_{90}= 53.8644 D_{85}= 48.5541 D_{60}= 8.2653
D_{50}= 0.0925 D_{30}= 0.0105 D_{15}= 0.0028
D_{10}= 0.0016 C_u= 5303.30 C_c= 0.01

Classification

USCS= GC AASHTO= A-6(3)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/15/12
Location: GT12-15 **Elev./Depth:** 5.4-5.6m

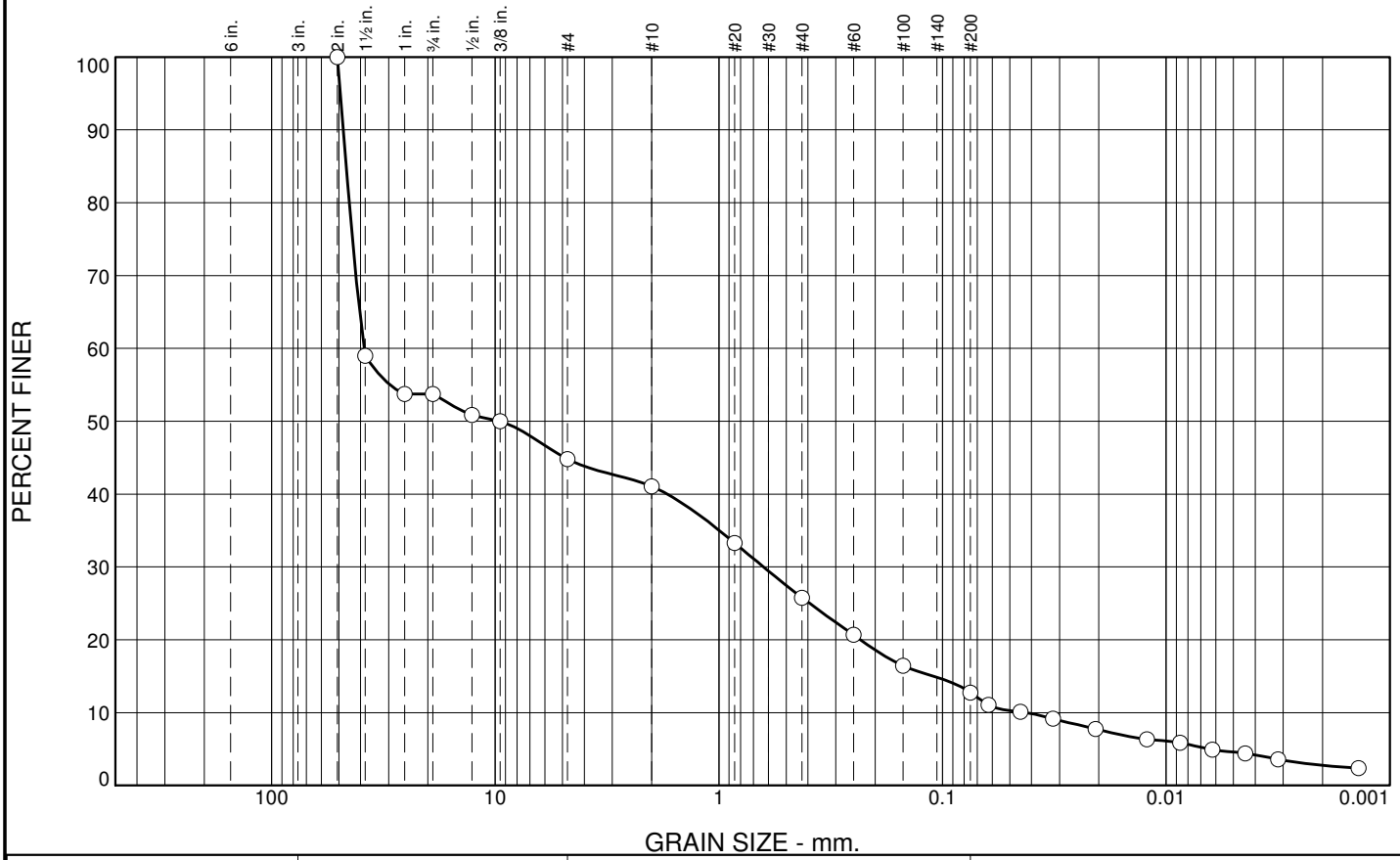
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: DB

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	46.2	9.0	3.8	15.2	13.0	10.0	2.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	59.0		
1	53.8		
.75	53.8		
.5	50.9		
.375	50.0		
#4	44.8		
#10	41.0		
#20	33.3		
#40	25.8		
#60	20.7		
#100	16.4		
#200	12.8		
0.0623 mm.	11.1		
0.0448 mm.	10.1		
0.0321 mm.	9.2		
0.0207 mm.	7.8		
0.0122 mm.	6.3		
0.0087 mm.	5.9		
0.0062 mm.	4.9		
0.0044 mm.	4.4		
0.0032 mm.	3.6		
0.0014 mm.	2.4		

* (no specification provided)

Soil Description

silty GRAVEL with sand

Atterberg Limits

PL= 13 LL= 15 PI= 2

Coefficients

D_{90}= 47.8967 D_{85}= 46.4704 D_{60}= 38.5401
D_{50}= 9.5368 D_{30}= 0.6312 D_{15}= 0.1096
D_{10}= 0.0423 C_u= 911.78 C_c= 0.24

Classification

USCS= GM AASHTO= A-1-a

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/9/12
Location: GT12-15 **Elev./Depth:** 11.2-11.4m

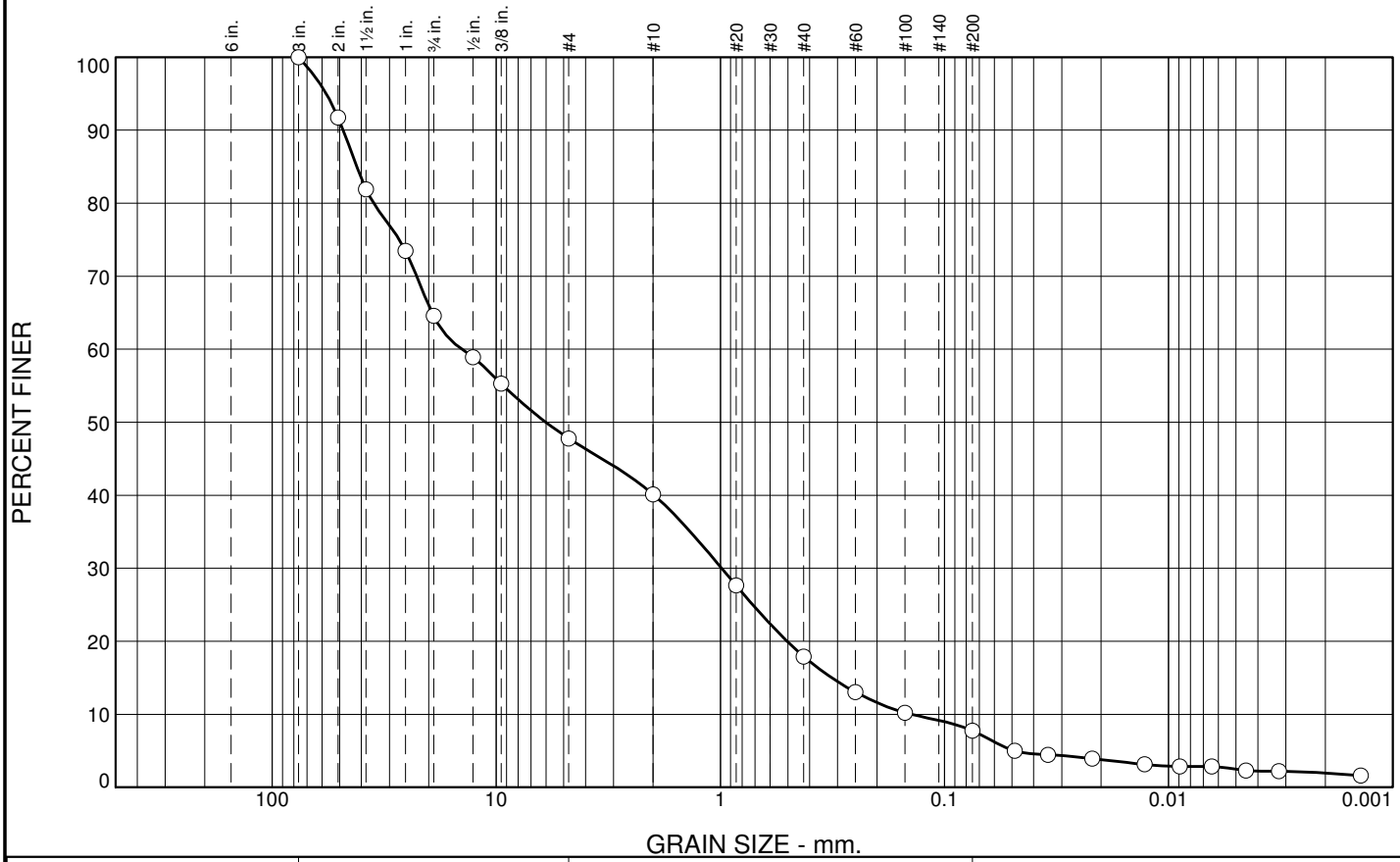
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	35.4	16.8	7.7	22.2	10.2	5.7	2.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	91.7		
1.5	81.9		
1	73.5		
.75	64.6		
.5	58.9		
.375	55.3		
#4	47.8		
#10	40.1		
#20	27.6		
#40	17.9		
#60	13.1		
#100	10.2		
#200	7.7		
0.0486 mm.	5.0		
0.0345 mm.	4.5		
0.0219 mm.	3.9		
0.0128 mm.	3.1		
0.0089 mm.	2.9		
0.0064 mm.	2.9		
0.0045 mm.	2.3		
0.0032 mm.	2.2		
0.0014 mm.	1.6		

* (no specification provided)

Soil Description

poorly graded GRAVEL with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 48.2314 D_{85}= 41.9601 D_{60}= 14.2368
D_{50}= 6.0113 D_{30}= 0.9867 D_{15}= 0.3185
D_{10}= 0.1406 C_u= 101.24 C_c= 0.49

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/9/12
Location: GT12-15 **Elev./Depth:** 18.11-18.31m

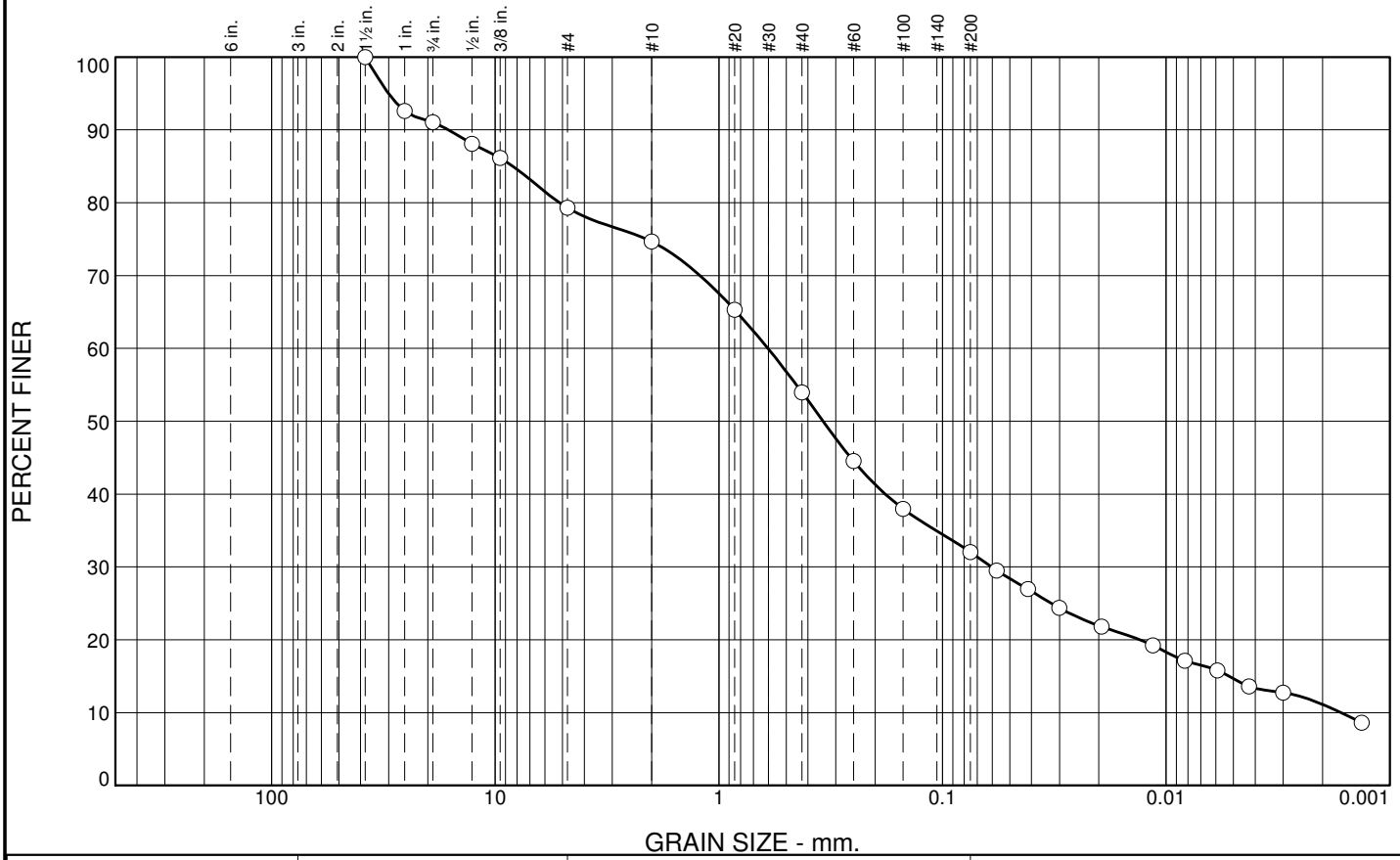
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.0	11.7	4.6	20.7	22.0	20.9	11.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	92.6		
.75	91.0		
.5	88.1		
.375	86.1		
#4	79.3		
#10	74.7		
#20	65.3		
#40	54.0		
#60	44.6		
#100	38.0		
#200	32.0		
0.0572 mm.	29.5		
0.0415 mm.	26.9		
0.0301 mm.	24.4		
0.0194 mm.	21.8		
0.0115 mm.	19.2		
0.0082 mm.	17.1		
0.0059 mm.	15.8		
0.0043 mm.	13.6		
0.0030 mm.	12.7		
0.0013 mm.	8.6		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 16 LL= 27 PI= 11

Coefficients

D_{90}= 16.2080 D_{85}= 8.3525 D_{60}= 0.6034
D_{50}= 0.3422 D_{30}= 0.0604 D_{15}= 0.0052
D_{10}= 0.0017 C_u= 365.08 C_c= 3.66

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/9/12
Location: GT12-15 **Elev./Depth:** 26.6-26.8m

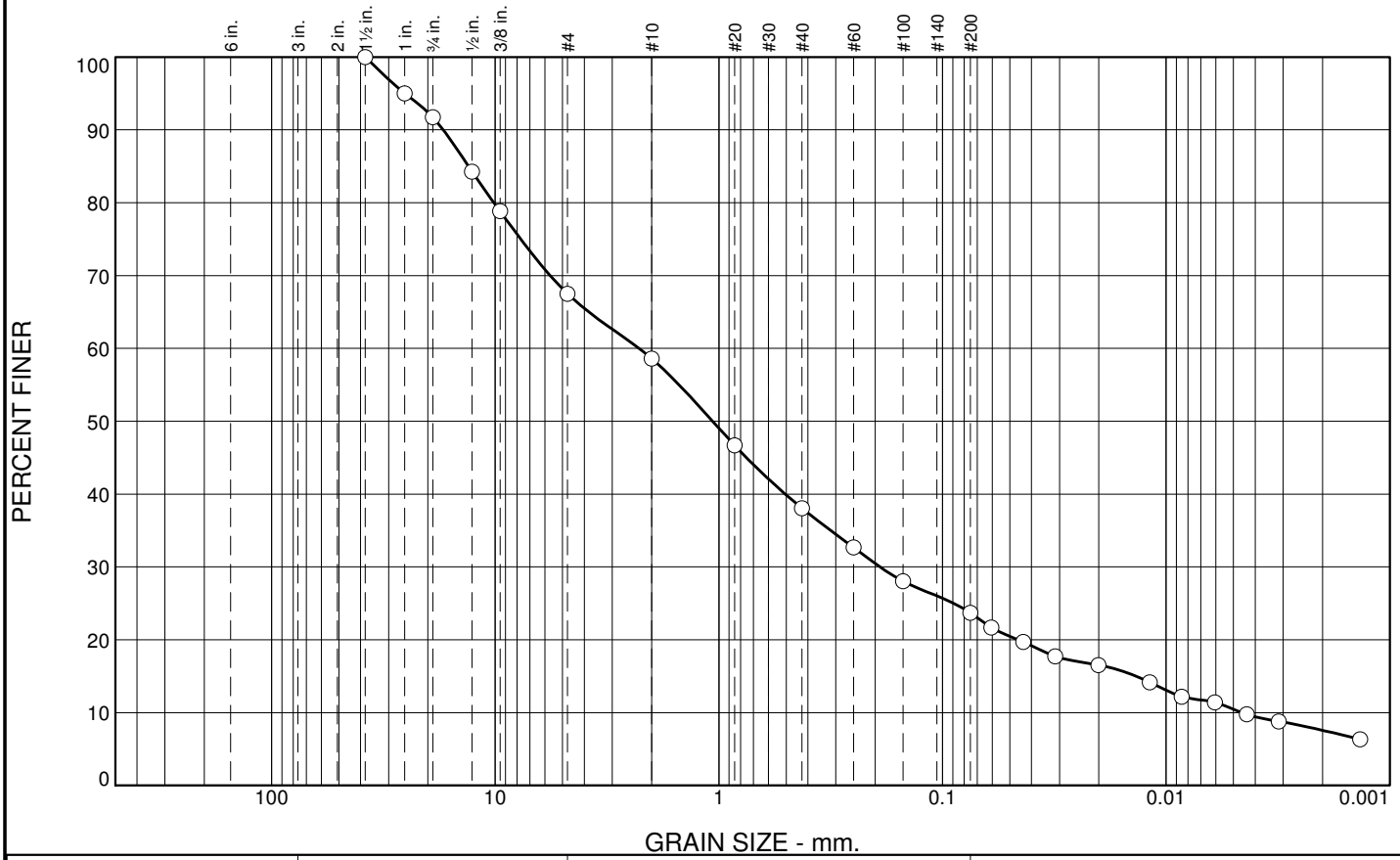
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.3	24.2	8.9	20.5	14.4	16.1	7.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	95.0		
.75	91.7		
.5	84.3		
.375	78.8		
#4	67.5		
#10	58.6		
#20	46.7		
#40	38.1		
#60	32.7		
#100	28.0		
#200	23.7		
0.0605 mm.	21.7		
0.0436 mm.	19.7		
0.0314 mm.	17.7		
0.0201 mm.	16.5		
0.0118 mm.	14.2		
0.0085 mm.	12.2		
0.0061 mm.	11.4		
0.0044 mm.	9.8		
0.0031 mm.	8.8		
0.0014 mm.	6.3		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 16 LL= 28 PI= 12

Coefficients

D_{90}= 17.0782 D_{85}= 13.1754 D_{60}= 2.2757
D_{50}= 1.0674 D_{30}= 0.1900 D_{15}= 0.0136
D_{10}= 0.0046 C_u= 496.73 C_c= 3.46

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/9/12
Location: GT12-15 **Elev./Depth:** 32.5-32.7m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

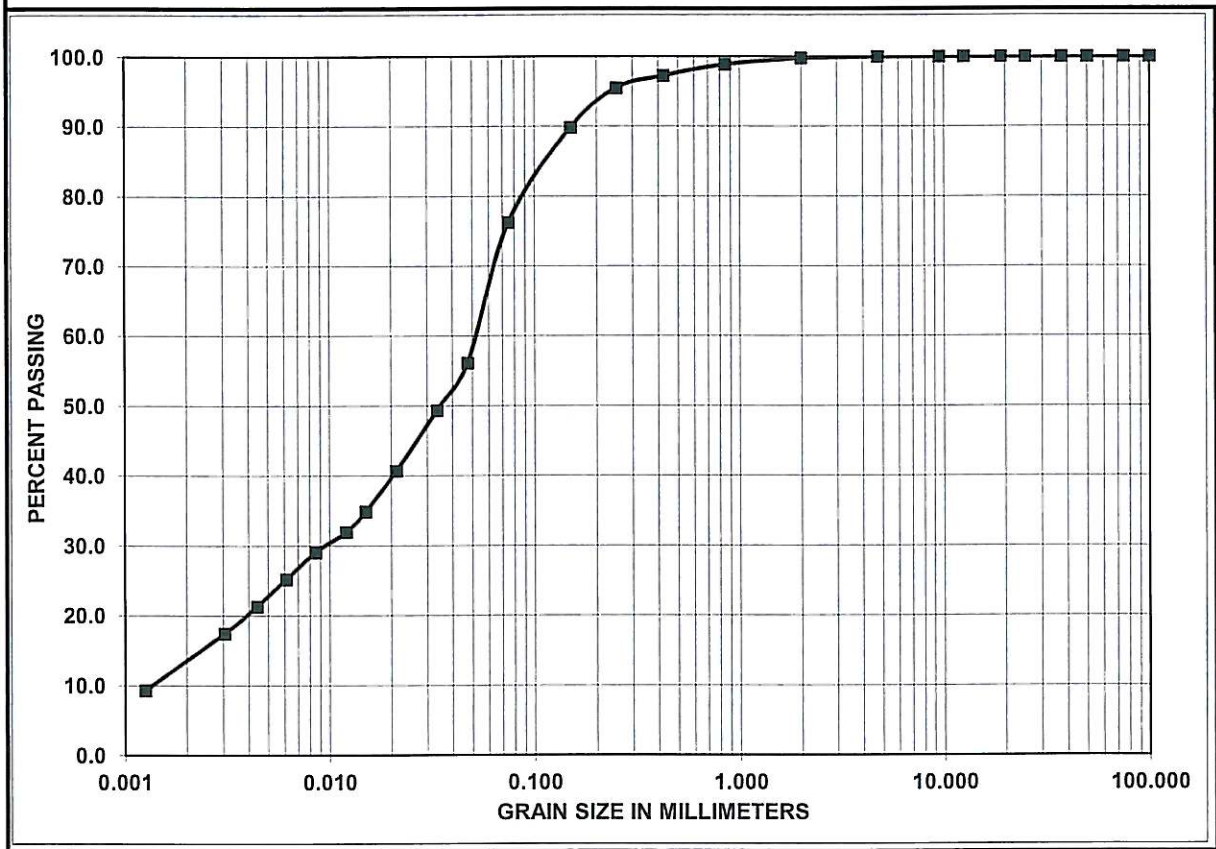
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8605
SAMPLED BY: Client
DATE SAMPLED: 12-Jul-12
SOURCE: GT12-15, sample 9
DATE TESTED: 13-Sep-12
DEPTH: 37.2m - 37.4m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.8
0.850	98.9
0.425	97.3
0.250	95.5
0.150	89.8
0.075	76.2
0.0475	56.1
0.0336	49.4
0.0212	40.7
0.0150	34.8
0.0121	31.9
0.0085	29.0
0.0061	25.2
0.0044	21.3
0.0030	17.4
0.0013	9.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	23.79%
SILT	63.54%
CLAY	12.67%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

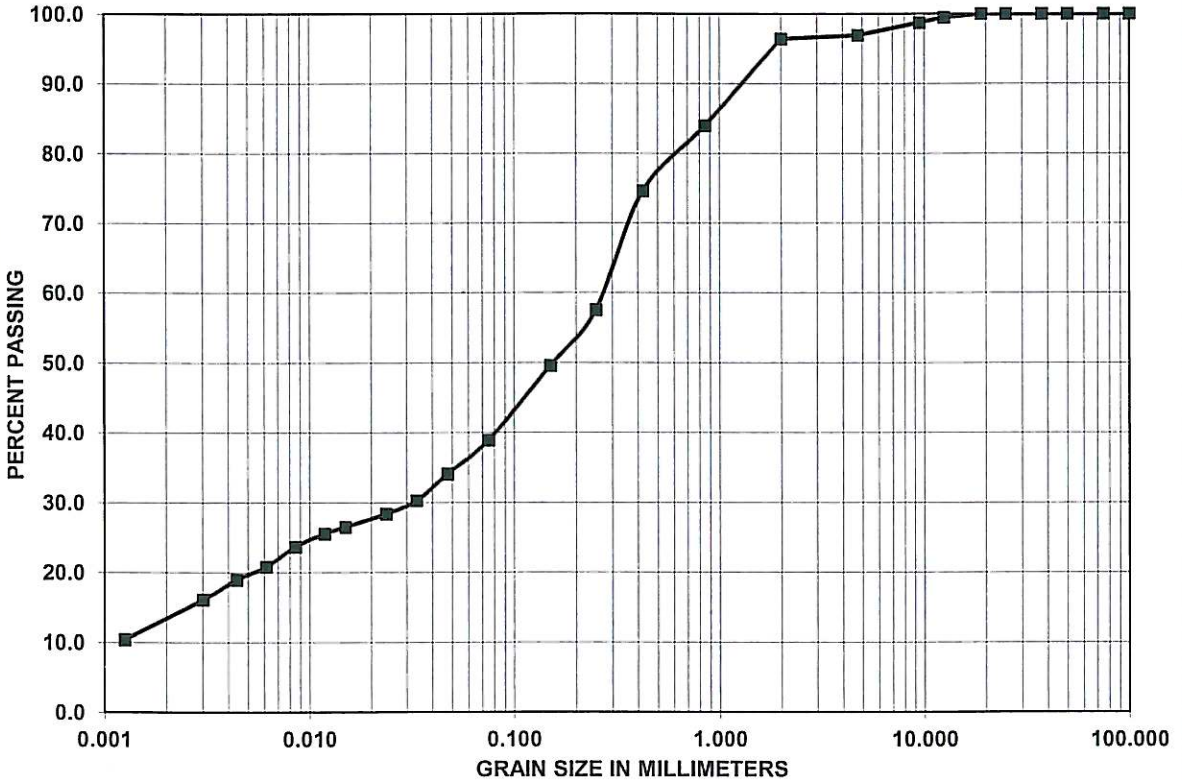
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8606
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 10
DATE TESTED: 13-Sep-12
DEPTH: 52.5m - 53.35m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.5
9.5	98.7
4.75	96.9
2.00	96.4
0.850	83.9
0.425	74.6
0.250	57.5
0.150	49.6
0.075	38.9
0.0474	34.1
0.0335	30.3
0.0237	28.4
0.0150	26.5
0.0119	25.6
0.0085	23.7
0.0061	20.8
0.0044	18.9
0.0030	16.1
0.0013	10.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	3.08%
SAND	58.04%
SILT	26.05%
CLAY	12.83%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

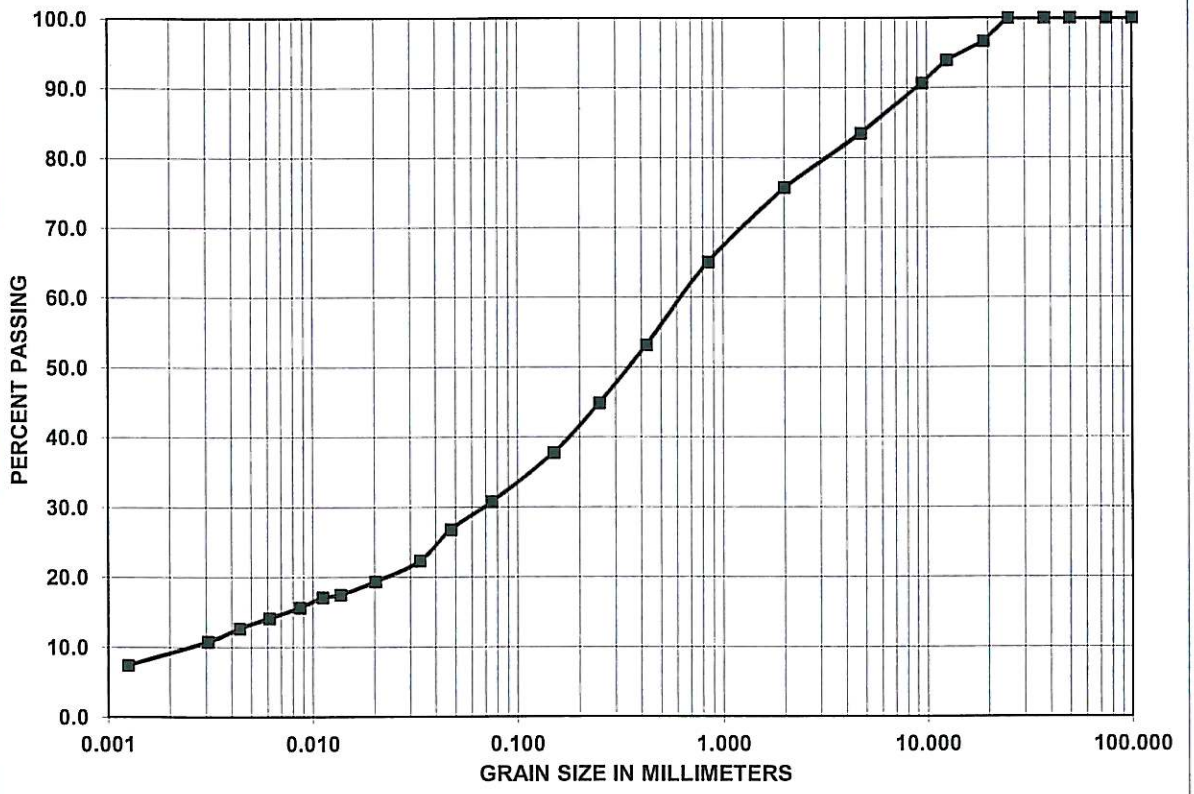
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8607
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 11
DATE TESTED: 13ep12
DEPTH: 53.1m - 53.3m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	96.6
12.5	93.9
9.5	90.6
4.75	83.4
2.00	75.7
0.850	65.0
0.425	53.2
0.250	44.9
0.150	37.7
0.075	30.8
0.0474	26.8
0.0335	22.3
0.0202	19.3
0.0137	17.5
0.0112	17.1
0.0087	15.6
0.0061	14.1
0.0044	12.6
0.0031	10.8
0.0013	7.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	16.58%
SAND	52.66%
SILT	21.94%
CLAY	8.82%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

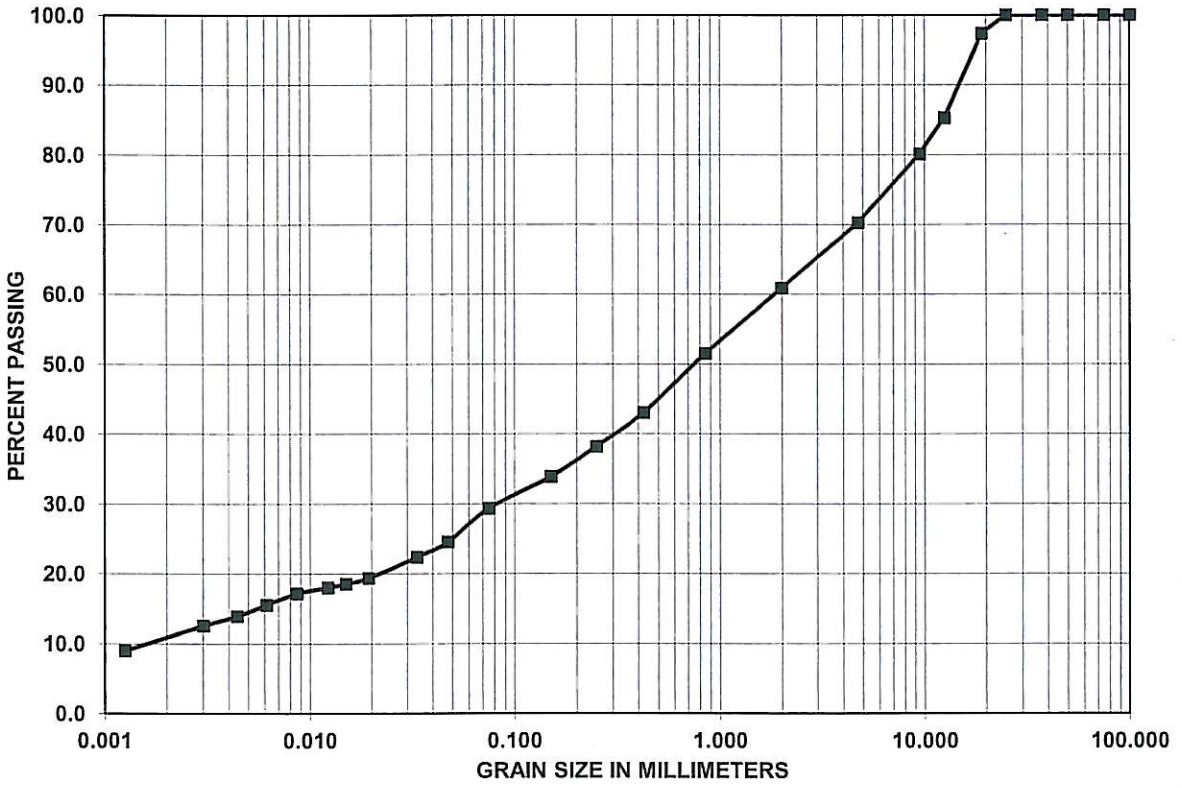
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8608
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 14
DATE TESTED: 13-Sep-12
DEPTH: 63.0m - 63.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	97.4
12.5	85.3
9.5	80.1
4.75	70.3
2.00	60.9
0.850	51.5
0.425	43.0
0.250	38.2
0.150	33.9
0.075	29.4
0.0474	24.6
0.0335	22.4
0.0194	19.4
0.0150	18.6
0.0122	18.0
0.0087	17.2
0.0061	15.6
0.0044	13.9
0.0030	12.6
0.0013	9.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	29.73%
SAND	40.91%
SILT	18.85%
CLAY	10.51%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

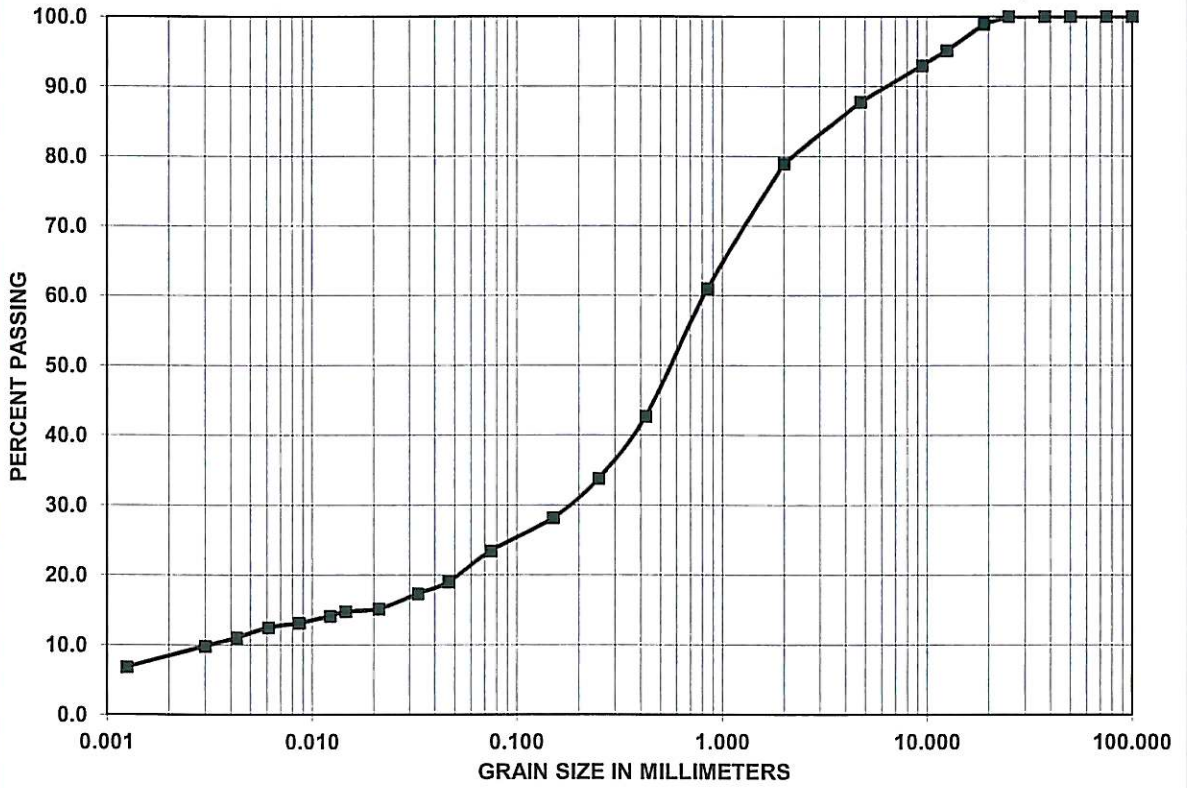
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 20-Sep-12

PROJECT NAME: Blackwater

TEST No: S8609
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 15
DATE TESTED: 20-Sep-12
DEPTH: 66.65-66.85m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	98.9
12.5	95.1
9.5	92.9
4.75	87.7
2.00	78.9
0.850	61.0
0.425	42.7
0.250	33.8
0.150	28.2
0.075	23.4
0.0467	19.0
0.0330	17.3
0.0212	15.1
0.0146	14.7
0.0122	14.1
0.0087	13.1
0.0061	12.4
0.0043	11.0
0.0030	9.8
0.0013	6.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	12.28%
SAND	64.31%
SILT	15.31%
CLAY	8.10%

TECHNICIAN: T. Renton

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Engineering interpretation or evaluation of the test results is provided only on written request.

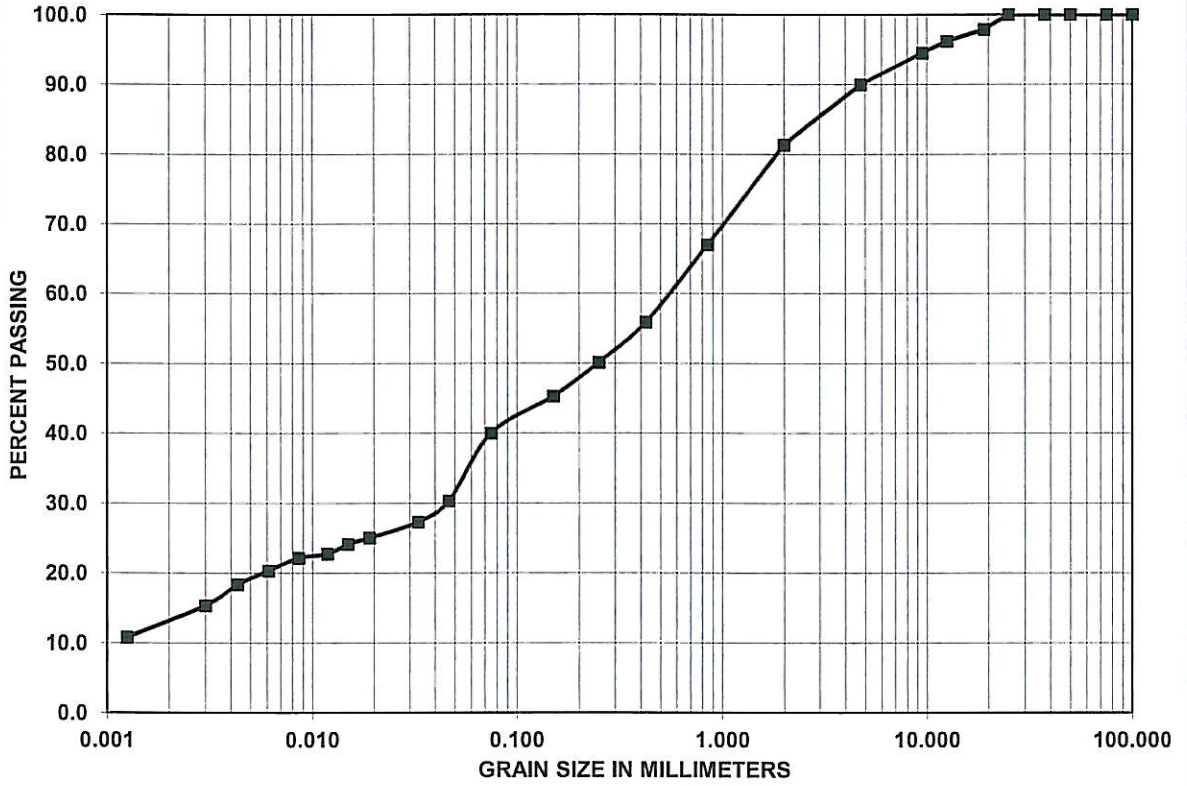
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 20-Sep-12

PROJECT NAME: Blackwater

TEST No: S8610
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 17
DATE TESTED: 20-Sep-12
DEPTH: 68.6m - 69.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	97.9
12.5	96.2
9.5	94.5
4.75	89.9
2.00	81.3
0.850	67.0
0.425	55.9
0.250	50.1
0.150	45.3
0.075	40.0
0.0467	30.3
0.0330	27.3
0.0190	25.0
0.0150	24.1
0.0118	22.8
0.0086	22.1
0.0061	20.3
0.0043	18.4
0.0030	15.3
0.0013	10.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	10.06%
SAND	49.97%
SILT	27.25%
CLAY	12.72%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
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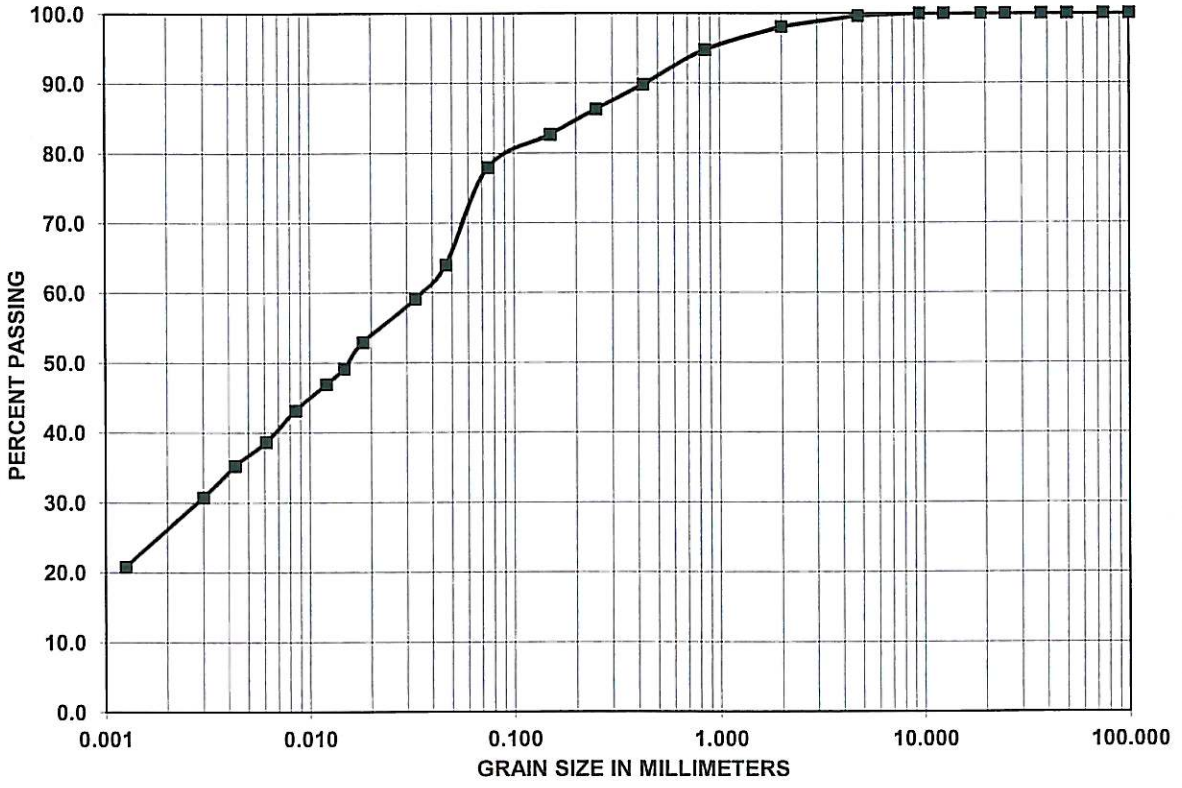
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 20-Sep-12

PROJECT NAME: Blackwater

TEST No: S8611
SAMPLED BY: Client
DATE SAMPLED: 13-Jul-12
SOURCE: GT12-15, sample 19
DATE TESTED: 20-Sep-12
DEPTH: 76.48m - 76.68m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	99.7
2.00	98.1
0.850	94.8
0.425	89.8
0.250	86.3
0.150	82.6
0.075	77.9
0.0466	64.0
0.0330	59.1
0.0183	52.9
0.0148	49.2
0.0121	46.9
0.0085	43.2
0.0061	38.7
0.0043	35.3
0.0030	30.8
0.0013	20.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.35%
SAND	21.72%
SILT	52.84%
CLAY	25.09%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

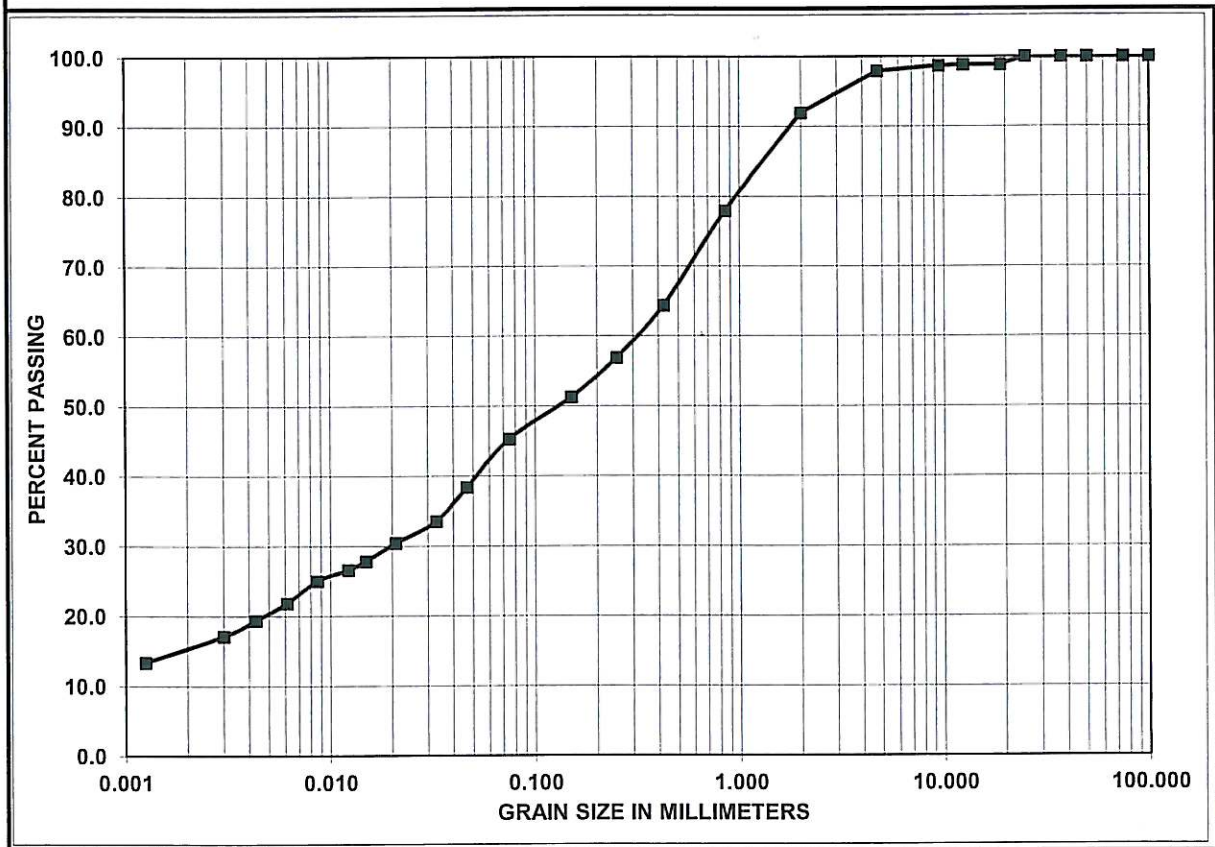
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 20-Sep-12

PROJECT NAME: Blackwater

TEST No: S8612
SAMPLED BY: Client
DATE SAMPLED: 14-Jul-12
SOURCE: GT12-15, sample 22
DATE TESTED: 20-Sep-12
DEPTH: 81.0m - 81.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	98.8
12.5	98.8
9.5	98.7
4.75	97.9
2.00	91.9
0.850	77.9
0.425	64.3
0.250	56.9
0.150	51.3
0.075	45.3
0.0466	38.4
0.0330	33.5
0.0209	30.4
0.0150	27.9
0.0122	26.6
0.0087	25.0
0.0061	21.8
0.0043	19.3
0.0030	17.1
0.0013	13.3

REMARKS:

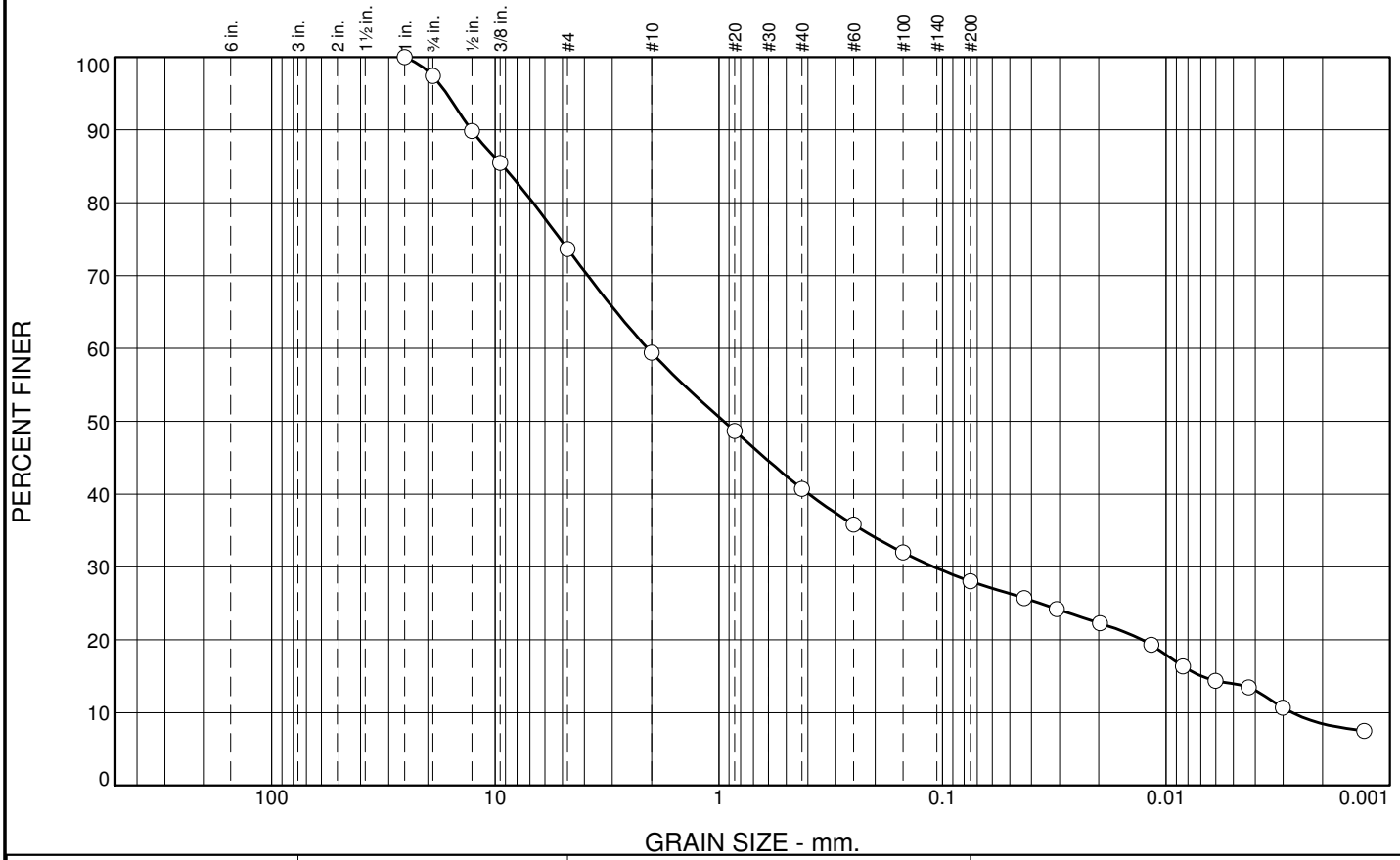
D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	2.10%
SAND	52.63%
SILT	30.32%
CLAY	14.95%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.6	23.7	14.3	18.7	12.6	14.1	14.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	97.4		
.5	89.8		
.375	85.5		
#4	73.7		
#10	59.4		
#20	48.7		
#40	40.7		
#60	35.8		
#100	32.0		
#200	28.1		
0.0431 mm.	25.7		
0.0308 mm.	24.2		
0.0198 mm.	22.3		
0.0117 mm.	19.3		
0.0084 mm.	16.3		
0.0060 mm.	14.4		
0.0043 mm.	13.5		
0.0030 mm.	10.7		
0.0013 mm.	7.5		

* (no specification provided)

Soil Description

clayey sand with gravel

Atterberg Limits

PL= 16 LL= 36 PI= 20

Coefficients

D_{90}= 12.8227 D_{85}= 9.2315 D_{60}= 2.0824
D_{50}= 0.9505 D_{30}= 0.1092 D_{15}= 0.0069
D_{10}= 0.0027 C_u= 761.05 C_c= 2.09

Classification

USCS= SC AASHTO= A-2-6(1)

Remarks

Sample No.: 24 **Source of Sample:** **Date:** 9/14/2012
Location: GH12-15 **Elev./Depth:** 86.12-86.32m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: rv **Checked By:** jdb

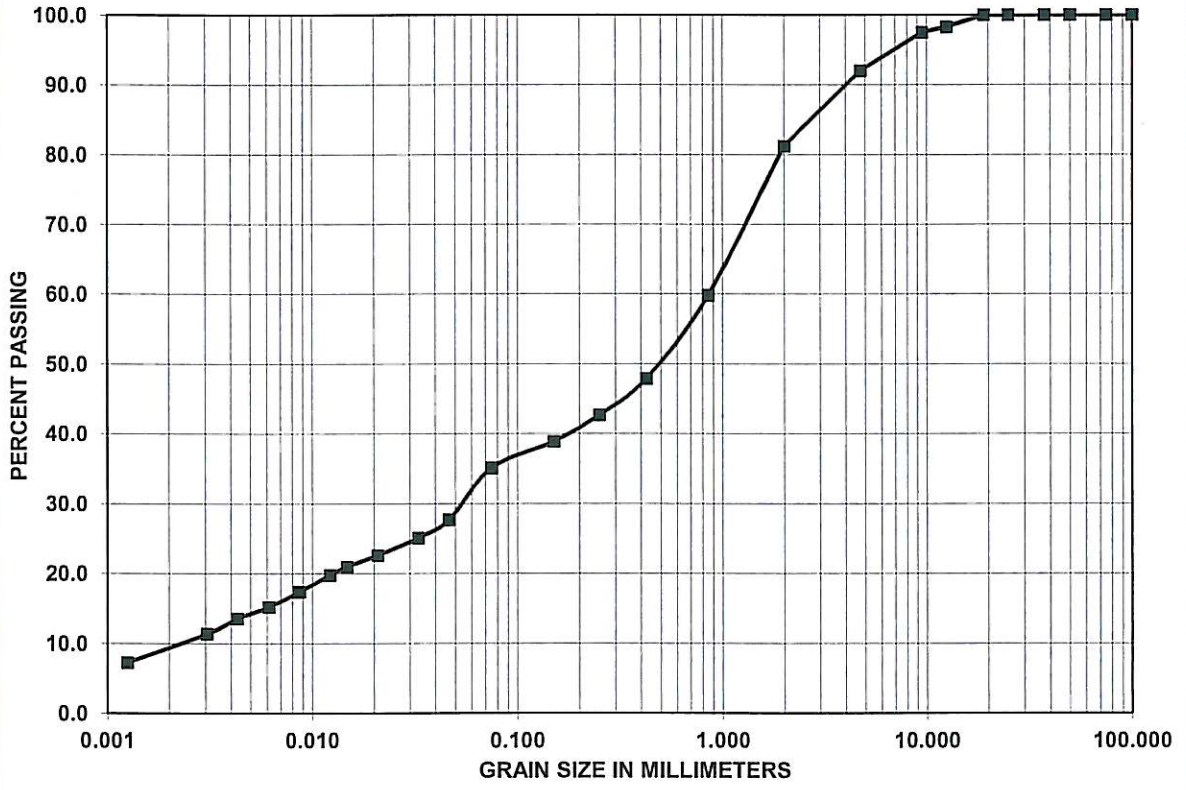
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 21-Sep-12

PROJECT NAME: Blackwater

TEST No: S8613
SAMPLED BY: Client
DATE SAMPLED: 14-Jul-12
SOURCE: GT12-15, sample 26
DATE TESTED: 21-Sep-12
DEPTH: 90.6m - 90.8m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	98.3
9.5	97.5
4.75	92.0
2.00	81.2
0.850	59.8
0.425	47.9
0.250	42.7
0.150	38.9
0.075	35.1
0.0467	27.7
0.0330	25.1
0.0209	22.6
0.0148	21.0
0.0122	19.8
0.0087	17.4
0.0061	15.2
0.0043	13.6
0.0031	11.4
0.0013	7.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	8.01%
SAND	56.92%
SILT	26.10%
CLAY	8.97%

TECHNICIAN: T. Renton

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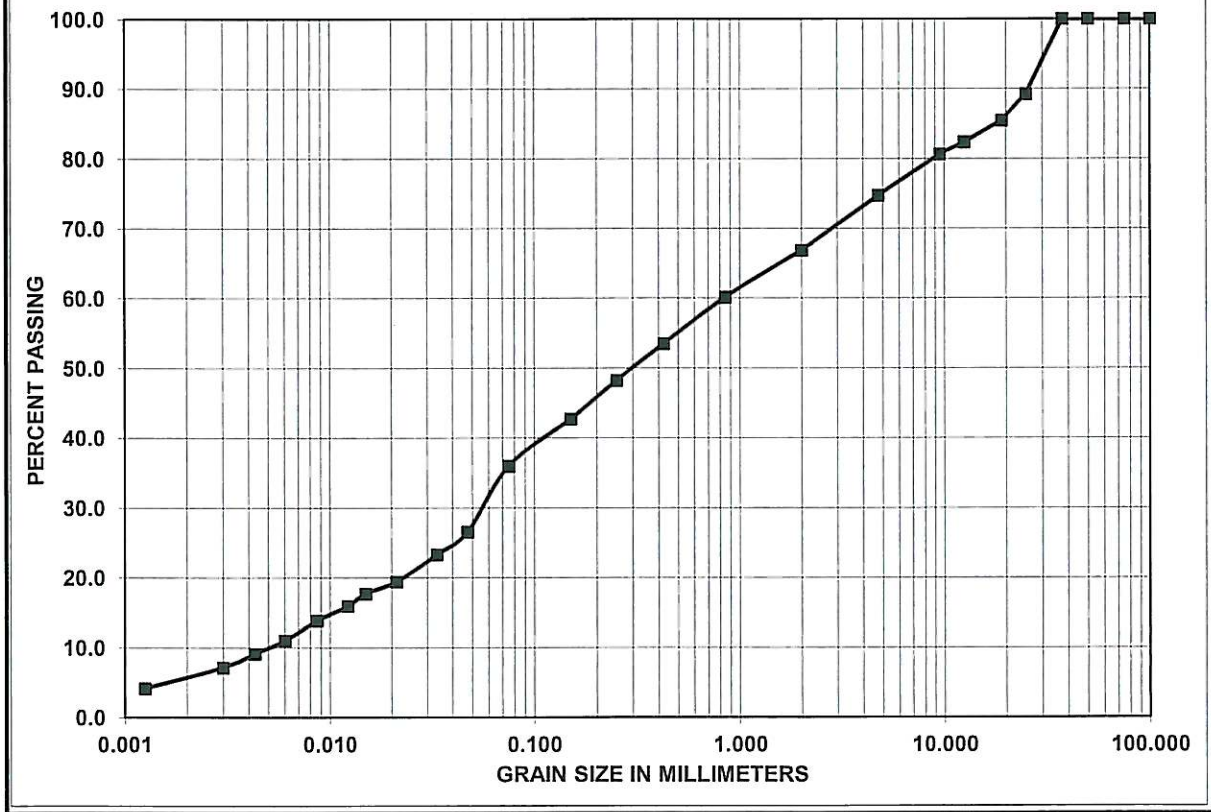
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 21-Sep-12

PROJECT NAME: Blackwater

TEST No: S8614
SAMPLED BY: Client
DATE SAMPLED: 14-Jul-12
SOURCE: GT12-16, sample 2
DATE TESTED: 21-Sep-12
DEPTH: 1.9m - 2.1m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	89.2
19.0	85.4
12.5	82.3
9.5	80.6
4.75	74.7
2.00	66.8
0.850	60.1
0.425	53.5
0.250	48.2
0.150	42.7
0.075	35.9
0.0473	26.5
0.0335	23.3
0.0212	19.4
0.0150	17.7
0.0122	15.9
0.0087	13.8
0.0060	11.0
0.0043	9.1
0.0030	7.2
0.0013	4.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	25.28%
SAND	38.77%
SILT	30.48%
CLAY	5.46%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
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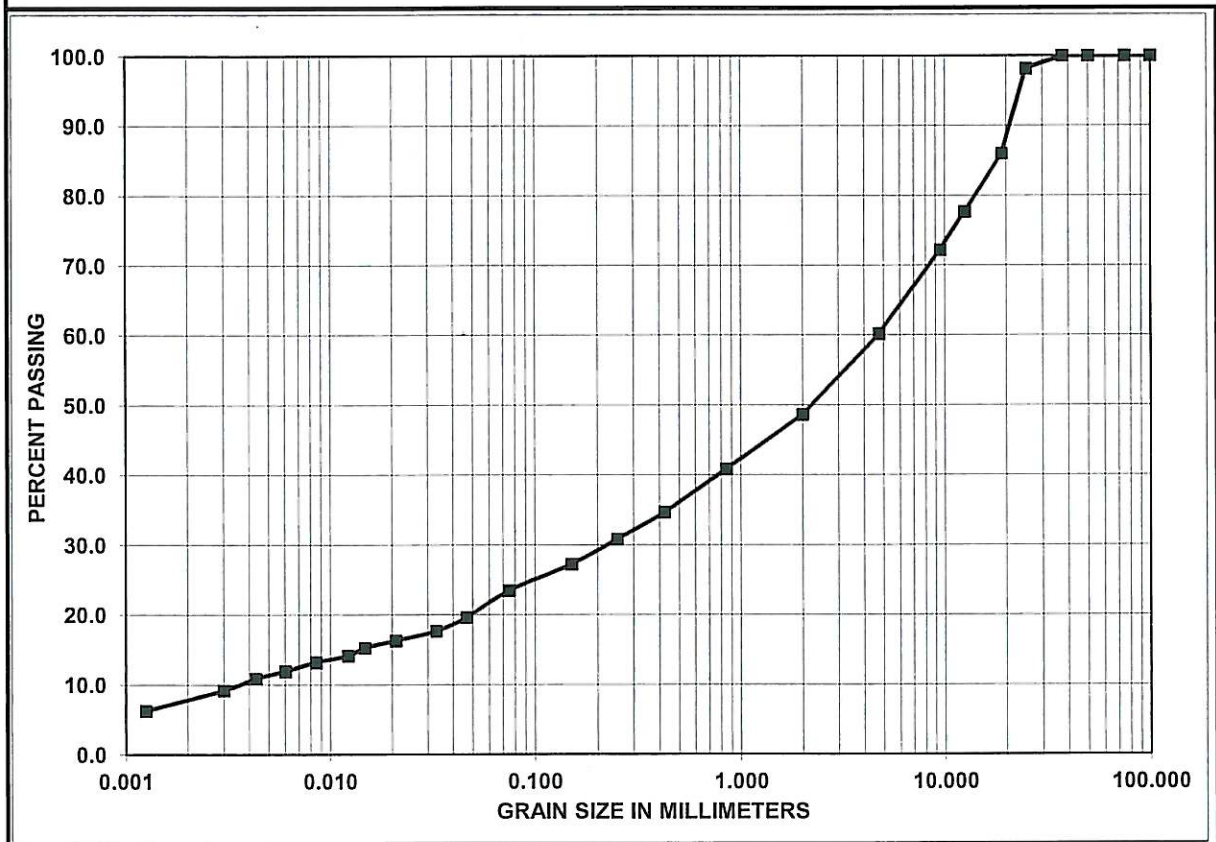
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 21-Sep-12

PROJECT NAME: Blackwater

TEST No: S8615
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 4
DATE TESTED: 19-Sep-12
DEPTH: 6.75m - 6.95m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	98.1
19.0	86.0
12.5	77.6
9.5	72.2
4.75	60.2
2.00	48.6
0.850	40.8
0.425	34.7
0.250	30.8
0.150	27.2
0.075	23.4
0.0467	19.6
0.0330	17.6
0.0209	16.3
0.0148	15.2
0.0122	14.1
0.0085	13.2
0.0060	11.9
0.0043	10.9
0.0030	9.2
0.0013	6.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	39.84%
SAND	36.74%
SILT	15.90%
CLAY	7.52%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

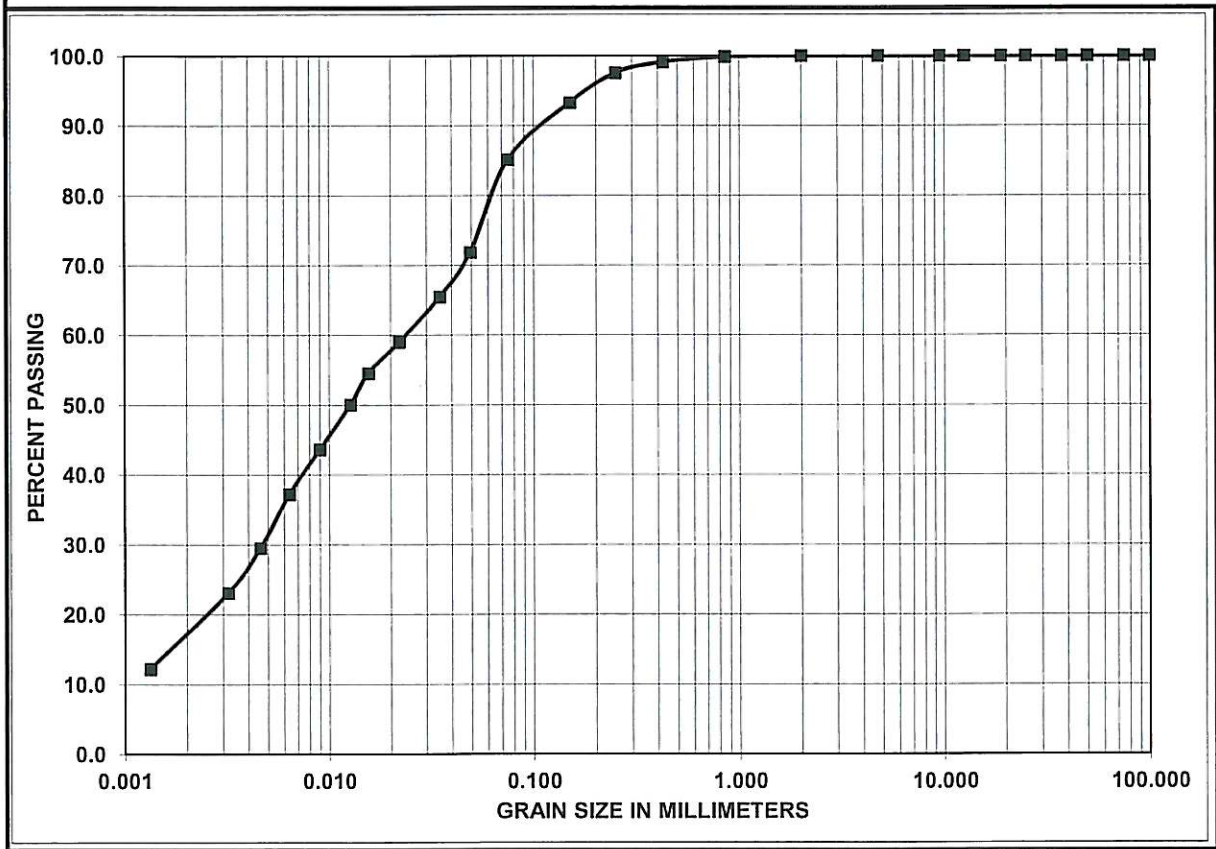
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8616
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 6
DATE TESTED: 19-Sep-12
DEPTH: 10.0m - 10.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	92.8
19.0	92.8
12.5	81.1
9.5	74.8
4.75	60.5
2.00	43.2
0.850	33.6
0.425	25.8
0.250	20.7
0.150	16.1
0.075	11.9
0.0467	16.9
0.0330	14.7
0.0209	13.6
0.0150	13.3
0.0122	13.1
0.0087	12.5
0.0060	11.4
0.0043	9.8
0.0030	9.1
0.0013	5.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	39.54%
SAND	48.60%
SILT	4.62%
CLAY	7.23%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

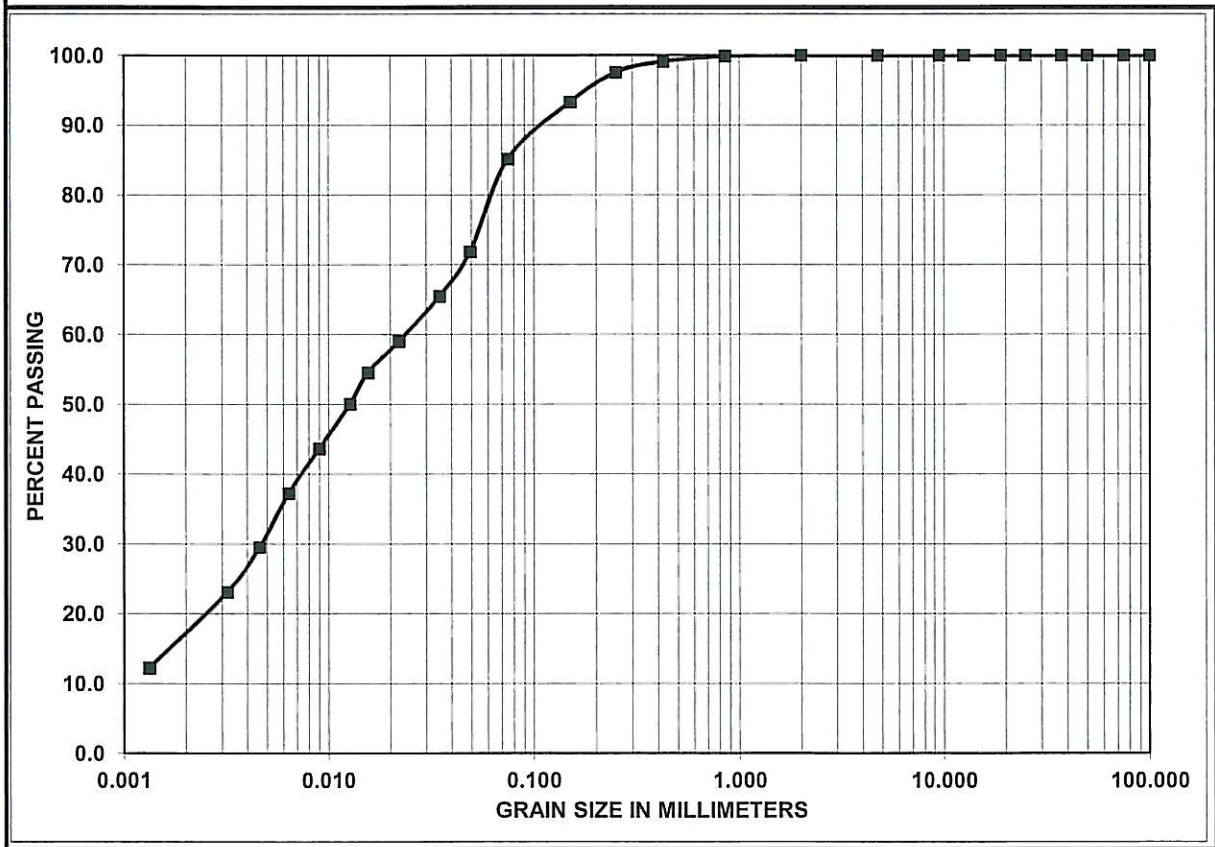
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8617
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 9
DATE TESTED: 21-Sep-12
DEPTH: 17.8m - 18.0m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	96.4
9.5	93.8
4.75	87.6
2.00	80.9
0.850	76.0
0.425	71.4
0.250	68.1
0.150	64.3
0.075	56.7
0.0473	42.5
0.0335	35.9
0.0212	27.7
0.0143	21.7
0.0110	18.6
0.0086	14.7
0.0061	12.4
0.0043	9.3
0.0030	7.0
0.0013	3.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	12.40%
SAND	30.86%
SILT	51.98%
CLAY	4.76%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

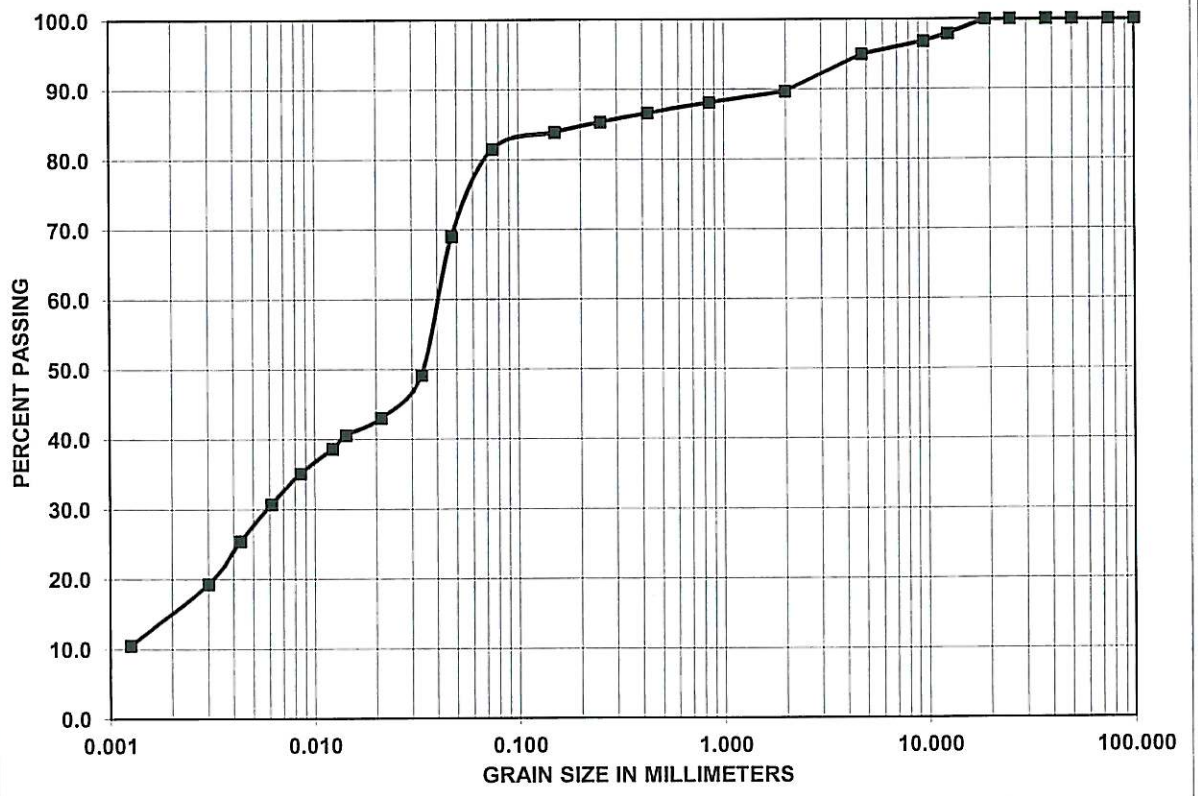
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8618
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 16
DATE TESTED: 21-Sep-12
DEPTH: 35.83m - 36.03m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	97.9
9.5	96.8
4.75	95.0
2.00	89.7
0.850	88.1
0.425	86.6
0.250	85.3
0.150	83.9
0.075	81.5
0.0473	69.0
0.0335	49.1
0.0212	43.0
0.0143	40.5
0.0123	38.6
0.0085	35.1
0.0061	30.7
0.0043	25.4
0.0030	19.3
0.0013	10.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	5.01%
SAND	13.49%
SILT	67.24%
CLAY	14.27%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

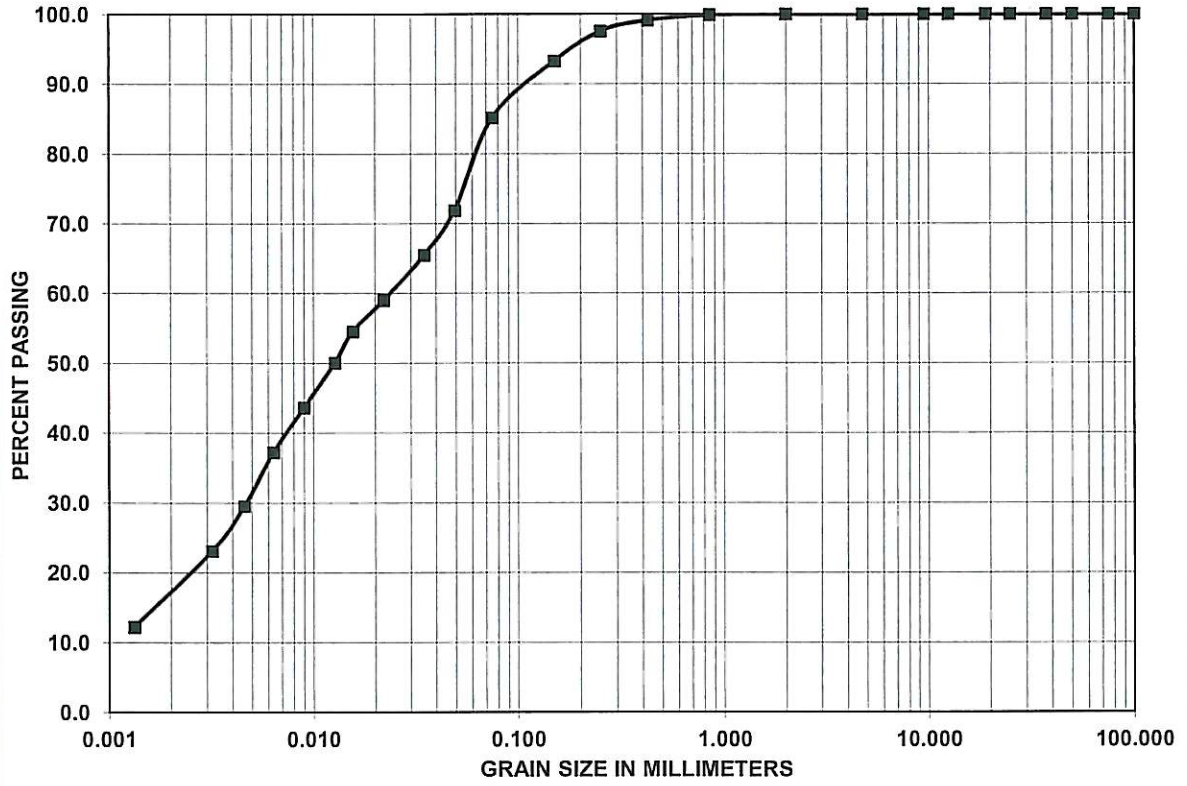
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 23-Sep-12

PROJECT NAME: Blackwater

TEST No: S8619
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 22
DATE TESTED: 21-Sep-12
DEPTH: 51.58m - 51.78m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.8
4.75	99.7
2.00	98.8
0.850	98.0
0.425	97.1
0.250	94.6
0.150	88.4
0.075	76.9
0.0467	62.3
0.0335	49.1
0.0212	44.4
0.0143	43.4
0.0122	42.5
0.0085	39.6
0.0061	35.9
0.0043	31.2
0.0030	27.4
0.0012	20.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.33%
SAND	22.79%
SILT	53.73%
CLAY	23.16%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

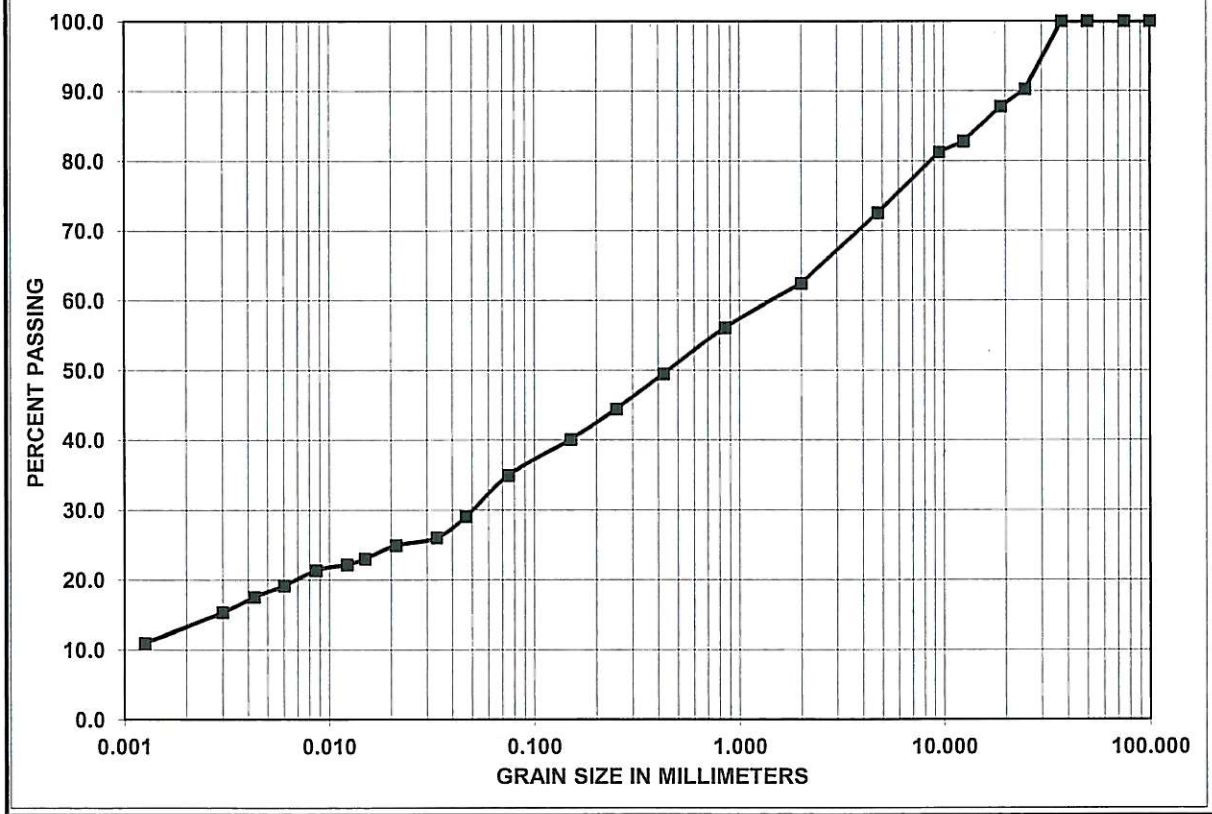
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8620
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 24
DATE TESTED: 21-Sep-12
DEPTH: 54.29m - 54.49m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	90.2
19.0	87.8
12.5	82.8
9.5	81.2
4.75	72.5
2.00	62.4
0.850	56.1
0.425	49.5
0.250	44.4
0.150	40.1
0.075	34.9
0.0467	29.0
0.0335	26.0
0.0212	24.9
0.0150	23.0
0.0122	22.2
0.0086	21.4
0.0060	19.2
0.0043	17.5
0.0030	15.3
0.0013	11.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	27.46%
SAND	37.60%
SILT	22.11%
CLAY	12.84%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

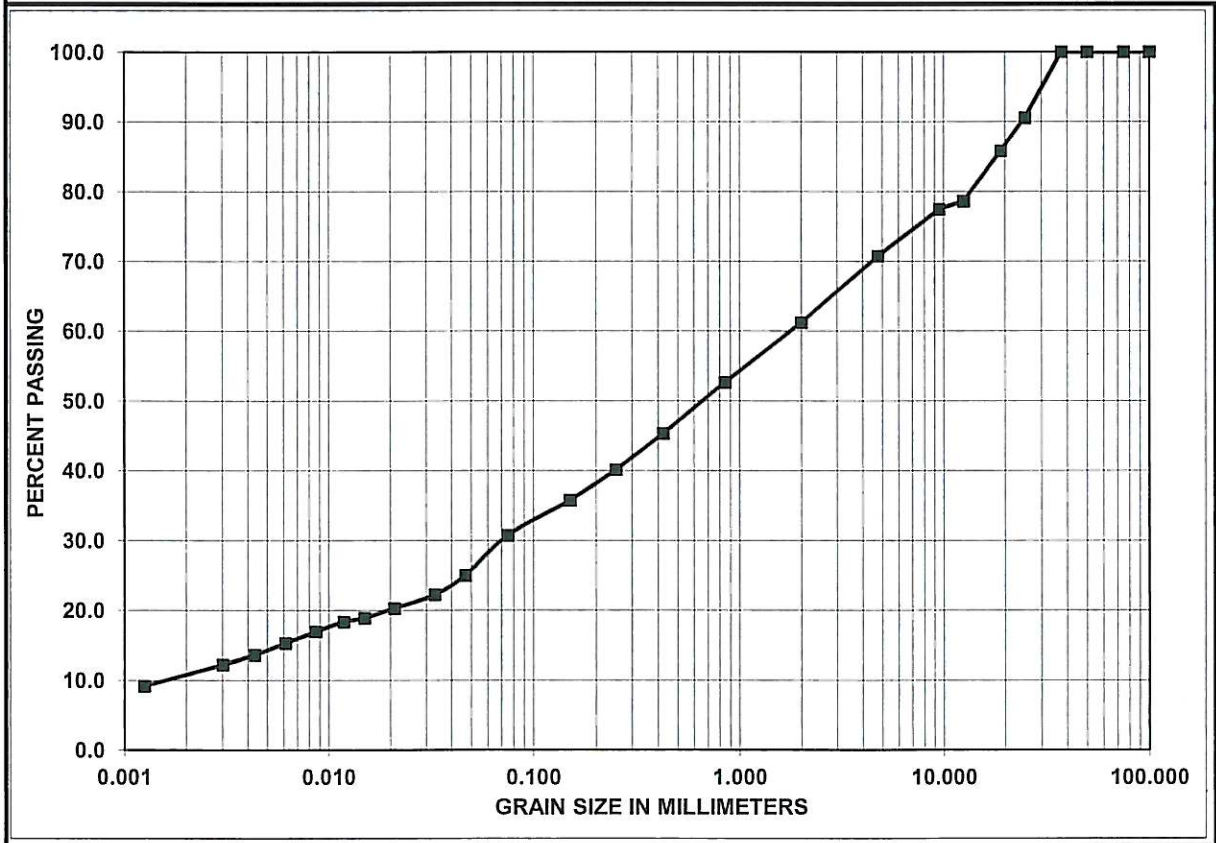
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8621
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 26
DATE TESTED: 21-Sep-12
DEPTH: 59.32m - 59.52m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	90.5
19.0	85.8
12.5	78.6
9.5	77.5
4.75	70.7
2.00	61.2
0.850	52.6
0.425	45.3
0.250	40.1
0.150	35.8
0.075	30.7
0.0467	25.0
0.0330	22.2
0.0209	20.3
0.0150	18.9
0.0118	18.3
0.0087	17.0
0.0061	15.3
0.0043	13.6
0.0030	12.2
0.0013	9.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	29.26%
SAND	40.03%
SILT	20.24%
CLAY	10.47%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.

Engineering interpretation or evaluation of the test results is provided only on written request.

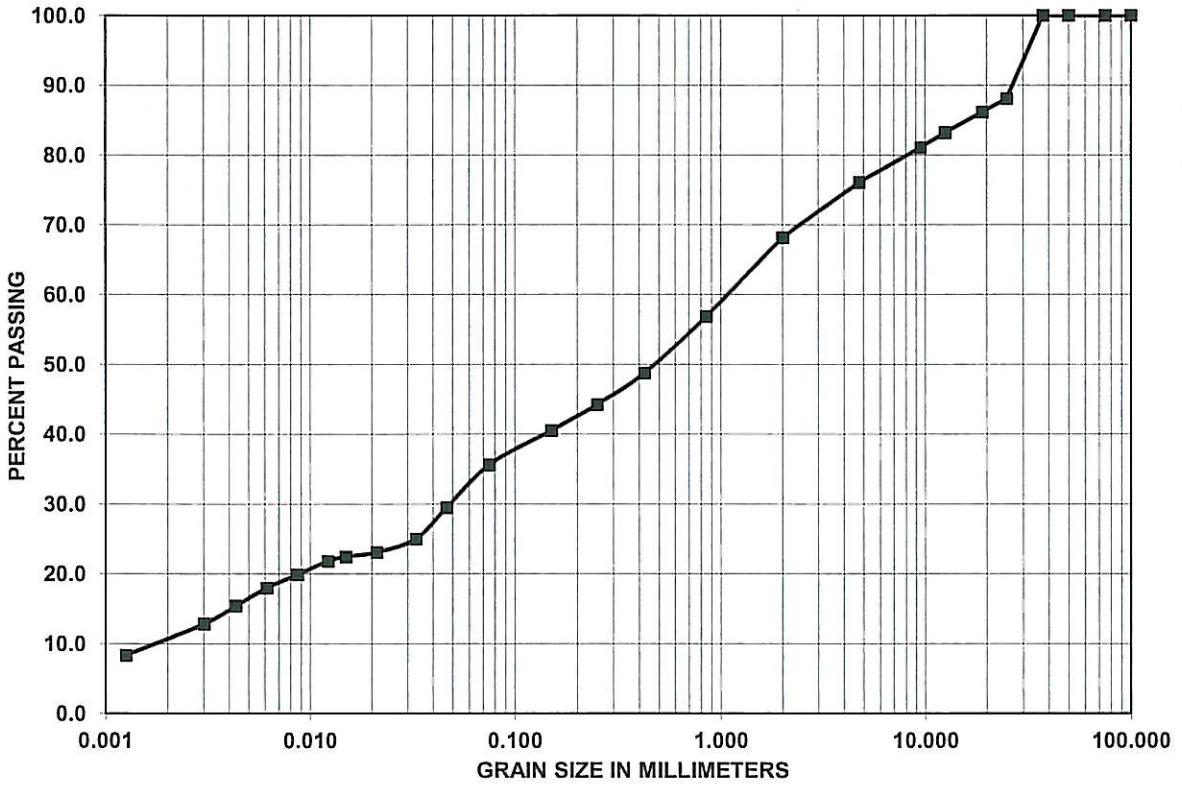
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8622
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 31
DATE TESTED: 21-Sep-12
DEPTH: 67.46m - 67.66m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	88.1
19.0	86.1
12.5	83.2
9.5	81.1
4.75	76.1
2.00	68.2
0.850	56.9
0.425	48.7
0.250	44.2
0.150	40.5
0.075	35.6
0.0467	29.5
0.0330	25.0
0.0212	23.1
0.0150	22.4
0.0122	21.8
0.0087	19.9
0.0061	18.0
0.0043	15.4
0.0030	12.8
0.0013	8.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	23.93%
SAND	40.49%
SILT	25.33%
CLAY	10.25%

TECHNICIAN: T. Renton

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

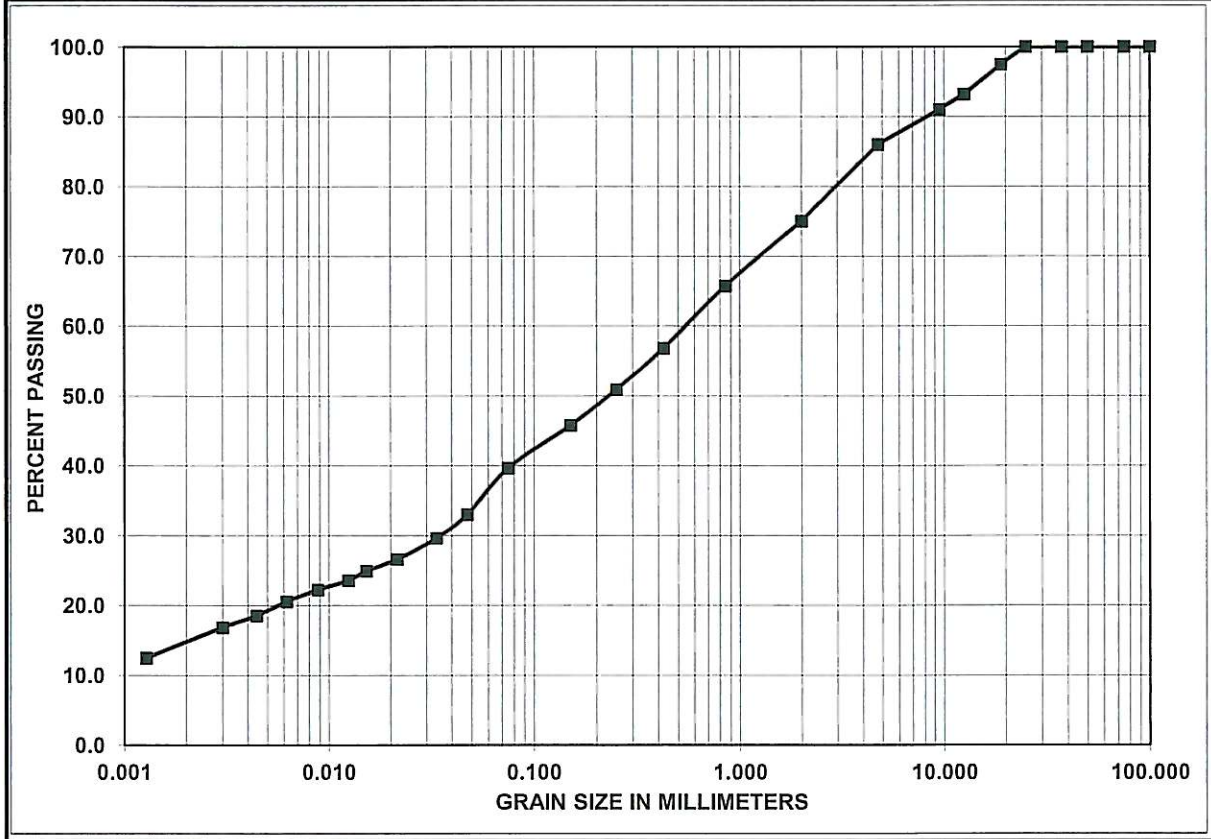
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8623
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 32
DATE TESTED: 26-Sep-12
DEPTH: 69.5m - 69.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	97.5
12.5	93.2
9.5	91.0
4.75	86.0
2.00	75.0
0.850	65.7
0.425	56.8
0.250	50.9
0.150	45.8
0.075	39.6
0.0476	33.0
0.0336	29.7
0.0216	26.6
0.0153	24.9
0.0125	23.6
0.0088	22.2
0.0062	20.6
0.0044	18.5
0.0030	16.8
0.0013	12.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_C =	N/A

GRAVEL	14.01%
SAND	46.36%
SILT	25.32%
CLAY	14.30%

TECHNICIAN: S. Herman

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

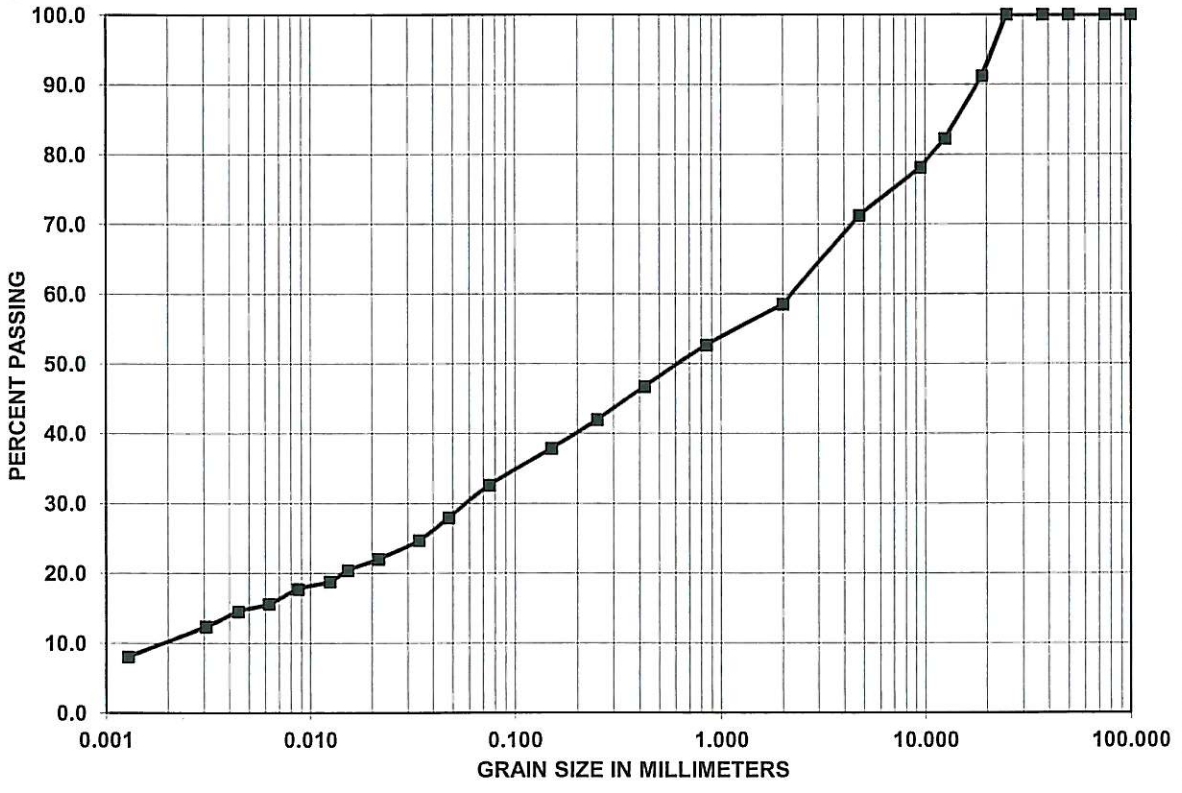
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8624
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 35
DATE TESTED: 26-Sep-12
DEPTH: 77.5m - 77.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	91.2
12.5	82.3
9.5	78.1
4.75	71.2
2.00	58.5
0.850	52.7
0.425	46.7
0.250	42.0
0.150	37.8
0.075	32.6
0.0476	27.9
0.0341	24.7
0.0216	22.0
0.0153	20.4
0.0125	18.8
0.0087	17.7
0.0062	15.6
0.0044	14.5
0.0031	12.3
0.0013	8.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	28.79%
SAND	38.62%
SILT	22.80%
CLAY	9.79%

TECHNICIAN: S. Herman

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

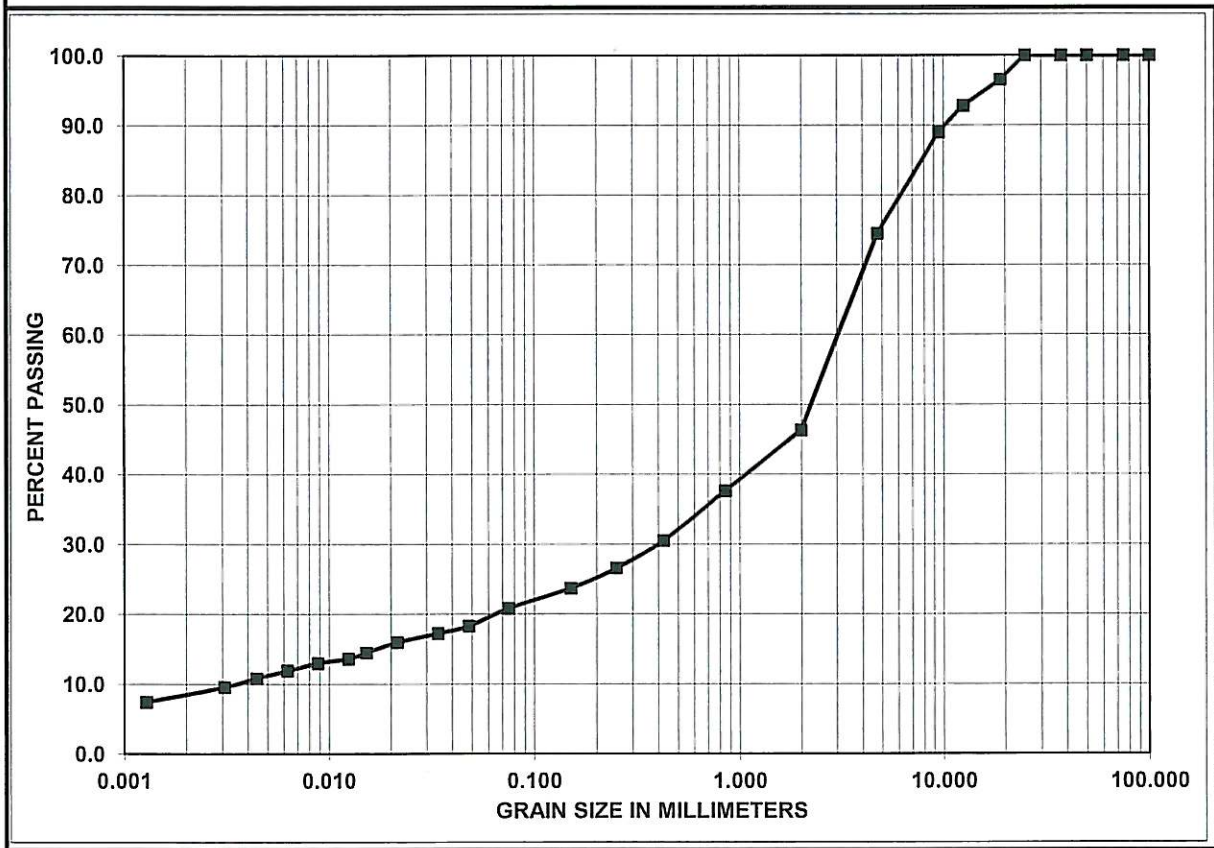
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Nanaimo, BC
PROJECT: KX05349
DATE: 01-Oct-12

PROJECT NAME: Blackwater

TEST No: S8625
SAMPLED BY: Client
DATE SAMPLED: 16-Jul-12
SOURCE: GT12-16, sample 39
DATE TESTED: 26-Sep-12
DEPTH: 89.66-89.86m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	96.5
12.5	92.8
9.5	89.0
4.75	74.5
2.00	46.3
0.850	37.6
0.425	30.5
0.250	26.6
0.150	23.7
0.075	20.8
0.0482	18.3
0.0341	17.2
0.0216	16.0
0.0153	14.5
0.0125	13.6
0.0088	13.0
0.0062	11.9
0.0044	10.8
0.0031	9.6
0.0013	7.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	25.53%
SAND	53.67%
SILT	12.50%
CLAY	8.31%

TECHNICIAN: S. Herman

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AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

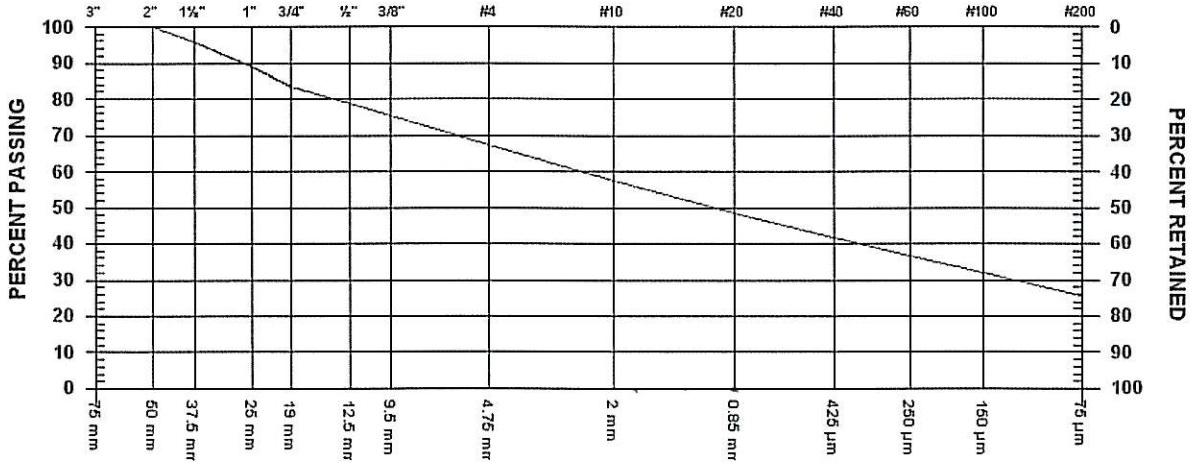
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 20 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Nov.16 DATE SAMPLED 2012.Jul.20

SUPPLIER
SOURCE 1.1m - 1.3m
SPECIFICATION
MATERIAL TYPE GT12-17, sample 01

SAMPLED BY Client
TESTED BY D. deSousa
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	95.6	
1"	25 mm	89.1	
3/4"	19 mm	83.3	
1/2"	12.5 mm	78.9	
3/8"	9.5 mm	75.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	67.1	
No. 10	2.00 mm	57.4	
No. 20	850 µm	48.7	
No. 40	425 µm	41.6	
No. 60	250 µm	36.6	
No. 100	150 µm	31.9	
No. 200	75 µm	25.5	

COMMENTS

Page 1 of 1 2012.Nov.19 AMEC Environment & Infrastructure PER. JMichaud

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GRAIN SIZE DISTRIBUTION

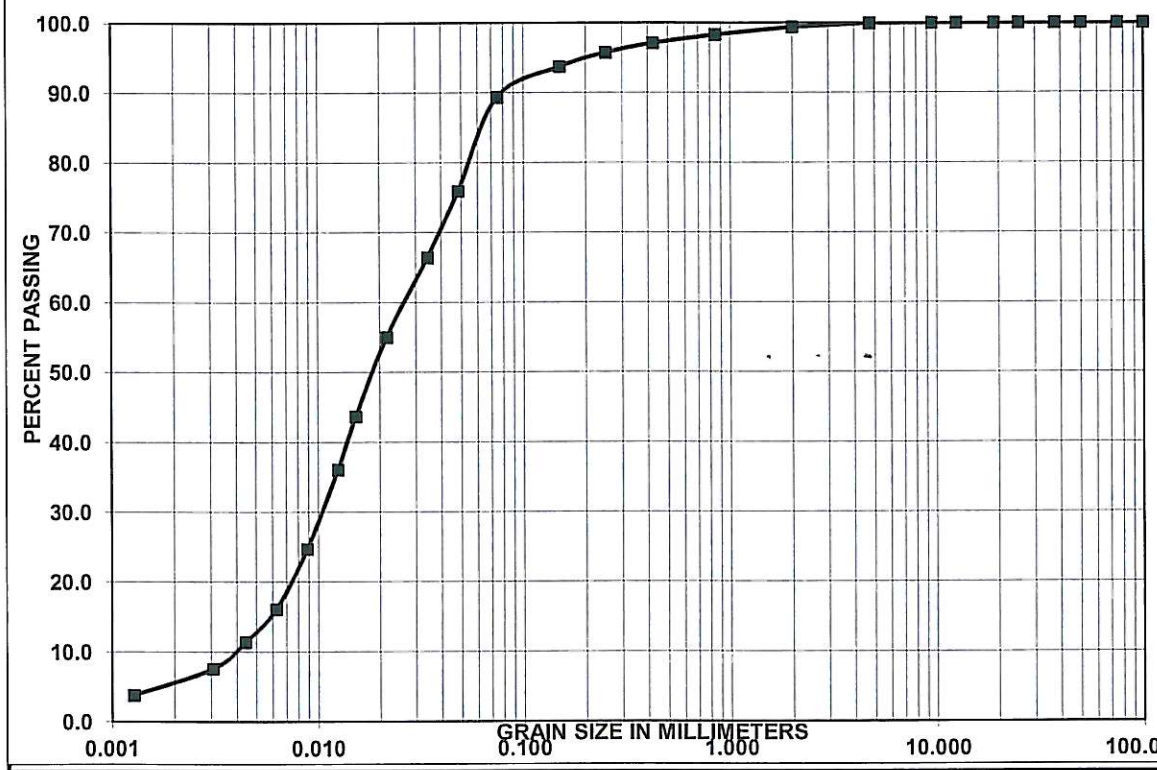
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Jul-12
SOURCE: GT12-17, sample 03
DATE TESTED: 16-Nov-12
DEPTH: 5.33m - 5.53m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.4
0.850	98.3
0.425	97.1
0.250	95.7
0.150	93.7
0.075	89.4
0.0485	75.9
0.0343	66.4
0.0217	55.0
0.0153	43.6
0.0125	36.0
0.0089	24.7
0.0063	16.1
0.0044	11.4
0.0031	7.6
0.0013	3.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.04%
SAND	10.59%
SILT	84.04%
CLAY	5.33%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

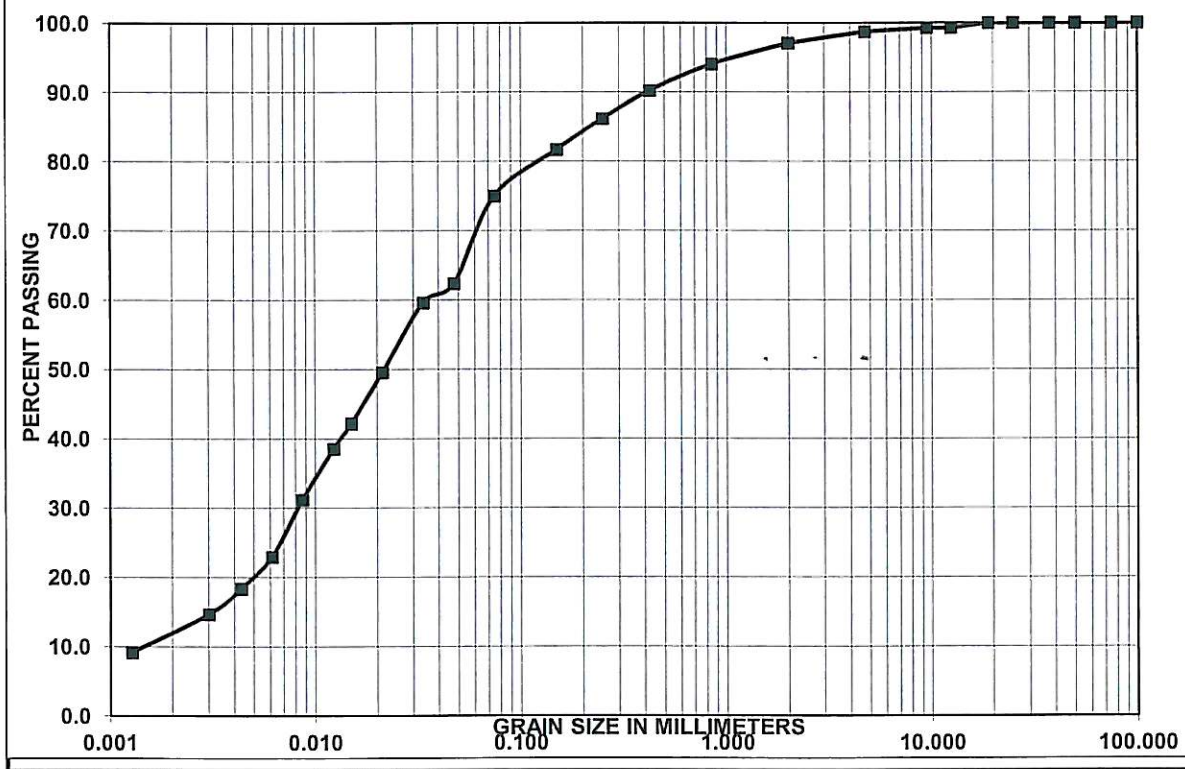
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Jul-12
SOURCE: GT12-17, sample 10
DATE TESTED: 19-Nov-12
DEPTH: 25.46m - 25.66m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.3
9.5	99.3
4.75	98.7
2.00	97.1
0.850	94.0
0.425	90.2
0.250	86.1
0.150	81.7
0.075	75.0
0.0476	62.4
0.0337	59.6
0.0213	49.5
0.0151	42.2
0.0123	38.5
0.0087	31.2
0.0061	22.9
0.0043	18.3
0.0030	14.7
0.0013	9.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.25%
SAND	23.75%
SILT	63.53%
CLAY	11.46%

TECHNICIAN: Bruce Garlick

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GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

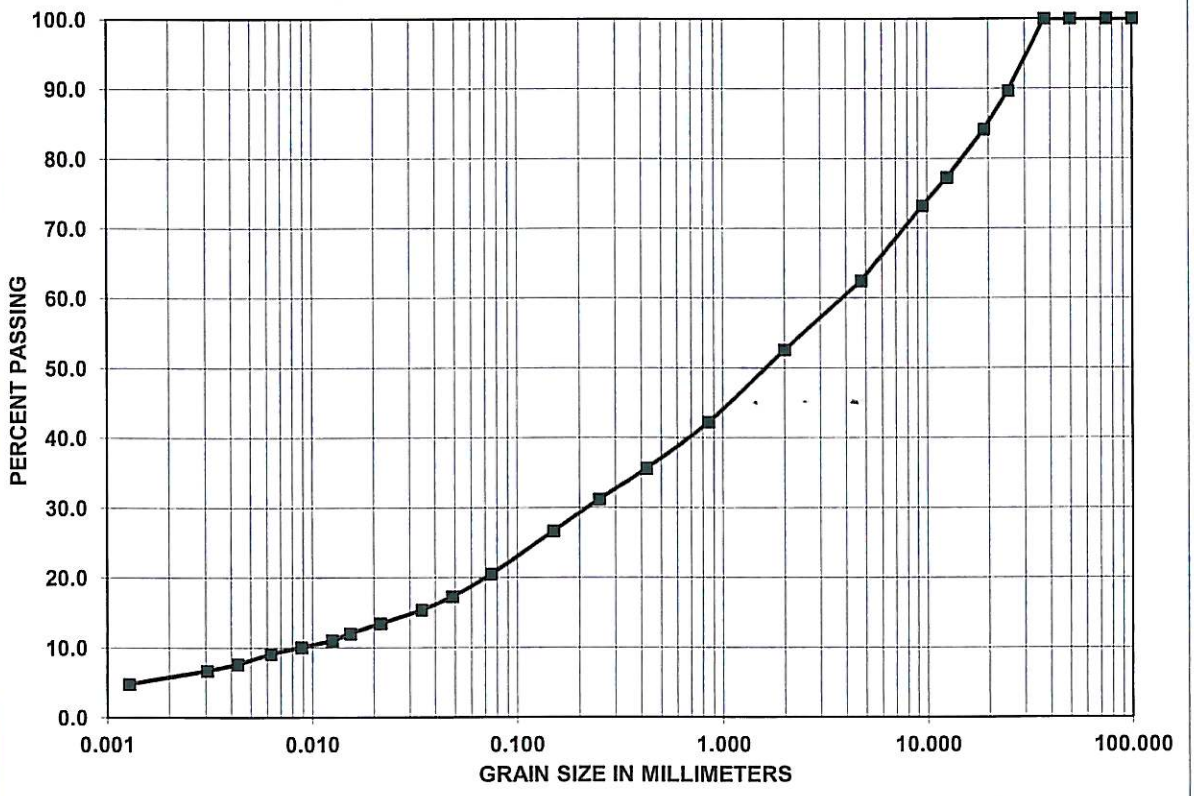
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 22-Nov-12

TEST No:
DATE SAMPLED: 20-Jul-12
DATE TESTED: 20-Nov-12

SAMPLED BY: Client
SOURCE: GT12-17, sample 14
DEPTH: 36.94m - 37.14m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	89.6
19.0	84.1
12.5	77.2
9.5	73.2
4.75	62.4
2.00	52.6
0.850	42.2
0.425	35.6
0.250	31.2
0.150	26.6
0.075	20.5
0.0485	17.3
0.0343	15.3
0.0217	13.4
0.0153	12.0
0.0125	11.0
0.0089	10.1
0.0063	9.1
0.0043	7.7
0.0031	6.7
0.0013	4.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	37.59%
SAND	41.91%
SILT	14.92%
CLAY	5.58%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:

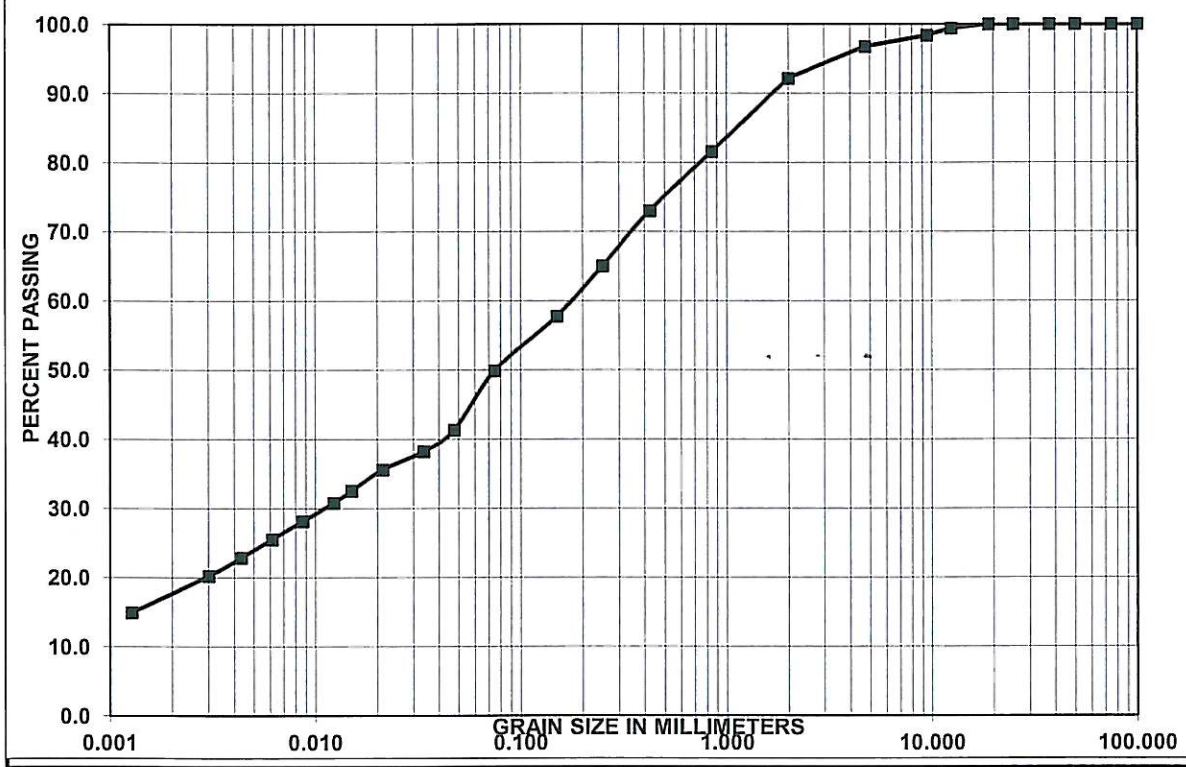
DATE SAMPLED: 20-Jul-12

DATE TESTED: 19-Nov-12

SAMPLED BY: Client

SOURCE: GT12-17, sample 22

DEPTH: 63.18m - 63.38m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.4
9.5	98.4
4.75	96.8
2.00	92.1
0.850	81.6
0.425	73.0
0.250	65.0
0.150	57.7
0.075	49.8
0.0476	41.3
0.0337	38.2
0.0213	35.6
0.0151	32.5
0.0123	30.8
0.0087	28.1
0.0061	25.5
0.0043	22.8
0.0030	20.2
0.0013	14.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	3.24%
SAND	46.93%
SILT	32.70%
CLAY	17.14%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

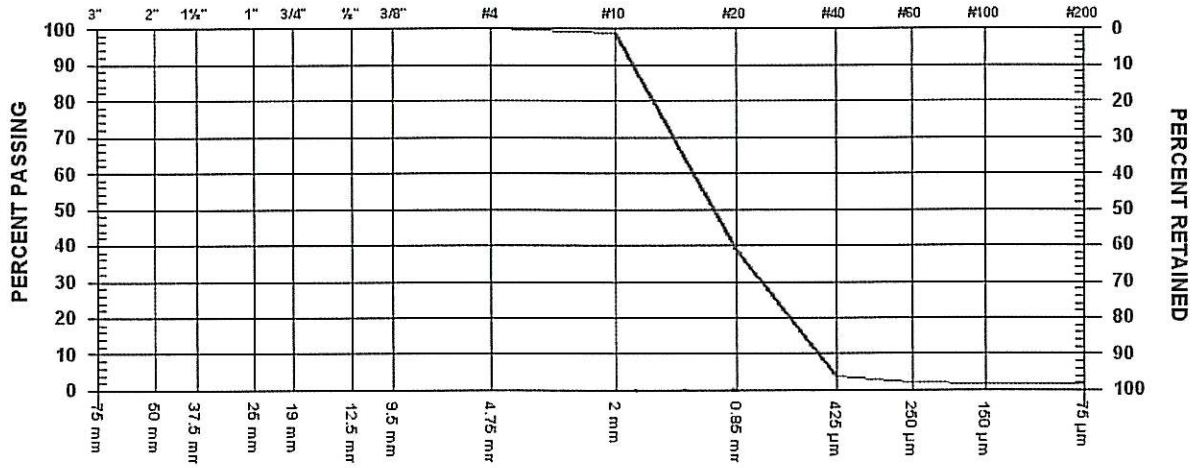
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 21 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Nov.16 DATE SAMPLED 2012.Jul.20

SUPPLIER
SOURCE 73.48m - 73.68m
SPECIFICATION
MATERIAL TYPE GT12-17, sample 26

SAMPLED BY Client
TESTED BY D. deSousa
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	100.0	
No. 10	2.00 mm	98.9	
No. 20	850 µm	38.7	
No. 40	425 µm	4.0	
No. 60	250 µm	2.1	
No. 100	150 µm	1.9	
No. 200	75 µm	1.7	

COMMENTS

Page 1 of 1 2012.Nov.19 AMEC Environment & Infrastructure PER. GMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

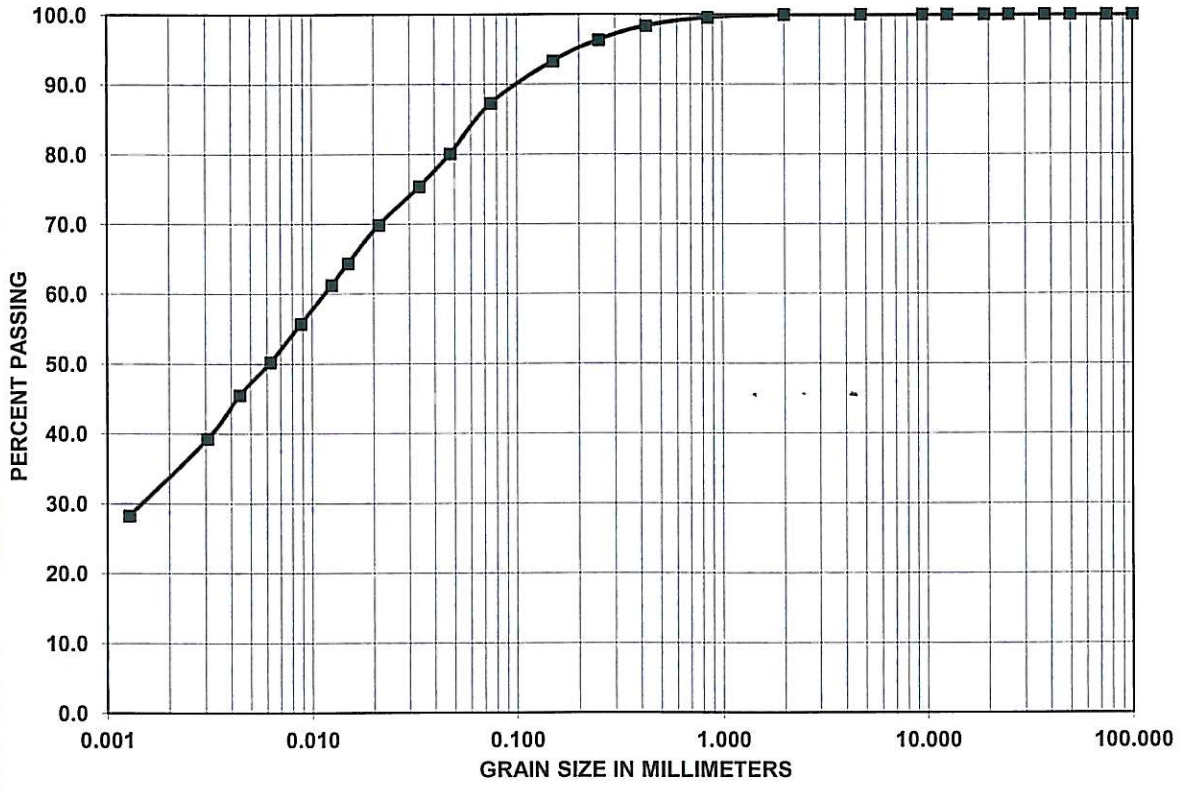
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Jul-12
SOURCE: GT12-17, sample 29
DATE TESTED: 20-Nov-12
DEPTH: 80.7m - 80.9m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.6
0.425	98.3
0.250	96.3
0.150	93.3
0.075	87.2
0.0476	80.0
0.0337	75.3
0.0213	69.8
0.0151	64.4
0.0125	61.2
0.0088	55.7
0.0063	50.2
0.0044	45.5
0.0031	39.2
0.0013	28.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	12.78%
SILT	54.53%
CLAY	32.69%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

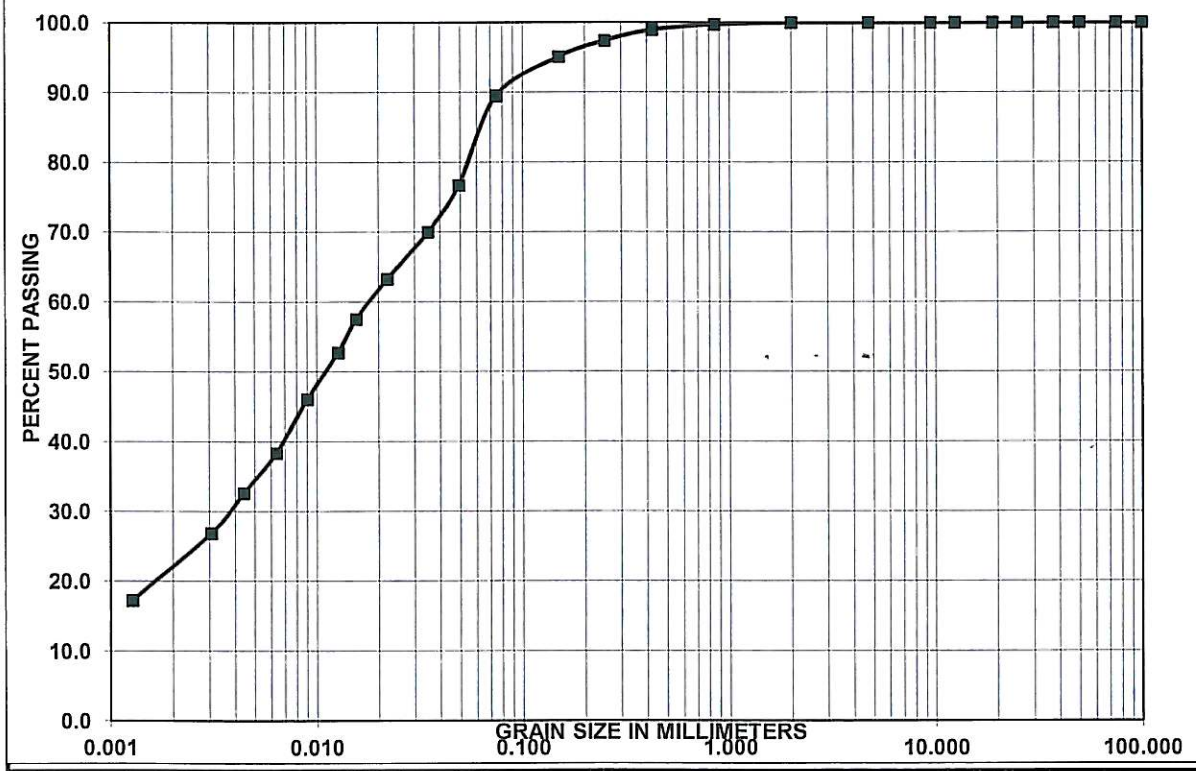
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
DATE SAMPLED: 20-Jul-12
DATE TESTED: 22-Nov-12

SAMPLED BY: Client
SOURCE: GT12-17, sample 33
DEPTH: 93.85m - 94.03m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.7
0.425	99.0
0.250	97.4
0.150	95.1
0.075	89.5
0.0494	76.7
0.0349	70.0
0.0221	63.3
0.0156	57.5
0.0128	52.7
0.0090	46.0
0.0064	38.3
0.0044	32.6
0.0031	26.8
0.0013	17.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	10.49%
SILT	68.38%
CLAY	21.12%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

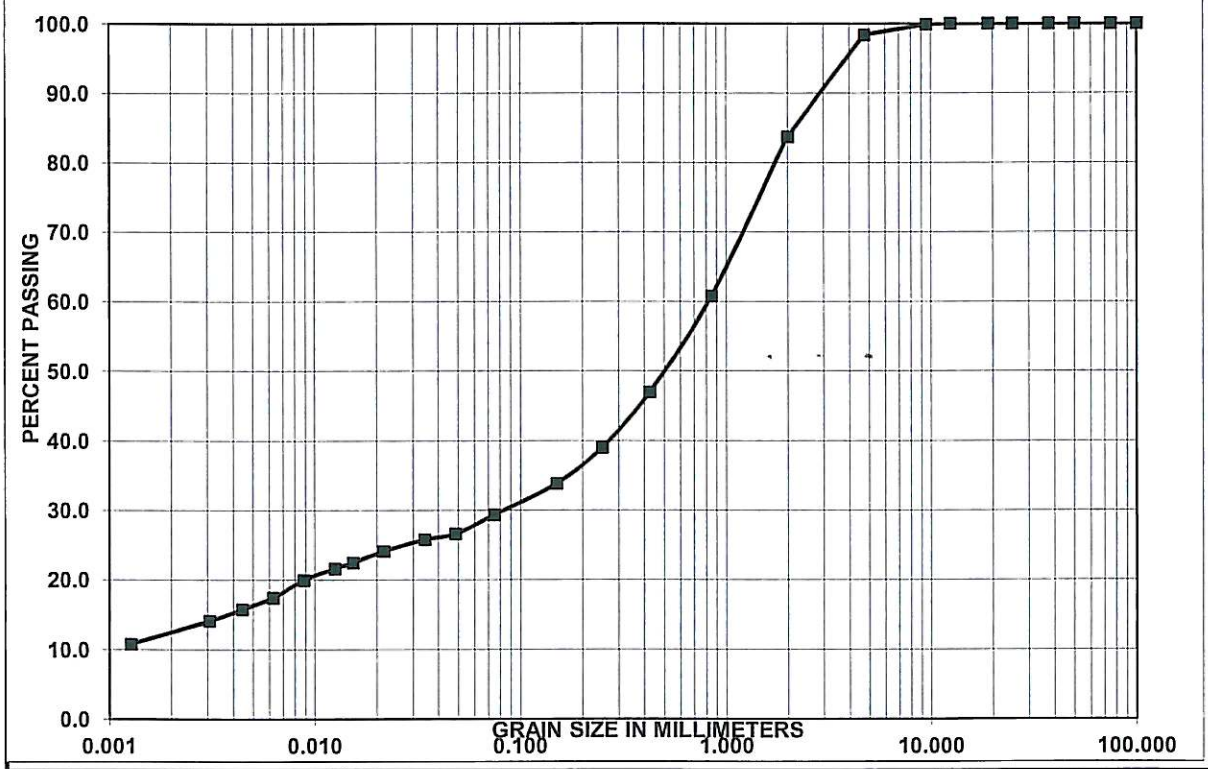
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Jul-12
SOURCE: GT12-17, sample 37
DATE TESTED: 21-Nov-12
DEPTH: 104.77m - 104.97m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.9
4.75	98.3
2.00	83.7
0.850	60.8
0.425	46.9
0.250	39.0
0.150	33.8
0.075	29.4
0.0485	26.6
0.0343	25.8
0.0217	24.1
0.0153	22.5
0.0125	21.6
0.0089	20.0
0.0063	17.5
0.0044	15.8
0.0031	14.1
0.0013	10.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.66%
SAND	68.99%
SILT	17.19%
CLAY	12.16%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
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GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

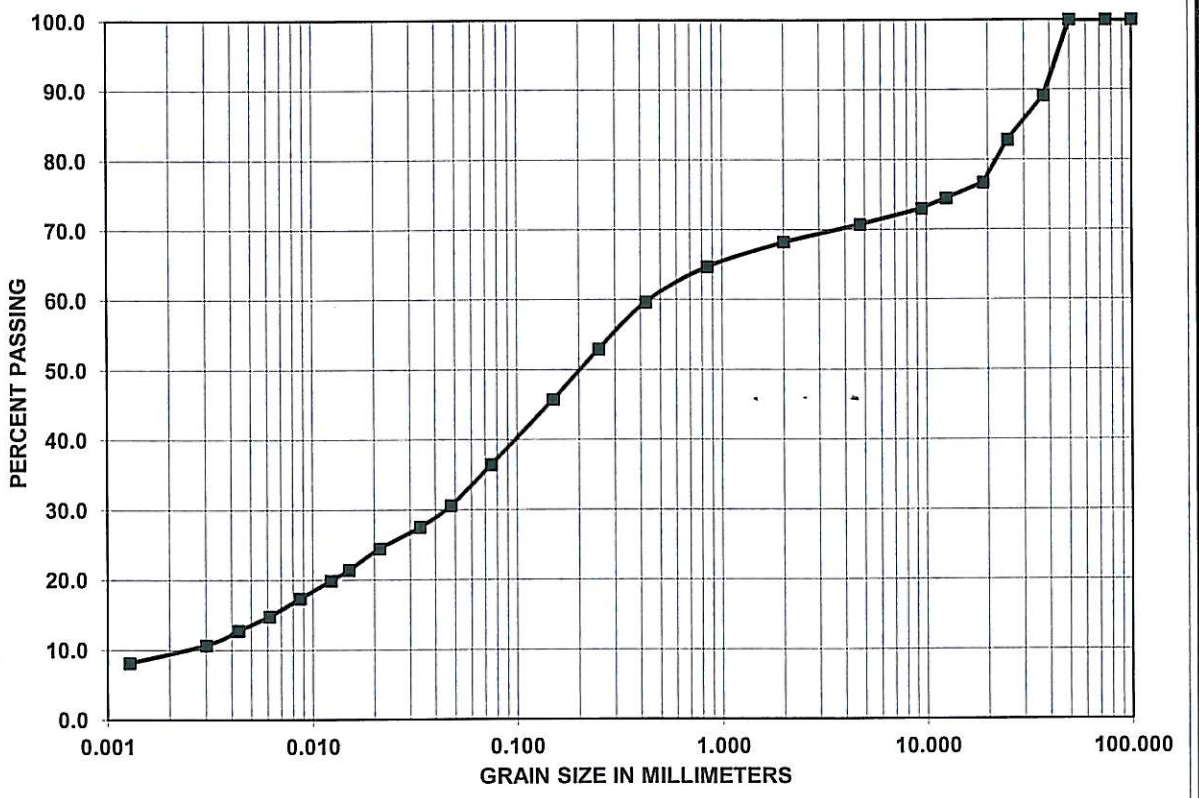
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
DATE SAMPLED: 24-Jul-12
DATE TESTED: 21-Nov-12

SAMPLED BY: Client
SOURCE: GT12-18, sample 3
DEPTH: 10.19m - 10.39m



SUMMARY	
Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	89.1
25.0	82.8
19.0	76.7
12.5	74.4
9.5	73.0
4.75	70.7
2.00	68.2
0.850	64.7
0.425	59.6
0.250	52.9
0.150	45.7
0.075	36.4
0.0476	30.6
0.0337	27.5
0.0213	24.5
0.0151	21.4
0.0123	19.9
0.0087	17.3
0.0061	14.8
0.0043	12.7
0.0030	10.7
0.0013	8.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	29.27%
SAND	34.31%
SILT	27.20%
CLAY	9.22%

TECHNICIAN: JMichaud

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GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

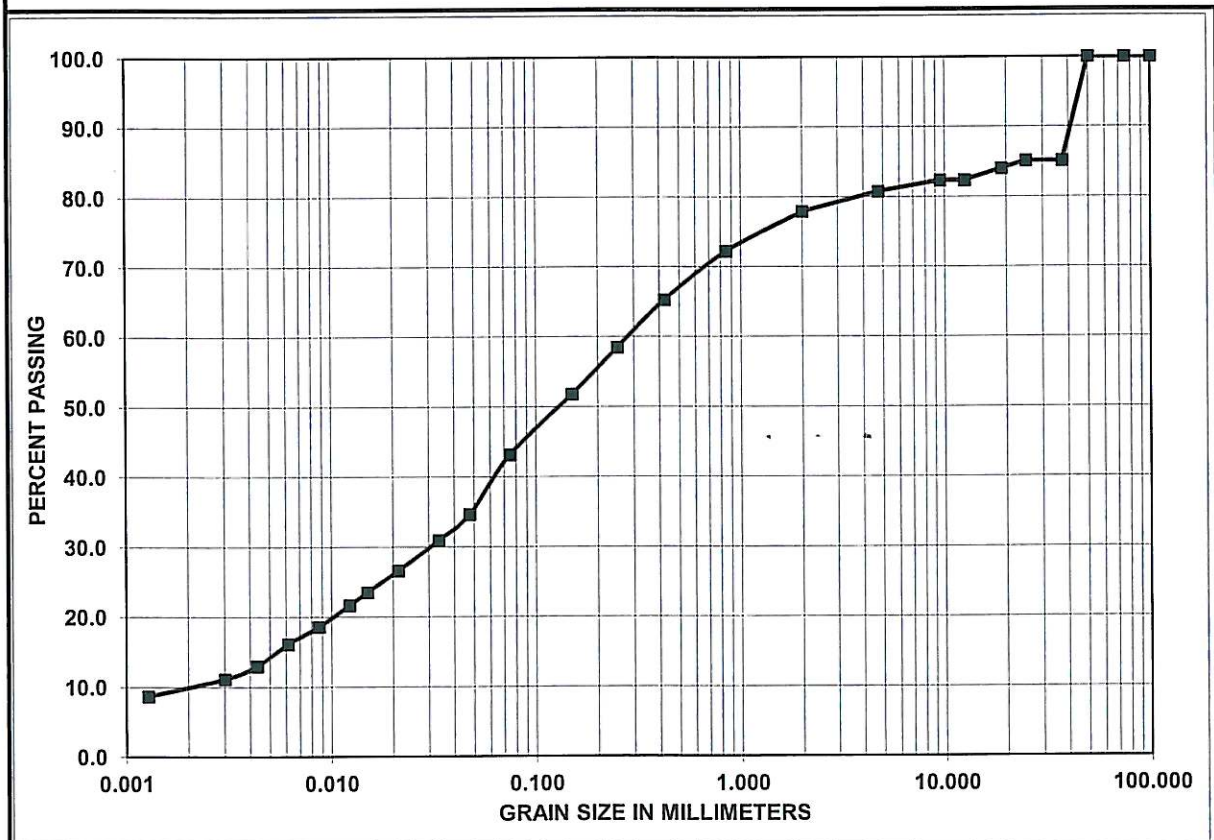
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
DATE SAMPLED: 24-Jul-12
DATE TESTED: 21-Nov-12

SAMPLED BY: Client
SOURCE: GT12-18, sample 4
DEPTH: 12.98m - 13.18m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	85.1
25.0	85.1
19.0	84.0
12.5	82.3
9.5	82.3
4.75	80.7
2.00	77.9
0.850	72.2
0.425	65.2
0.250	58.5
0.150	51.8
0.075	43.1
0.0476	34.6
0.0337	30.9
0.0213	26.6
0.0151	23.5
0.0123	21.6
0.0087	18.6
0.0061	16.1
0.0043	13.0
0.0030	11.1
0.0013	8.7

REMARKS:

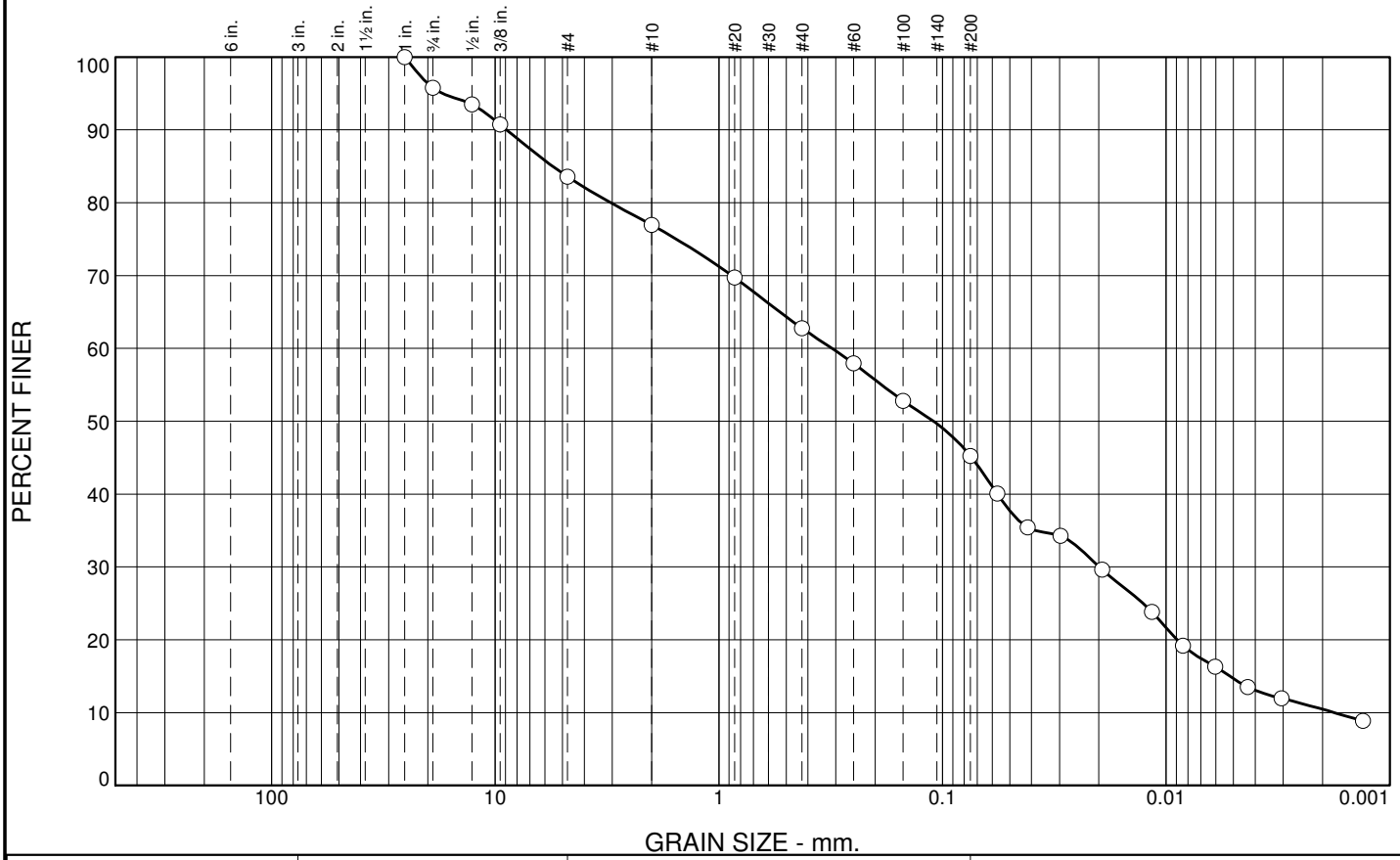
D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	19.26%
SAND	37.62%
SILT	33.43%
CLAY	9.69%

TECHNICIAN: GMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.2	12.2	6.7	14.1	17.6	30.5	14.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	95.8		
.5	93.5		
.375	90.7		
#4	83.6		
#10	76.9		
#20	69.7		
#40	62.8		
#60	58.0		
#100	52.8		
#200	45.2		
0.0570 mm.	40.1		
0.0416 mm.	35.4		
0.0297 mm.	34.3		
0.0194 mm.	29.6		
0.0116 mm.	23.8		
0.0084 mm.	19.2		
0.0060 mm.	16.3		
0.0043 mm.	13.5		
0.0030 mm.	12.0		
0.0013 mm.	8.9		

* (no specification provided)

Soil Description

clayey sand with gravel

Atterberg Limits

PL= 15 LL= 26 PI= 11

Coefficients

D_{90}= 8.9105 D_{85}= 5.5329 D_{60}= 0.3121
D_{50}= 0.1099 D_{30}= 0.0200 D_{15}= 0.0052
D_{10}= 0.0018 C_u= 176.38 C_c= 0.72

Classification

USCS= SC AASHTO= A-6(2)

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 9/14/2012
Location: GH12-18 **Elev./Depth:** 15.6-15.8m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: rv **Checked By:** jdb

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

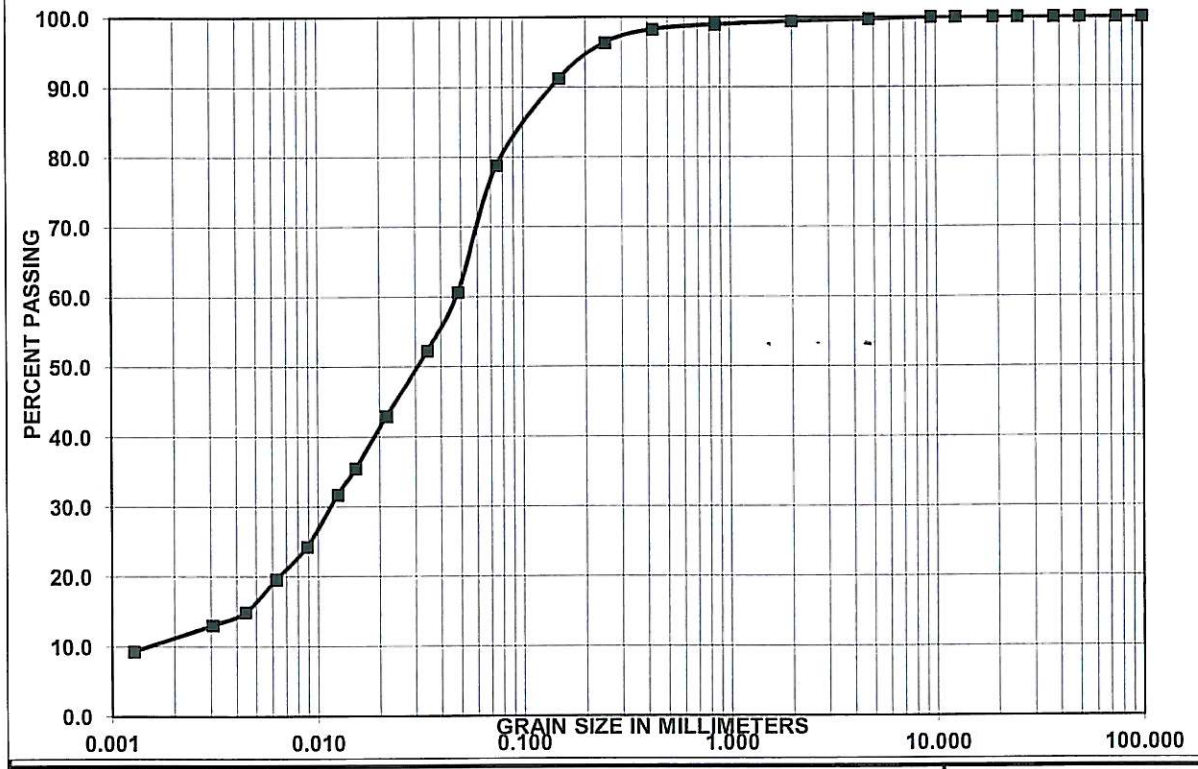
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
DATE SAMPLED: 24-Jul-12
DATE TESTED: 21-Nov-12

SAMPLED BY: Client
SOURCE: GT12-18, sample 07
DEPTH: 22.74m - 22.94m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	99.7
2.00	99.4
0.850	98.9
0.425	98.3
0.250	96.3
0.150	91.2
0.075	78.8
0.0485	60.6
0.0343	52.3
0.0217	42.9
0.0153	35.5
0.0125	31.7
0.0089	24.3
0.0063	19.6
0.0044	14.9
0.0031	13.1
0.0013	9.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.29%
SAND	20.91%
SILT	67.96%
CLAY	10.84%

TECHNICIAN: Bruce Garlick

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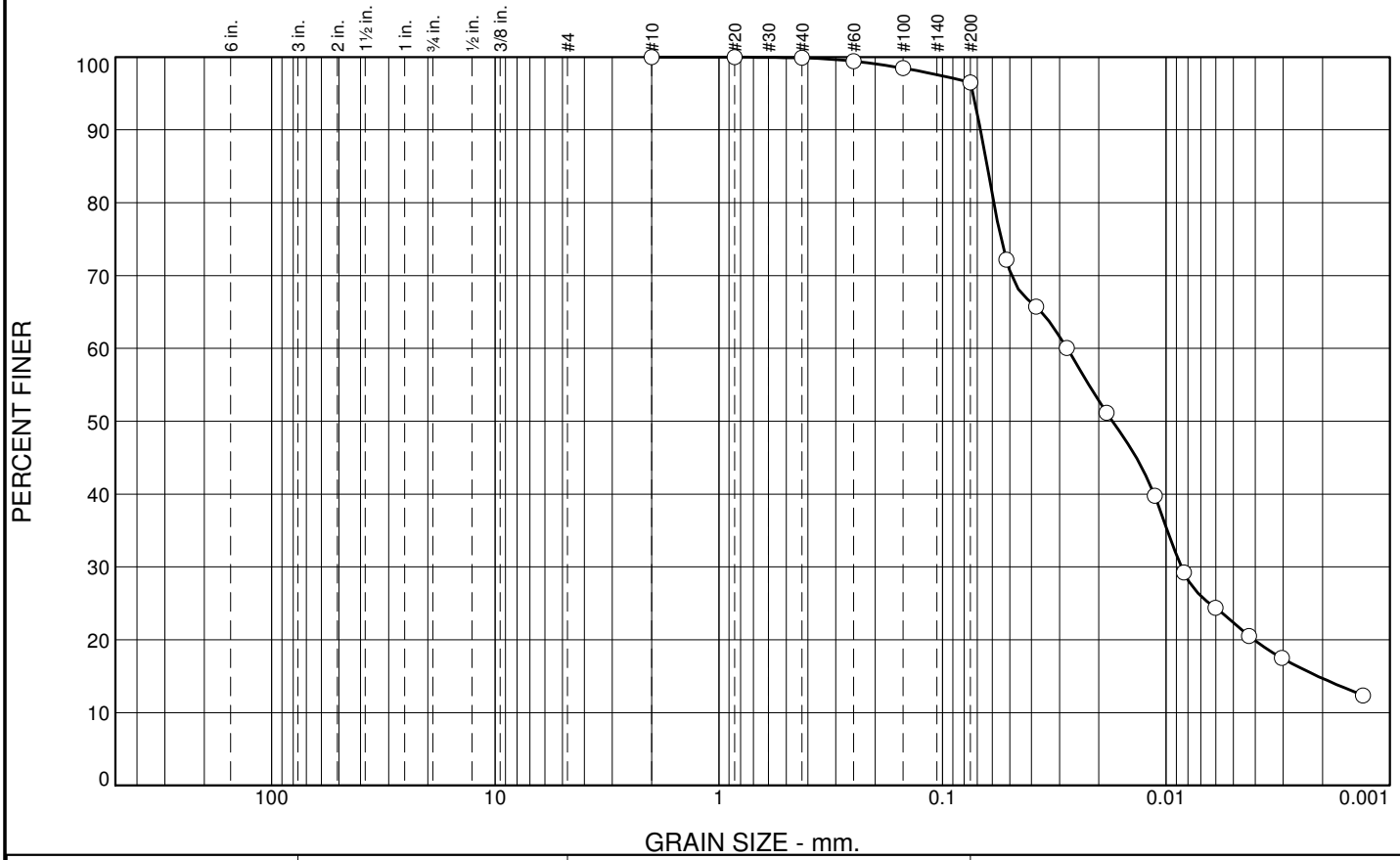
Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.1	3.4	74.2	22.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	99.9		
#60	99.4		
#100	98.5		
#200	96.5		
0.0519 mm.	72.2		
0.0381 mm.	65.7		
0.0278 mm.	60.1		
0.0185 mm.	51.2		
0.0113 mm.	39.8		
0.0083 mm.	29.2		
0.0060 mm.	24.4		
0.0043 mm.	20.5		
0.0030 mm.	17.5		
0.0013 mm.	12.4		

* (no specification provided)

Soil Description

silty clay

Atterberg Limits

PL= 16 LL= 21 PI= 5

Coefficients

D_{90}= 0.0676 D_{85}= 0.0631 D_{60}= 0.0278
D_{50}= 0.0174 D_{30}= 0.0086 D_{15}= 0.0021
D_{10}= C_u= C_c=

Classification

USCS= CL-ML AASHTO= A-4(2)

Remarks

Sample No.: 8 **Source of Sample:** **Date:** 9/14/2012
Location: Gh12-18 **Elev./Depth:** 25.13-25.23m

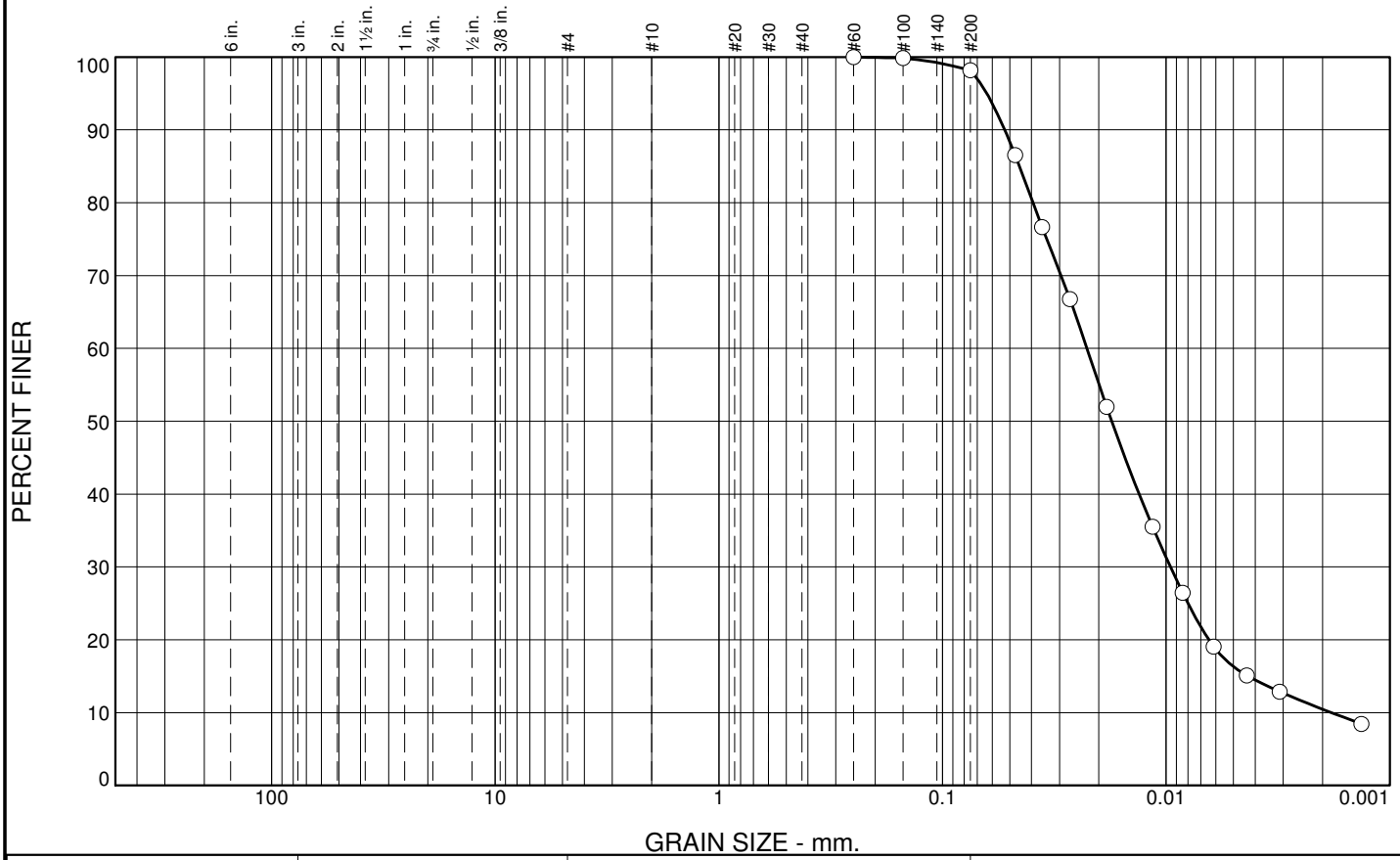
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: dab **Checked By:** jdb

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.0	1.8	81.9	16.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#60	100.0		
#100	99.9		
#200	98.2		
0.0473 mm.	86.5		
0.0359 mm.	76.7		
0.0269 mm.	66.8		
0.0185 mm.	52.0		
0.0115 mm.	35.5		
0.0084 mm.	26.5		
0.0061 mm.	19.1		
0.0044 mm.	15.1		
0.0031 mm.	12.9		
0.0013 mm.	8.5		

* (no specification provided)

Soil Description

silty clay

Atterberg Limits

PL= 18 LL= 25 PI= 7

Coefficients

D_{90}= 0.0527 D_{85}= 0.0453 D_{60}= 0.0226
D_{50}= 0.0175 D_{30}= 0.0096 D_{15}= 0.0043
D_{10}= 0.0018 C_u= 12.40 C_c= 2.22

Classification

USCS= CL-ML AASHTO= A-4(5)

Remarks

Sample No.: 10 **Source of Sample:** **Date:** 9/14/2012
Location: GH12-18 **Elev./Depth:** 32.95-33.15m

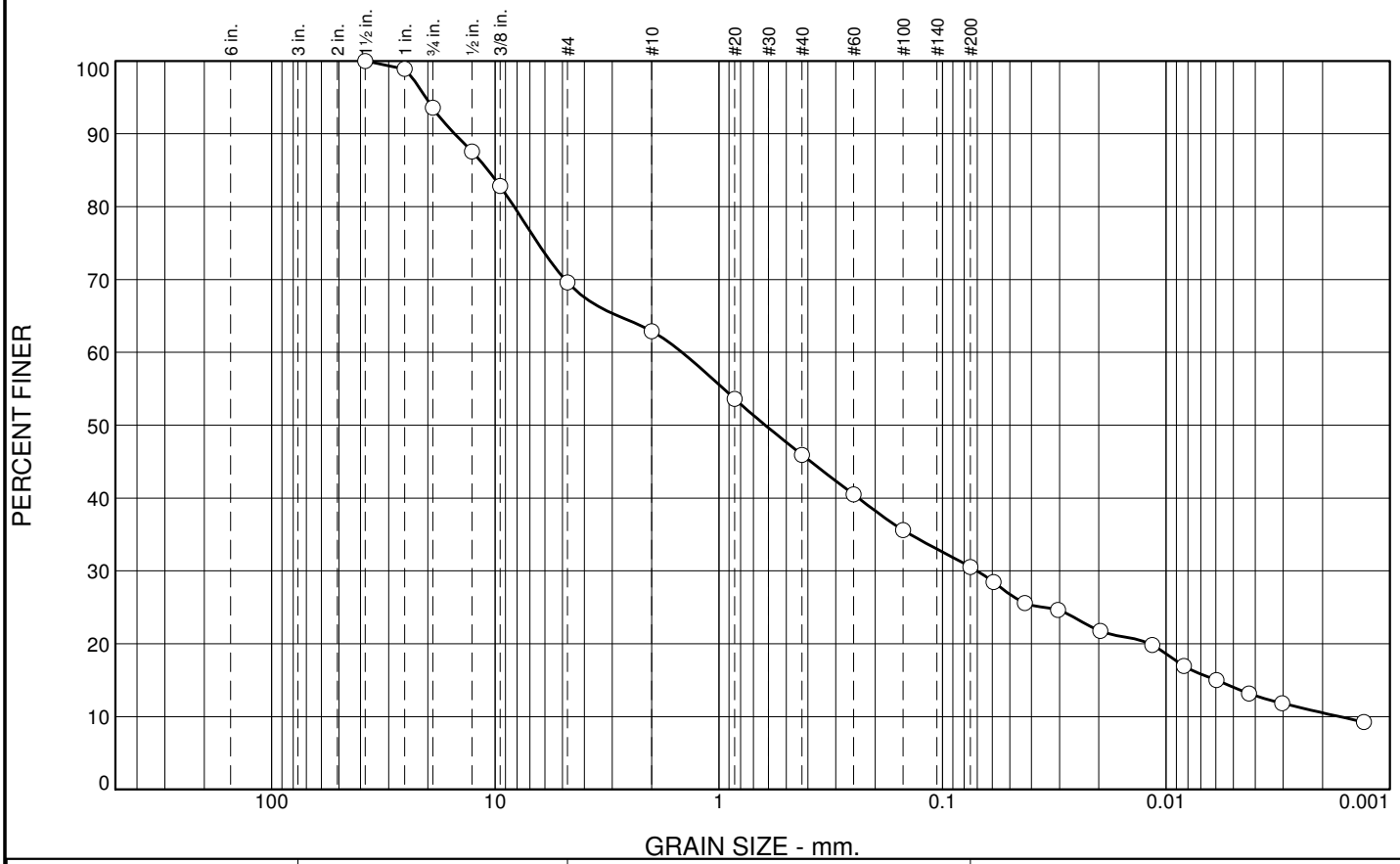
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: dab **Checked By:** jdb

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.4	24.0	6.7	17.0	15.4	16.5	14.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.9		
.75	93.6		
.5	87.5		
.375	82.8		
#4	69.6		
#10	62.9		
#20	53.6		
#40	45.9		
#60	40.5		
#100	35.6		
#200	30.5		
0.0591 mm.	28.5		
0.0428 mm.	25.6		
0.0305 mm.	24.6		
0.0197 mm.	21.7		
0.0115 mm.	19.8		
0.0083 mm.	16.9		
0.0060 mm.	15.0		
0.0043 mm.	13.2		
0.0030 mm.	11.8		
0.0013 mm.	9.3		

* (no specification provided)

Soil Description

clayey sand with gravel

Atterberg Limits

PL= 15 LL= 32 PI= 17

Coefficients

D_{90}= 15.1890 D_{85}= 10.7694 D_{60}= 1.4616
D_{50}= 0.6204 D_{30}= 0.0702 D_{15}= 0.0059
D_{10}= 0.0017 C_u= 872.66 C_c= 2.01

Classification

USCS= SC AASHTO= A-2-6(1)

Remarks

Sample No.: 11 **Source of Sample:** **Date:** 9/14/2012
Location: GH12-18 **Elev./Depth:** 35.75-35.95m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: dab **Checked By:** jdb

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:

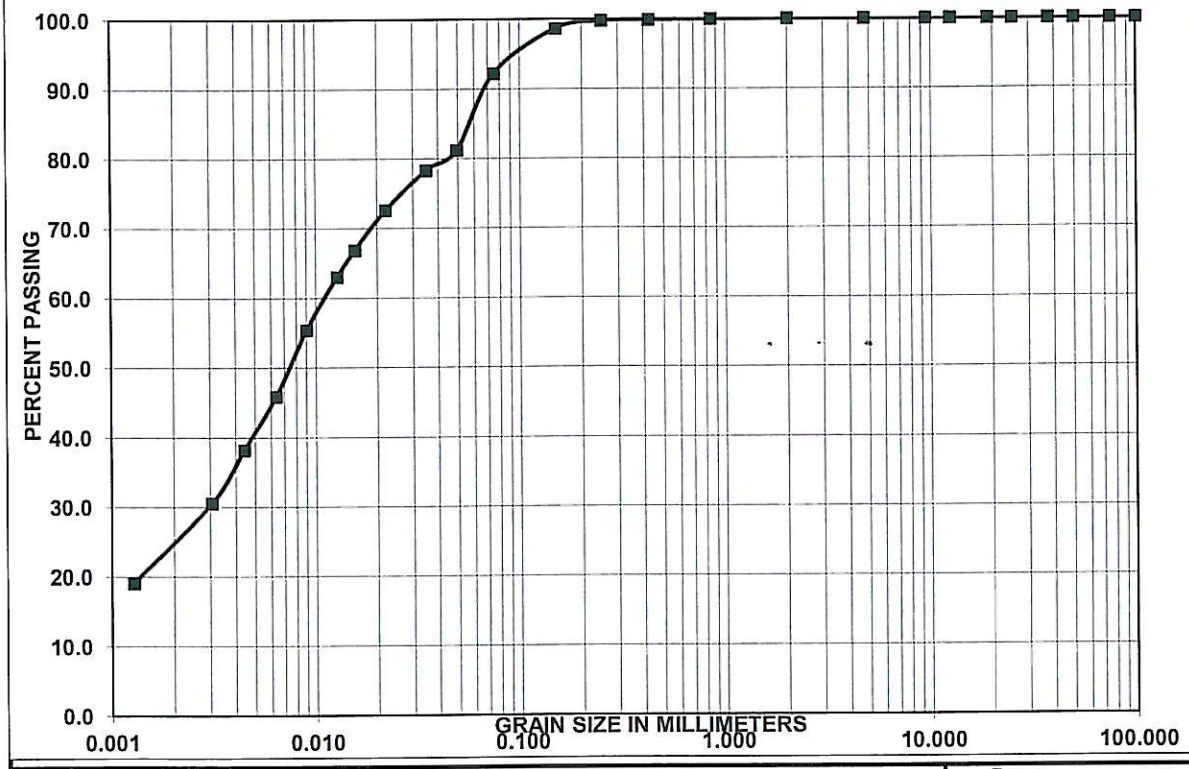
DATE SAMPLED: 24-Jul-12

DATE TESTED: 22-Nov-12

SAMPLED BY: Client

SOURCE: GT12-18, sample 12

DEPTH: 38.67m - 38.87m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.9
0.425	99.8
0.250	99.7
0.150	98.6
0.075	92.1
0.0494	81.2
0.0349	78.3
0.0221	72.6
0.0156	66.8
0.0128	63.0
0.0090	55.4
0.0064	45.8
0.0044	38.2
0.0031	30.6
0.0013	19.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	7.85%
SILT	68.42%
CLAY	23.73%

TECHNICIAN: Bruce Garlick

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Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

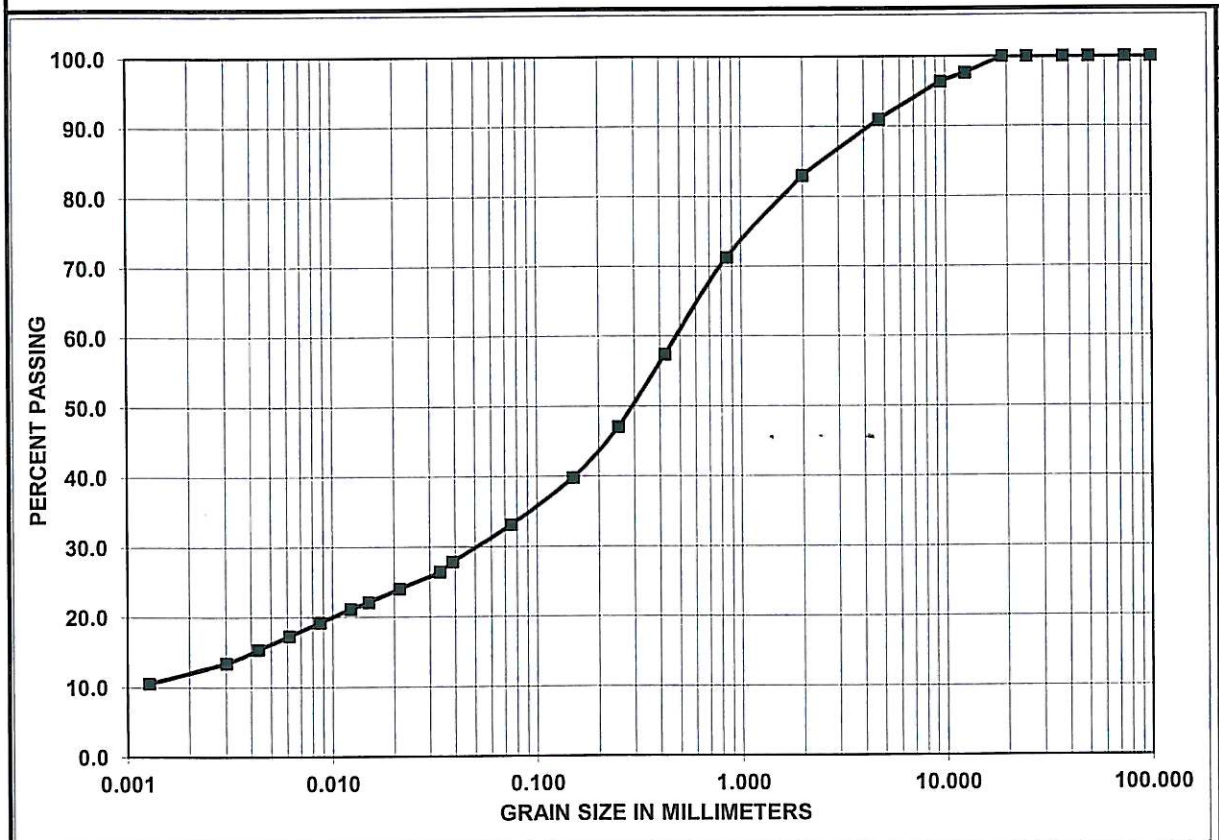
Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:
DATE SAMPLED: 24-Jul-12
DATE TESTED: 21-Nov-12

SAMPLED BY: Client
SOURCE: GT12-18, sample 16
DEPTH: 51.49m - 51.69m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	97.7
9.5	96.4
4.75	91.0
2.00	83.0
0.850	71.2
0.425	57.4
0.250	47.1
0.150	39.8
0.075	33.1
0.0389	27.9
0.0337	26.4
0.0213	24.0
0.0151	22.1
0.0123	21.1
0.0087	19.2
0.0061	17.3
0.0043	15.4
0.0030	13.4
0.0013	10.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	9.03%
SAND	57.83%
SILT	21.37%
CLAY	11.77%

TECHNICIAN: GMichaud

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GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

TEST No:

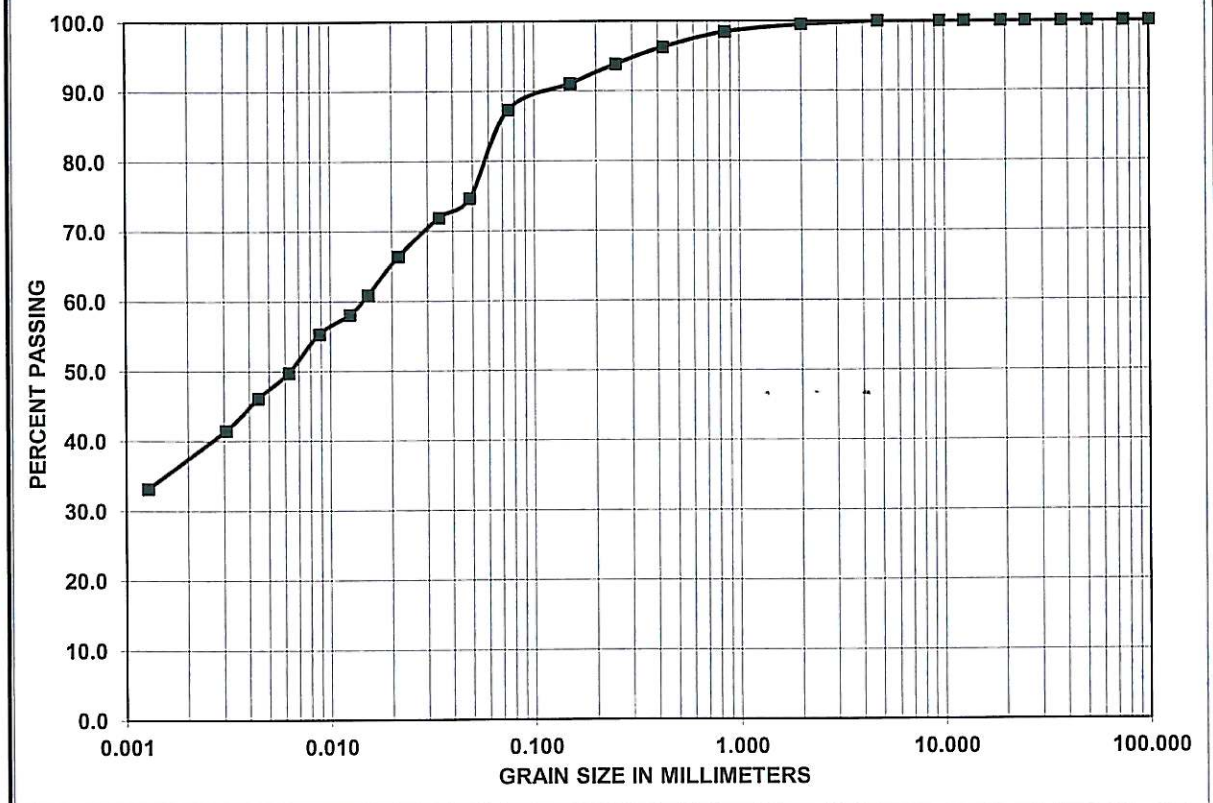
DATE SAMPLED: 24-Jul-12

DATE TESTED: 21-Nov-12

SAMPLED BY: Client

SOURCE: GT12-18, sample 20

DEPTH: 69.0m - 69.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.5
0.850	98.5
0.425	96.3
0.250	93.8
0.150	91.0
0.075	87.3
0.0485	74.7
0.0343	71.9
0.0217	66.4
0.0153	60.8
0.0125	58.1
0.0089	55.3
0.0063	49.8
0.0044	46.1
0.0031	41.5
0.0013	33.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_C =	N/A

GRAVEL	0.00%
SAND	12.72%
SILT	50.75%
CLAY	36.53%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

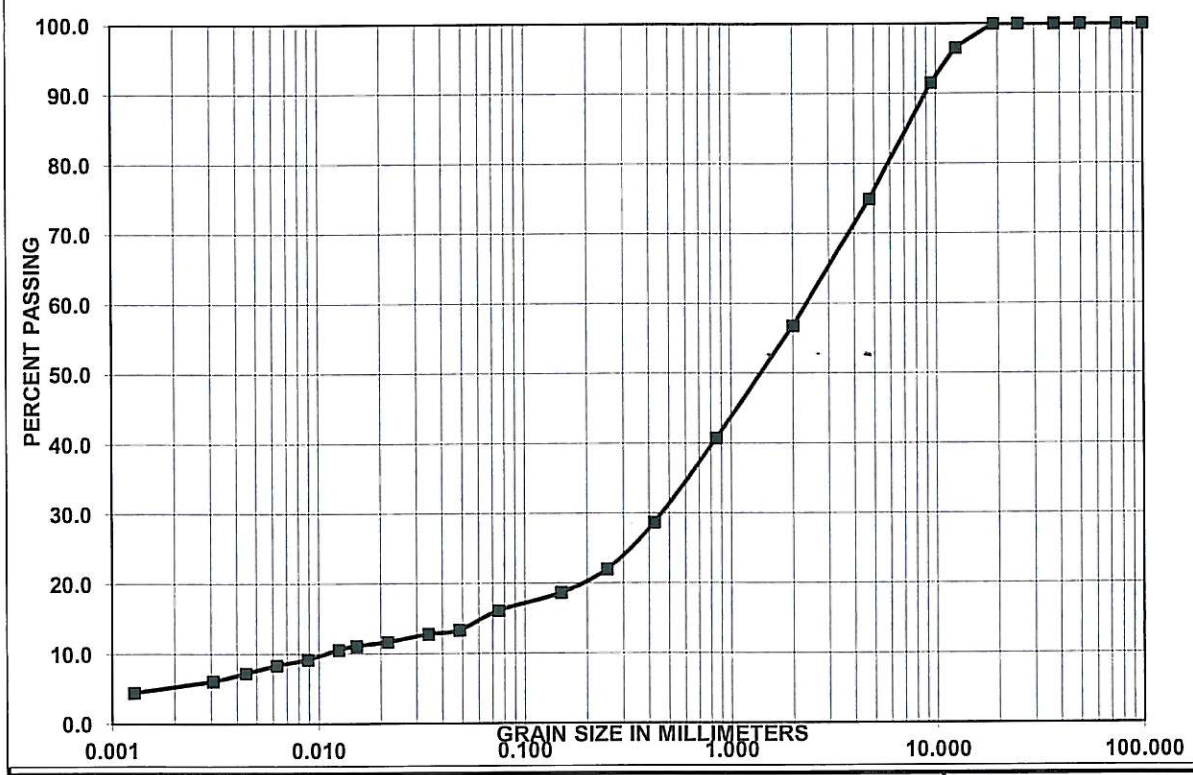
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 7-Aug-12
SOURCE: GT12-19, sample 02
DATE TESTED: 20-Nov-12
DEPTH: 5.45m - 5.65m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	96.5
9.5	91.5
4.75	74.9
2.00	56.8
0.850	40.7
0.425	28.7
0.250	22.0
0.150	18.7
0.075	16.1
0.0485	13.4
0.0343	12.8
0.0217	11.7
0.0153	11.1
0.0125	10.6
0.0089	9.2
0.0063	8.3
0.0044	7.2
0.0031	6.1
0.0013	4.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	25.08%
SAND	58.78%
SILT	11.01%
CLAY	5.13%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
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AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

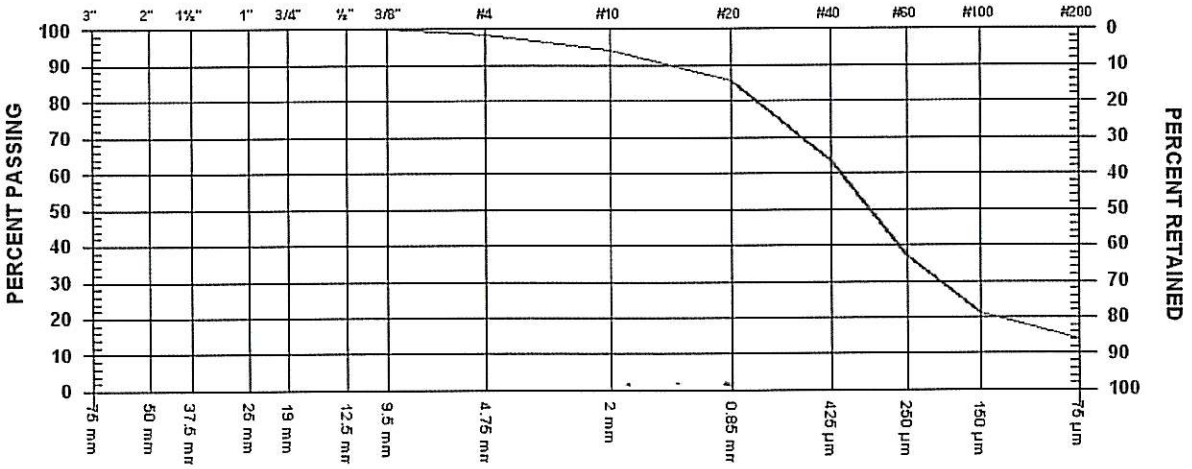
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 22 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Nov.16 DATE SAMPLED 2012.Aug.07

SUPPLIER
SOURCE 11.26m - 11.46m
SPECIFICATION
MATERIAL TYPE GT12-19, sample 03

SAMPLED BY Client
TESTED BY D. deSousa
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	100.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	98.3	
No. 10	2.00 mm	94.3	
No. 20	850 µm	85.6	
No. 40	425 µm	63.3	
No. 60	250 µm	37.2	
No. 100	150 µm	21.5	
No. 200	75 µm	13.9	

COMMENTS

 2012.Nov.19 AMEC Environment & Infrastructure PER. GMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

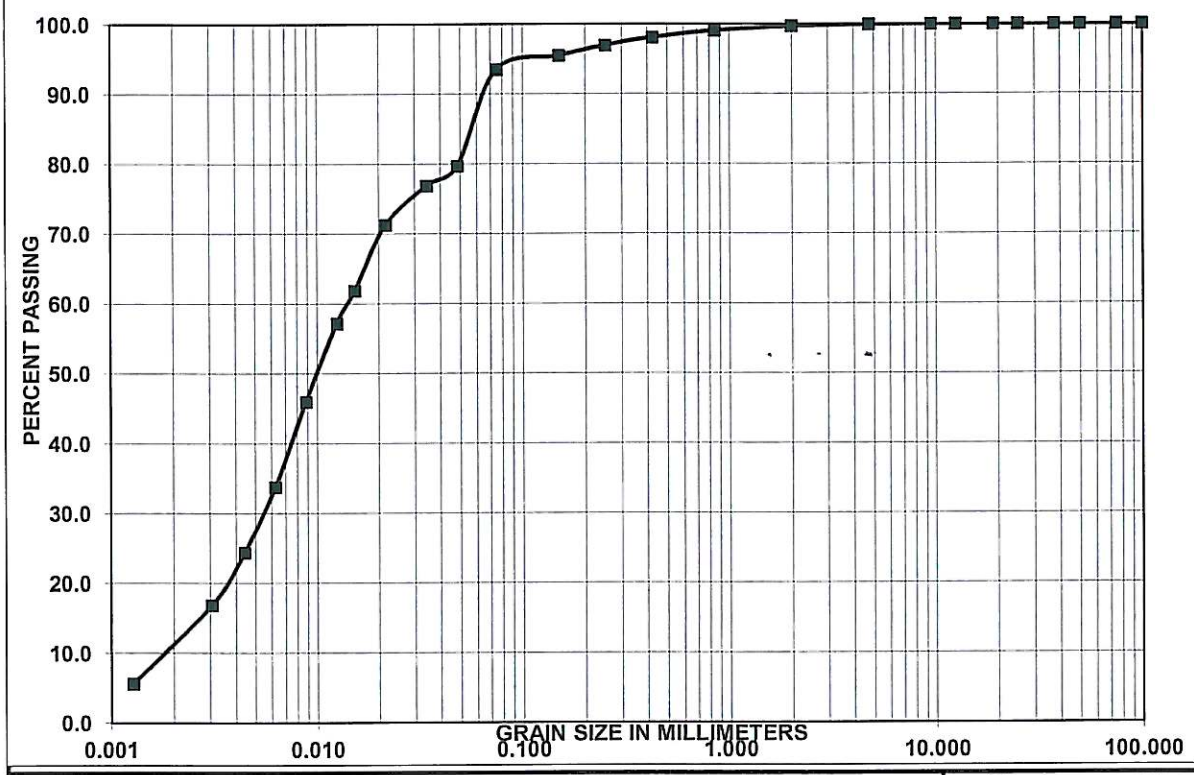
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 23-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 7-Aug-12
SOURCE: GT12-19, sample 06
DATE TESTED: 20-Nov-12
DEPTH: 22.04m - 22.24m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	99.9
2.00	99.7
0.850	99.1
0.425	98.1
0.250	96.9
0.150	95.5
0.075	93.5
0.0485	79.7
0.0343	76.9
0.0217	71.2
0.0153	61.9
0.0125	57.2
0.0089	45.9
0.0063	33.7
0.0044	24.4
0.0031	16.9
0.0013	5.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.05%
SAND	6.48%
SILT	83.30%
CLAY	10.17%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

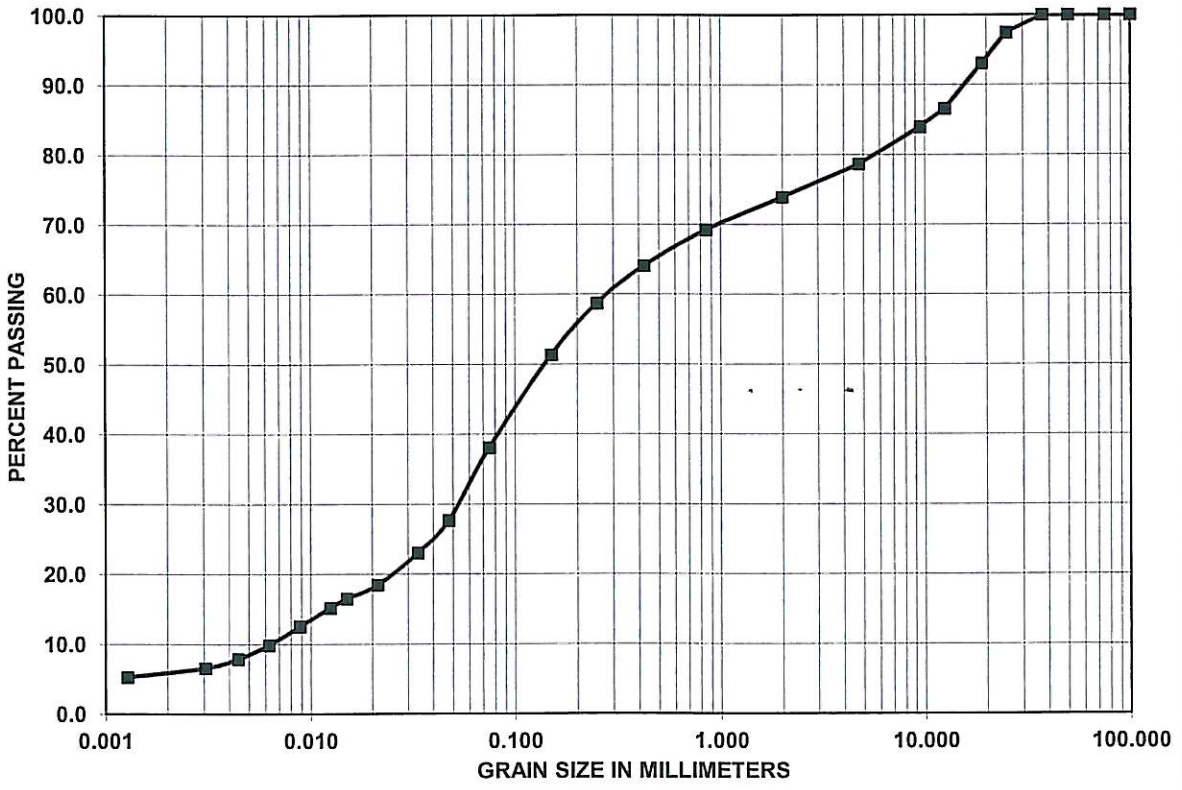
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 22-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 7-Aug-12
SOURCE: GT12-19, sample 7
DATE TESTED: 20-Nov-12
DEPTH: 31.03m - 31.23m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	97.5
19.0	93.1
12.5	86.5
9.5	83.9
4.75	78.6
2.00	73.9
0.850	69.2
0.425	64.0
0.250	58.7
0.150	51.3
0.075	38.0
0.0476	27.6
0.0337	23.0
0.0213	18.4
0.0151	16.5
0.0125	15.1
0.0089	12.5
0.0063	9.9
0.0044	7.9
0.0031	6.6
0.0013	5.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	21.37%
SAND	40.60%
SILT	32.22%
CLAY	5.80%

TECHNICIAN: YMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

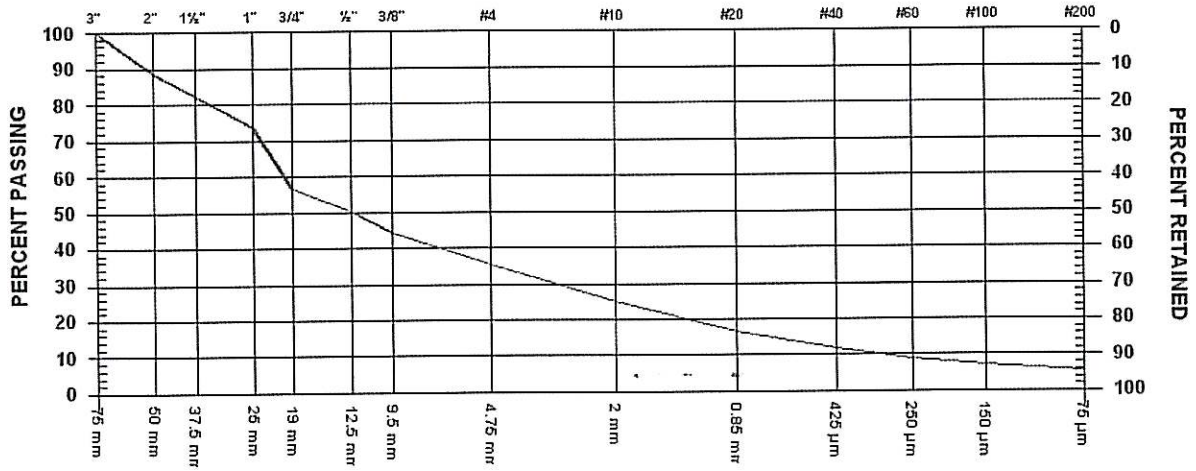
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 23 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Nov.16 DATE SAMPLED 2012.Aug.09

SUPPLIER
SOURCE 5.14m - 5.34m
SPECIFICATION
MATERIAL TYPE GT12-20, sample 02

SAMPLED BY Client
TESTED BY D. deSousa
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	88.4	
1 1/2"	37.5 mm		
1"	25 mm	73.8	
3/4"	19 mm	56.8	
1/2"	12.5 mm	50.1	
3/8"	9.5 mm	44.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	35.2	
No. 10	2.00 mm	25.3	
No. 20	850 µm	16.6	
No. 40	425 µm	11.8	
No. 60	250 µm	9.0	
No. 100	150 µm	7.2	
No. 200	75 µm	5.7	

COMMENTS

Page 1 of 1 2012.Nov.19 AMEC Environment & Infrastructure PER. GMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 22-Nov-12

TEST No:

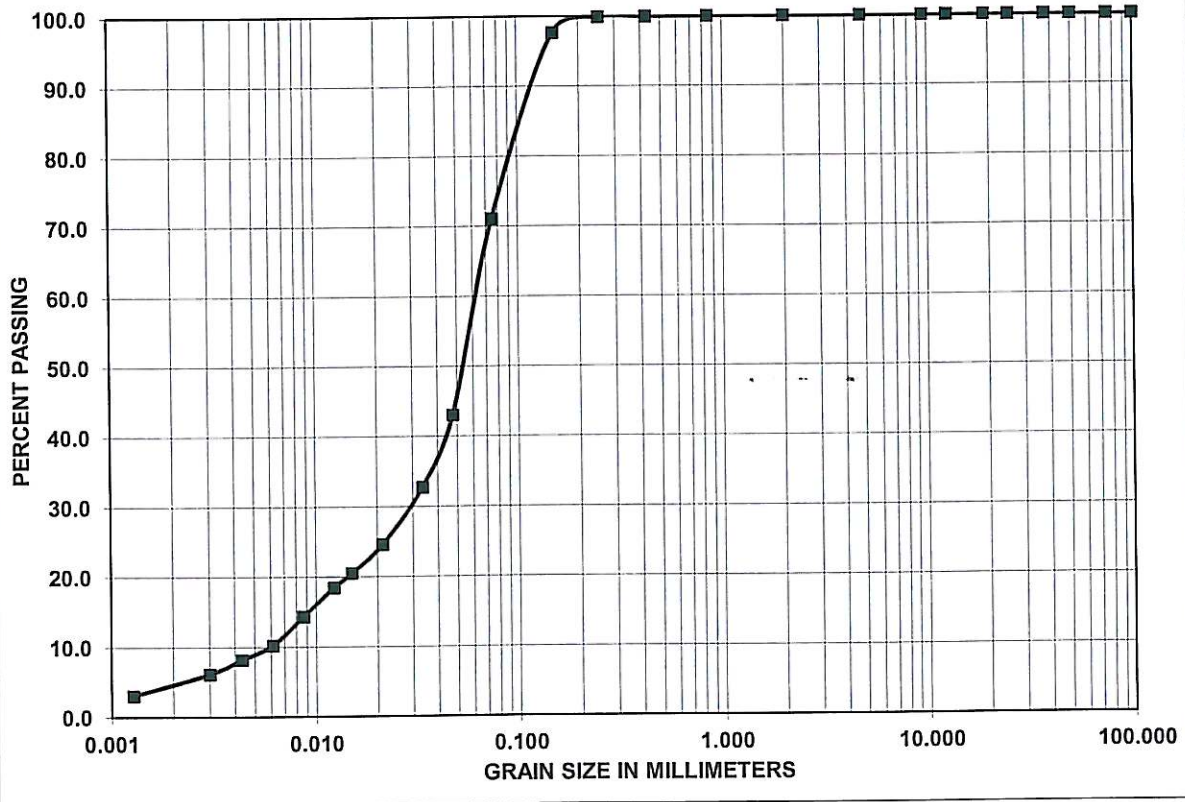
DATE SAMPLED: 9-Aug-12

DATE TESTED: 19-Nov-12

SAMPLED BY: Client

SOURCE: GT12-20, sample 3

DEPTH: 9.96m - 10.16m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	100.0
0.425	99.9
0.250	99.9
0.150	97.6
0.075	71.0
0.0476	43.0
0.0337	32.8
0.0213	24.6
0.0151	20.5
0.0123	18.4
0.0087	14.3
0.0061	10.2
0.0043	8.2
0.0030	6.1
0.0013	3.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	28.97%
SILT	66.68%
CLAY	4.35%

TECHNICIAN: GMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 22-Nov-12

TEST No:

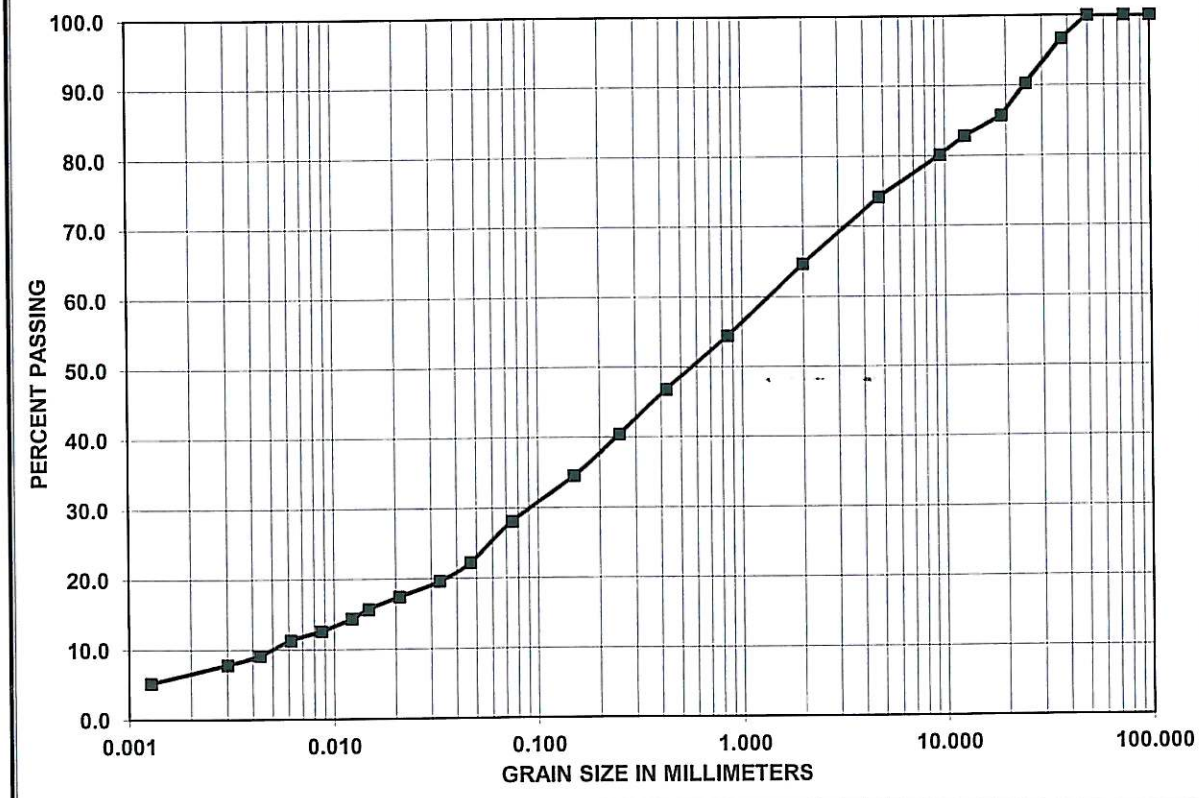
DATE SAMPLED: 9-Aug-12

DATE TESTED: 19-Nov-12

SAMPLED BY: Client

SOURCE: GT12-20, sample 4

DEPTH: 20.2m - 20.4m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	96.7
25.0	90.2
19.0	85.7
12.5	82.8
9.5	80.1
4.75	74.2
2.00	64.6
0.850	54.4
0.425	46.8
0.250	40.4
0.150	34.5
0.075	28.1
0.0467	22.2
0.0330	19.6
0.0209	17.4
0.0148	15.7
0.0123	14.4
0.0087	12.6
0.0061	11.3
0.0043	9.2
0.0030	7.8
0.0013	5.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	25.84%
SAND	46.08%
SILT	21.76%
CLAY	6.32%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

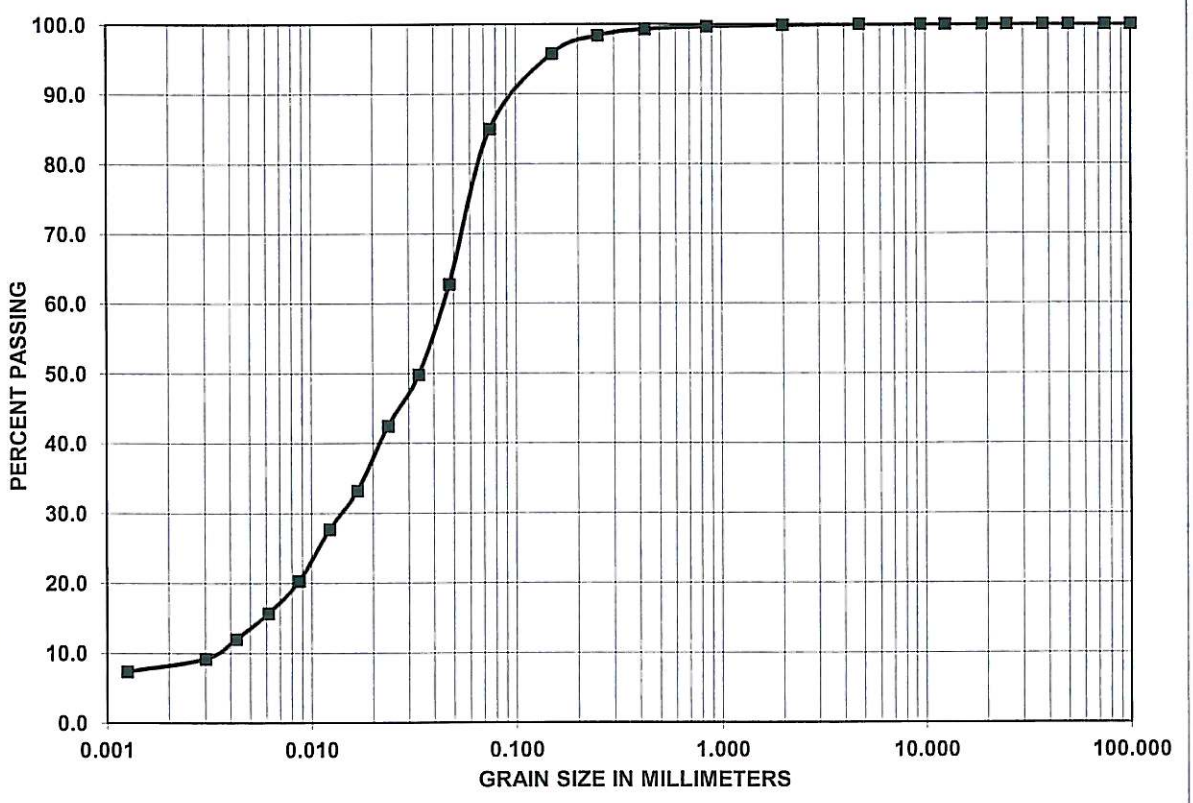
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-1
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 2
DATE TESTED: 12-Sep-12
DEPTH: 5.4m - 5.6m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.9
0.850	99.7
0.425	99.3
0.250	98.4
0.150	95.8
0.075	84.9
0.0476	62.8
0.0337	49.8
0.0238	42.4
0.0168	33.2
0.0123	27.7
0.0087	20.3
0.0061	15.7
0.0043	12.0
0.0030	9.2
0.0013	7.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	15.1%
SILT	76.8%
CLAY	8.2%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

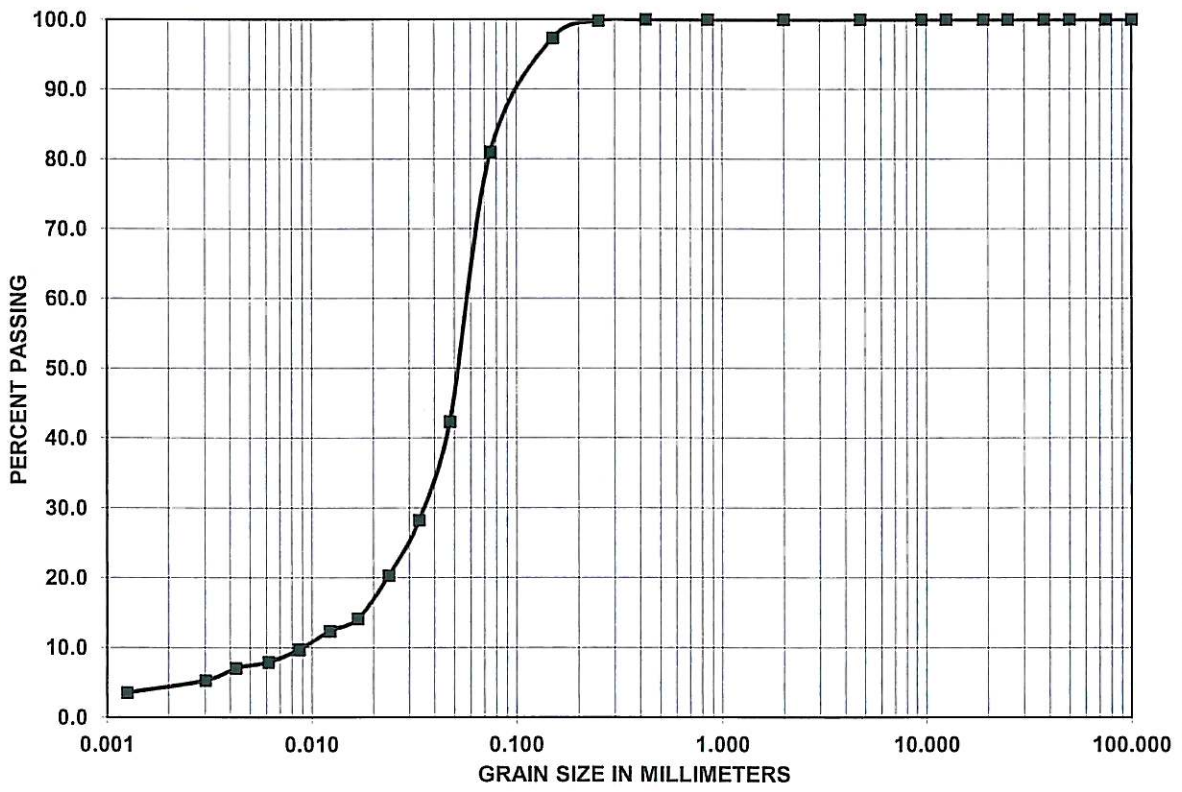
Kight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-2
DATE SAMPLED: 12-Aug-12
DATE TESTED: 12-Sep-12

SAMPLED BY: Client
SOURCE: GT12-21, sample 3
DEPTH: 7.82m - 8.02m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	100.0
0.425	100.0
0.250	99.8
0.150	97.3
0.075	80.9
0.0476	42.3
0.0337	28.2
0.0238	20.3
0.0168	14.1
0.0123	12.4
0.0087	9.7
0.0061	7.9
0.0043	7.1
0.0030	5.3
0.0013	3.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	19.1%
SILT	76.7%
CLAY	4.3%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

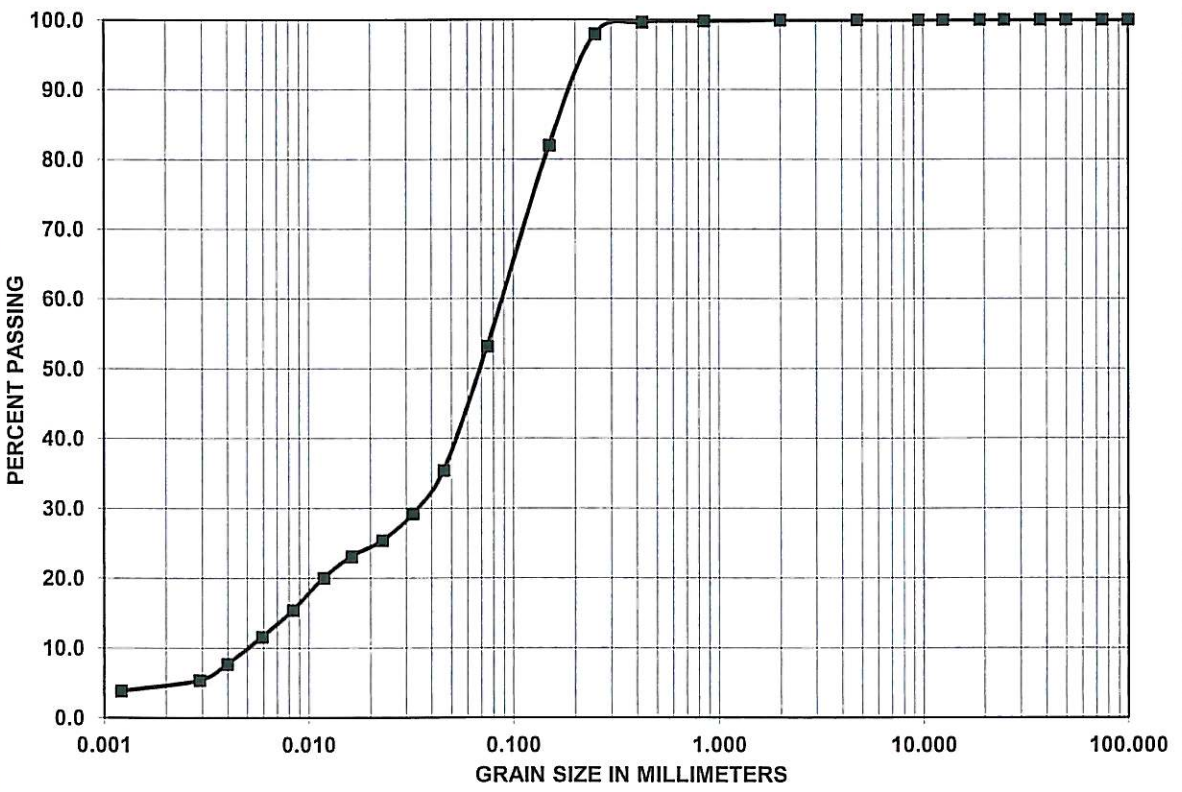
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-3
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 4
DATE TESTED: 12-Sep-12
DEPTH: 14.7m - 14.9m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.8
0.425	99.7
0.250	98.0
0.150	82.0
0.075	53.2
0.0459	35.4
0.0324	29.2
0.0229	25.4
0.0162	23.1
0.0118	20.0
0.0084	15.4
0.0059	11.5
0.0040	7.7
0.0029	5.4
0.0012	3.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	46.8%
SILT	48.7%
CLAY	4.6%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

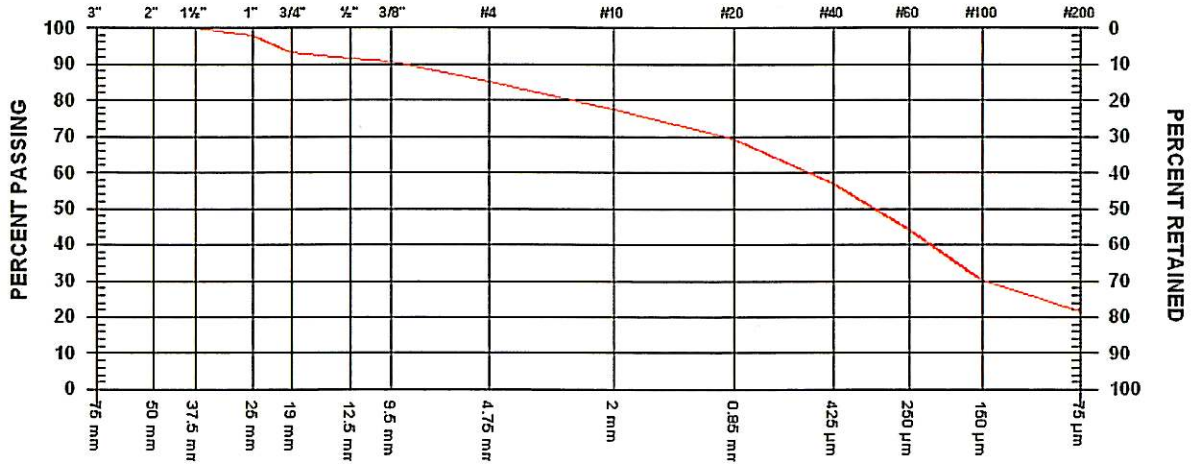
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 4 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.07 DATE SAMPLED 2012.Aug.12

SUPPLIER
SOURCE 20.26m - 20.46m
SPECIFICATION
MATERIAL TYPE GT12-21, sample S5

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.7	
3/4"	19 mm	93.1	
1/2"	12.5 mm	91.6	
3/8"	9.5 mm	90.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	85.3	
No. 10	2.00 mm	77.6	
No. 20	850 µm	69.5	
No. 40	425 µm	57.2	
No. 60	250 µm	44.1	
No. 100	150 µm	30.4	
No. 200	75 µm	21.6	

COMMENTS

 2012.Oct.01 AMEC Environment & Infrastructure PER. GMichaud

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GRAIN SIZE DISTRIBUTION

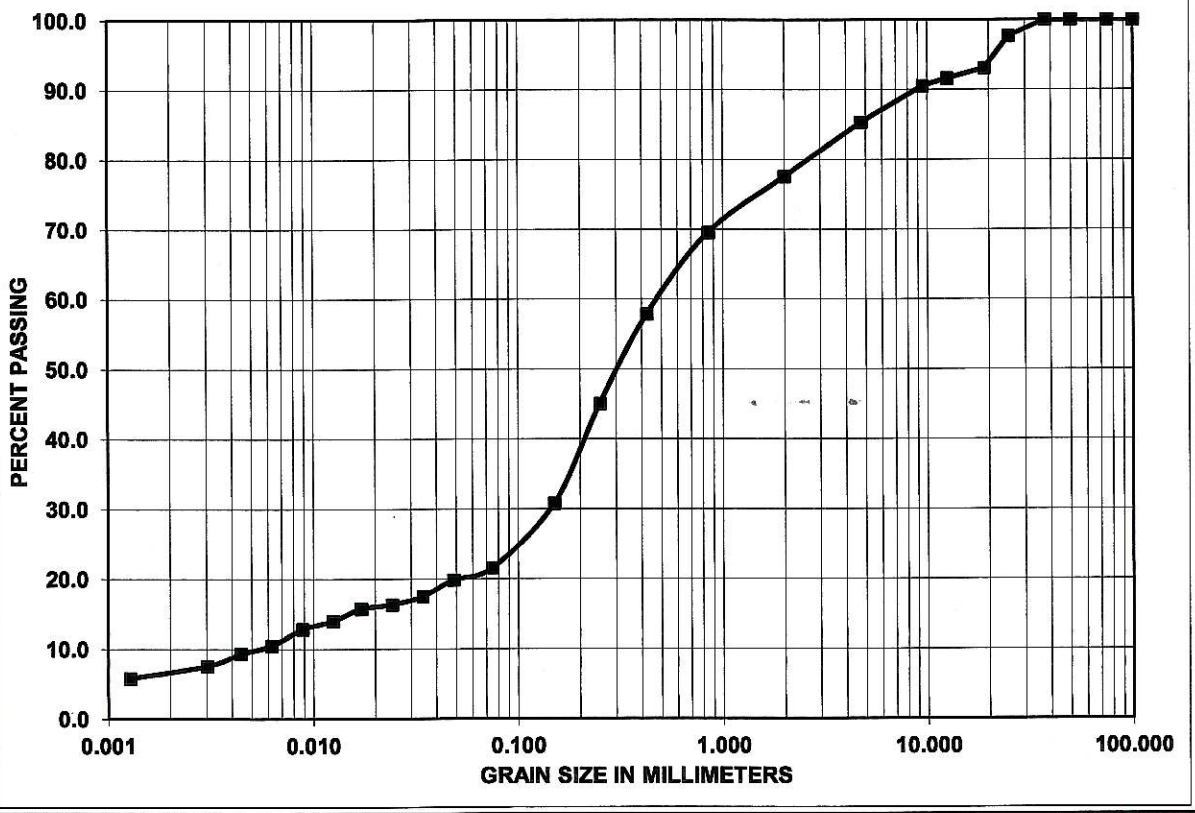
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-13
DATE SAMPLED: 12-Aug-12
DATE TESTED: 19-Sep-12

SAMPLED BY: Client
SOURCE: GT12-21, sample 5
DEPTH: 20.26m - 20.46m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	97.7
19.0	93.1
12.5	91.6
9.5	90.5
4.75	85.3
2.00	77.5
0.850	69.5
0.425	57.9
0.250	45.0
0.150	30.8
0.075	21.6
0.0485	19.8
0.0343	17.5
0.0242	16.3
0.0171	15.7
0.0125	14.0
0.0089	12.8
0.0063	10.5
0.0044	9.3
0.0030	7.6
0.0013	5.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	14.7%
SAND	63.7%
SILT	15.0%
CLAY	6.6%

TECHNICIAN: YMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

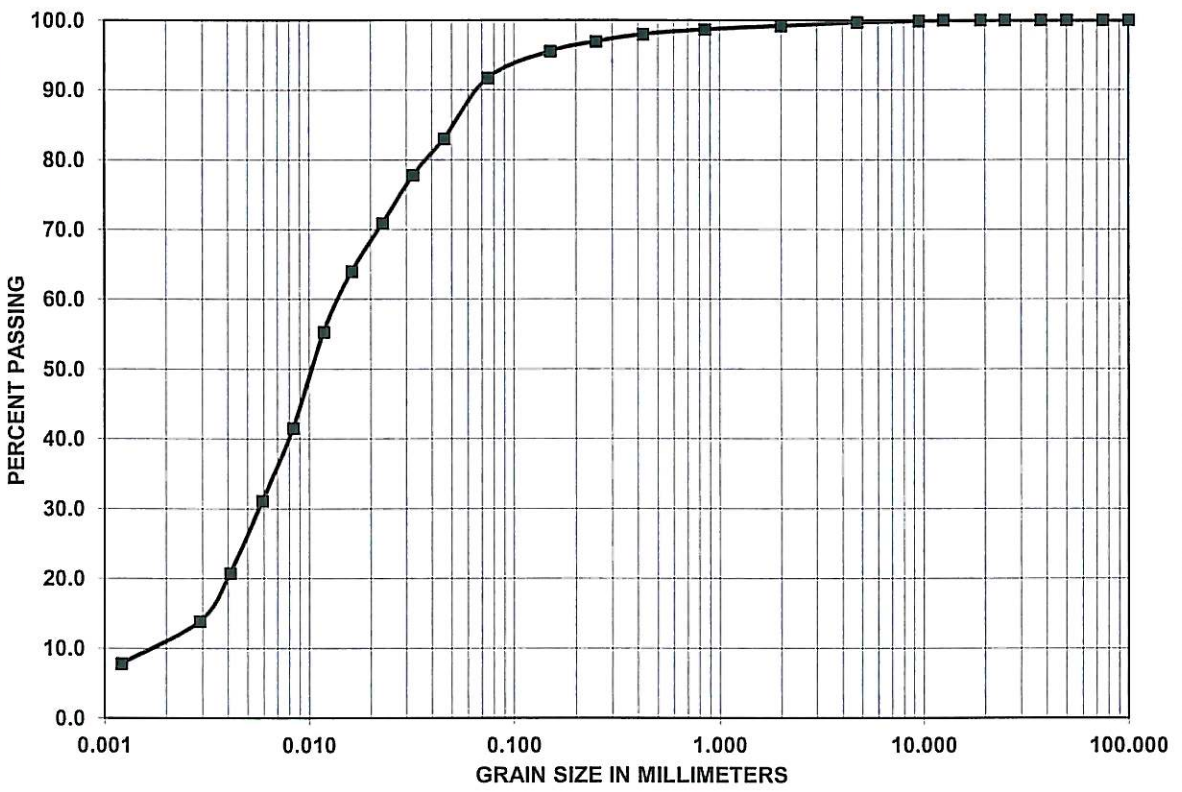
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-4
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 7
DATE TESTED: 12-Sep-12
DEPTH: 26.83m - 27.03m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.9
4.75	99.7
2.00	99.2
0.850	98.7
0.425	98.0
0.250	96.9
0.150	95.5
0.075	91.7
0.0459	83.0
0.0324	77.8
0.0229	70.9
0.0162	64.0
0.0118	55.3
0.0084	41.5
0.0059	31.1
0.0041	20.7
0.0029	13.8
0.0012	7.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.3%
SAND	8.0%
SILT	81.1%
CLAY	10.6%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

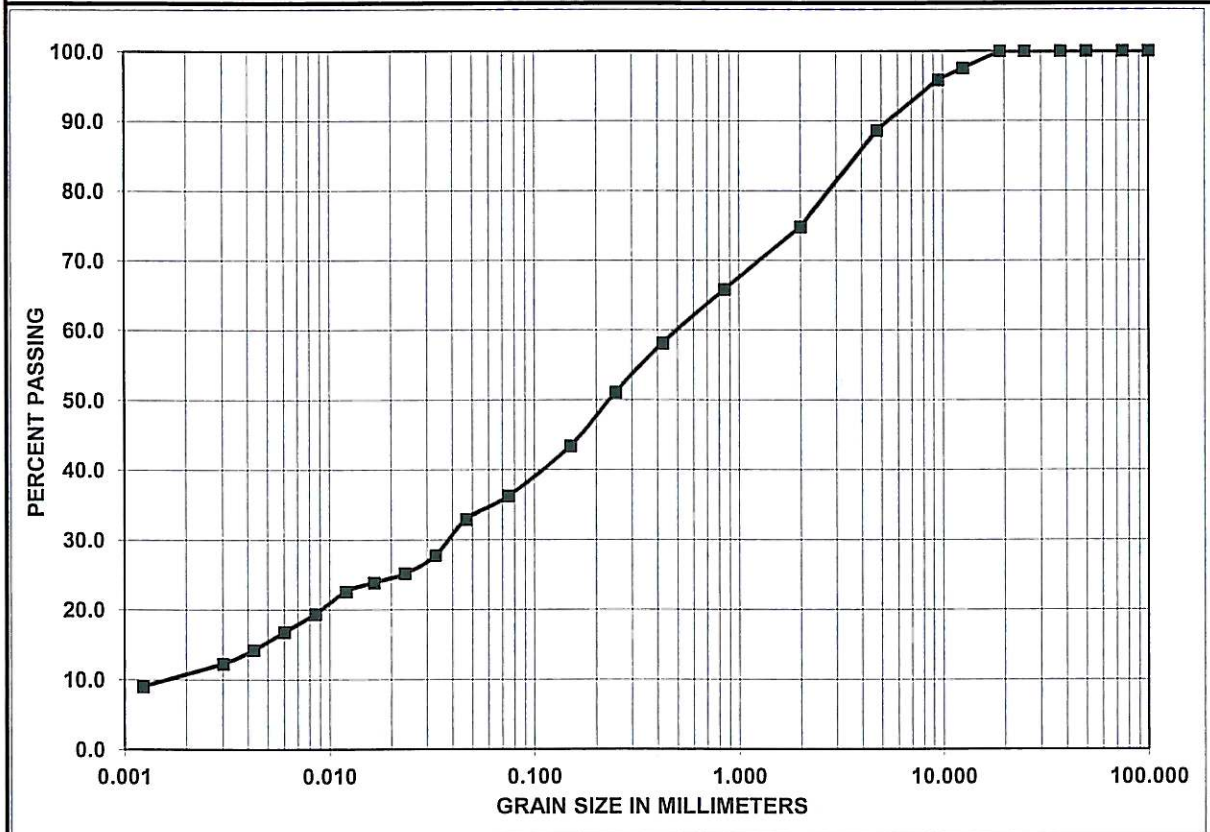
Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-5
DATE SAMPLED: 12-Aug-12
DATE TESTED: 12-Sep-12

SAMPLED BY: Client
SOURCE: GT12-21, sample 8
DEPTH: 32.76m - 32.96m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	97.6
9.5	95.9
4.75	88.6
2.00	74.8
0.850	65.8
0.425	58.1
0.250	51.1
0.150	43.4
0.075	36.2
0.0467	32.9
0.0330	27.7
0.0234	25.2
0.0165	23.9
0.0121	22.6
0.0085	19.4
0.0060	16.8
0.0043	14.2
0.0030	12.3
0.0012	9.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	11.4%
SAND	52.4%
SILT	25.8%
CLAY	10.4%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

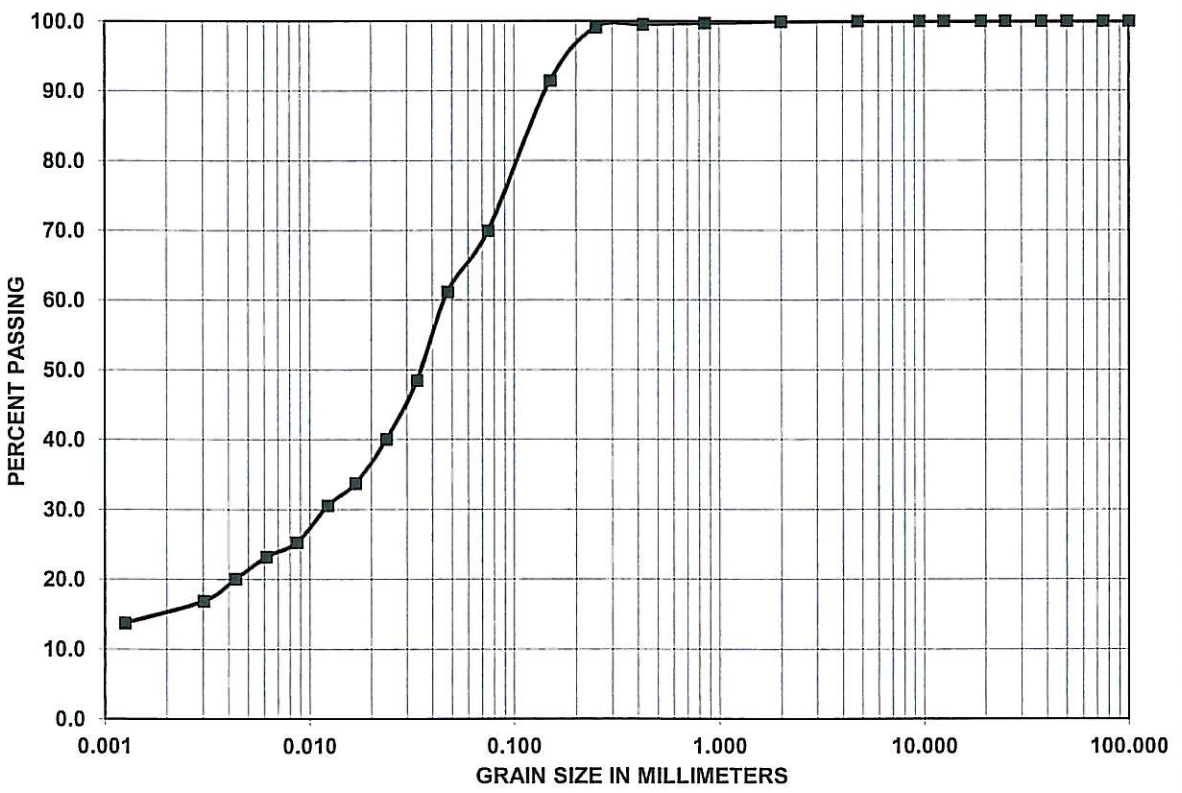
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-6
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 12
DATE TESTED: 12-Sep-12
DEPTH: 50.74m - 50.94m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.9
0.850	99.7
0.425	99.5
0.250	99.1
0.150	91.4
0.075	69.9
0.0476	61.1
0.0337	48.5
0.0238	40.1
0.0168	33.7
0.0123	30.6
0.0087	25.3
0.0061	23.2
0.0043	20.0
0.0030	16.9
0.0013	13.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	30.1%
SILT	54.9%
CLAY	15.0%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

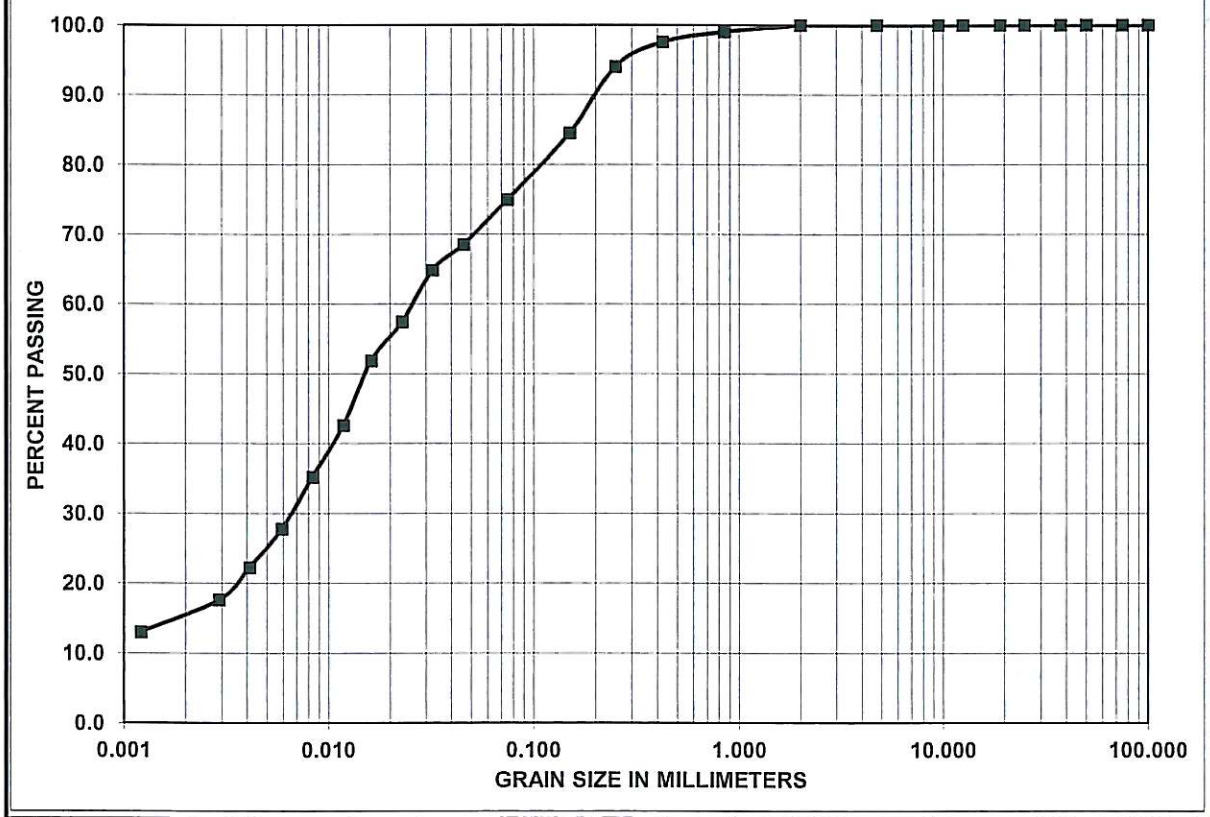
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-7
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 13
DATE TESTED: 19-Sep-12
DEPTH: 56.41m - 56.61m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.1
0.425	97.6
0.250	94.0
0.150	84.5
0.075	74.9
0.0459	68.5
0.0324	64.8
0.0229	57.4
0.0162	51.9
0.0118	42.6
0.0084	35.2
0.0059	27.8
0.0041	22.2
0.0029	17.6
0.0012	13.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	25.1%
SILT	59.8%
CLAY	15.1%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

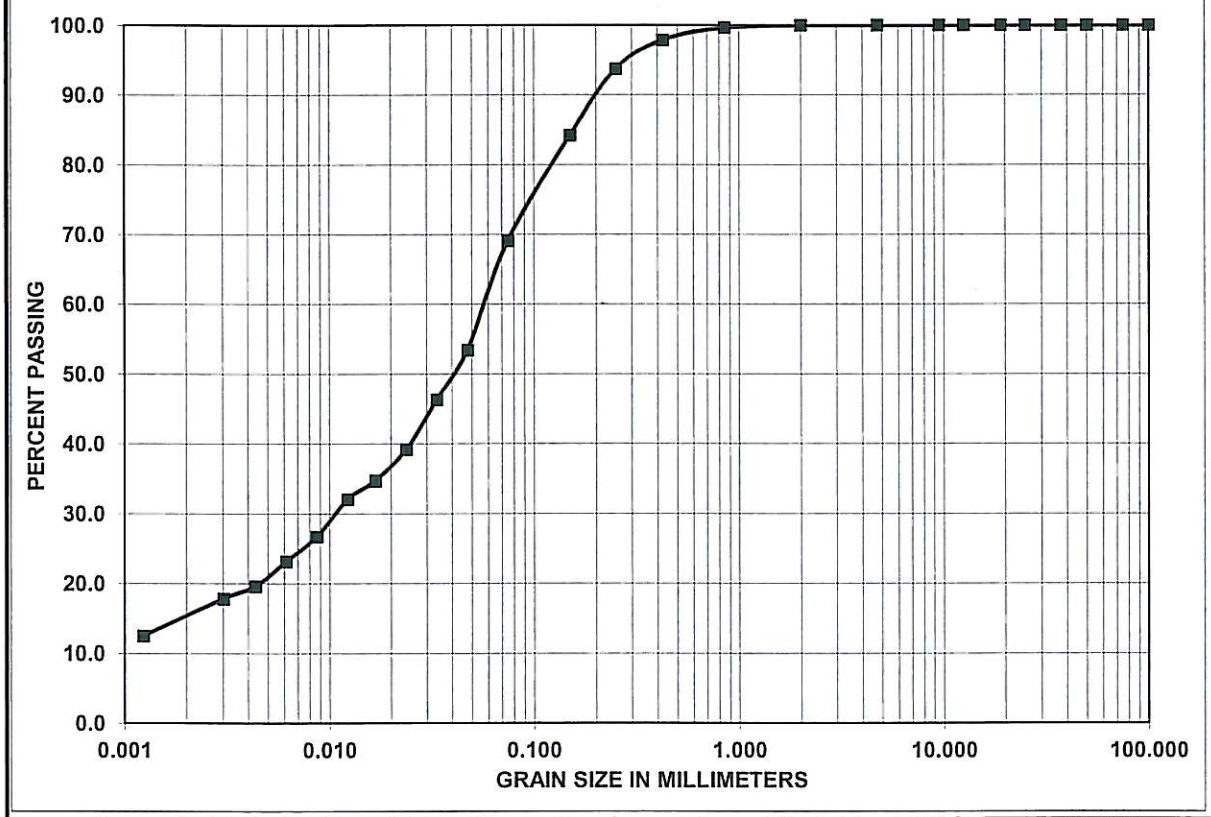
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-8
SAMPLED BY: Client
DATE SAMPLED: 12-Aug-12
SOURCE: GT12-21, sample 14
DATE TESTED: 19-Sep-12
DEPTH: 59.52m - 59.72m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.6
0.425	97.8
0.250	93.7
0.150	84.2
0.075	69.1
0.0476	53.4
0.0337	46.3
0.0238	39.2
0.0168	34.7
0.0123	32.1
0.0087	26.7
0.0061	23.2
0.0043	19.6
0.0030	17.8
0.0012	12.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_C =	N/A

GRAVEL	0.0%
SAND	30.9%
SILT	54.3%
CLAY	14.8%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 30-Sep-12

PROJECT NAME: Blackwater

TEST No:

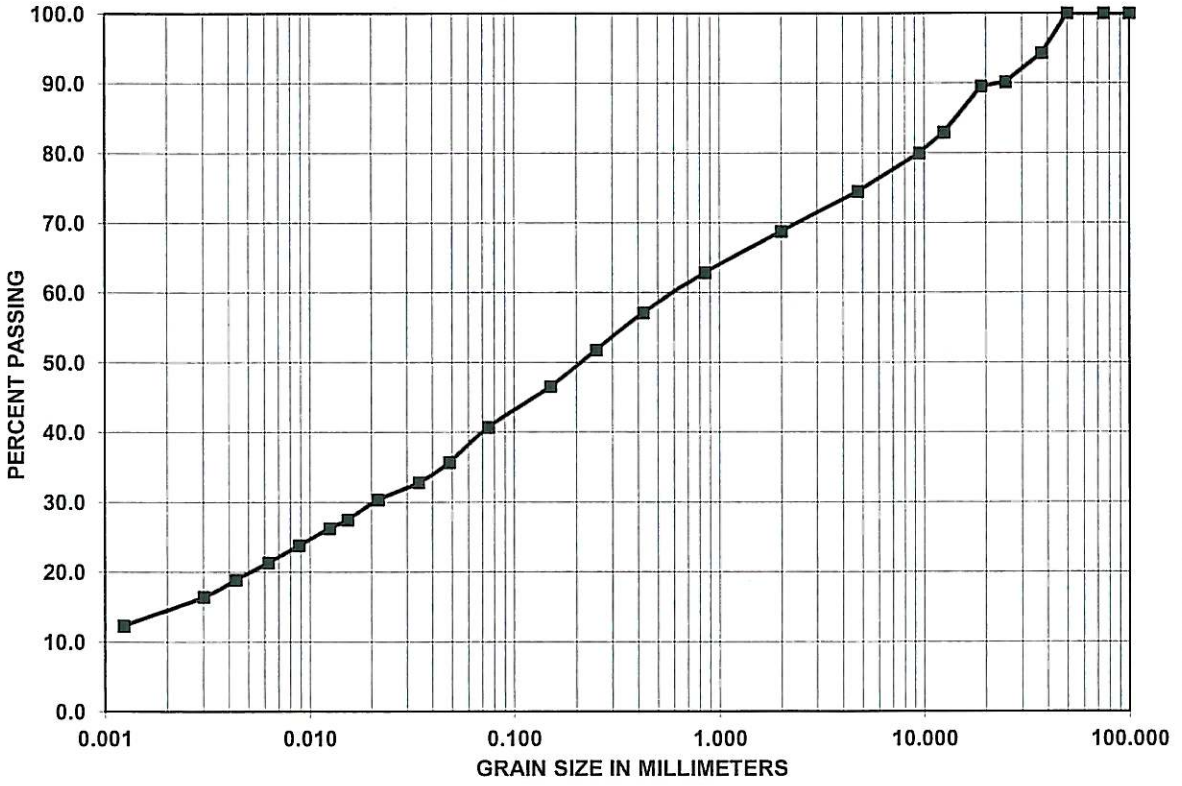
SAMPLED BY: Client

DATE SAMPLED: 13-Aug-12

SOURCE: GT12-22, sample S1

DATE TESTED: 27-Sep-12

DEPTH: 1.58m - 1.78m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	94.3
25.0	90.1
19.0	89.5
12.5	82.9
9.5	80.0
4.75	74.5
2.00	68.7
0.850	62.8
0.425	57.1
0.250	51.8
0.150	46.5
0.075	40.7
0.0485	35.7
0.0343	32.8
0.0217	30.3
0.0153	27.5
0.0125	26.2
0.0089	23.8
0.0063	21.3
0.0043	18.9
0.0030	16.4
0.0012	12.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	25.53%
SAND	33.80%
SILT	26.59%
CLAY	14.08%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

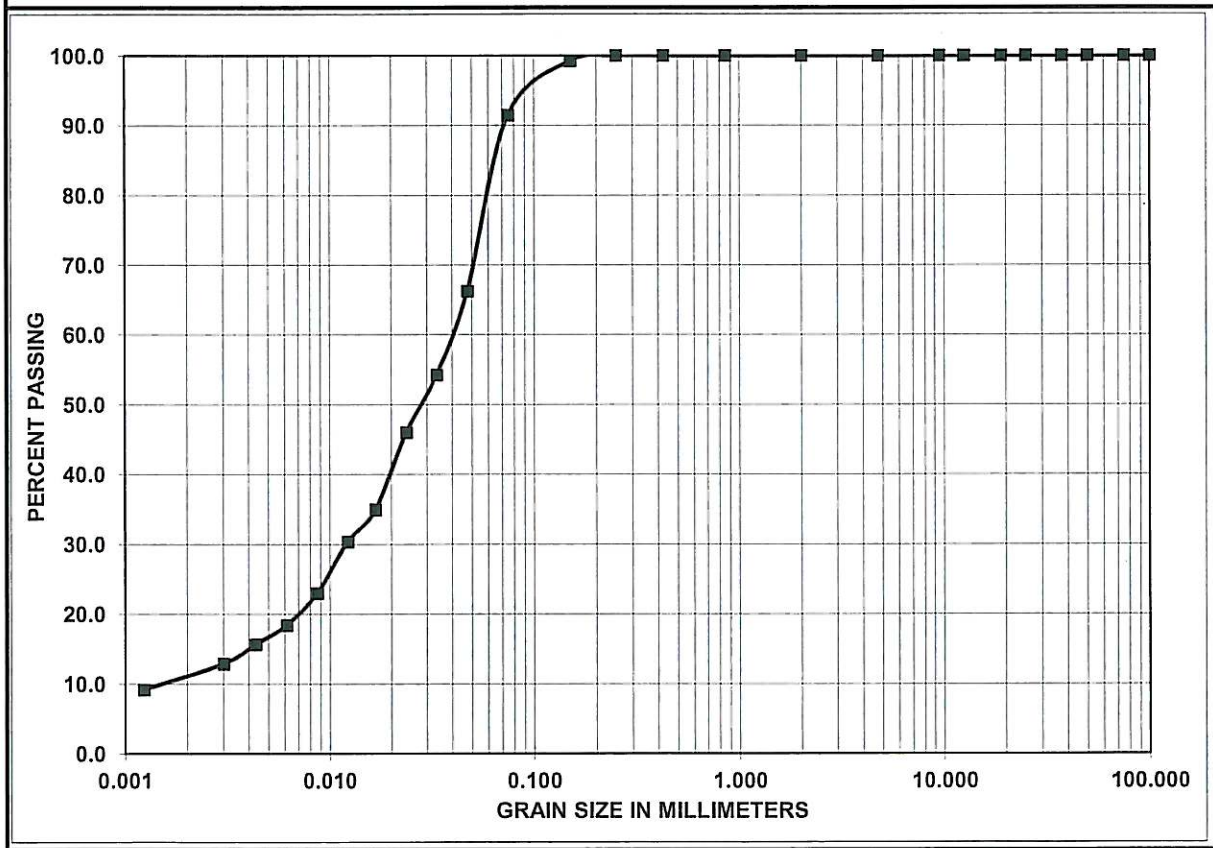
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-9
SAMPLED BY: Client
DATE SAMPLED: 13-Aug-12
SOURCE: GT12-22, sample 2
DATE TESTED: 19-Sep-12
DEPTH: 8.28m - 8.41m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	100.0
0.425	100.0
0.250	100.0
0.150	99.3
0.075	91.5
0.0476	66.2
0.0337	54.3
0.0238	46.0
0.0168	34.9
0.0123	30.4
0.0087	23.0
0.0061	18.4
0.0043	15.6
0.0030	12.9
0.0012	9.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	8.5%
SILT	80.7%
CLAY	10.8%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

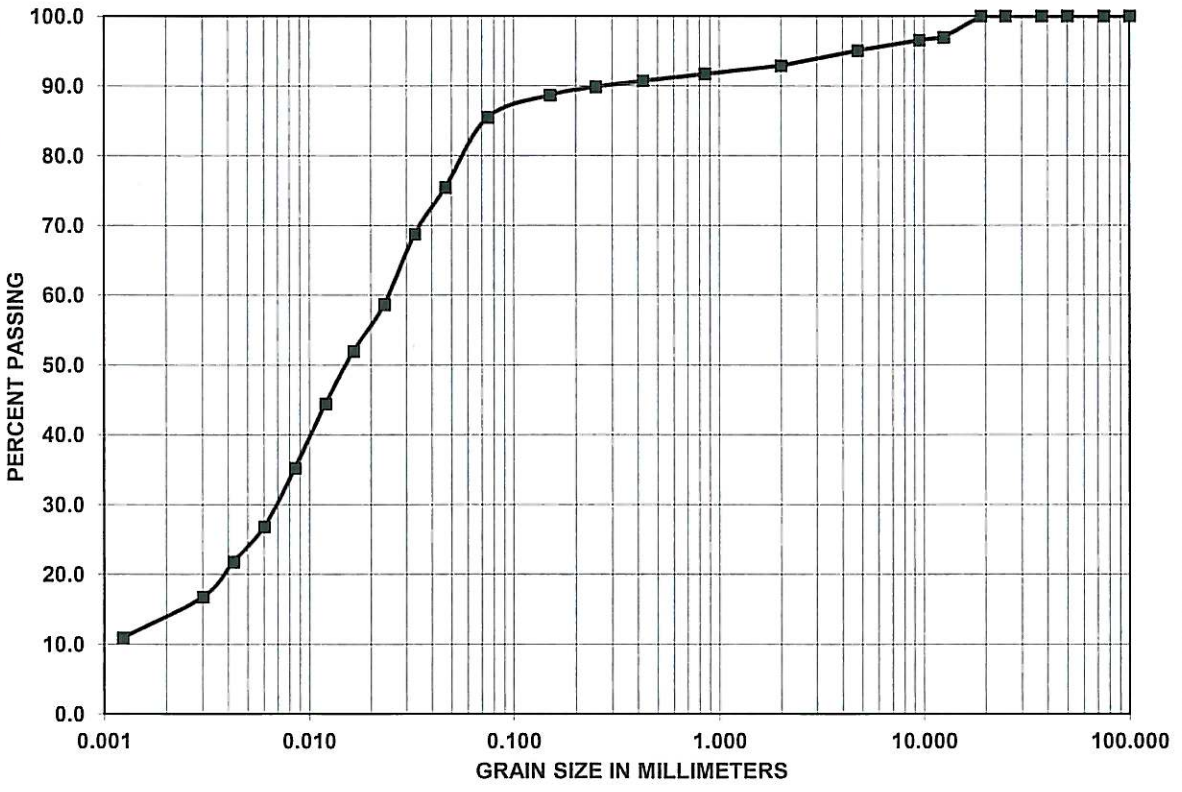
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-10
SAMPLED BY: Client
DATE SAMPLED: 13-Aug-12
SOURCE: GT12-22, sample 3
DATE TESTED: 19-Sep-12
DEPTH: 14.26m - 14.46m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	96.9
9.5	96.6
4.75	95.1
2.00	92.9
0.850	91.7
0.425	90.7
0.250	89.8
0.150	88.7
0.075	85.4
0.0467	75.4
0.0330	68.7
0.0234	58.7
0.0165	52.0
0.0121	44.4
0.0085	35.2
0.0060	26.8
0.0043	21.8
0.0030	16.8
0.0012	10.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	4.9%
SAND	9.6%
SILT	72.0%
CLAY	13.4%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

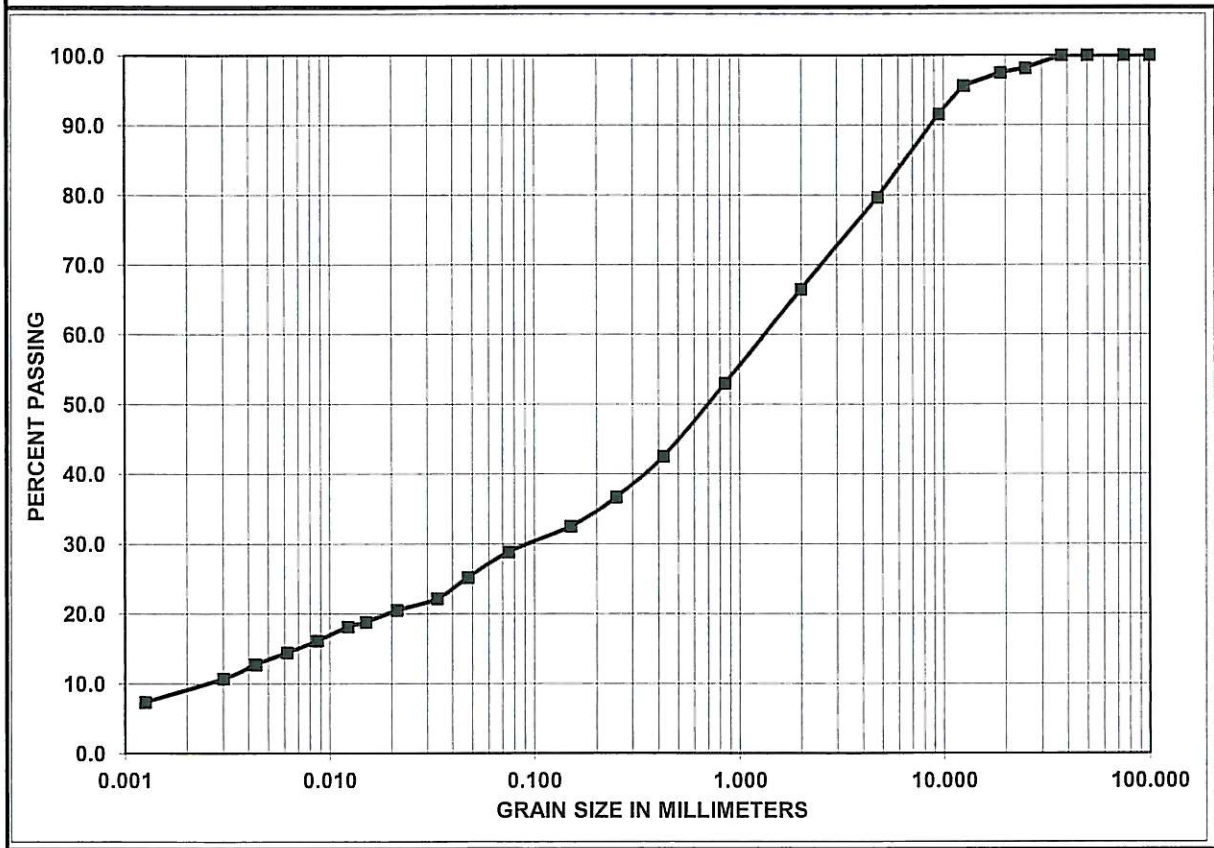
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 30-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 13-Aug-12
SOURCE: GT12-22, sample S7
DATE TESTED: 27-Sep-12
DEPTH: 33.78m - 33.98m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	98.1
19.0	97.5
12.5	95.6
9.5	91.6
4.75	79.6
2.00	66.5
0.850	53.0
0.425	42.5
0.250	36.7
0.150	32.5
0.075	28.8
0.0476	25.2
0.0337	22.2
0.0213	20.5
0.0151	18.8
0.0123	18.1
0.0087	16.1
0.0062	14.4
0.0043	12.8
0.0030	10.7
0.0013	7.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	20.36%
SAND	50.80%
SILT	20.02%
CLAY	8.82%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

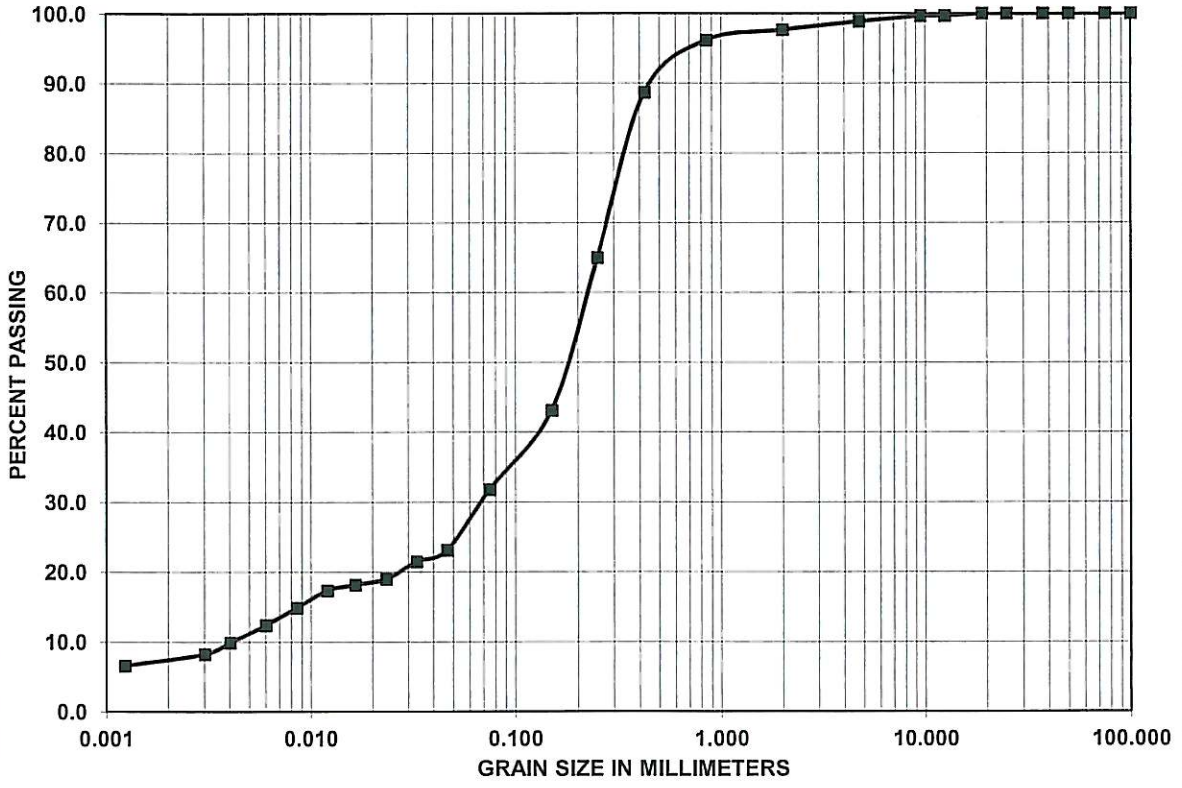
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-11
SAMPLED BY: Client
DATE SAMPLED: 13-Aug-12
SOURCE: GT12-22, sample 8
DATE TESTED: 19-Sep-12
DEPTH: 38.51m - 38.71m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.7
9.5	99.7
4.75	98.9
2.00	97.7
0.850	96.2
0.425	88.7
0.250	65.0
0.150	43.1
0.075	31.8
0.0467	23.1
0.0330	21.5
0.0234	19.0
0.0165	18.2
0.0121	17.3
0.0085	14.9
0.0060	12.4
0.0040	9.9
0.0030	8.3
0.0012	6.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.1%
SAND	67.1%
SILT	24.5%
CLAY	7.3%

TECHNICIAN: B. Shearer

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AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

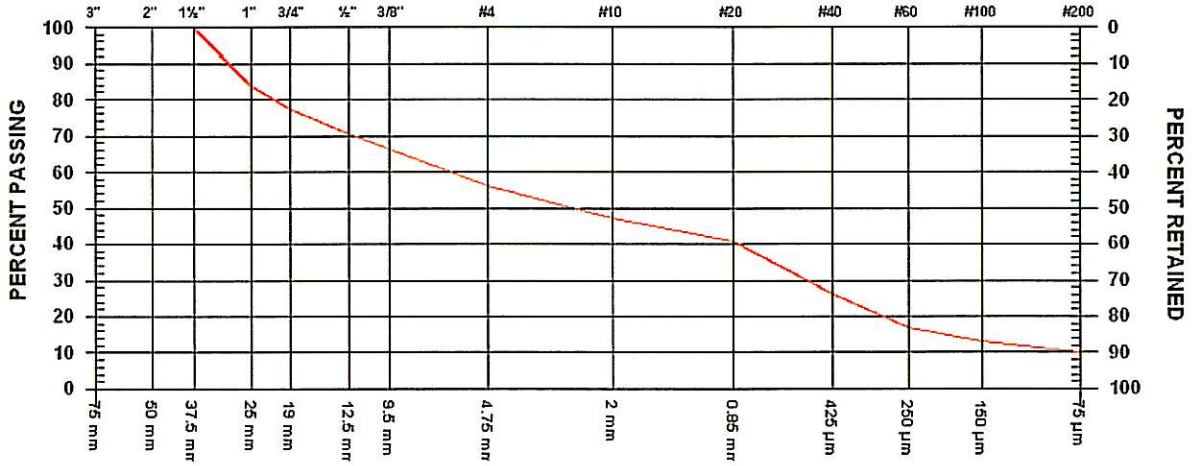
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 5 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.07 DATE SAMPLED 2012.Aug.13

SUPPLIER
SOURCE 44.8m - 45.0m
SPECIFICATION
MATERIAL TYPE GT12-22, sample S9

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	84.0	
3/4"	19 mm	77.5	
1/2"	12.5 mm	70.5	
3/8"	9.5 mm	66.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	56.1	
No. 10	2.00 mm	47.2	
No. 20	850 µm	40.7	
No. 40	425 µm	26.4	
No. 60	250 µm	17.2	
No. 100	150 µm	13.1	
No. 200	75 µm	10.3	

COMMENTS

Page 1 of 1 2012.Oct.01 AMEC Environment & Infrastructure PER. YMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.
Report System Software Registered to: AMEC Earth & Environmental, Prince George

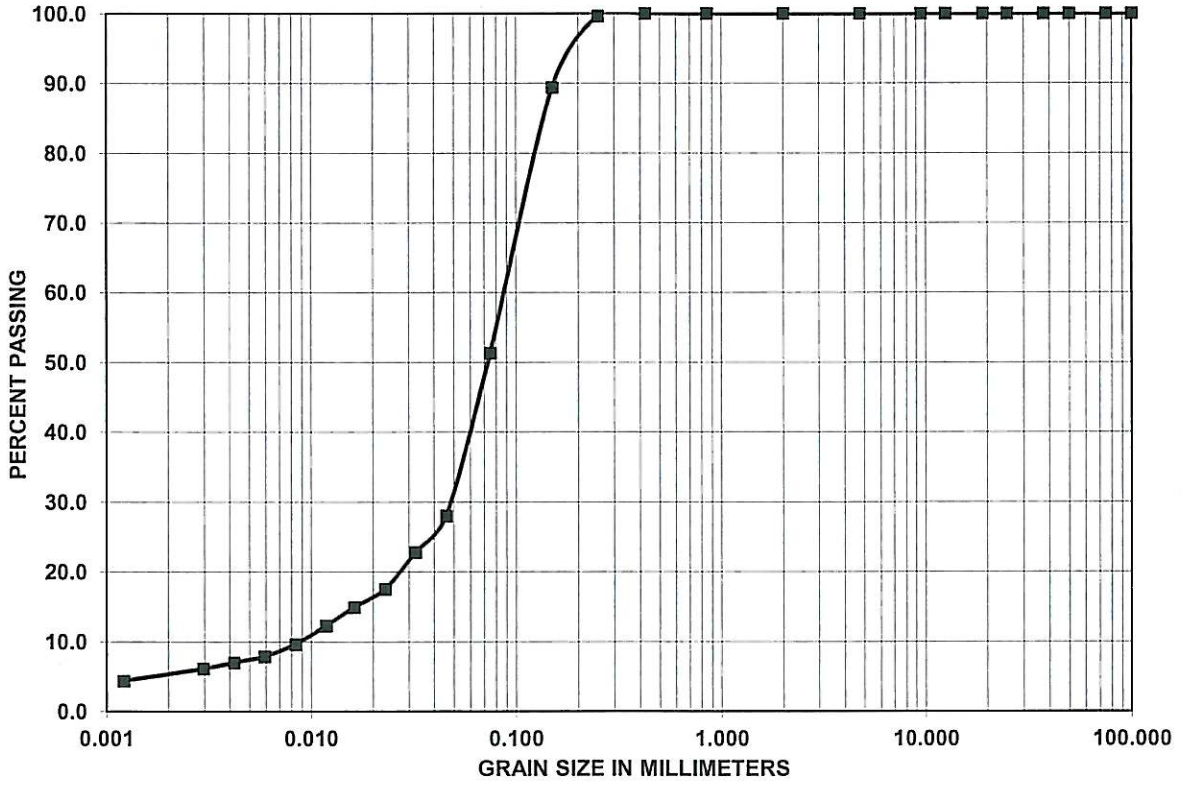
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-12
SAMPLED BY: Client
DATE SAMPLED: 13-Aug-12
SOURCE: GT12-22, sample 10
DATE TESTED: 19-Sep-12
DEPTH: 51.19m - 51.39m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	100.0
0.425	100.0
0.250	99.6
0.150	89.4
0.075	51.3
0.0459	28.0
0.0324	22.8
0.0229	17.5
0.0162	14.9
0.0118	12.3
0.0084	9.6
0.0059	7.9
0.0042	7.0
0.0030	6.1
0.0012	4.4

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.0%
SAND	48.7%
SILT	46.2%
CLAY	5.2%

TECHNICIAN: B. Shearer

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Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

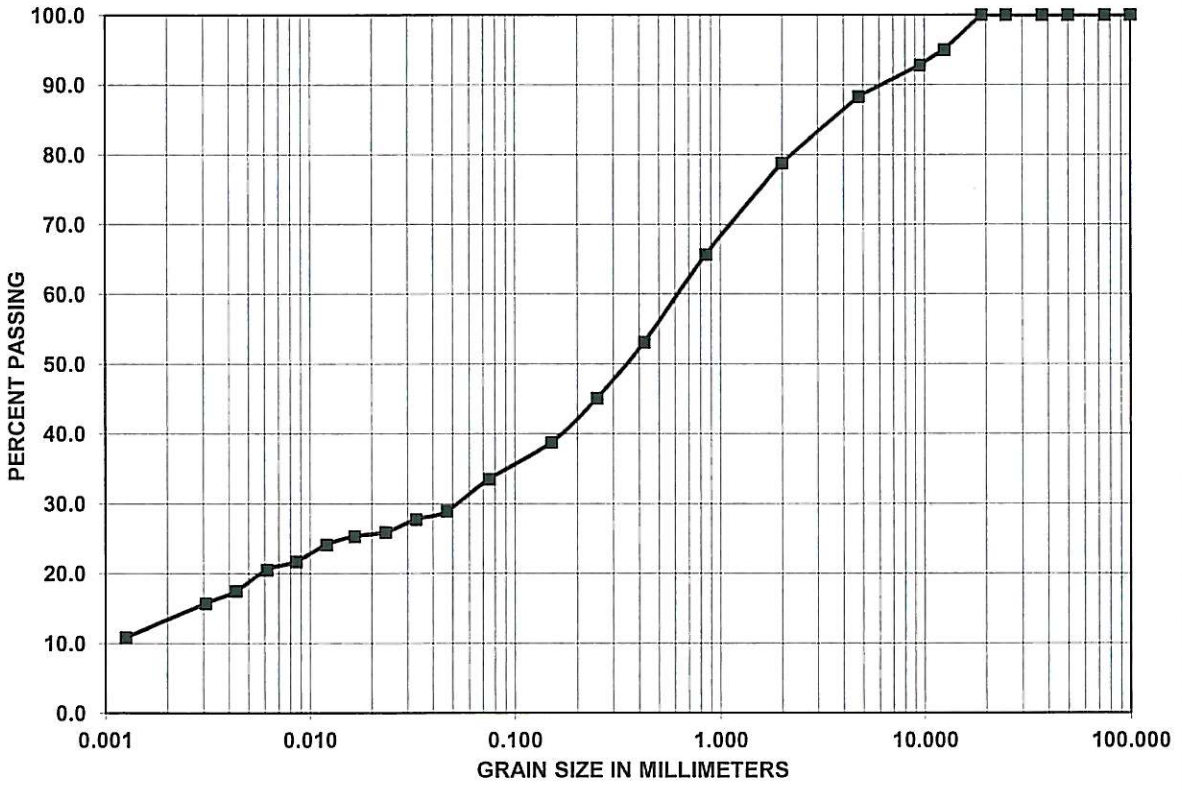
Knight Piesold

OFFICE: Kamloops, BC
PROJECT: KX05349
DATE: 26-Sep-09

PROJECT NAME: Blackwater

TEST No: Lab 12-198-13
DATE SAMPLED: 13-Aug-12
DATE TESTED: 19-Sep-12

SAMPLED BY: Client
SOURCE: GT12-22, sample 11
DEPTH: 57.58m - 57.78m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	95.0
9.5	92.8
4.75	88.3
2.00	78.8
0.850	65.6
0.425	53.1
0.250	45.1
0.150	38.7
0.075	33.5
0.0467	28.9
0.0330	27.7
0.0234	25.9
0.0165	25.3
0.0121	24.1
0.0085	21.7
0.0061	20.5
0.0043	17.5
0.0031	15.7
0.0013	10.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	11.7%
SAND	54.8%
SILT	20.7%
CLAY	12.8%

TECHNICIAN: B. Shearer

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:

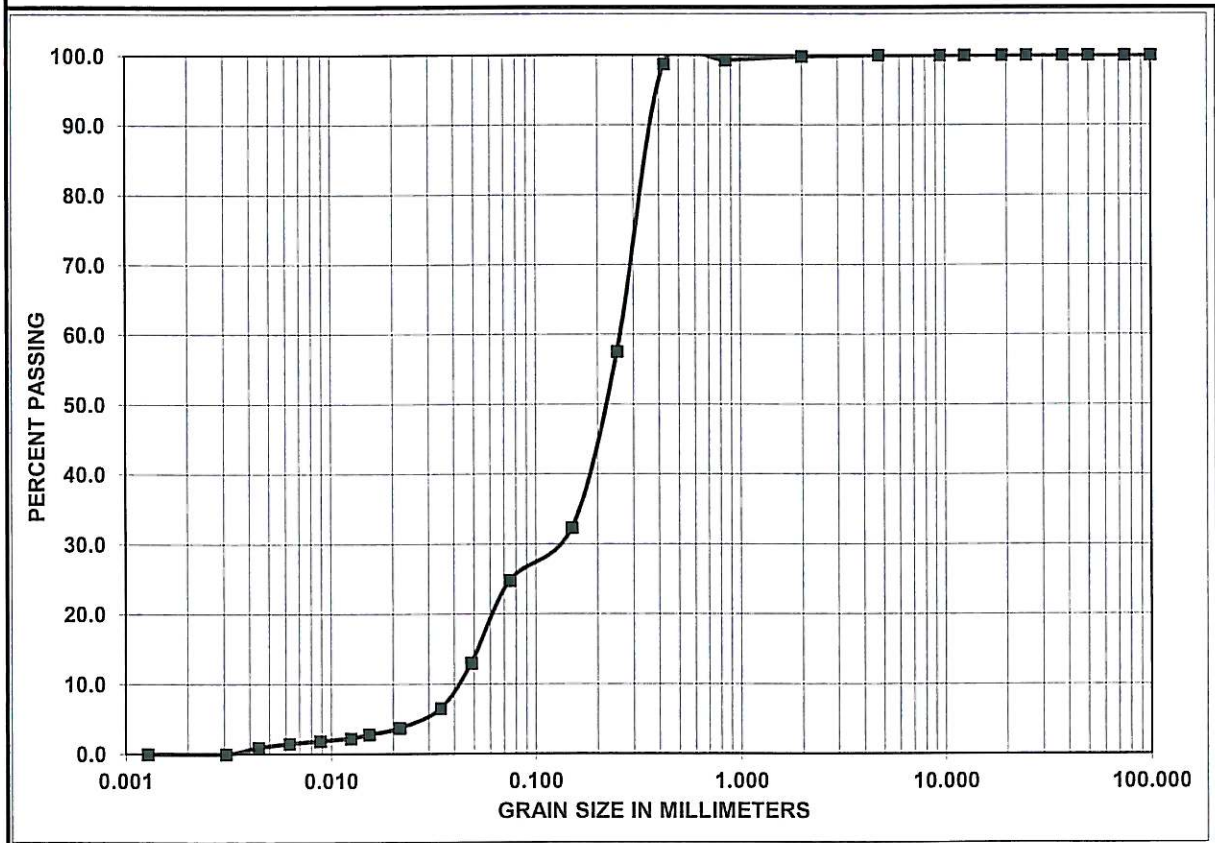
SAMPLED BY: Client

DATE SAMPLED: 14-Aug-12

SOURCE: GT12-23, sample 2

DATE TESTED: 2-Sep-12

DEPTH: 4.64m - 4.84m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.8
0.850	99.3
0.425	98.8
0.250	57.6
0.150	32.3
0.075	24.8
0.0485	13.0
0.0343	6.5
0.0217	3.7
0.0153	2.8
0.0125	2.2
0.0089	1.9
0.0063	1.5
0.0044	0.9
0.0031	0.0
0.0013	0.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	75.23%
SILT	24.77%
CLAY	0.00%

TECHNICIAN: GMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

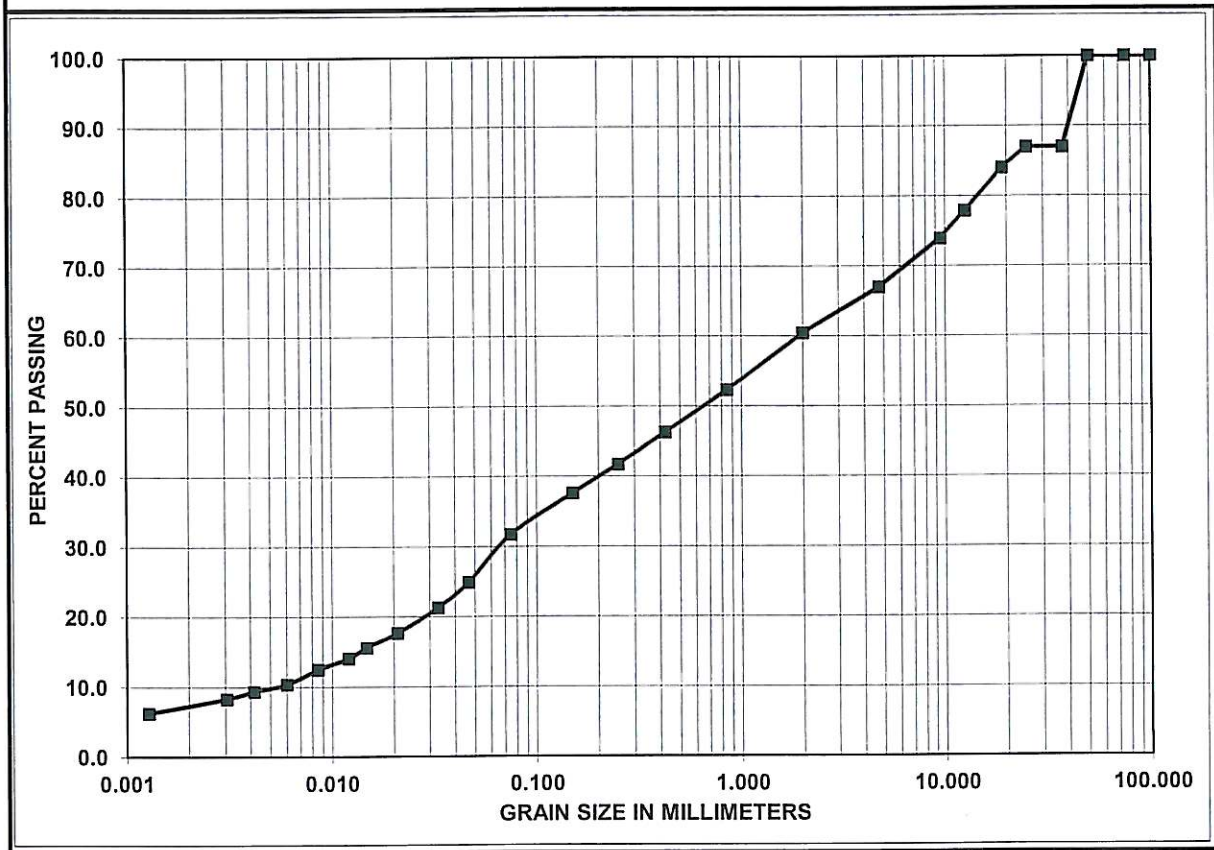
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 14-Aug-12
SOURCE: GT12-23, sample 3
DATE TESTED: 2-Sep-12
DEPTH: 6.31m - 6.51m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	86.9
25.0	86.9
19.0	84.0
12.5	77.9
9.5	73.9
4.75	67.0
2.00	60.4
0.850	52.3
0.425	46.3
0.250	41.7
0.150	37.6
0.075	31.7
0.0467	24.9
0.0330	21.3
0.0209	17.6
0.0148	15.6
0.0121	14.0
0.0085	12.5
0.0060	10.4
0.0042	9.3
0.0031	8.3
0.0013	6.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	33.04%
SAND	35.25%
SILT	24.64%
CLAY	7.07%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

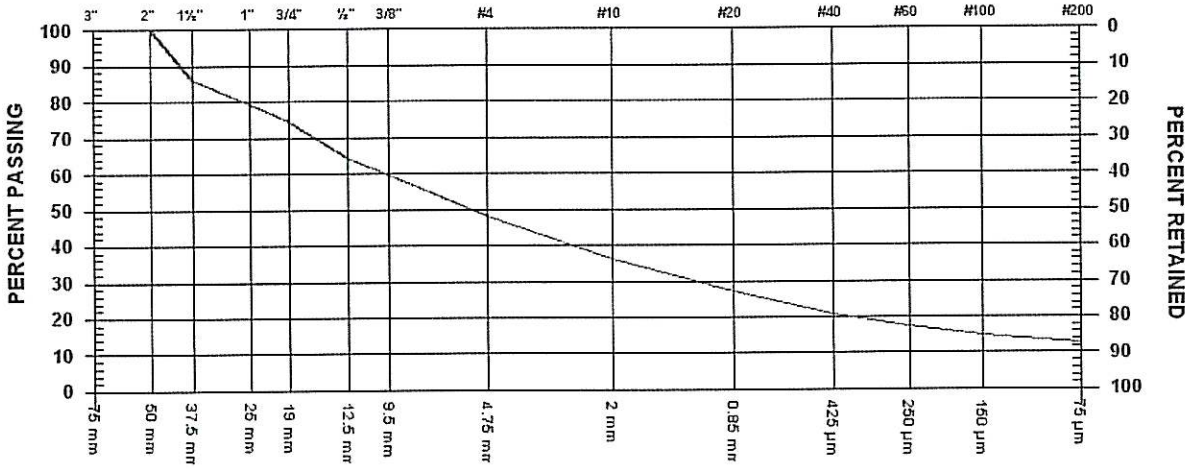
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 6 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.10 DATE SAMPLED 2012.Aug.14

SUPPLIER
SOURCE 11.99m - 12.19m
SPECIFICATION
MATERIAL TYPE GT12-23, sample S4

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	85.9	
1"	25 mm	79.0	
3/4"	19 mm	74.7	
1/2"	12.5 mm	64.1	
3/8"	9.5 mm	59.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	48.0	
No. 10	2.00 mm	36.2	
No. 20	850 µm	27.3	
No. 40	425 µm	20.9	
No. 60	250 µm	17.6	
No. 100	150 µm	15.1	
No. 200	75 µm	12.7	

MOISTURE CONTENT 5.9%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

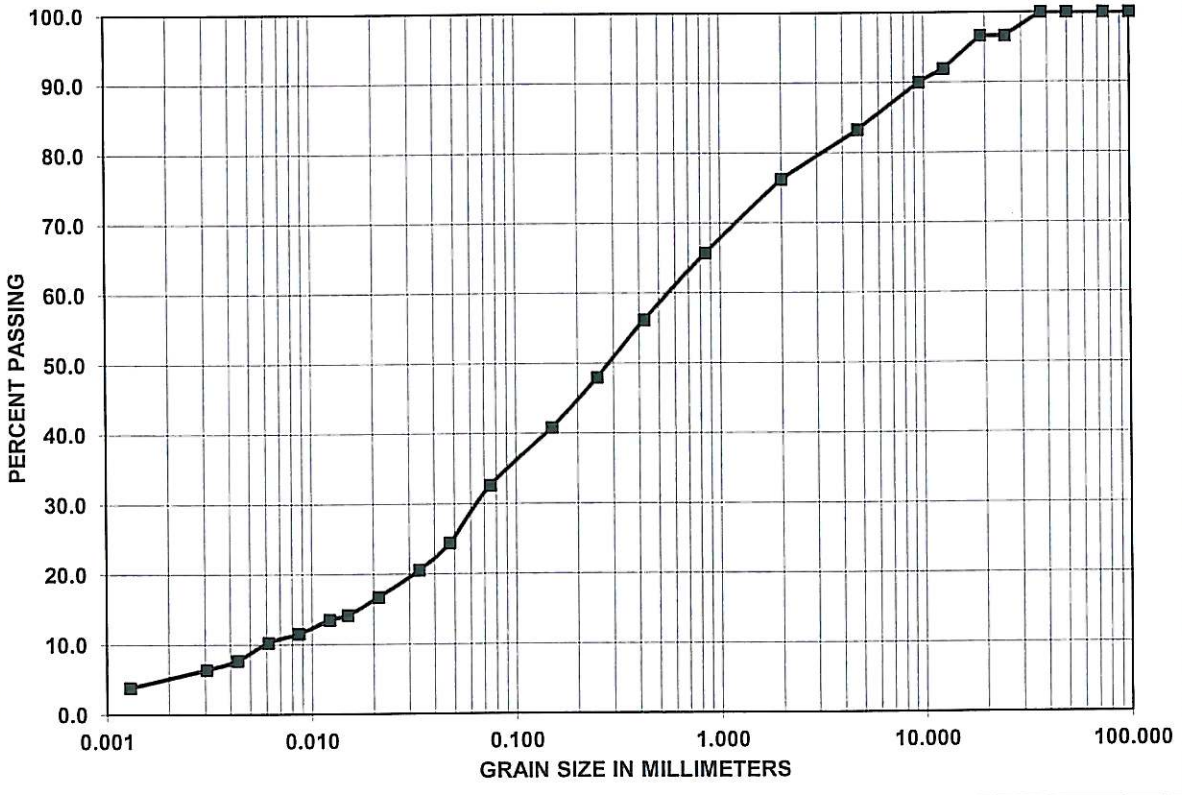
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 14-Aug-12
SOURCE: GT12-23, sample 5
DATE TESTED: 2-Sep-12
DEPTH: 14.25m - 14.45m



SUMMARY	
Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	96.6
19.0	96.6
12.5	91.9
9.5	90.0
4.75	83.3
2.00	76.2
0.850	65.7
0.425	56.2
0.250	48.0
0.150	40.8
0.075	32.6
0.0474	24.4
0.0335	20.5
0.0212	16.7
0.0150	14.1
0.0123	13.5
0.0087	11.5
0.0061	10.3
0.0043	7.7
0.0031	6.4
0.0013	3.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	16.74%
SAND	50.67%
SILT	27.72%
CLAY	4.87%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

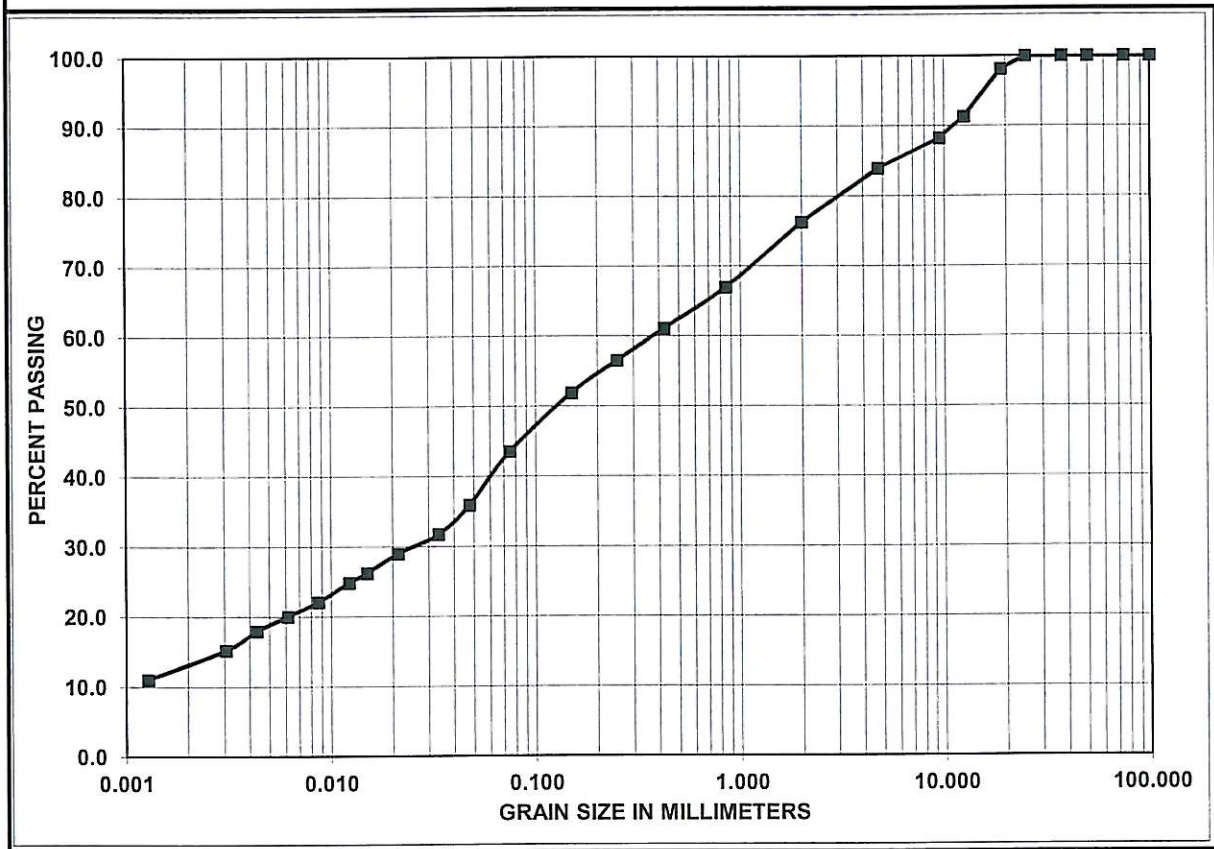
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 14-Aug-12
SOURCE: GT12-23, sample 9
DATE TESTED: 2-Sep-12
DEPTH: 34.89m - 35.09m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	98.1
12.5	91.3
9.5	88.2
4.75	83.9
2.00	76.2
0.850	66.9
0.425	61.0
0.250	56.5
0.150	51.9
0.075	43.5
0.0476	35.9
0.0337	31.7
0.0213	29.0
0.0151	26.2
0.0123	24.8
0.0087	22.1
0.0061	20.0
0.0043	17.9
0.0031	15.2
0.0013	11.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	16.14%
SAND	40.37%
SILT	30.78%
CLAY	12.71%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

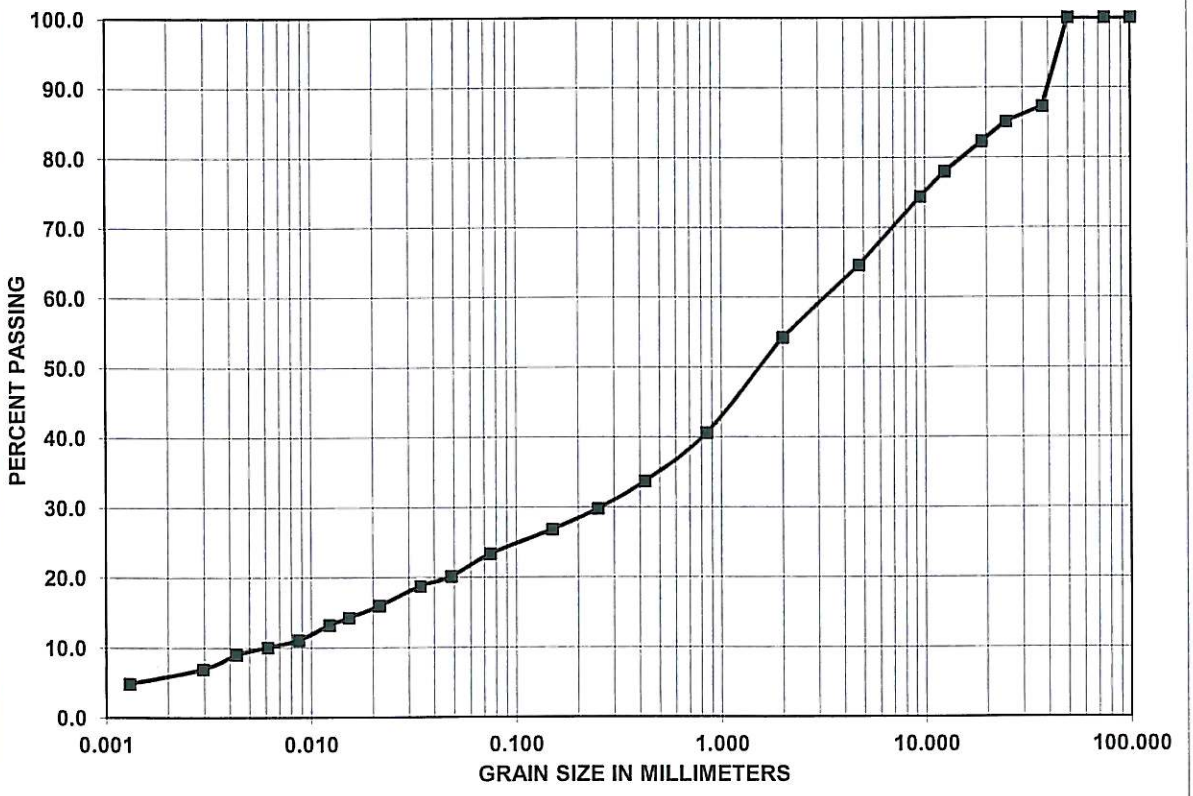
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Aug-12
SOURCE: GT12-24, sample BS1
DATE TESTED: 5-Sep-12
DEPTH: 16.17m - 16.42m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	87.3
25.0	85.1
19.0	82.3
12.5	78.0
9.5	74.4
4.75	64.6
2.00	54.3
0.850	40.6
0.425	33.7
0.250	29.8
0.150	26.8
0.075	23.3
0.0483	20.1
0.0342	18.7
0.0216	16.0
0.0153	14.2
0.0123	13.2
0.0087	11.1
0.0061	10.1
0.0043	9.0
0.0030	6.9
0.0013	4.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	35.42%
SAND	41.25%
SILT	17.59%
CLAY	5.74%

TECHNICIAN: M Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

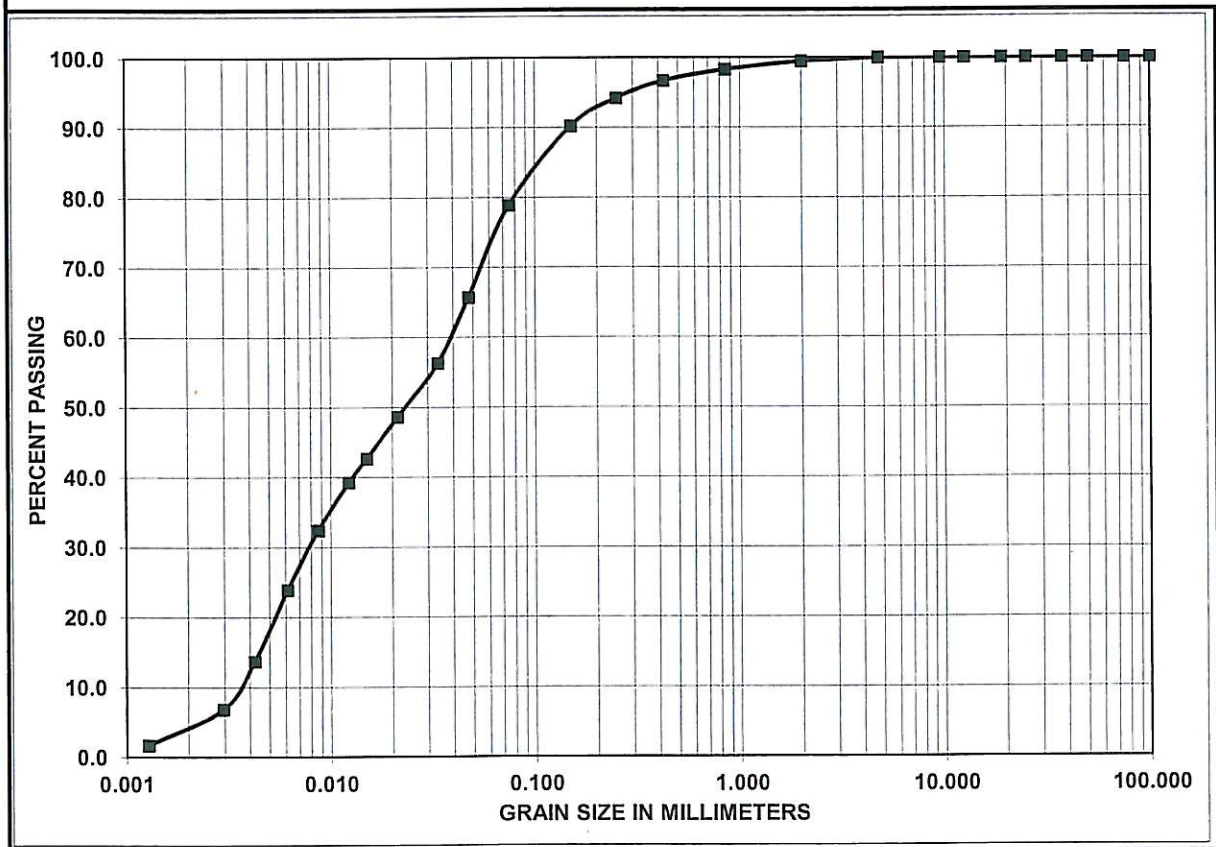
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Aug-12
SOURCE: G12-24, sample BS2
DATE TESTED: 5-Sep-12
DEPTH: 22.59m - 22.86m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.5
0.850	98.3
0.425	96.7
0.250	94.2
0.150	90.2
0.075	78.9
0.0476	65.7
0.0337	56.3
0.0213	48.6
0.0151	42.6
0.0123	39.2
0.0087	32.4
0.0061	23.9
0.0042	13.6
0.0030	6.8
0.0013	1.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.03%
SAND	21.08%
SILT	74.98%
CLAY	3.91%

TECHNICIAN: GMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

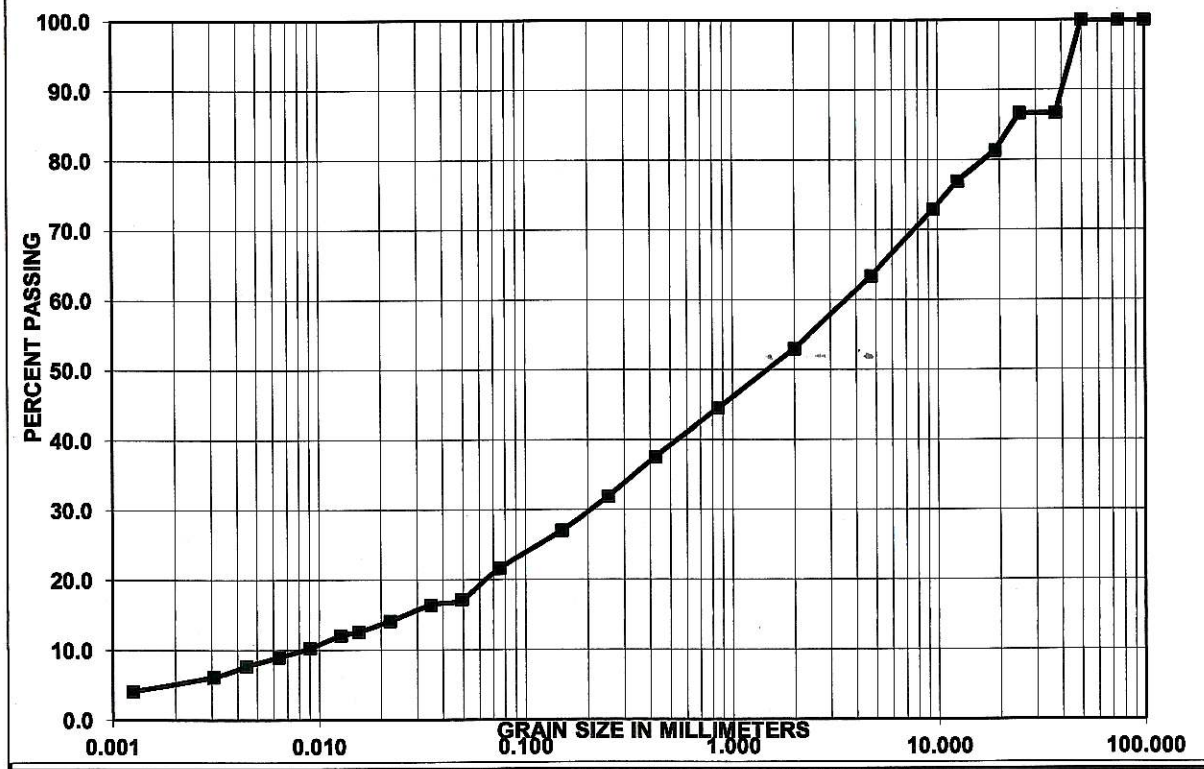
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 17-Oct-11

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 20-Aug-12
SOURCE: GT12-24, sample BS3
DATE TESTED: 16-Oct-12
DEPTH: 32.33m - 32.53 m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	86.7
25.0	86.7
19.0	81.3
12.5	76.9
9.5	72.9
4.75	63.4
2.00	53.0
0.850	44.5
0.425	37.6
0.250	31.9
0.150	27.0
0.075	21.6
0.0494	17.2
0.0349	16.5
0.0221	14.1
0.0156	12.6
0.0128	12.1
0.0090	10.3
0.0064	9.0
0.0044	7.7
0.0031	6.2
0.0013	4.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	36.60%
SAND	41.80%
SILT	16.64%
CLAY	4.96%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

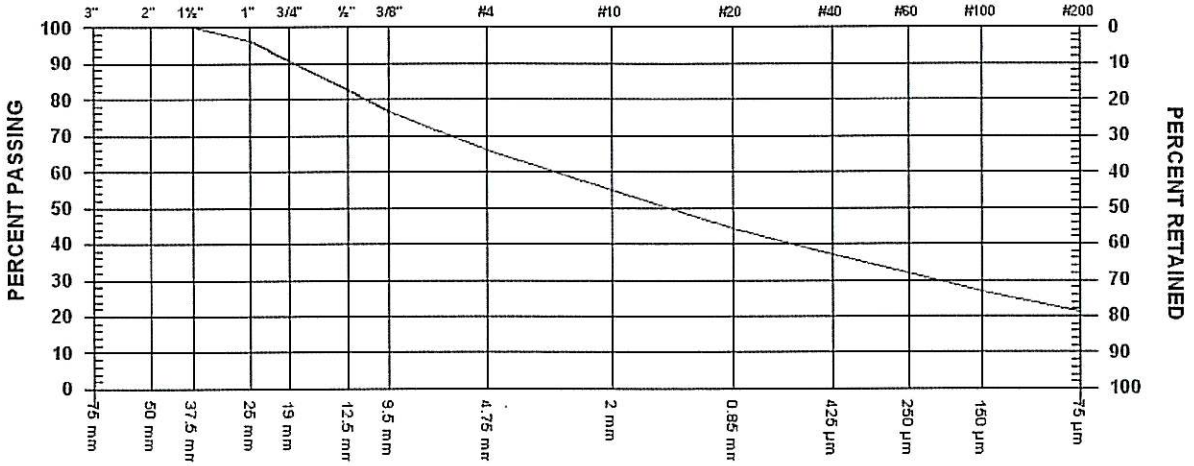
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 7 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.10 DATE SAMPLED 2012.Aug.20

SUPPLIER
SOURCE 32.33m - 32.53m
SPECIFICATION
MATERIAL TYPE GT12-24, sample BS3

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	96.4	
3/4"	19 mm	90.6	
1/2"	12.5 mm	82.8	
3/8"	9.5 mm	76.6	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	65.8	
No. 10	2.00 mm	54.8	
No. 20	850 µm	44.4	
No. 40	425 µm	37.1	
No. 60	250 µm	31.9	
No. 100	150 µm	27.0	
No. 200	75 µm	21.4	

MOISTURE CONTENT 10.9%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. YMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:

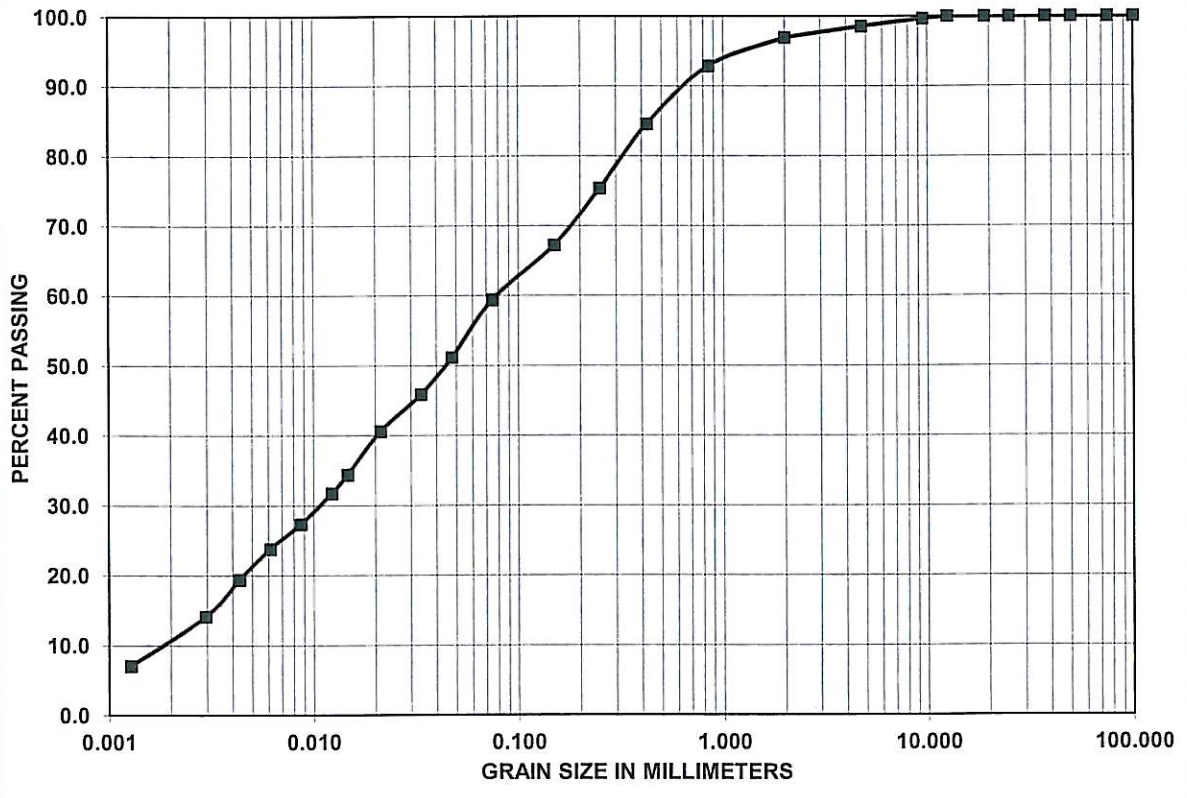
SAMPLED BY: Client

DATE SAMPLED: 20-Aug-12

SOURCE: GT12-24, sample BS4

DATE TESTED: 5-Sep-12

DEPTH: 37.04m - 37.24m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.7
4.75	98.5
2.00	97.0
0.850	92.9
0.425	84.5
0.250	75.3
0.150	67.2
0.075	59.4
0.0476	51.2
0.0337	45.9
0.0213	40.6
0.0147	34.4
0.0123	31.8
0.0087	27.3
0.0061	23.8
0.0043	19.4
0.0030	14.1
0.0013	7.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.46%
SAND	39.15%
SILT	49.29%
CLAY	10.09%

TECHNICIAN: JM Richard

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

amec

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 17-Oct-11

TEST No:

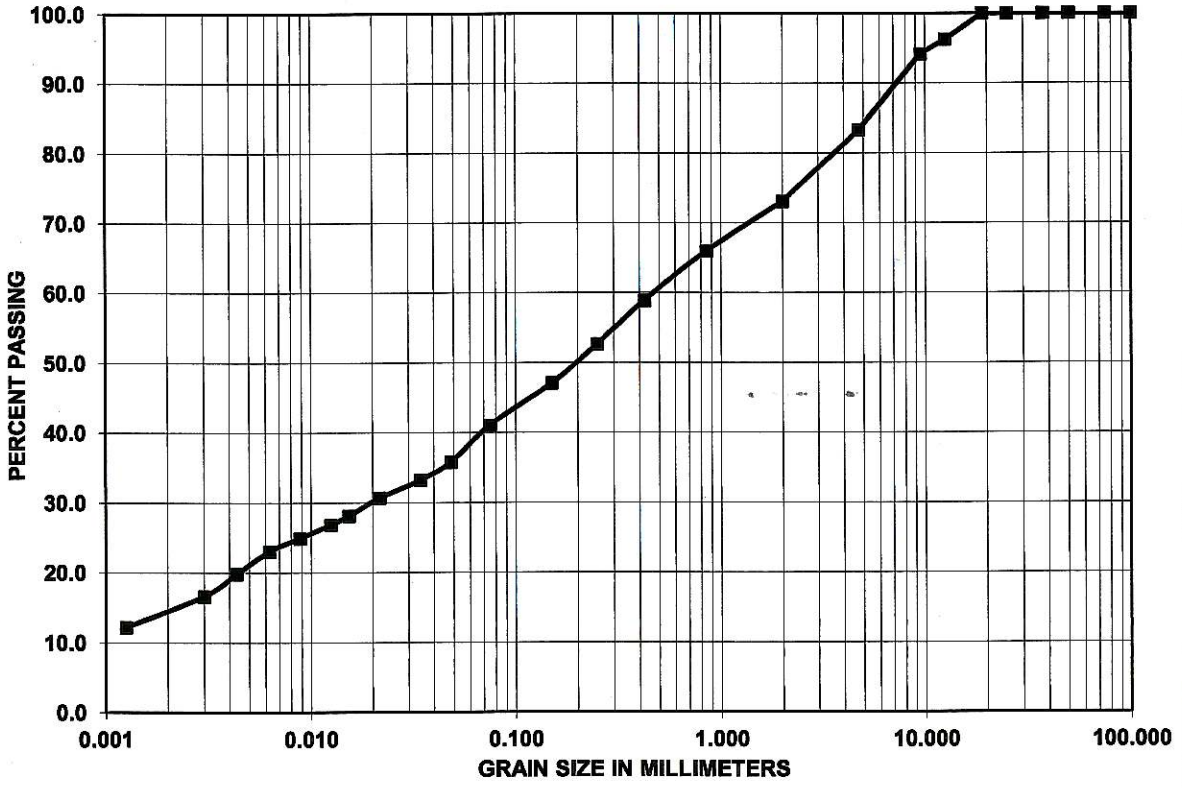
SAMPLED BY: Client

DATE SAMPLED: 20-Aug-12

SOURCE: GT12-24, sample BS5

DATE TESTED: 16-Oct-12

DEPTH: 43.75m - 44.00 m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	96.2
9.5	94.2
4.75	83.3
2.00	73.0
0.850	65.9
0.425	58.9
0.250	52.7
0.150	47.0
0.075	41.0
0.0485	35.8
0.0343	33.2
0.0217	30.7
0.0153	28.1
0.0125	26.8
0.0089	24.9
0.0063	23.0
0.0043	19.8
0.0030	16.6
0.0013	12.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	16.74%
SAND	42.24%
SILT	26.98%
CLAY	14.04%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

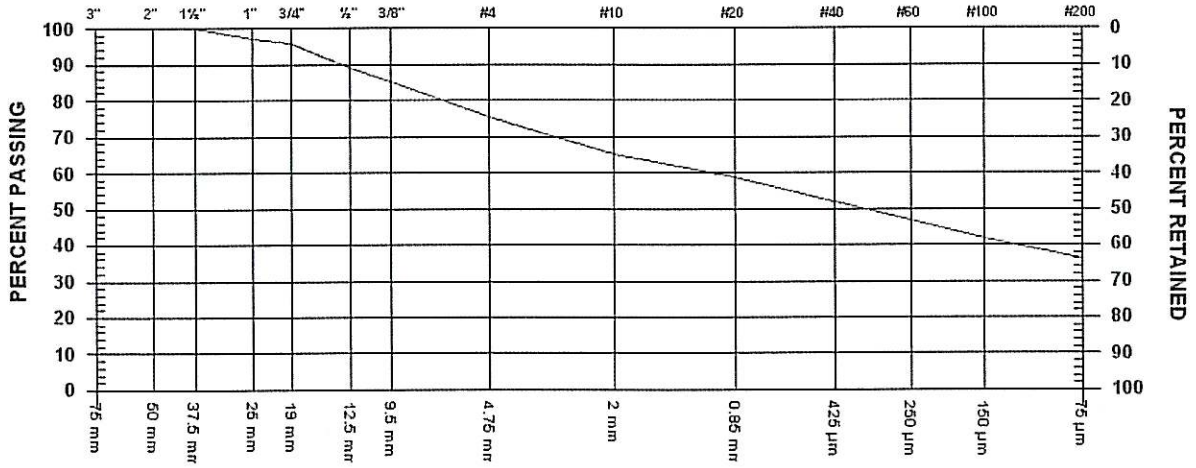
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 8 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.10 DATE SAMPLED 2012.Aug.20

SUPPLIER
SOURCE 43.75m - 44.00m
SPECIFICATION
MATERIAL TYPE GT12-24, sample BS5

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	96.9	
3/4"	19 mm	95.9	
1/2"	12.5 mm	89.0	
3/8"	9.5 mm	85.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	75.4	
No. 10	2.00 mm	65.3	
No. 20	850 µm	58.6	
No. 40	425 µm	52.1	
No. 60	250 µm	46.8	
No. 100	150 µm	41.7	
No. 200	75 µm	36.2	

MOISTURE CONTENT 13.8%

COMMENTS

 2012.Sep.28 AMEC Environment & Infrastructure PER. MMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.
Report System Software Registered to AMEC E3&I Environmental, Prince George

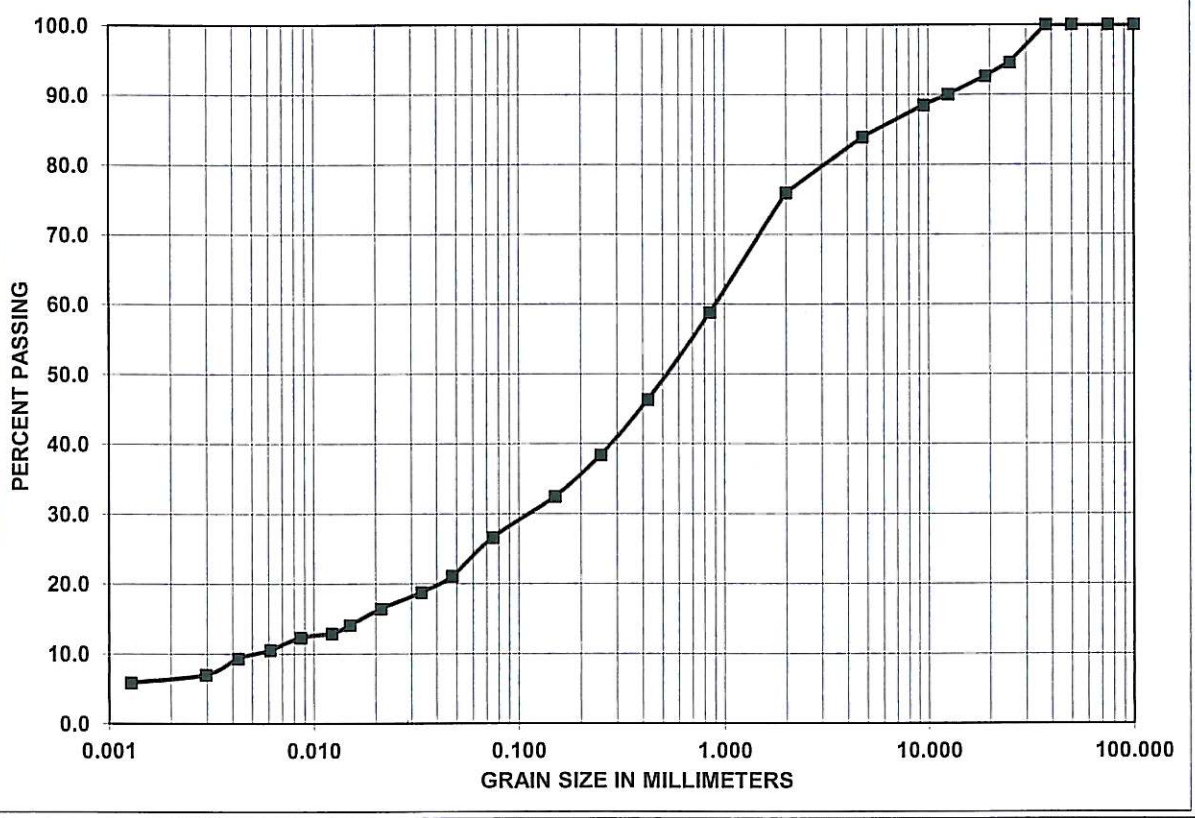
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 21-Aug-12
SOURCE: GT12-25, sample BS2
DATE TESTED: 5-Sep-12
DEPTH: 8.30m - 8.49m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	94.6
19.0	92.6
12.5	90.0
9.5	88.5
4.75	83.9
2.00	75.9
0.850	58.8
0.425	46.3
0.250	38.4
0.150	32.5
0.075	26.6
0.0474	21.1
0.0335	18.7
0.0213	16.4
0.0150	14.1
0.0123	12.9
0.0087	12.3
0.0061	10.5
0.0043	9.4
0.0030	7.0
0.0013	5.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	16.13%
SAND	57.27%
SILT	20.24%
CLAY	6.36%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:

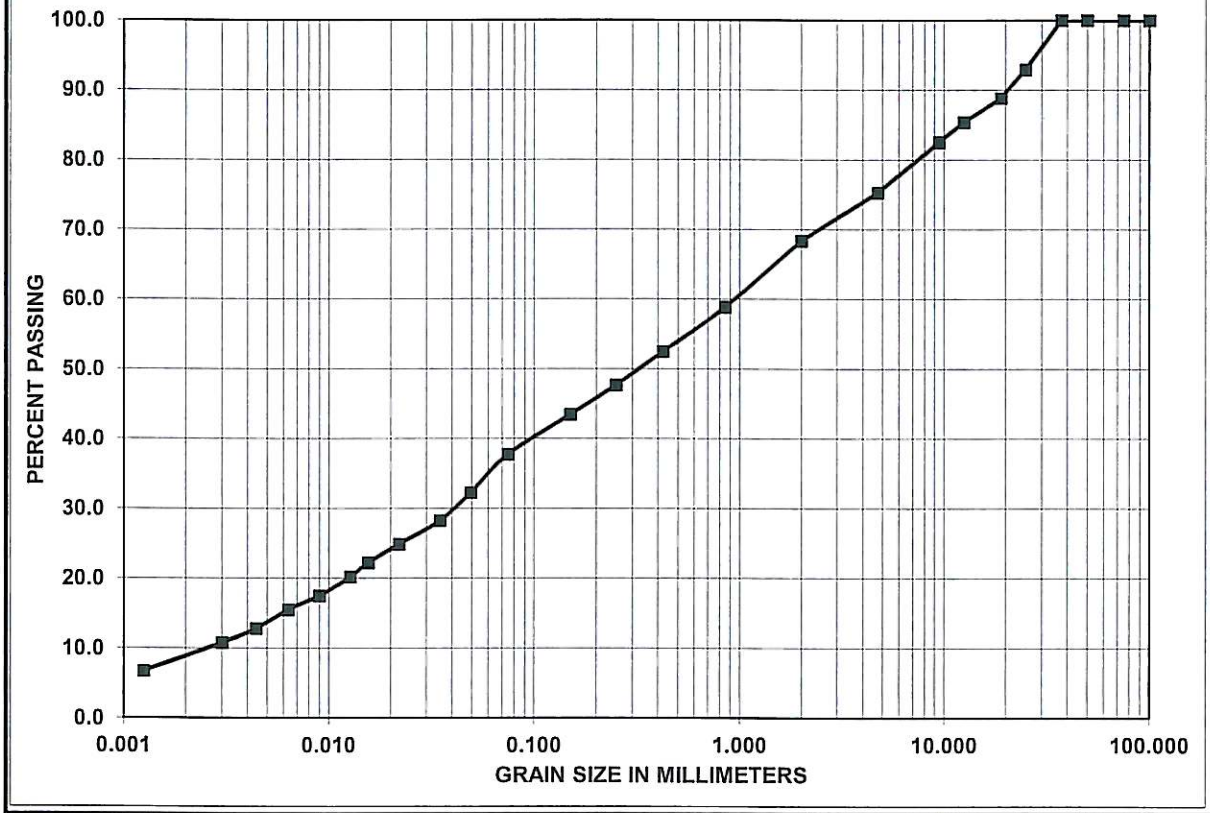
SAMPLED BY: Client

DATE SAMPLED: 21-Aug-12

SOURCE: GT12-25, sample BS3

DATE TESTED: 4-Sep-12

DEPTH: 22.26m - 22.57m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	92.9
19.0	88.8
12.5	85.3
9.5	82.5
4.75	75.2
2.00	68.3
0.850	58.8
0.425	52.5
0.250	47.7
0.150	43.4
0.075	37.7
0.0494	32.3
0.0349	28.2
0.0221	24.9
0.0156	22.2
0.0128	20.2
0.0090	17.5
0.0064	15.5
0.0044	12.8
0.0030	10.8
0.0013	6.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	24.75%
SAND	37.55%
SILT	29.26%
CLAY	8.43%

TECHNICIAN: M Michaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

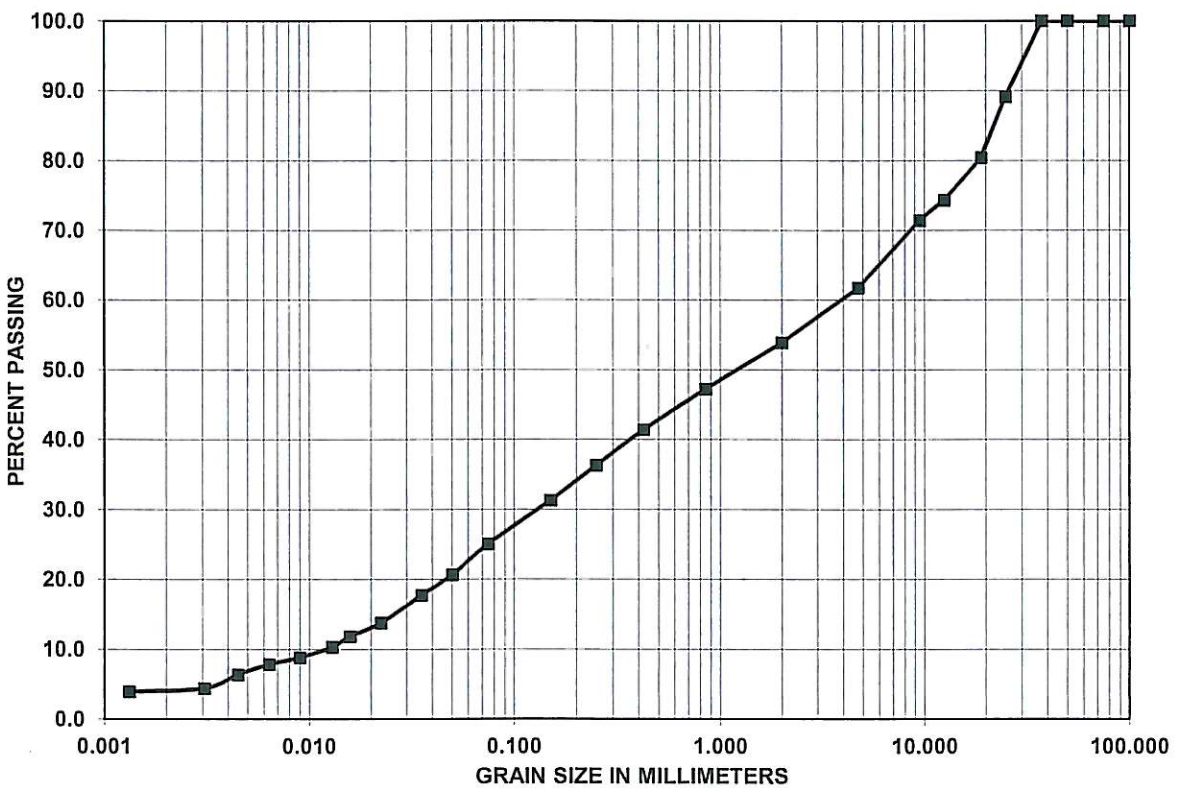
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 21-Aug-12
SOURCE: GT12-25, sample BS5
DATE TESTED: 3-Sep-12
DEPTH: 43.25m - 43.40m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	89.1
19.0	80.4
12.5	74.3
9.5	71.4
4.75	61.7
2.00	53.9
0.850	47.2
0.425	41.4
0.250	36.3
0.150	31.3
0.075	25.0
0.0502	20.6
0.0355	17.7
0.0224	13.8
0.0159	11.8
0.0130	10.3
0.0090	8.8
0.0064	7.9
0.0045	6.4
0.0031	4.4
0.0013	3.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	38.27%
SAND	36.71%
SILT	20.90%
CLAY	4.12%

TECHNICIAN: YMichaud

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GRAIN SIZE DISTRIBUTION

amec

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 17-Oct-11

TEST No:

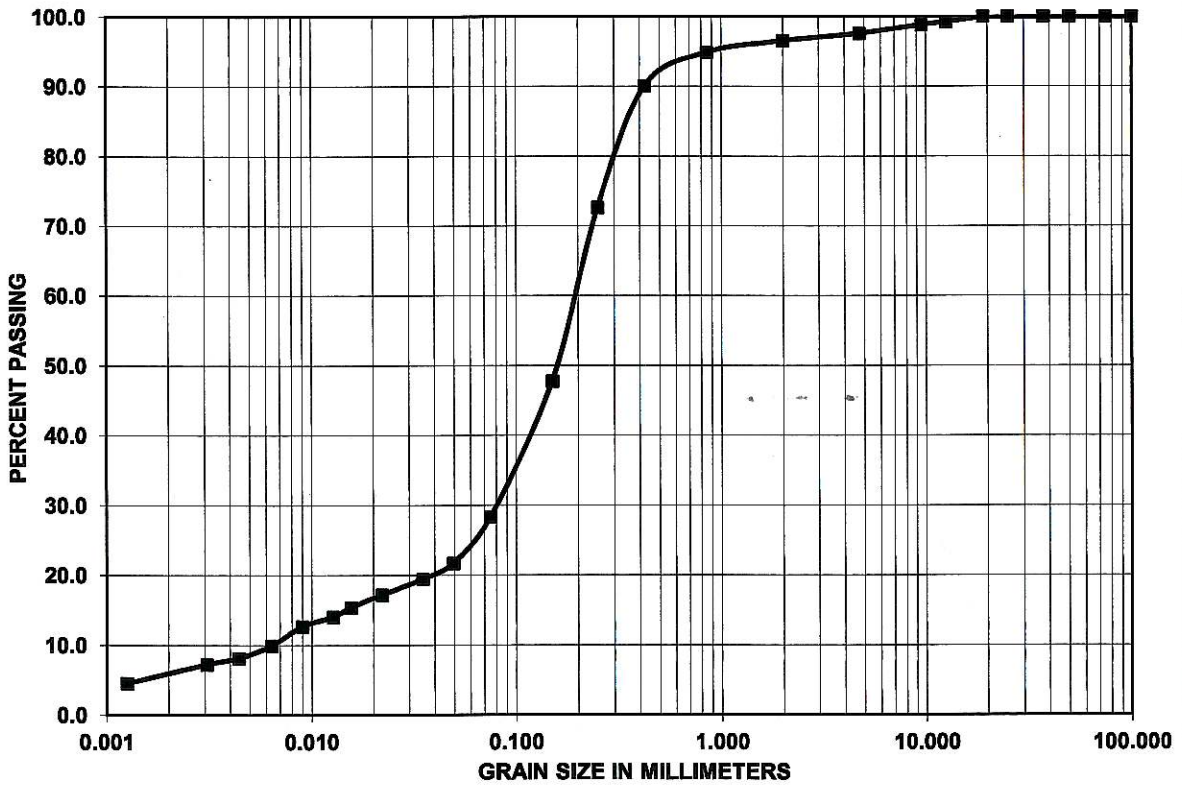
DATE SAMPLED: 21-Aug-12

DATE TESTED: 16-Oct-12

SAMPLED BY: Client

SOURCE: GT12-25, sample BS6

DEPTH: 42.35m - 42.55 m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.2
9.5	98.8
4.75	97.6
2.00	96.6
0.850	94.9
0.425	90.0
0.250	72.6
0.150	47.8
0.075	28.3
0.0494	21.7
0.0349	19.4
0.0221	17.2
0.0156	15.4
0.0128	14.0
0.0090	12.7
0.0064	9.9
0.0044	8.1
0.0031	7.2
0.0013	4.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	2.40%
SAND	69.28%
SILT	22.67%
CLAY	5.64%

TECHNICIAN: Bruce Garlick

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Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

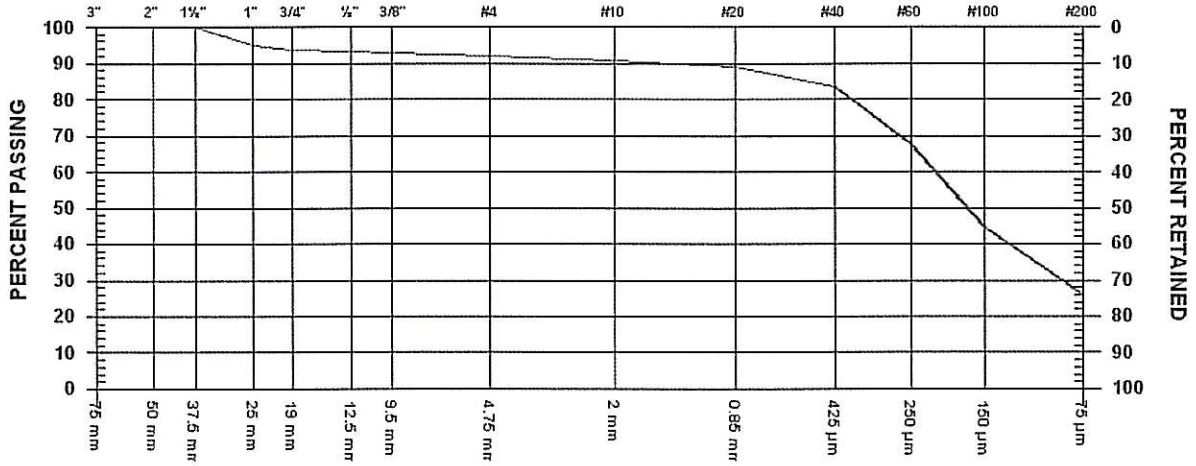
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 9 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.13 DATE SAMPLED 2012.Aug.21

SUPPLIER
SOURCE 42.35m - 42.55m
SPECIFICATION
MATERIAL TYPE GT12-25, sample BS6

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	95.1	
3/4"	19 mm	93.7	
1/2"	12.5 mm	93.2	
3/8"	9.5 mm	92.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	92.1	
No. 10	2.00 mm	90.8	
No. 20	850 µm	88.8	
No. 40	425 µm	83.6	
No. 60	250 µm	67.9	
No. 100	150 µm	44.7	
No. 200	75 µm	26.1	

MOISTURE CONTENT 13.0%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. YMichaud

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Report System Software Registered to AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

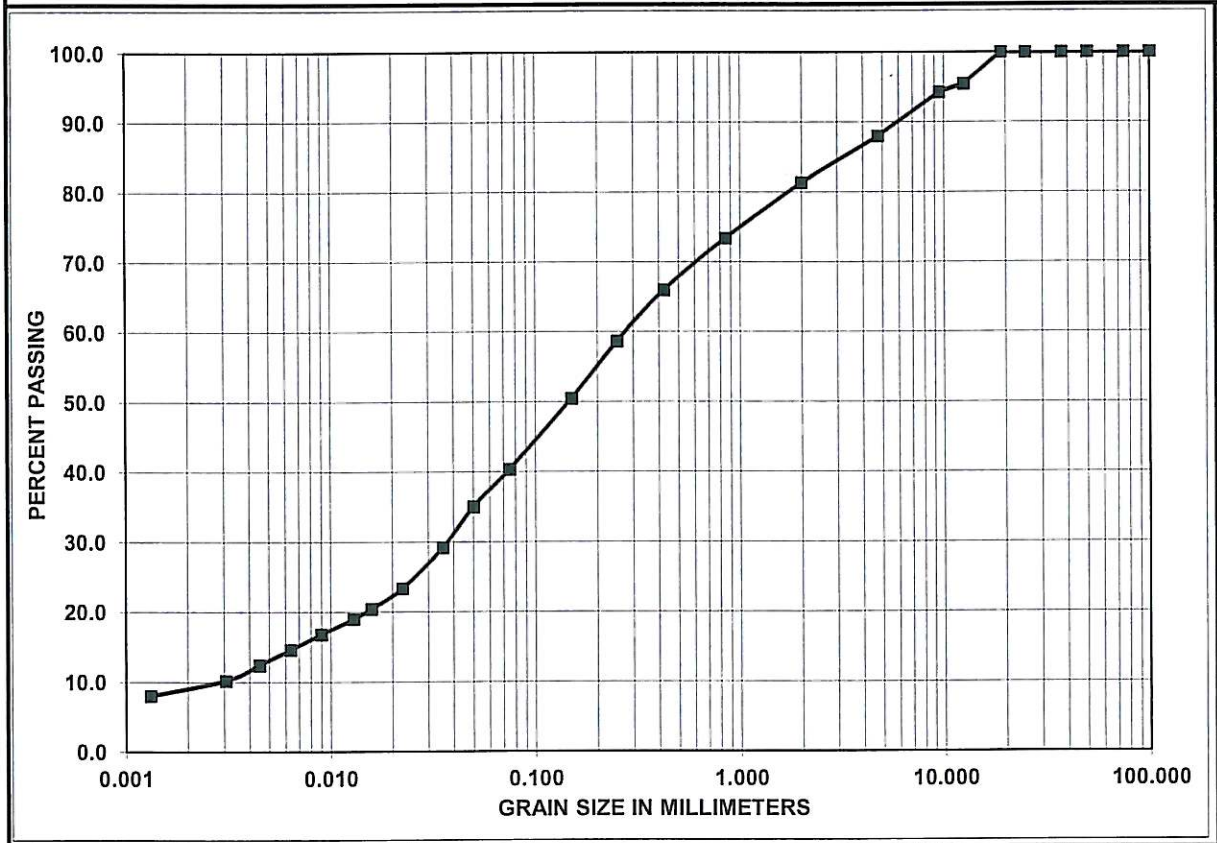
OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 27-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client

DATE SAMPLED: 23-Aug-12
SOURCE: GT12-26, sample BS1

DATE TESTED: 3-Sep-12
DEPTH: 8.31m - 8.51m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	95.4
9.5	94.2
4.75	87.9
2.00	81.3
0.850	73.4
0.425	65.9
0.250	58.6
0.150	50.4
0.075	40.3
0.0502	35.0
0.0355	29.2
0.0224	23.3
0.0159	20.4
0.0130	19.0
0.0090	16.8
0.0064	14.6
0.0045	12.4
0.0031	10.2
0.0013	8.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	12.06%
SAND	47.64%
SILT	31.43%
CLAY	8.87%

TECHNICIAN: JMichaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

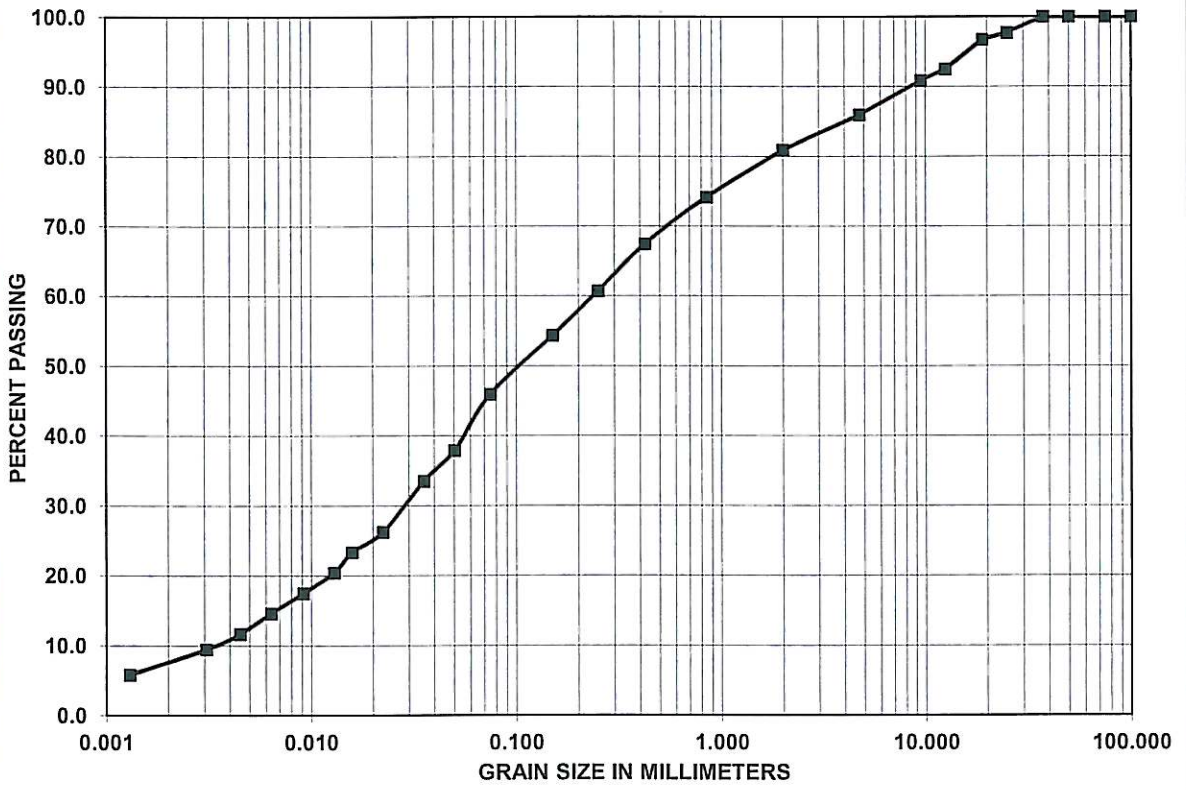
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 24-Aug-12
SOURCE: GT12-27, sample BS1
DATE TESTED: 3-Sep-12
DEPTH: 4.90m - 5.06m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	97.7
19.0	96.7
12.5	92.4
9.5	90.8
4.75	85.9
2.00	80.9
0.850	74.1
0.425	67.4
0.250	60.7
0.150	54.3
0.075	45.9
0.0503	37.9
0.0356	33.5
0.0224	26.2
0.0159	23.3
0.0130	20.4
0.0092	17.5
0.0064	14.6
0.0045	11.7
0.0031	9.5
0.0013	5.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	14.11%
SAND	39.98%
SILT	38.64%
CLAY	7.27%

TECHNICIAN: D Michaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

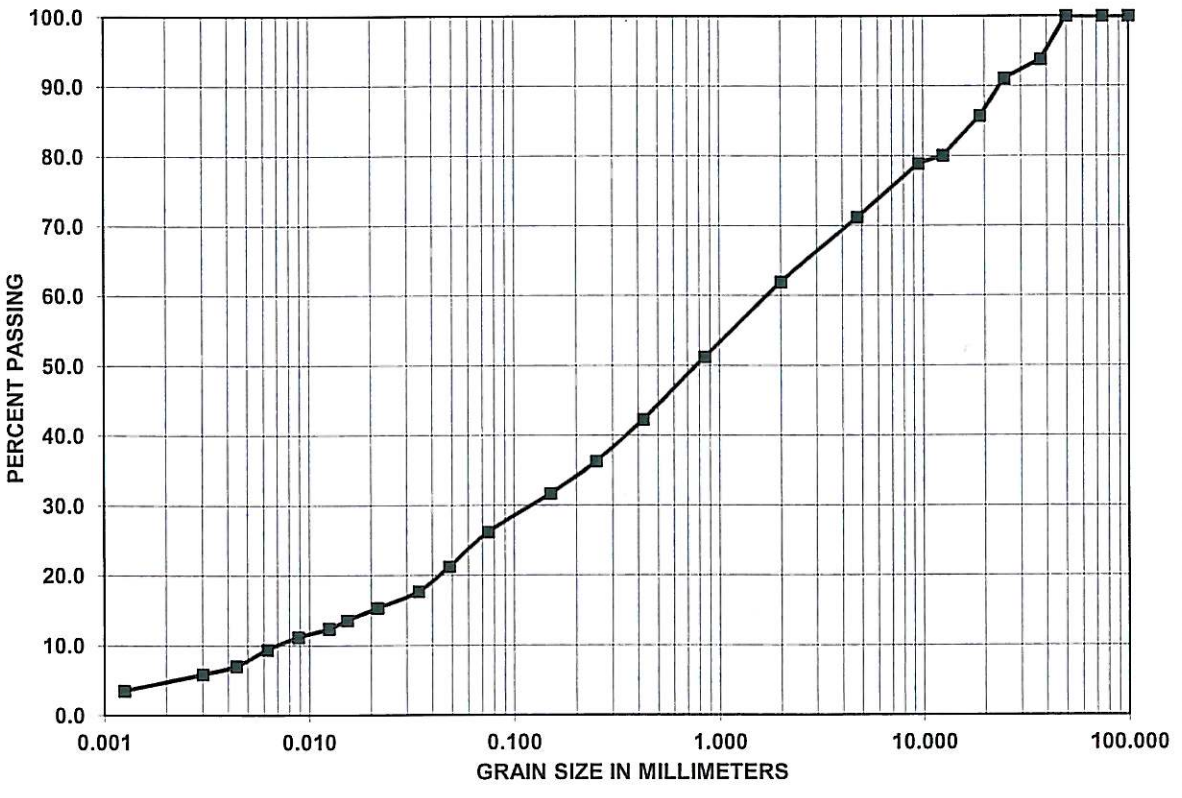
OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client

DATE SAMPLED: 24-Aug-12
SOURCE: GT12-27, sample BS2

DATE TESTED: 4-Sep-12
DEPTH: 14.33m - 14.48m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	93.8
25.0	91.0
19.0	85.7
12.5	80.0
9.5	78.9
4.75	71.2
2.00	61.9
0.850	51.2
0.425	42.2
0.250	36.3
0.150	31.7
0.075	26.2
0.0485	21.2
0.0343	17.7
0.0217	15.3
0.0153	13.5
0.0125	12.4
0.0089	11.2
0.0063	9.4
0.0044	7.1
0.0030	5.9
0.0013	3.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	28.83%
SAND	45.01%
SILT	21.63%
CLAY	4.54%

TECHNICIAN: JM Richard

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

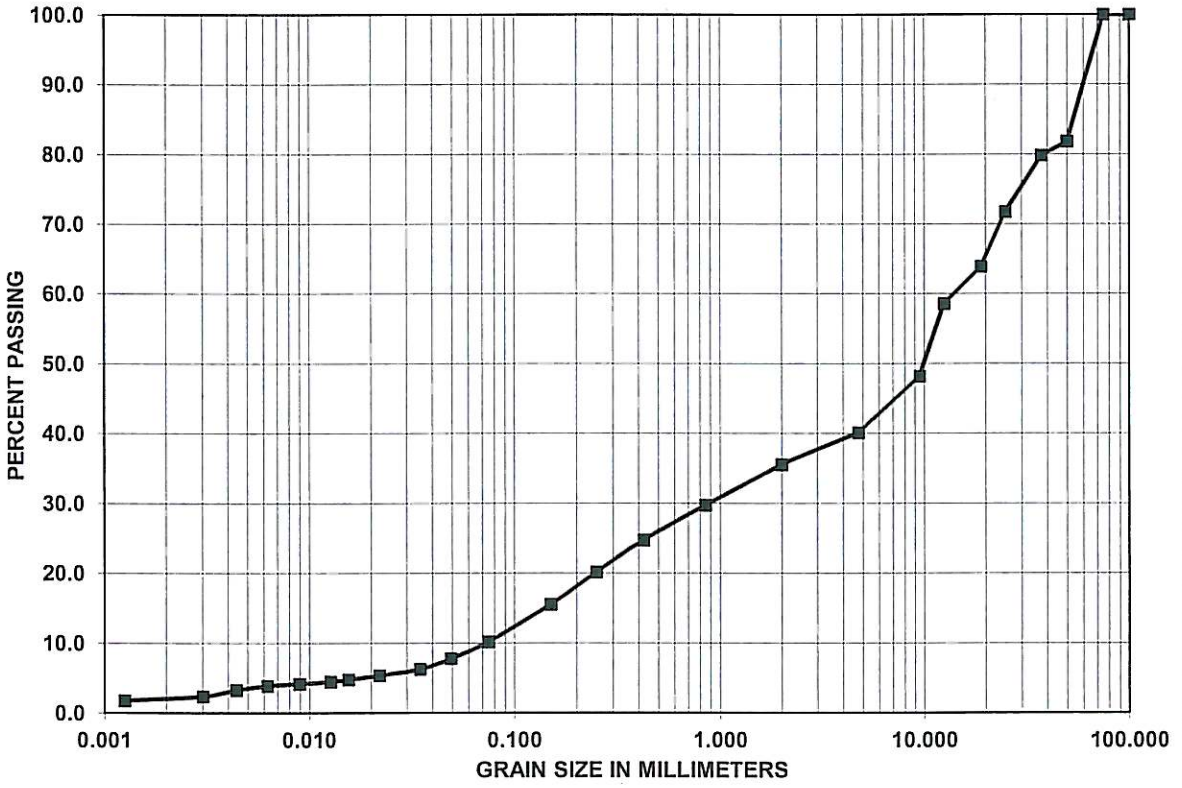
SAMPLED BY: Client

DATE SAMPLED: 24-Aug-12

SOURCE: GT12-27, sample BS3

DATE TESTED: 3-Sep-12

DEPTH: 26.83m - 27.00m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	81.8
37.5	79.8
25.0	71.7
19.0	63.9
12.5	58.6
9.5	48.2
4.75	40.1
2.00	35.5
0.850	29.7
0.425	24.7
0.250	20.1
0.150	15.5
0.075	10.2
0.0492	7.8
0.0348	6.3
0.0220	5.4
0.0156	4.8
0.0127	4.5
0.0090	4.2
0.0063	3.9
0.0044	3.3
0.0030	2.4
0.0013	1.8

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	59.92%
SAND	29.88%
SILT	8.15%
CLAY	2.05%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

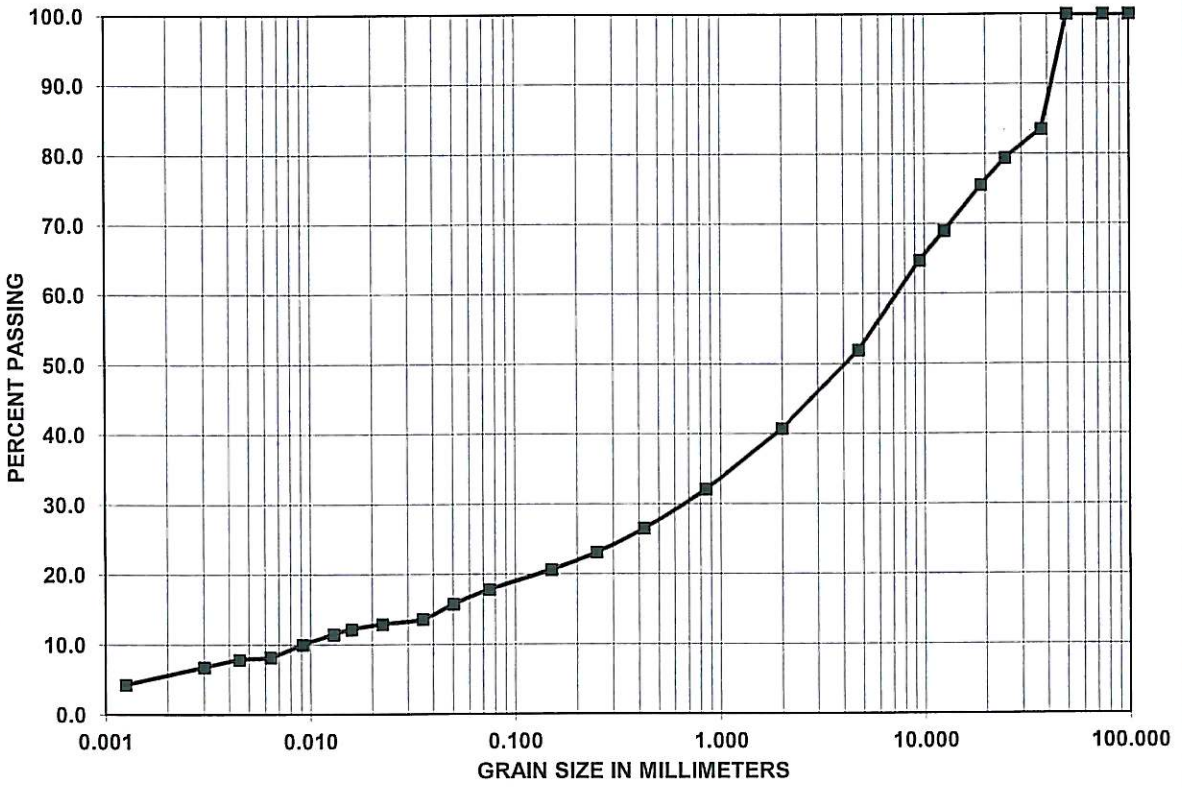
SAMPLED BY: Client

DATE SAMPLED: 24-Aug-12

SOURCE: GT12-27, sample BS5

DATE TESTED: 4-Sep-12

DEPTH: 45.06m - 45.32m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	83.5
25.0	79.4
19.0	75.5
12.5	68.9
9.5	64.7
4.75	51.9
2.00	40.7
0.850	32.1
0.425	26.5
0.250	23.1
0.150	20.6
0.075	17.8
0.0503	15.7
0.0356	13.6
0.0225	12.9
0.0159	12.2
0.0130	11.4
0.0092	10.0
0.0064	8.2
0.0045	7.9
0.0030	6.8
0.0013	4.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	48.09%
SAND	34.14%
SILT	12.42%
CLAY	5.35%

TECHNICIAN: M Richard

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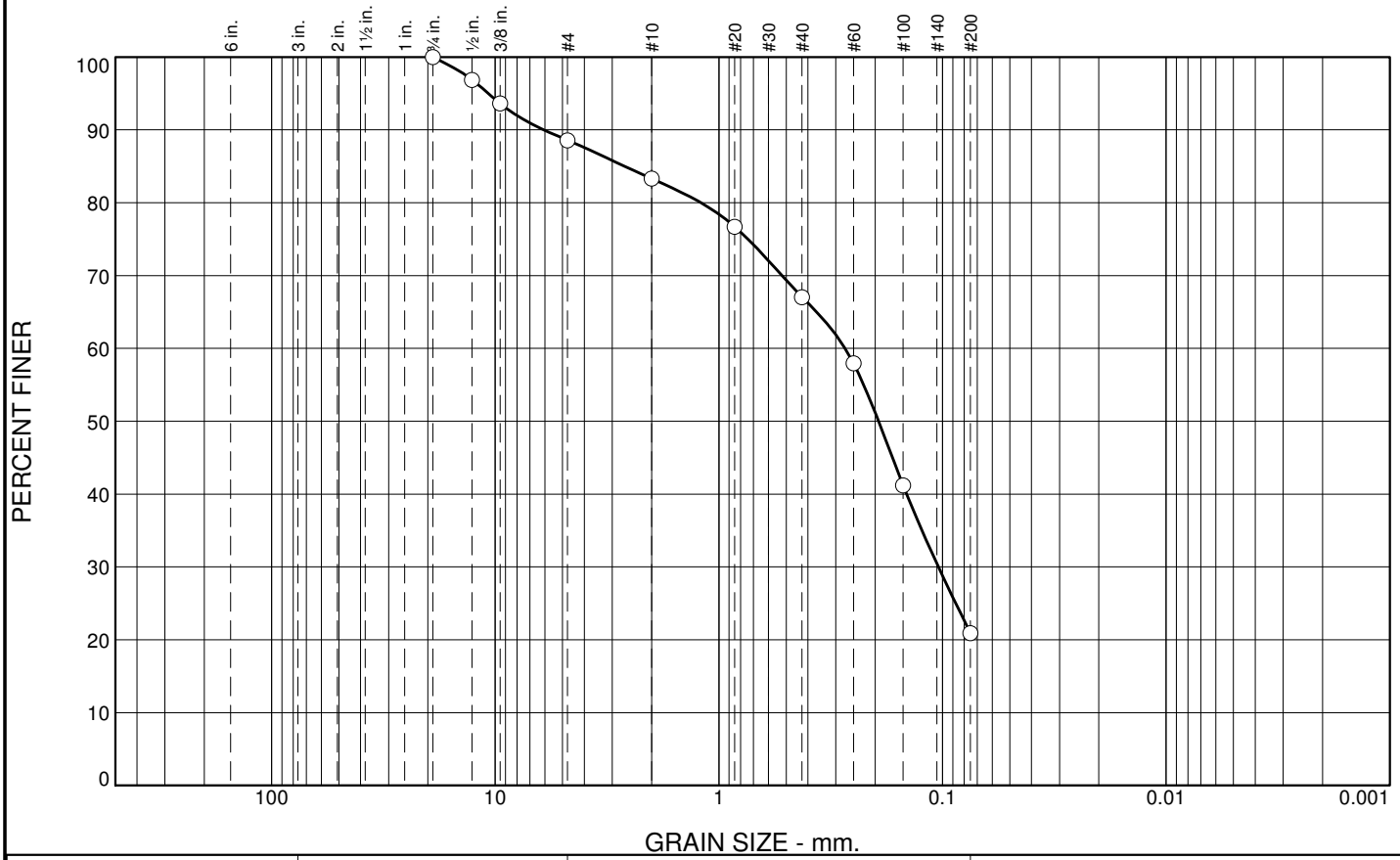
Engineering interpretation or evaluation of the test results is provided only on written request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	11.4	5.3	16.3	46.1	20.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	96.9		
.375	93.6		
#4	88.6		
#10	83.3		
#20	76.7		
#40	67.0		
#60	58.0		
#100	41.2		
#200	20.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 6.0722 D_{85}= 2.6369 D_{60}= 0.2727
D_{50}= 0.1930 D_{30}= 0.1043 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 9/14/2012
Location: GH12-28 **Elev./Depth:** 23-25m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: dab **Checked By:** jdb

GRAIN SIZE DISTRIBUTION

amec

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 18-Oct-12

Attention: Josie Speed

PROJECT NAME: Blackwater

TEST No:

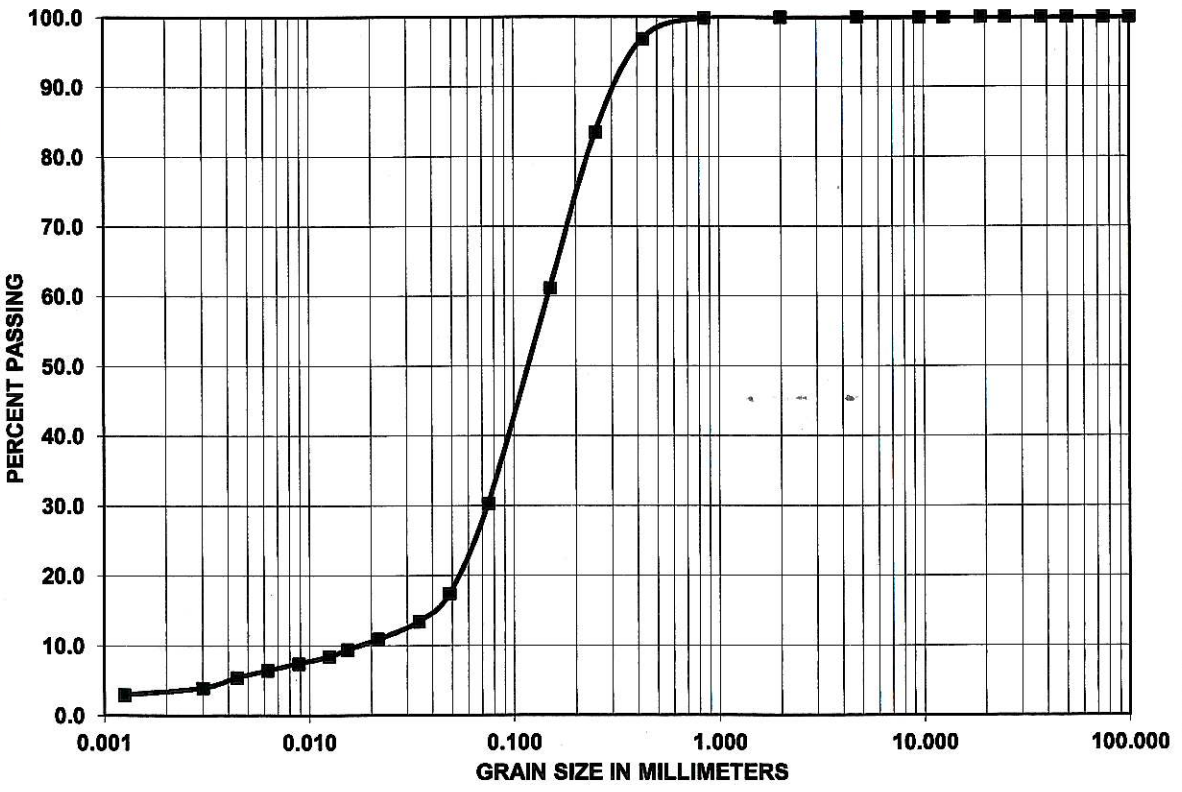
SAMPLED BY: Client

DATE SAMPLED: 25-Aug-12

SOURCE: GT12-29, sample BS1

DATE TESTED: 17-Oct-12

DEPTH: 5.73m - 5.89 m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.9
0.425	96.9
0.250	83.5
0.150	61.1
0.075	30.3
0.0485	17.4
0.0343	13.4
0.0217	10.9
0.0153	9.4
0.0125	8.4
0.0089	7.4
0.0063	6.5
0.0044	5.5
0.0030	4.0
0.0013	3.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	69.70%
SILT	26.90%
CLAY	3.40%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

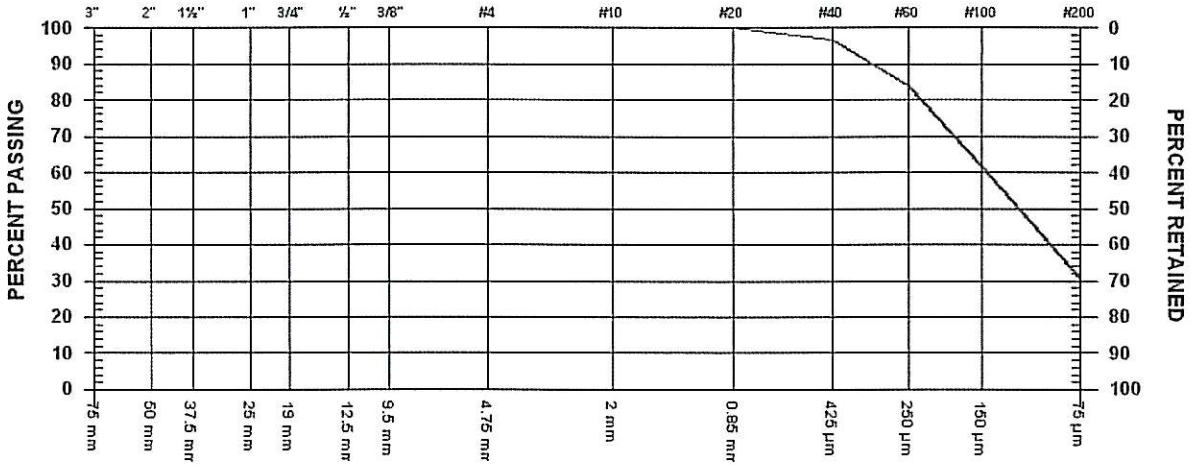
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 10 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.13 DATE SAMPLED 2012.Aug.25

SUPPLIER
SOURCE 5.73m - 5.89m
SPECIFICATION
MATERIAL TYPE GT12-29, sample BS1

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm		
1"	25 mm		
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm		

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm		
No. 10	2.00 mm		
No. 20	850 µm	100.0	
No. 40	425 µm	96.5	
No. 60	250 µm	84.0	
No. 100	150 µm	61.9	
No. 200	75 µm	30.6	

MOISTURE CONTENT 15.6%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

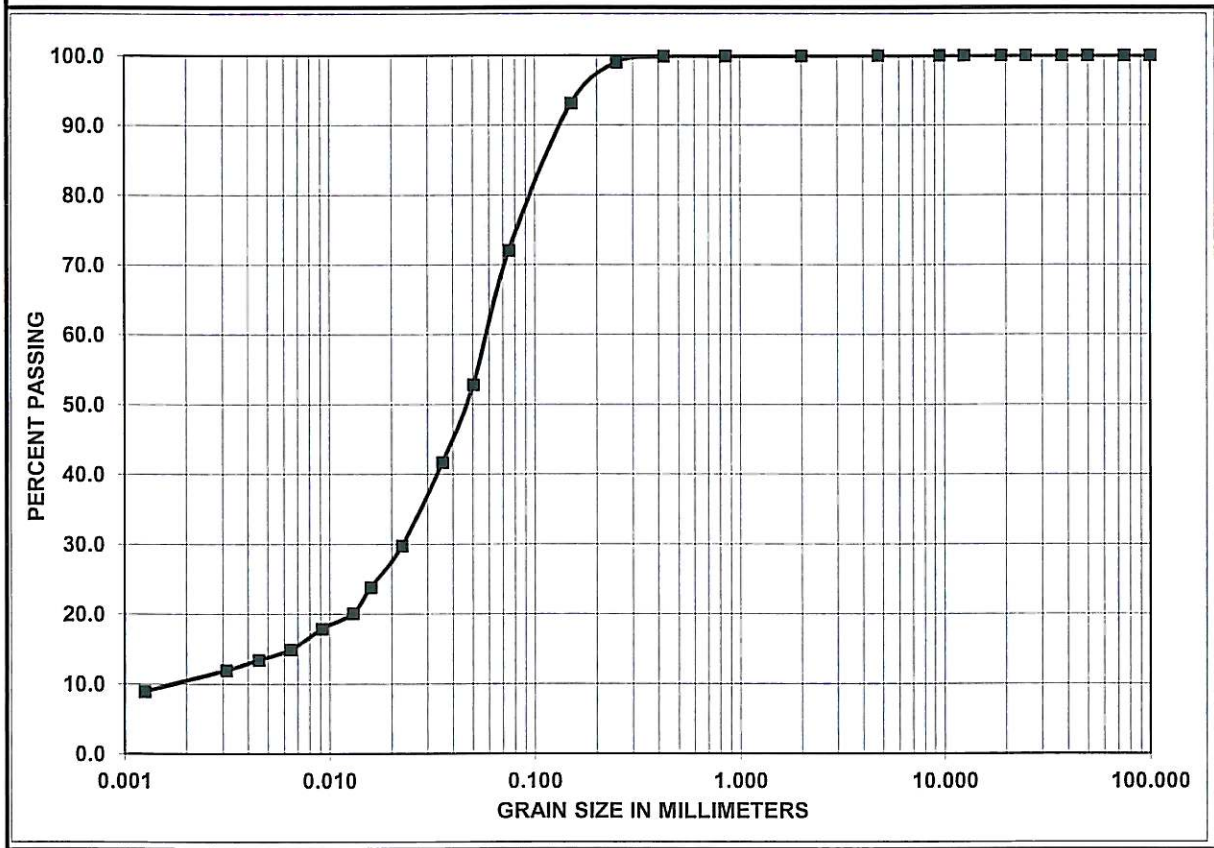
SAMPLED BY: Client

DATE SAMPLED: 25-Aug-12

SOURCE: GT12-29, sample BS2

DATE TESTED: 7-Sep-12

DEPTH: 14.74m - 14.94m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	99.9
0.850	99.9
0.425	99.9
0.250	99.0
0.150	93.1
0.075	72.1
0.0503	52.8
0.0356	41.7
0.0225	29.8
0.0159	23.8
0.0130	20.1
0.0092	17.9
0.0065	14.9
0.0045	13.4
0.0031	11.9
0.0012	8.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	27.94%
SILT	61.93%
CLAY	10.13%

TECHNICIAN: GMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

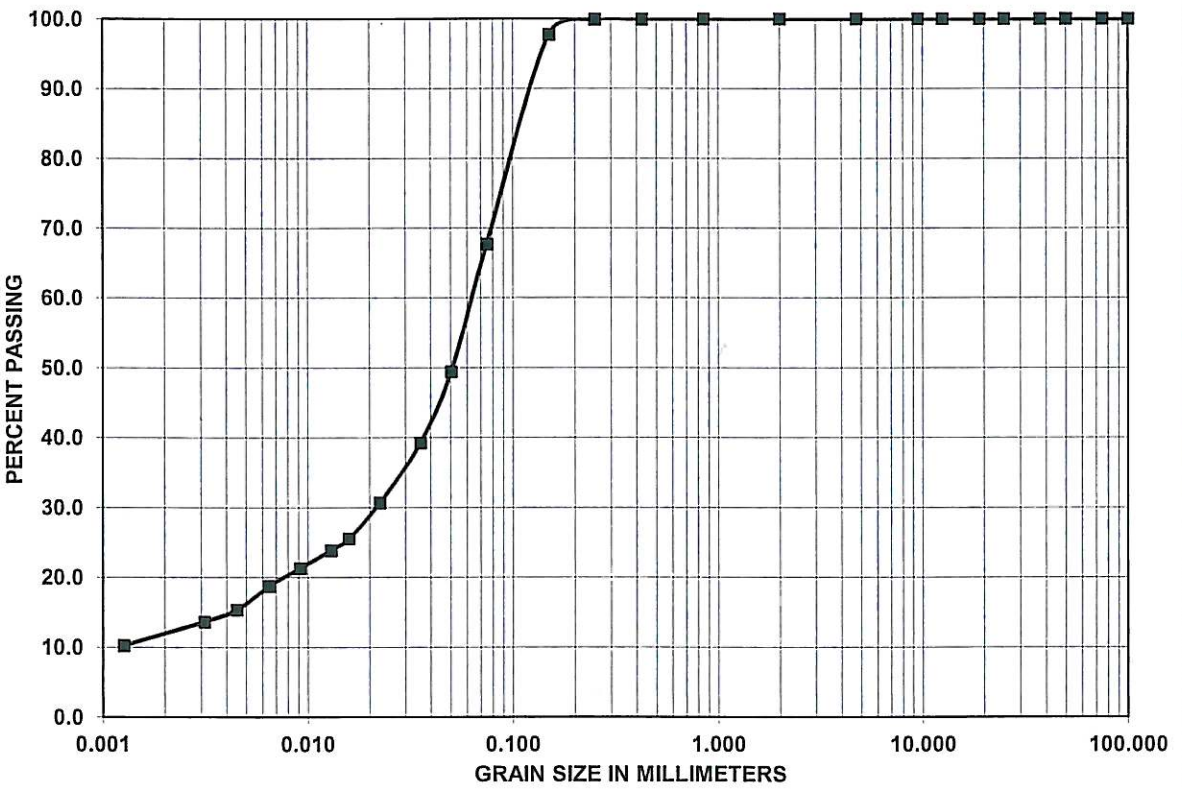
SAMPLED BY: Client

DATE SAMPLED: 25-Aug-12

SOURCE: GT12-29, sample BS4

DATE TESTED: 7-Sep-12

DEPTH: 32.73m - 32.93m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	100.0
0.425	99.9
0.250	99.9
0.150	97.7
0.075	67.7
0.0503	49.4
0.0356	39.2
0.0225	30.7
0.0159	25.6
0.0130	23.9
0.0092	21.3
0.0065	18.7
0.0045	15.3
0.0031	13.6
0.0013	10.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.00%
SAND	32.30%
SILT	56.12%
CLAY	11.58%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

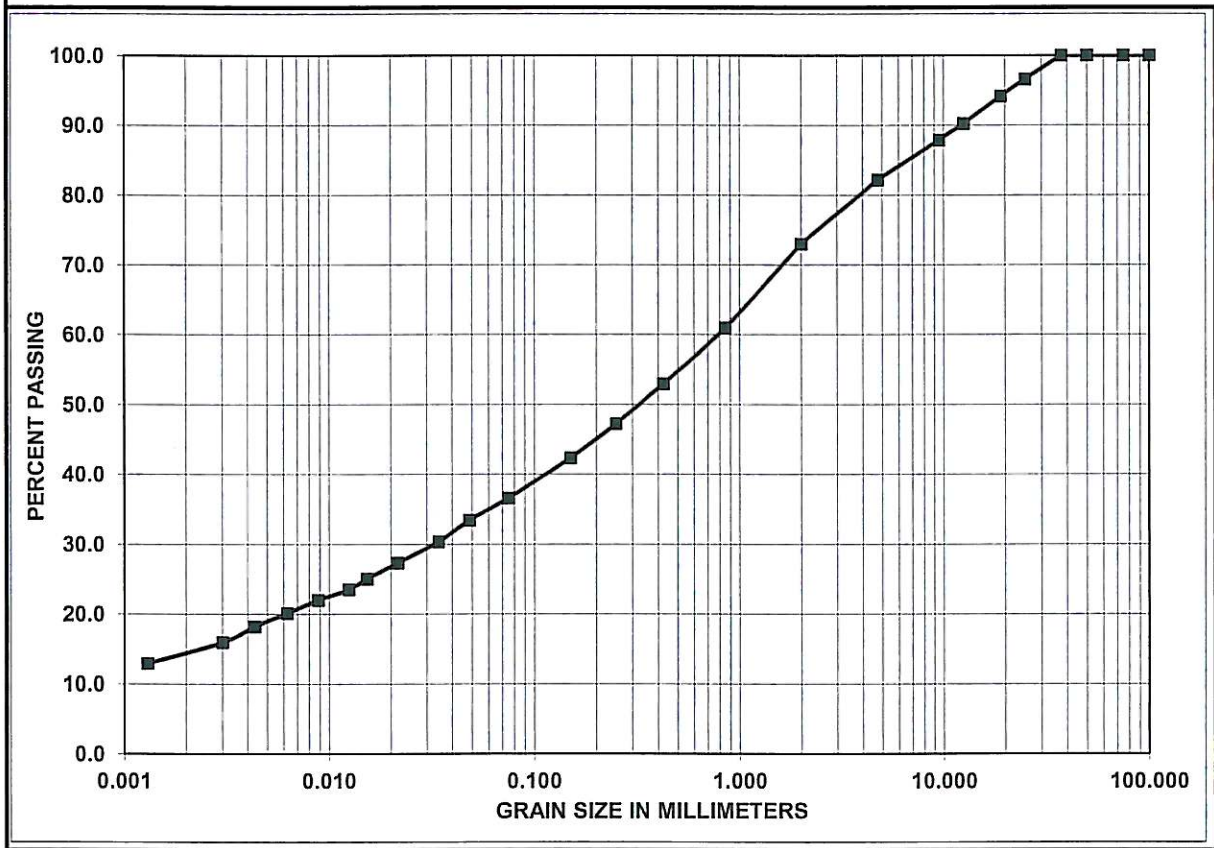
SAMPLED BY: Client

DATE SAMPLED: 25-Aug-12

SOURCE: GT12-29, sample BS5

DATE TESTED: 6-Sep-12

DEPTH: 40.64m - 40.85m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	96.6
19.0	94.1
12.5	90.2
9.5	87.8
4.75	82.1
2.00	73.0
0.850	61.0
0.425	53.0
0.250	47.2
0.150	42.3
0.075	36.6
0.0485	33.4
0.0343	30.4
0.0217	27.3
0.0153	25.1
0.0125	23.5
0.0089	22.0
0.0062	20.1
0.0043	18.2
0.0030	15.9
0.0013	12.9

REMARKS:

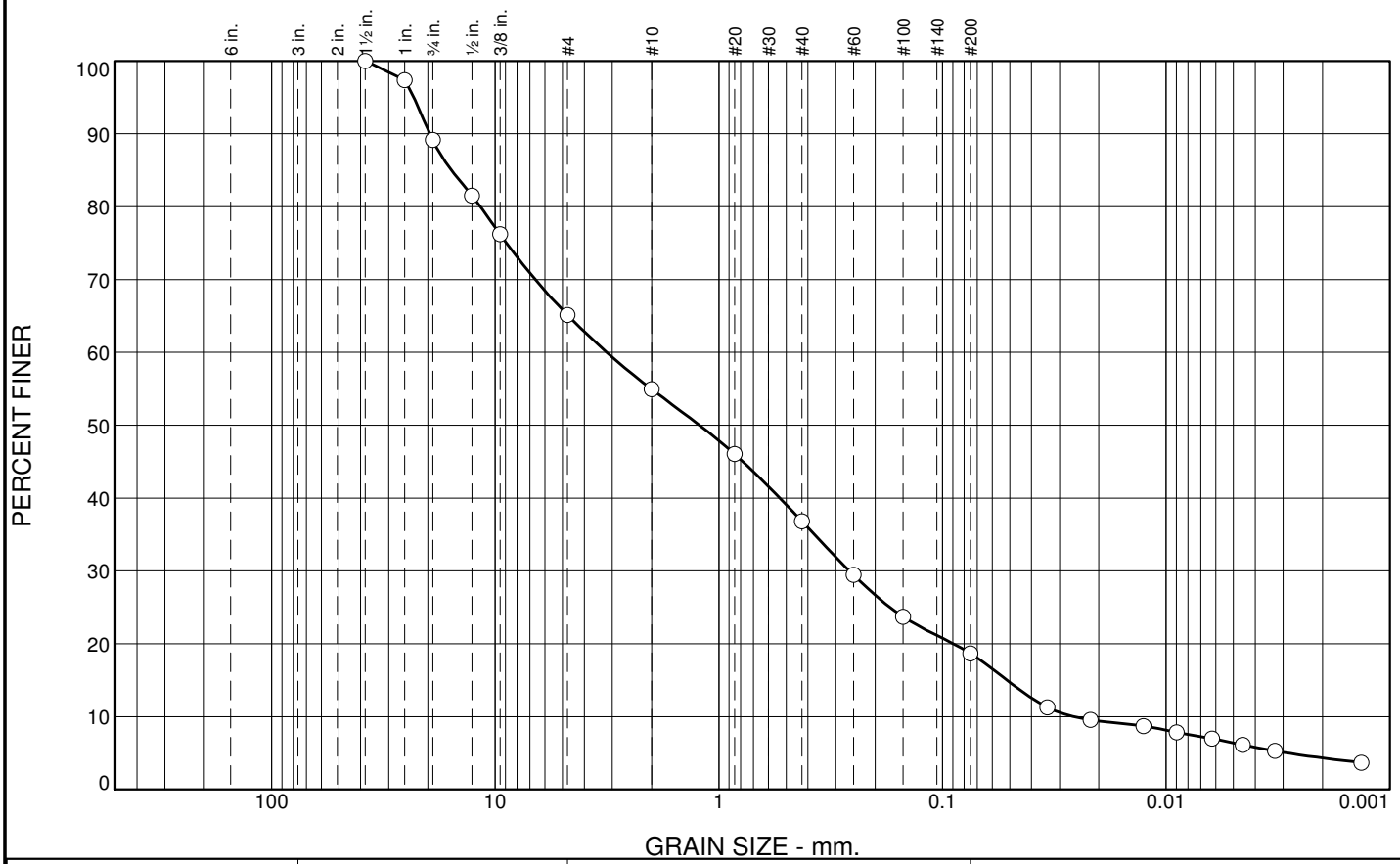
D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	17.86%
SAND	45.57%
SILT	22.42%
CLAY	14.15%

TECHNICIAN: YMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.8	24.1	10.1	18.2	18.1	14.4	4.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.4		
.75	89.2		
.5	81.5		
.375	76.2		
#4	65.1		
#10	55.0		
#20	46.0		
#40	36.8		
#60	29.5		
#100	23.7		
#200	18.7		
0.0340 mm.	11.3		
0.0218 mm.	9.6		
0.0126 mm.	8.7		
0.0090 mm.	7.9		
0.0062 mm.	7.0		
0.0045 mm.	6.1		
0.0033 mm.	5.3		
0.0013 mm.	3.7		

* (no specification provided)

Soil Description

silty SAND with gravel

Atterberg Limits

PL= 14 LL= 17 PI= 3

Coefficients

D_{90}= 19.6356 D_{85}= 15.7184 D_{60}= 3.1703
D_{50}= 1.2218 D_{30}= 0.2605 D_{15}= 0.0515
D_{10}= 0.0259 C_u= 122.24 C_c= 0.83

Classification

USCS= SM AASHTO= A-1-b

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/19/12
Location: GT12-31 **Elev./Depth:** 4.57-4.87m

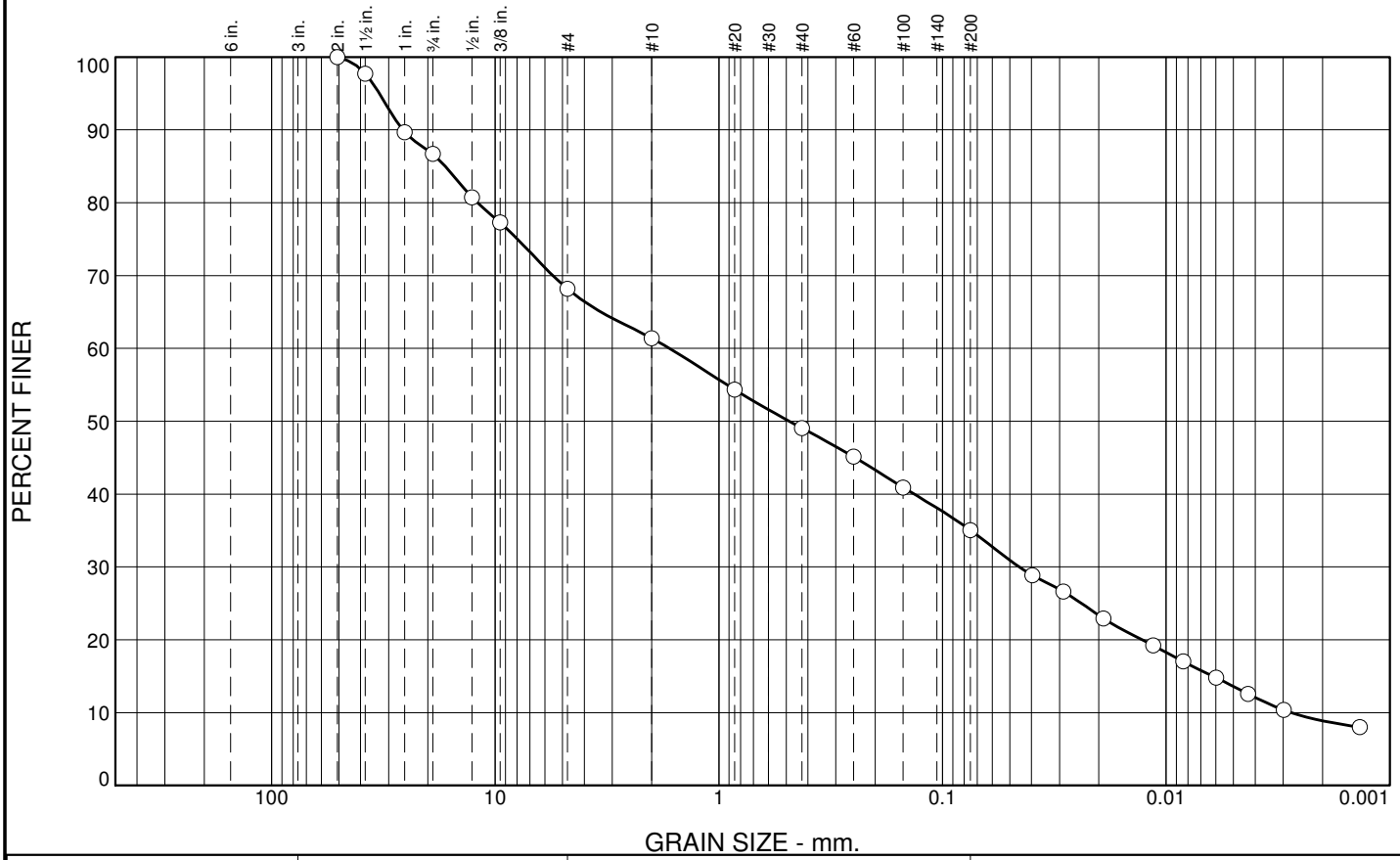
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.3	18.5	6.8	12.3	14.0	26.2	8.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	97.7		
1	89.7		
.75	86.7		
.5	80.7		
.375	77.3		
#4	68.2		
#10	61.4		
#20	54.3		
#40	49.1		
#60	45.1		
#100	40.9		
#200	35.1		
0.0397 mm.	28.9		
0.0289 mm.	26.6		
0.0190 mm.	22.9		
0.0114 mm.	19.2		
0.0084 mm.	17.0		
0.0060 mm.	14.8		
0.0043 mm.	12.6		
0.0030 mm.	10.4		
0.0014 mm.	8.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 12 LL= 22 PI= 10

Coefficients

D_{90}= 25.9338 D_{85}= 16.7415 D_{60}= 1.6633
D_{50}= 0.4842 D_{30}= 0.0454 D_{15}= 0.0062
D_{10}= 0.0028 C_u= 604.08 C_c= 0.45

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/12/12
Location: GT12-31 **Elev./Depth:** 14.16-14.43m

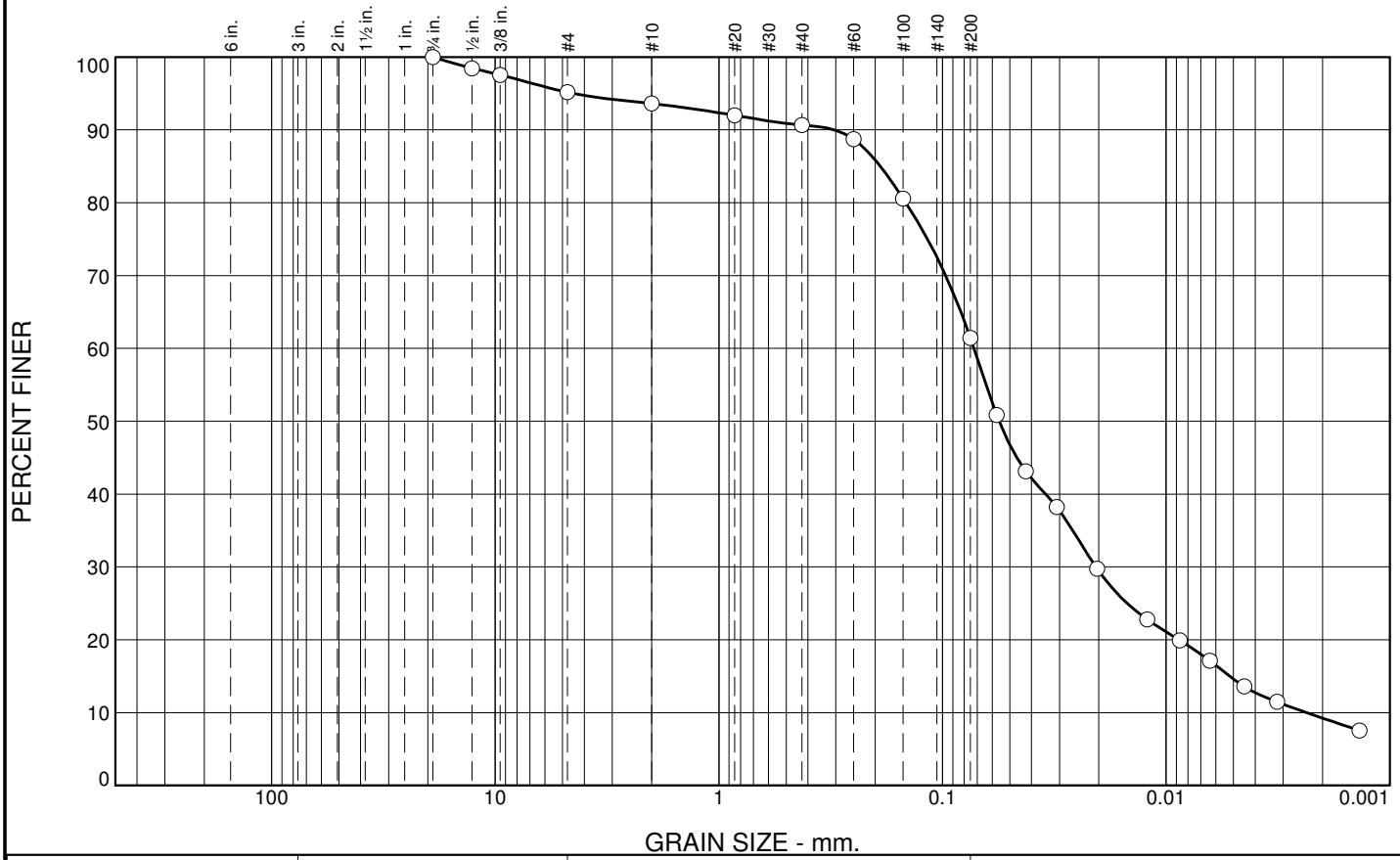
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.8	1.6	3.0	29.2	52.2	9.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	98.4		
.375	97.6		
#4	95.2		
#10	93.6		
#20	92.0		
#40	90.6		
#60	88.7		
#100	80.5		
#200	61.4		
0.0572 mm.	50.9		
0.0424 mm.	43.1		
0.0308 mm.	38.2		
0.0204 mm.	29.8		
0.0121 mm.	22.8		
0.0087 mm.	19.9		
0.0064 mm.	17.1		
0.0045 mm.	13.6		
0.0032 mm.	11.5		
0.0014 mm.	7.5		

* (no specification provided)

Soil Description

sandy SILT

Atterberg Limits

PL= 16 LL= 19 PI= 3

Coefficients

D_{90}= 0.3044 D_{85}= 0.1897 D_{60}= 0.0723
D_{50}= 0.0558 D_{30}= 0.0206 D_{15}= 0.0052
D_{10}= 0.0024 C_u= 30.71 C_c= 2.50

Classification

USCS= ML AASHTO= A-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/19/12
Location: GT12-31 **Elev./Depth:** 19.8-20.0m

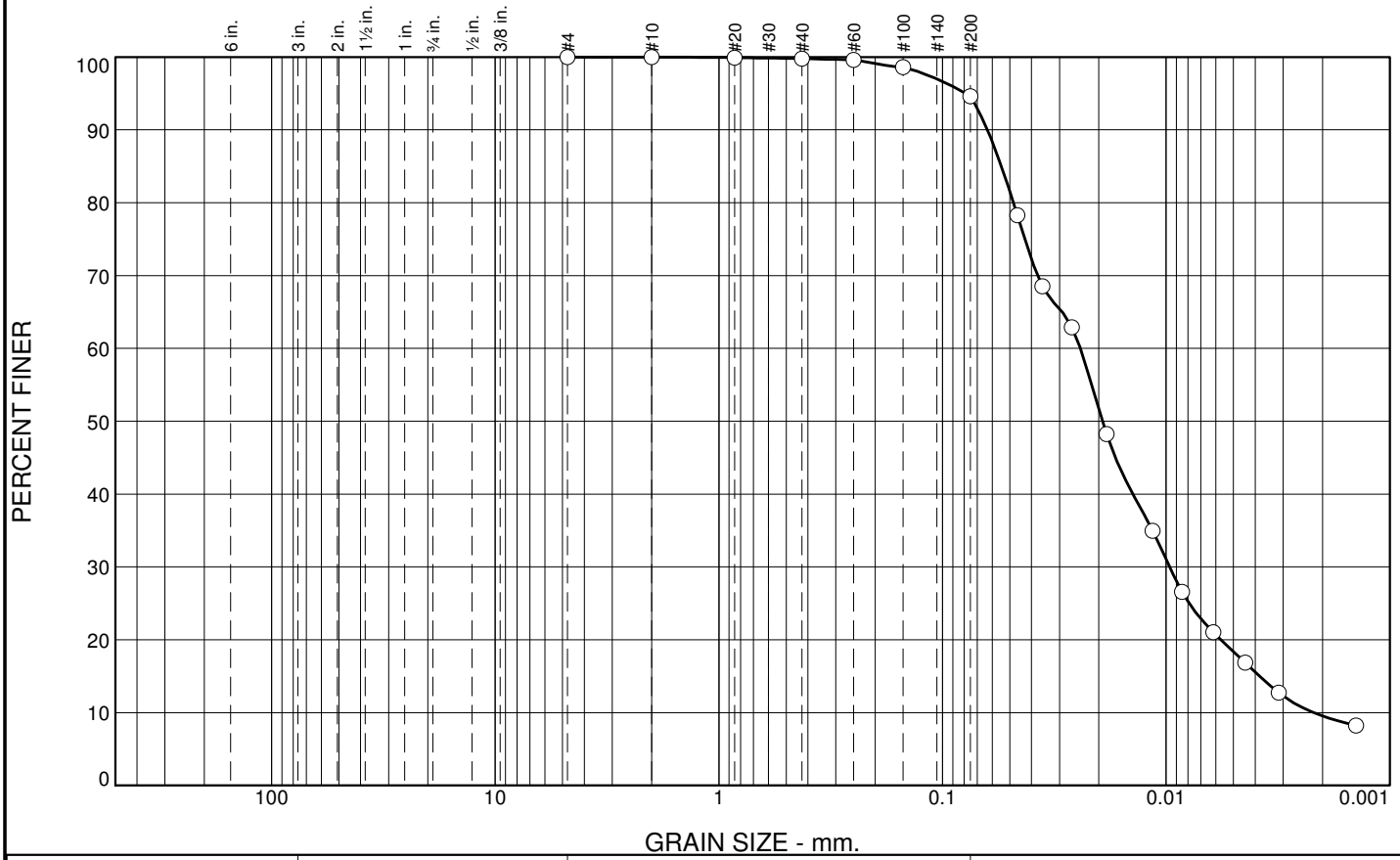
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.2	5.2	85.0	9.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.8		
#60	99.6		
#100	98.6		
#200	94.6		
0.0463 mm.	78.3		
0.0357 mm.	68.5		
0.0264 mm.	62.9		
0.0185 mm.	48.2		
0.0115 mm.	35.0		
0.0085 mm.	26.6		
0.0062 mm.	21.0		
0.0044 mm.	16.9		
0.0031 mm.	12.7		
0.0014 mm.	8.2		

* (no specification provided)

Soil Description

silty CLAY

Atterberg Limits

PL= 18 LL= 25 PI= 7

Coefficients

D_{90}= 0.0630 D_{85}= 0.0546 D_{60}= 0.0242
D_{50}= 0.0193 D_{30}= 0.0096 D_{15}= 0.0038
D_{10}= 0.0022 C_u= 11.07 C_c= 1.76

Classification

USCS= CL-ML AASHTO= A-4(5)

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/12/12
Location: GT12-31 **Elev./Depth:** 37.38-37.54m

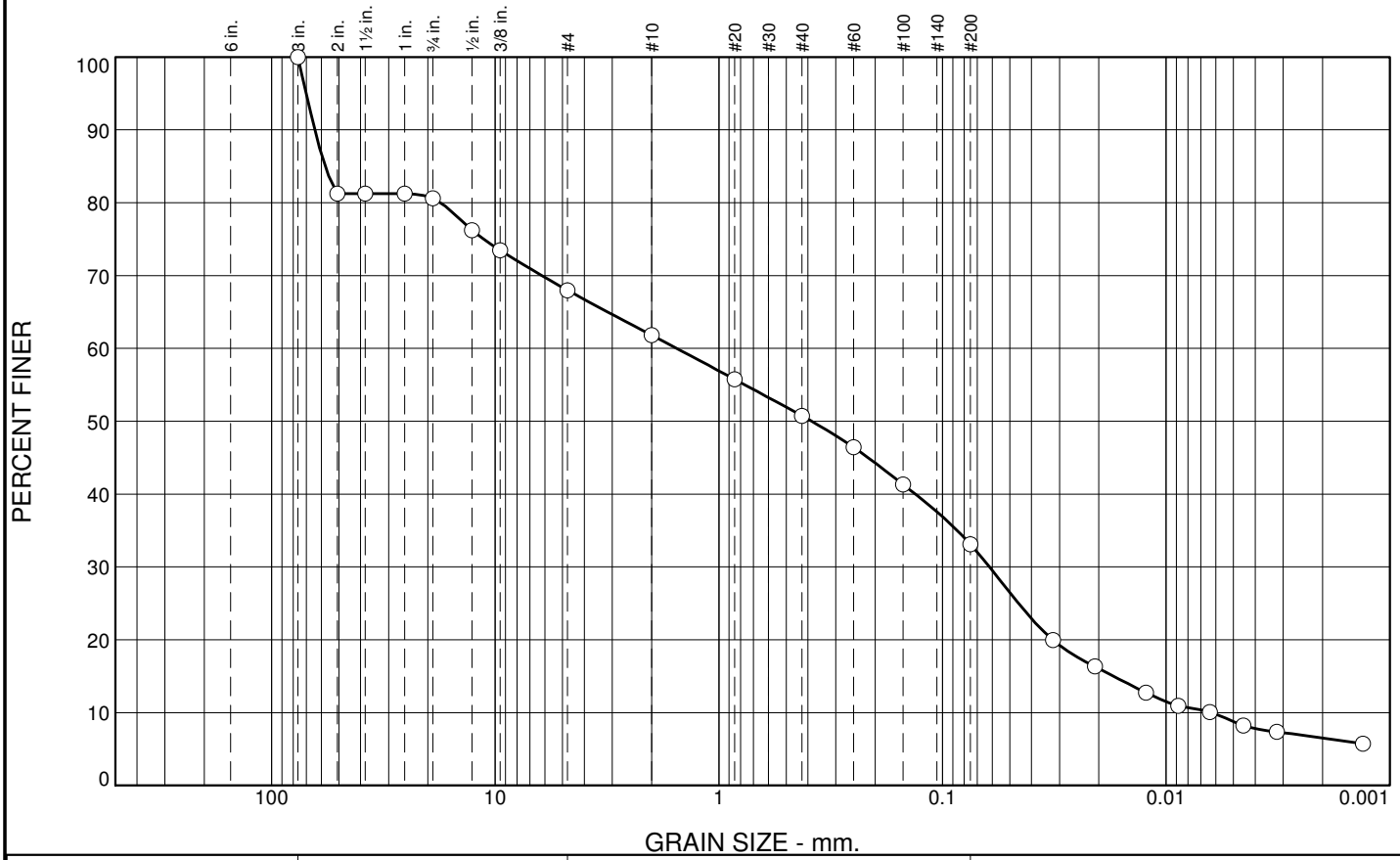
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	19.4	12.6	6.2	11.1	17.6	26.6	6.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	81.3		
1.5	81.3		
1	81.3		
.75	80.6		
.5	76.2		
.375	73.5		
#4	68.0		
#10	61.8		
#20	55.8		
#40	50.7		
#60	46.4		
#100	41.3		
#200	33.1		
0.0321 mm.	19.9		
0.0208 mm.	16.3		
0.0123 mm.	12.8		
0.0088 mm.	11.0		
0.0064 mm.	10.1		
0.0045 mm.	8.2		
0.0032 mm.	7.4		
0.0013 mm.	5.7		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 17 PI= 4

Coefficients

D_{90}= 64.1038 D_{85}= 57.6273 D_{60}= 1.5435
D_{50}= 0.3853 D_{30}= 0.0616 D_{15}= 0.0172
D_{10}= 0.0063 C_u= 246.21 C_c= 0.39

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/19/12
Location: GT12-32 **Elev./Depth:** 15.84-16.04m

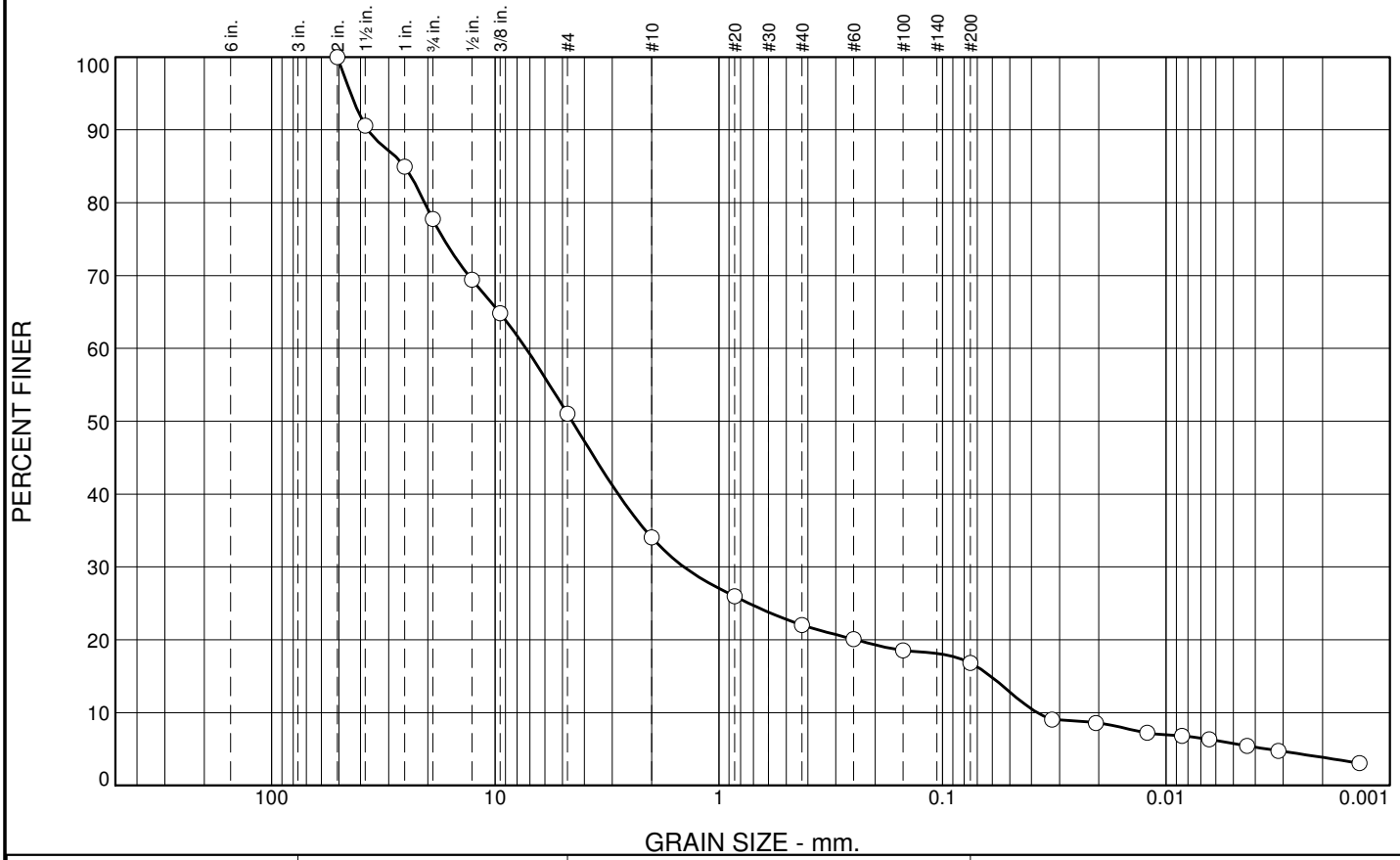
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: MF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	22.3	26.7	17.0	12.0	5.2	12.9	3.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	90.6		
1	84.9		
.75	77.7		
.5	69.4		
.375	64.8		
#4	51.0		
#10	34.0		
#20	26.0		
#40	22.0		
#60	20.1		
#100	18.5		
#200	16.8		
0.0323 mm.	9.0		
0.0206 mm.	8.6		
0.0121 mm.	7.2		
0.0085 mm.	6.8		
0.0064 mm.	6.3		
0.0044 mm.	5.4		
0.0031 mm.	4.8		
0.0014 mm.	3.1		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 15 LL= 29 PI= 14

Coefficients

D_{90}= 37.1078 D_{85}= 25.4735 D_{60}= 7.3006
D_{50}= 4.5347 D_{30}= 1.4310 D_{15}= 0.0610
D_{10}= 0.0377 C_u= 193.59 C_c= 7.44

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Sample No.: 2a **Source of Sample:** **Date:** 11/20/12
Location: GT12-32 **Elev./Depth:** 24.38-24.58m

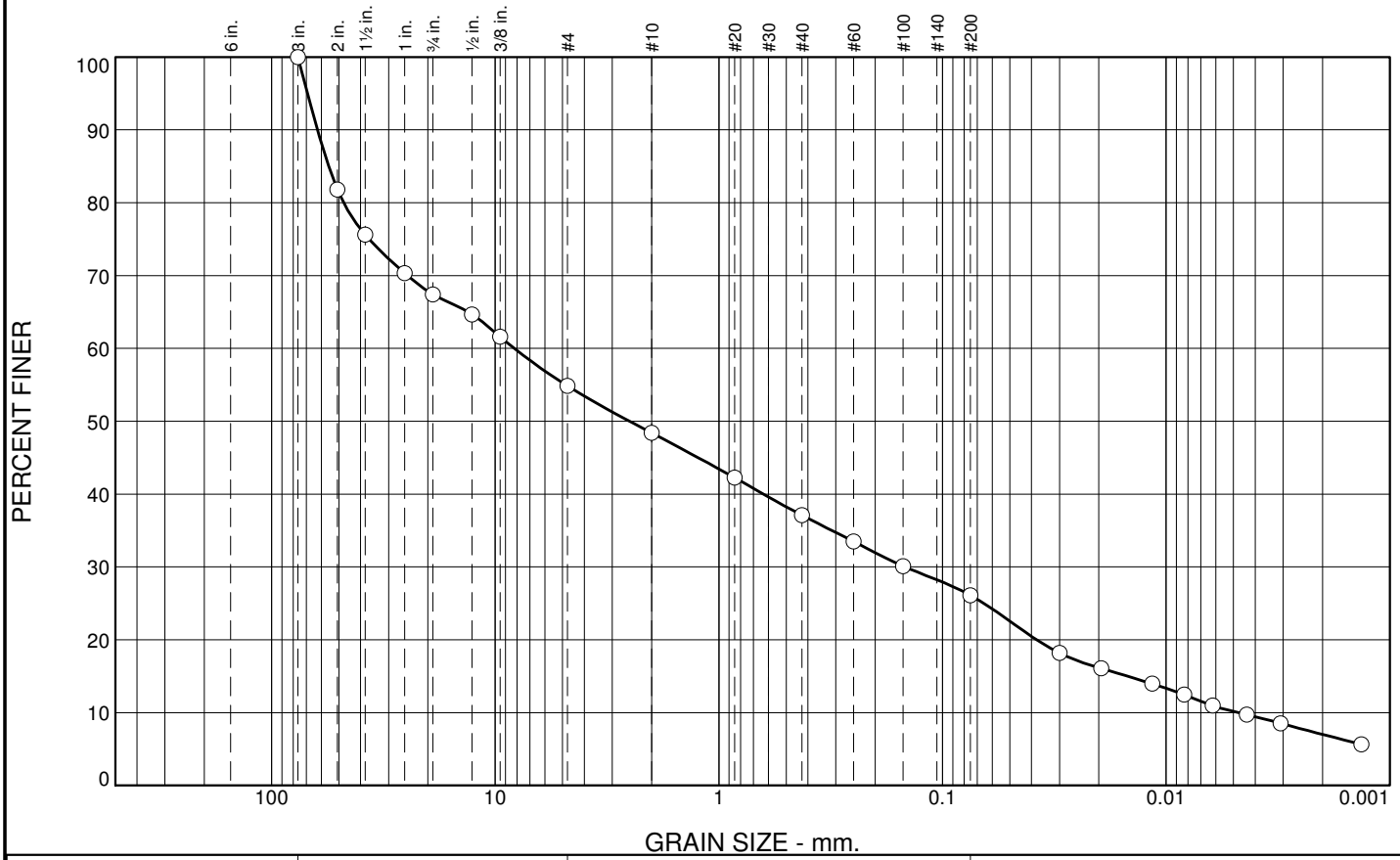
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	32.6	12.5	6.5	11.3	11.0	19.1	7.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	81.8		
1.5	75.6		
1	70.3		
.75	67.4		
.5	64.7		
.375	61.6		
#4	54.9		
#10	48.4		
#20	42.2		
#40	37.1		
#60	33.5		
#100	30.1		
#200	26.1		
0.0300 mm.	18.2		
0.0195 mm.	16.1		
0.0115 mm.	14.0		
0.0083 mm.	12.5		
0.0062 mm.	11.0		
0.0044 mm.	9.7		
0.0031 mm.	8.5		
0.0013 mm.	5.7		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 14 LL= 22 PI= 8

Coefficients

D_{90}= 62.3550 D_{85}= 55.5551 D_{60}= 8.2314
D_{50}= 2.5084 D_{30}= 0.1473 D_{15}= 0.0149
D_{10}= 0.0047 C_u= 1738.82 C_c= 0.56

Classification

USCS= GC AASHTO= A-2-4(0)

Remarks

Sample No.: 2b **Source of Sample:** **Date:** 11/20/12
Location: GT12-32 **Elev./Depth:** 39.63-39.83m

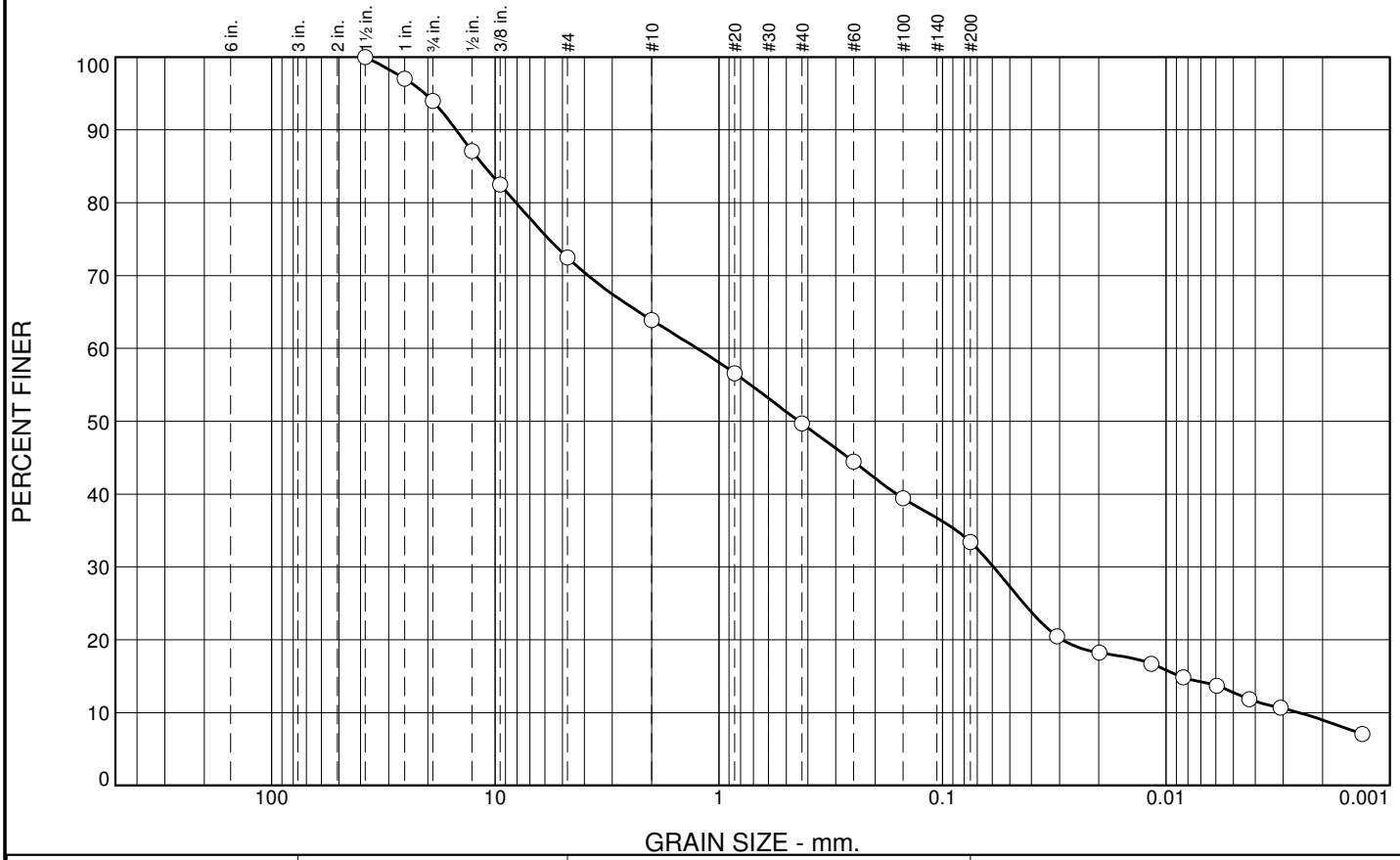
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.0	21.5	8.6	14.2	16.3	24.4	9.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.0		
.75	94.0		
.5	87.1		
.375	82.5		
#4	72.5		
#10	63.9		
#20	56.6		
#40	49.7		
#60	44.5		
#100	39.4		
#200	33.4		
0.0307 mm.	20.5		
0.0199 mm.	18.2		
0.0116 mm.	16.7		
0.0084 mm.	14.8		
0.0059 mm.	13.7		
0.0042 mm.	11.8		
0.0031 mm.	10.7		
0.0013 mm.	7.1		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 14 LL= 23 PI= 9

Coefficients

D_{90}= 14.9717 D_{85}= 11.1989 D_{60}= 1.2517
D_{50}= 0.4390 D_{30}= 0.0591 D_{15}= 0.0087
D_{10}= 0.0025 C_u= 491.18 C_c= 1.09

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/20/12
Location: GT12-32 **Elev./Depth:** 49.08-49.28m

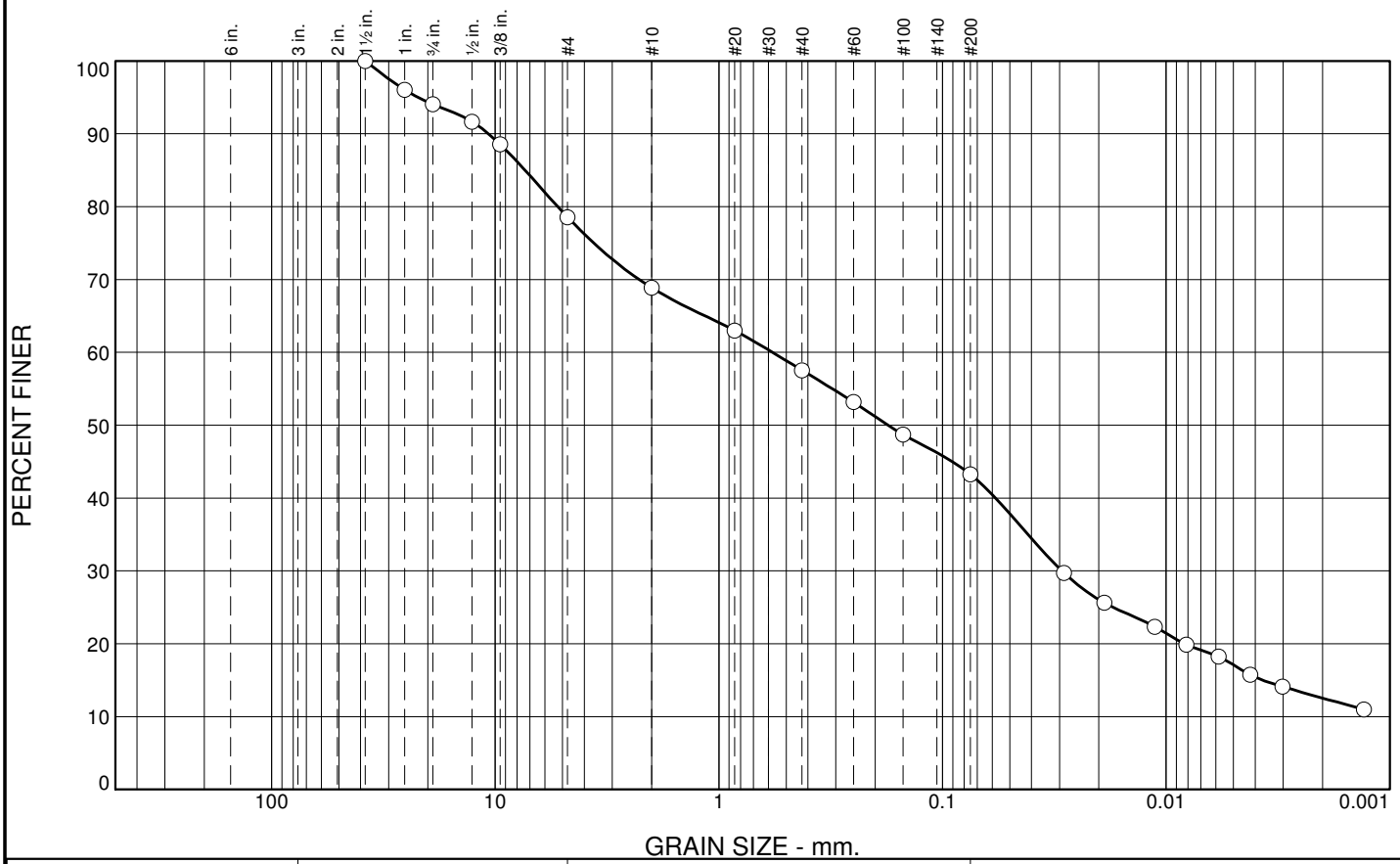
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.9	15.5	9.7	11.4	14.3	30.6	12.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	96.0		
.75	94.1		
.5	91.6		
.375	88.6		
#4	78.6		
#10	68.9		
#20	63.0		
#40	57.5		
#60	53.2		
#100	48.7		
#200	43.2		
0.0286 mm.	29.7		
0.0189 mm.	25.6		
0.0112 mm.	22.3		
0.0081 mm.	19.9		
0.0058 mm.	18.2		
0.0042 mm.	15.8		
0.0030 mm.	14.1		
0.0013 mm.	11.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 12 LL= 28 PI= 16

Coefficients

D_{90}= 10.7419 D_{85}= 7.3625 D_{60}= 0.5756
D_{50}= 0.1752 D_{30}= 0.0292 D_{15}= 0.0037
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(3)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/20/12
Location: GT12-33 **Elev./Depth:** 4.6-4.8m

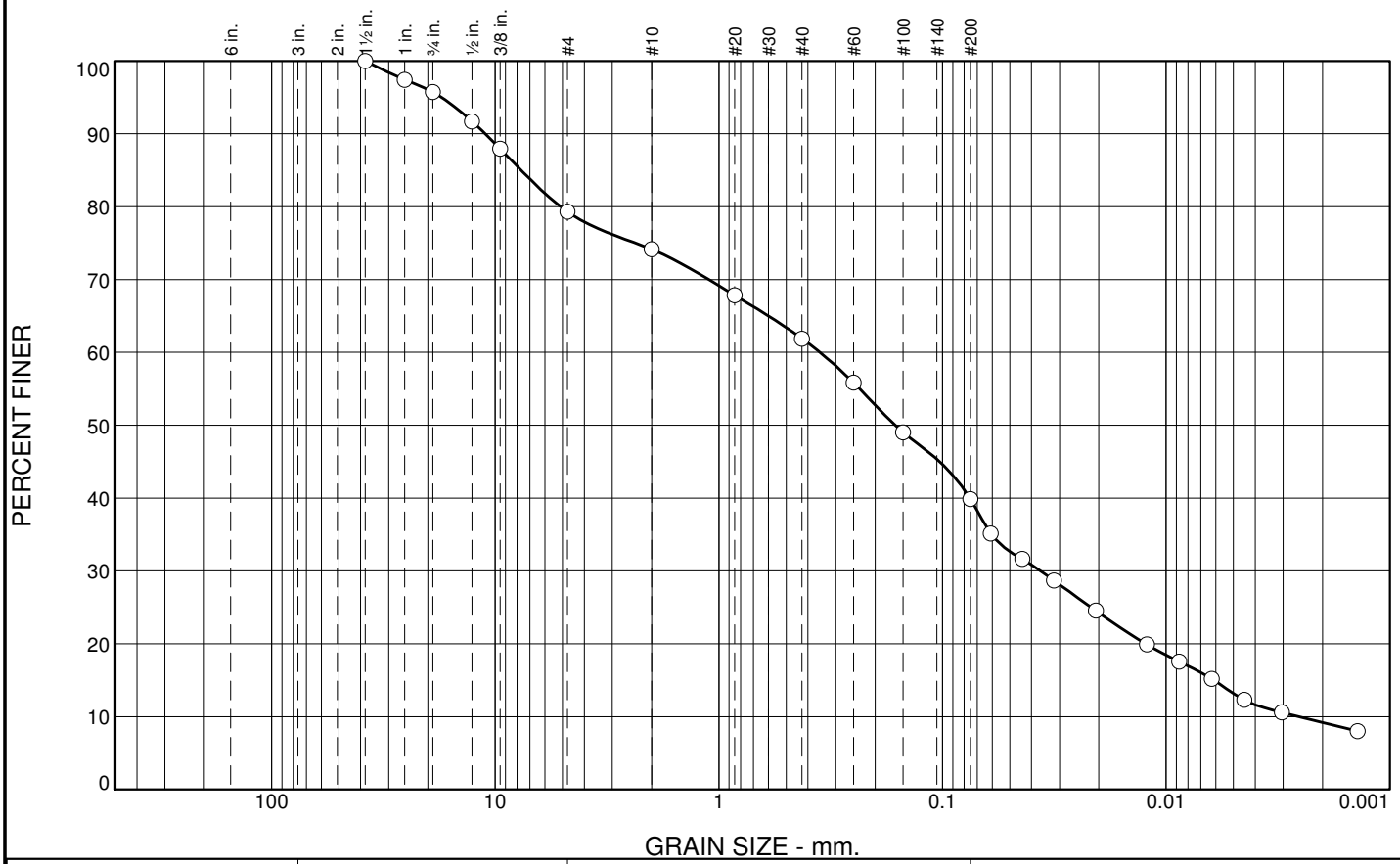
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.3	16.4	5.2	12.2	22.1	30.6	9.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.4		
.75	95.7		
.5	91.7		
.375	88.0		
#4	79.3		
#10	74.1		
#20	67.8		
#40	61.9		
#60	55.8		
#100	49.0		
#200	39.8		
0.0608 mm.	35.1		
0.0440 mm.	31.6		
0.0318 mm.	28.7		
0.0206 mm.	24.5		
0.0122 mm.	19.9		
0.0087 mm.	17.6		
0.0063 mm.	15.2		
0.0045 mm.	12.3		
0.0030 mm.	10.6		
0.0014 mm.	8.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{90}= 11.1032 D_{85}= 7.6702 D_{60}= 0.3537
D_{50}= 0.1627 D_{30}= 0.0365 D_{15}= 0.0061
D_{10}= 0.0025 C_u= 139.46 C_c= 1.49

Classification

USCS= SC AASHTO= A-6(1)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/12/12
Location: GT12-33 **Elev./Depth:** 33.4-33.54m

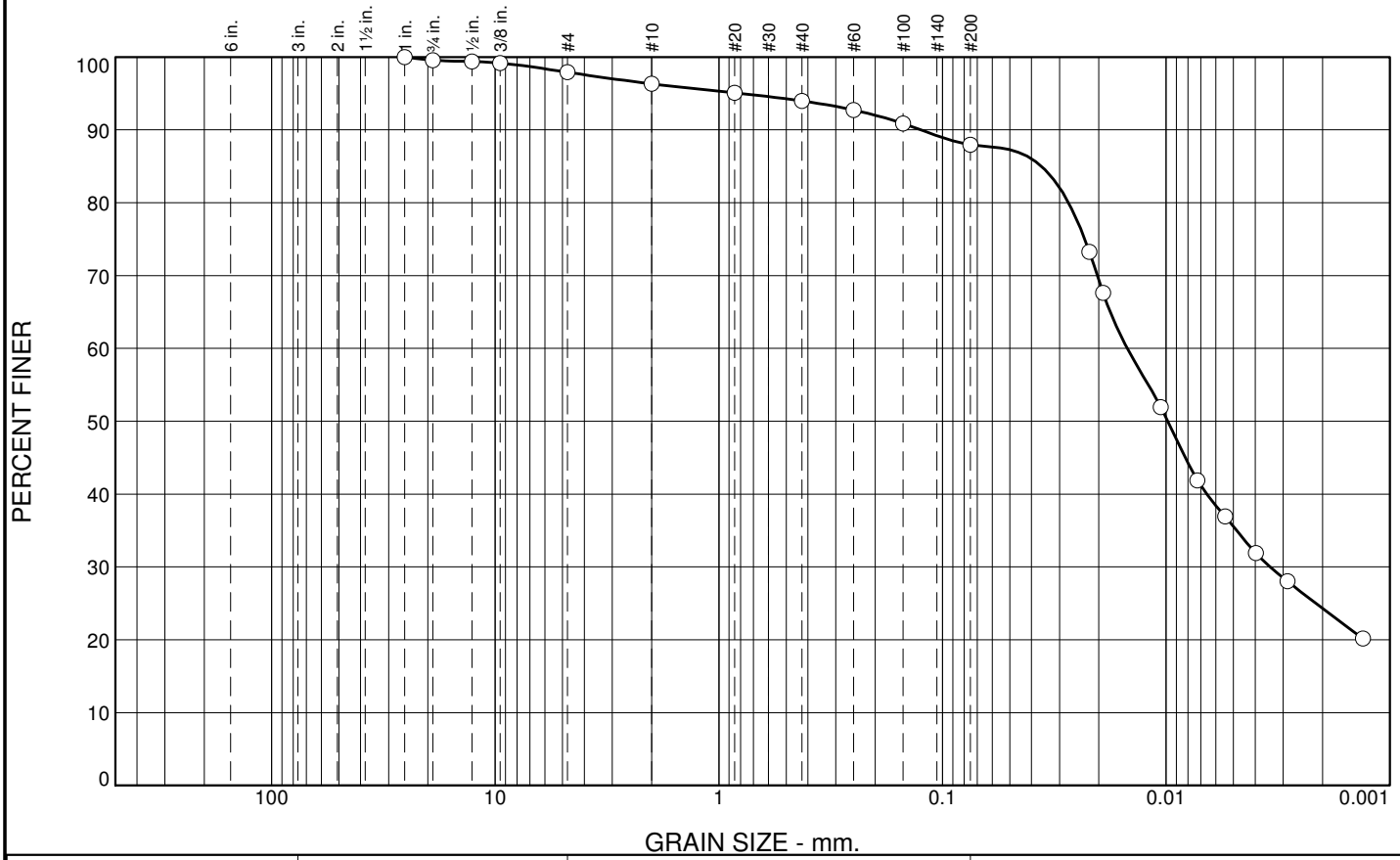
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.4	1.7	1.6	2.3	6.0	63.7	24.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	99.6		
.5	99.4		
.375	99.1		
#4	97.9		
#10	96.3		
#20	95.1		
#40	94.0		
#60	92.7		
#100	90.9		
#200	88.0		
0.0220 mm.	73.3		
0.0191 mm.	67.6		
0.0106 mm.	51.9		
0.0072 mm.	41.9		
0.0055 mm.	36.9		
0.0040 mm.	31.9		
0.0029 mm.	28.1		
0.0013 mm.	20.2		

* (no specification provided)

Soil Description

lean CLAY

Atterberg Limits

PL= 21 LL= 41 PI= 20

Coefficients

D_{90}= 0.1254 D_{85}= 0.0361 D_{60}= 0.0149
D_{50}= 0.0098 D_{30}= 0.0034 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(18)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/20/12
Location: GT12-33 **Elev./Depth:** 40.03-40.23m

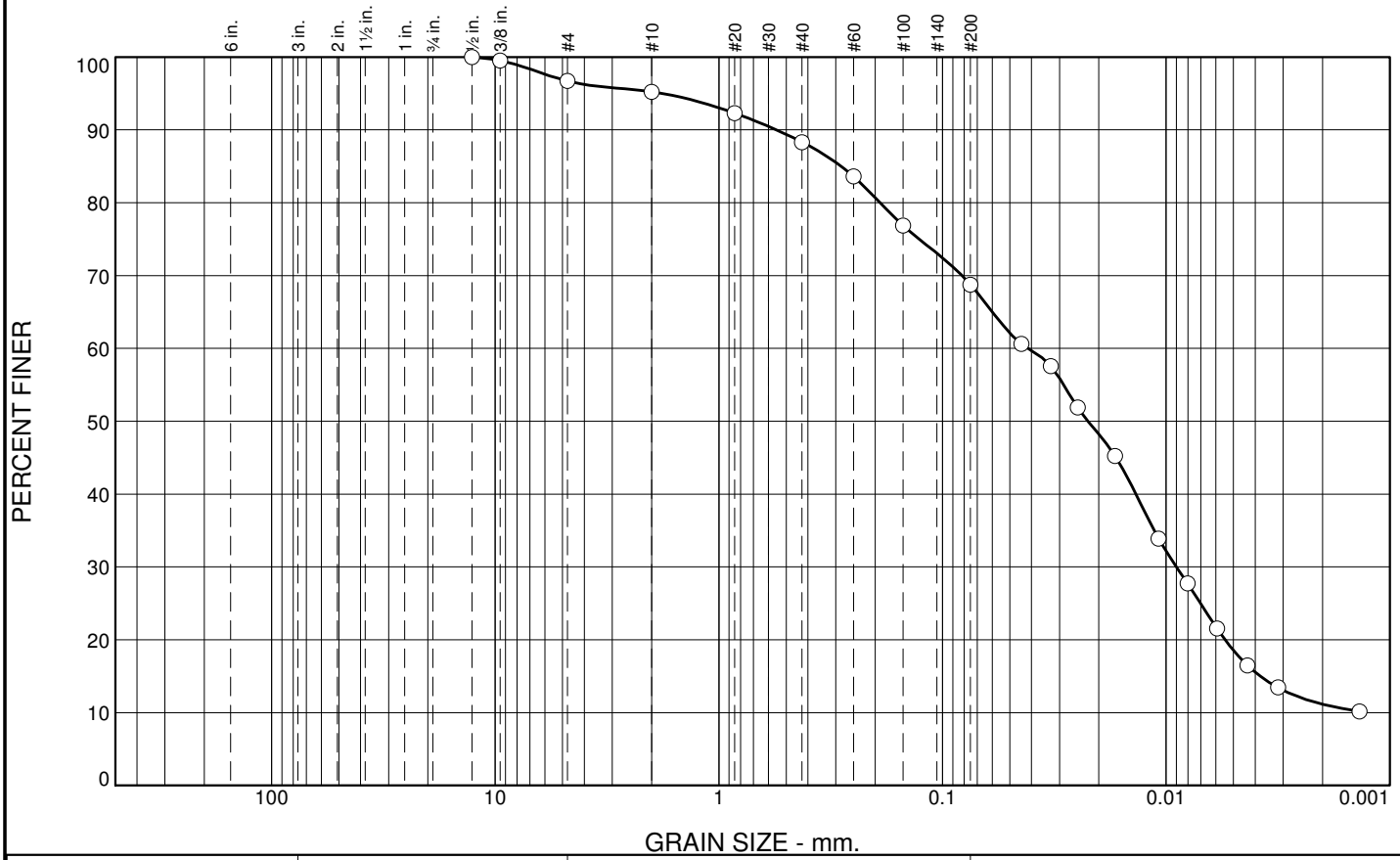
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	3.3	1.5	6.9	19.5	57.6	11.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5	100.0		
.375	99.5		
#4	96.7		
#10	95.2		
#20	92.3		
#40	88.3		
#60	83.6		
#100	76.9		
#200	68.8		
0.0444 mm.	60.6		
0.0328 mm.	57.5		
0.0249 mm.	51.9		
0.0169 mm.	45.2		
0.0108 mm.	33.9		
0.0080 mm.	27.7		
0.0059 mm.	21.6		
0.0043 mm.	16.5		
0.0032 mm.	13.5		
0.0014 mm.	10.2		

* (no specification provided)

Soil Description

sandy silty CLAY

Atterberg Limits

PL= 15 LL= 20 PI= 5

Coefficients

D_{90}= 0.5534 D_{85}= 0.2843 D_{60}= 0.0415
D_{50}= 0.0224 D_{30}= 0.0090 D_{15}= 0.0038
D_{10}= C_u= C_c=

Classification

USCS= CL-ML AASHTO= A-4(1)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/12/12
Location: GT12-34 **Elev./Depth:** 3.45-3.7m

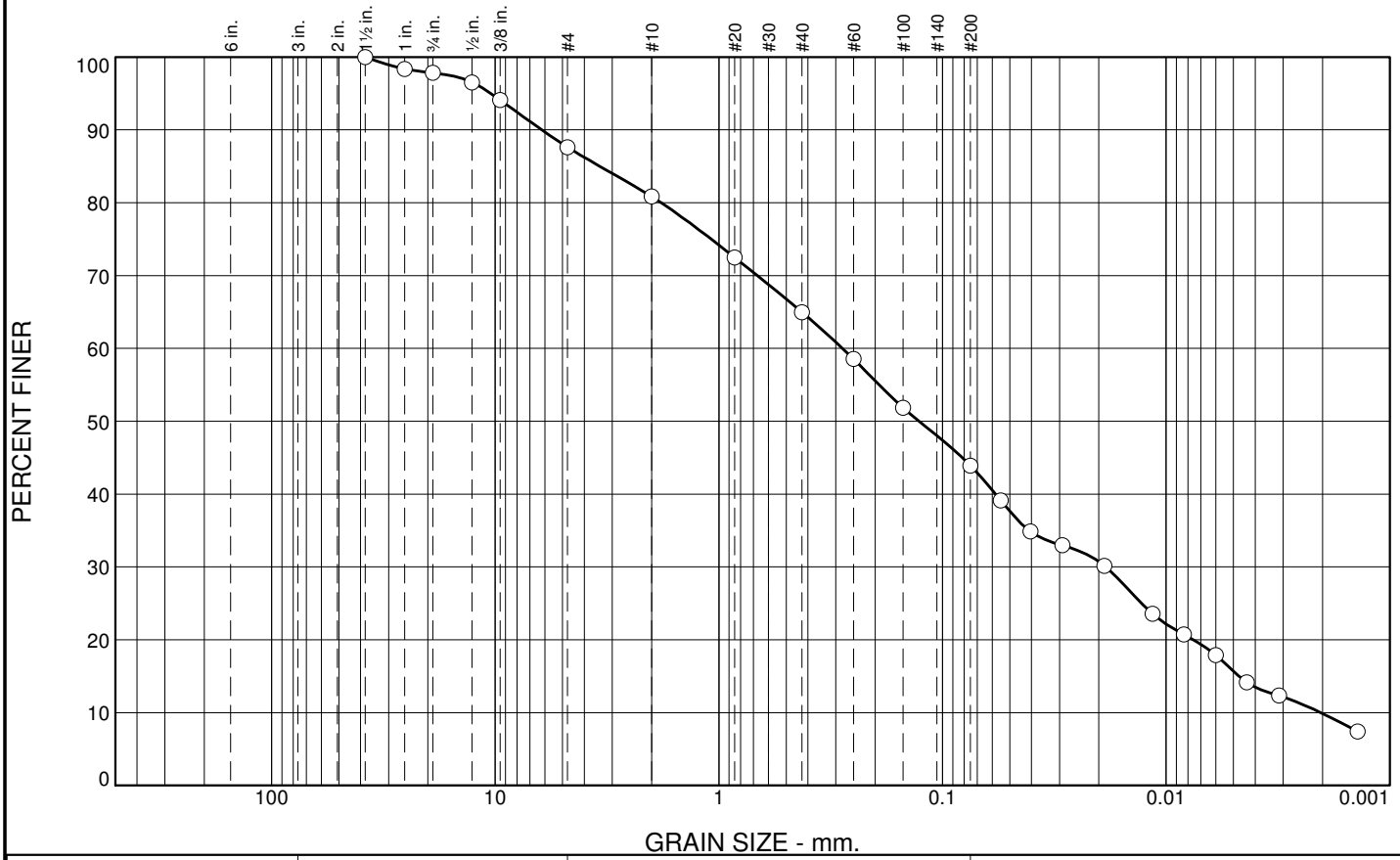
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.2	10.2	6.8	15.9	21.0	34.0	9.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.4		
.75	97.8		
.5	96.5		
.375	94.1		
#4	87.6		
#10	80.8		
#20	72.5		
#40	64.9		
#60	58.5		
#100	51.9		
#200	43.9		
0.0548 mm.	39.1		
0.0405 mm.	34.9		
0.0291 mm.	33.0		
0.0189 mm.	30.2		
0.0115 mm.	23.6		
0.0083 mm.	20.7		
0.0060 mm.	17.9		
0.0044 mm.	14.2		
0.0031 mm.	12.3		
0.0014 mm.	7.4		

* (no specification provided)

Soil Description

silty, clayey SAND

Atterberg Limits

PL= 12 LL= 19 PI= 7

Coefficients

D_{90}= 6.2029 D_{85}= 3.4119 D_{60}= 0.2802
D_{50}= 0.1273 D_{30}= 0.0186 D_{15}= 0.0047
D_{10}= 0.0020 C_u= 137.64 C_c= 0.61

Classification

USCS= SC-SM AASHTO= A-4(0)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/12/12
Location: GT12-34 **Elev./Depth:** 17.45-17.6m

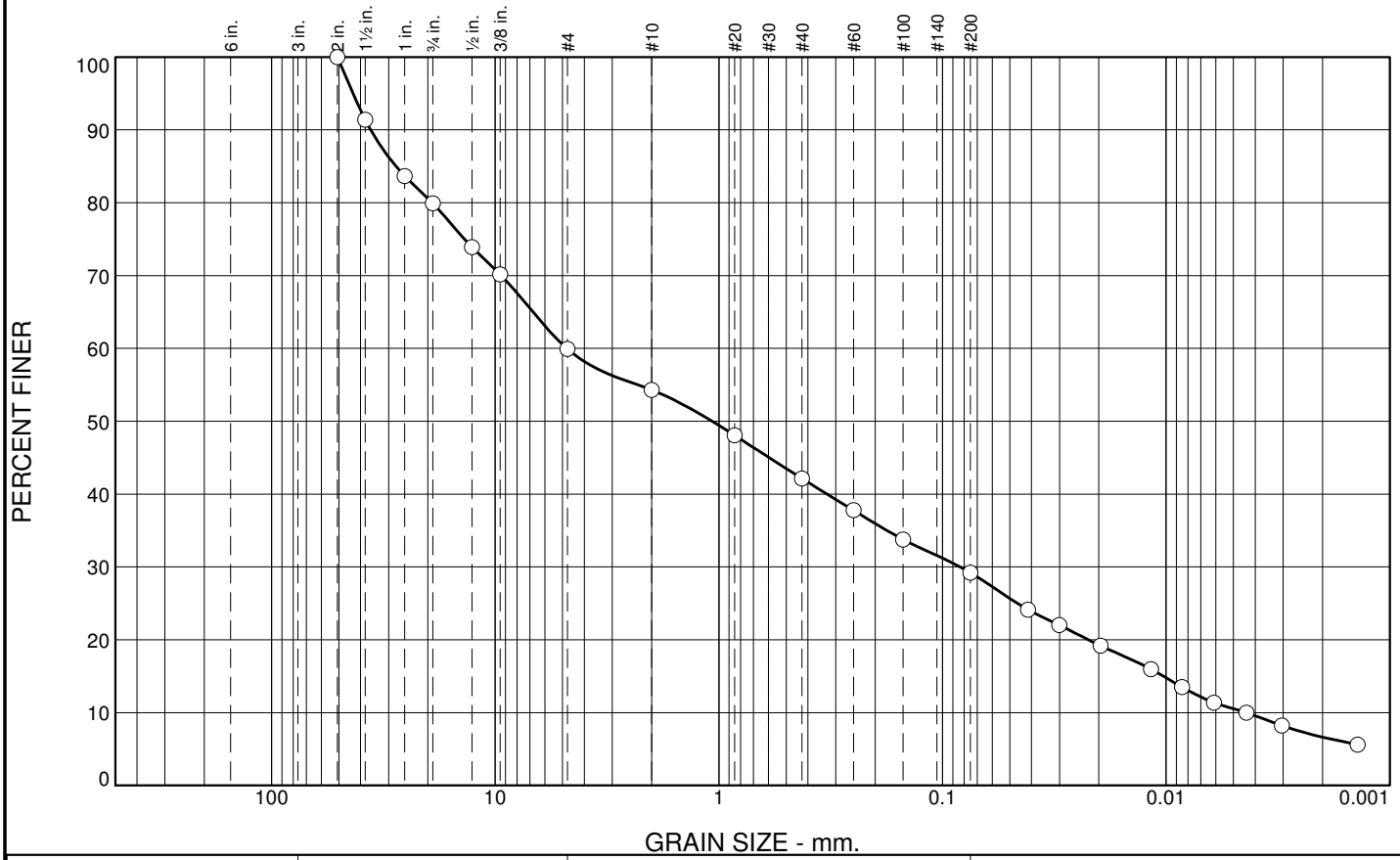
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	20.1	20.0	5.6	12.2	12.9	22.6	6.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	91.4		
1	83.7		
.75	79.9		
.5	73.9		
.375	70.2		
#4	59.9		
#10	54.3		
#20	48.1		
#40	42.1		
#60	37.8		
#100	33.8		
#200	29.2		
0.0414 mm.	24.1		
0.0300 mm.	22.0		
0.0196 mm.	19.2		
0.0117 mm.	16.0		
0.0085 mm.	13.5		
0.0061 mm.	11.4		
0.0044 mm.	10.0		
0.0030 mm.	8.2		
0.0014 mm.	5.6		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 13 LL= 22 PI= 9

Coefficients

D_{90}= 36.0392 D_{85}= 27.8289 D_{60}= 4.7864
D_{50}= 1.0732 D_{30}= 0.0836 D_{15}= 0.0103
D_{10}= 0.0044 C_u= 1089.78 C_c= 0.33

Classification

USCS= GC AASHTO= A-2-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/12/12
Location: GT12-34 **Elev./Depth:** 42.07-42.27m

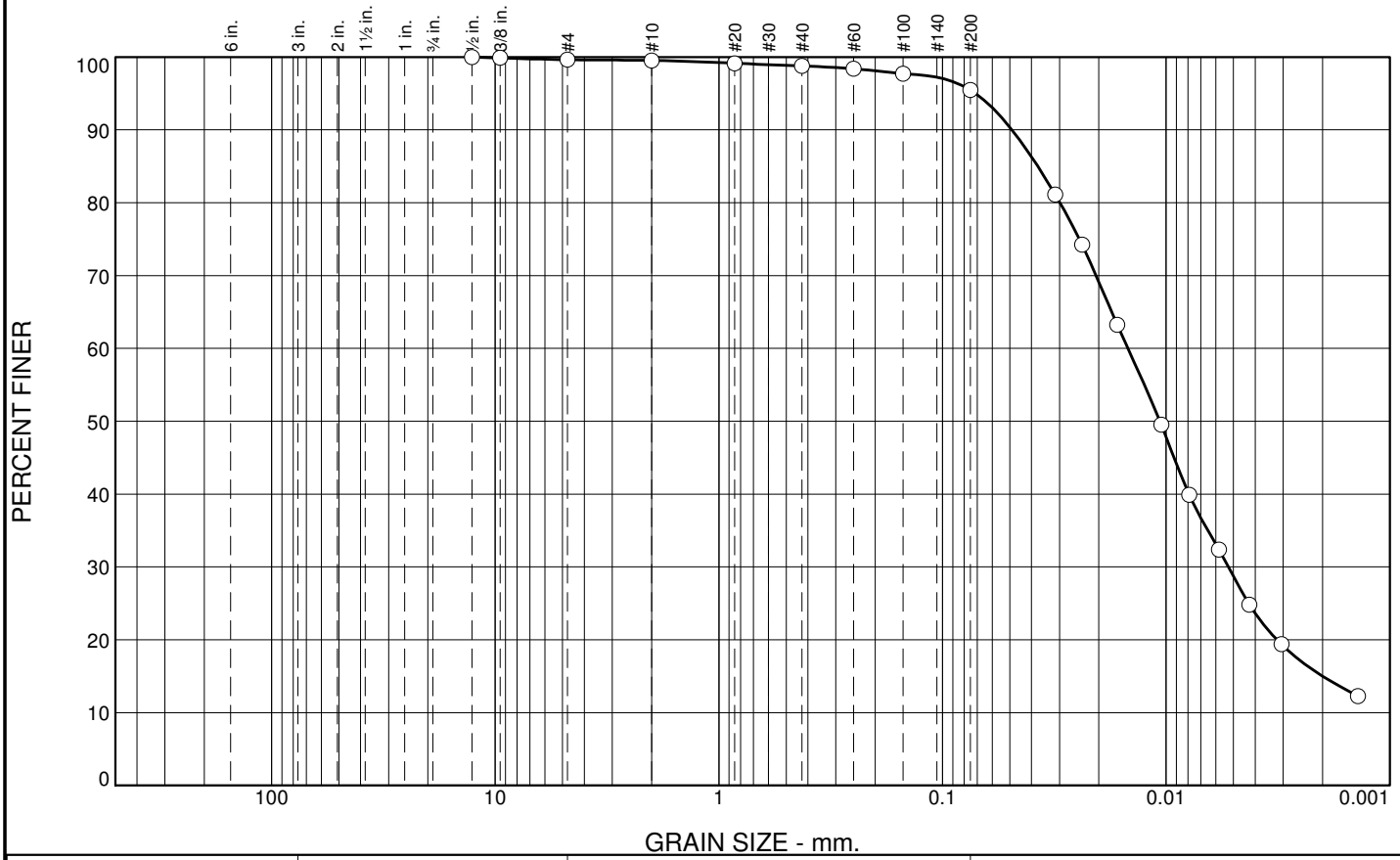
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	0.1	0.7	3.3	80.5	15.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.5	100.0		
.375	99.9		
#4	99.6		
#10	99.5		
#20	99.1		
#40	98.8		
#60	98.4		
#100	97.7		
#200	95.5		
0.0314 mm.	81.1		
0.0238 mm.	74.2		
0.0165 mm.	63.2		
0.0105 mm.	49.5		
0.0079 mm.	39.9		
0.0058 mm.	32.4		
0.0042 mm.	24.8		
0.0031 mm.	19.4		
0.0014 mm.	12.3		

* (no specification provided)

Soil Description

silty CLAY

Atterberg Limits

PL= 17 LL= 24 PI= 7

Coefficients

D_{90}= 0.0489 D_{85}= 0.0375 D_{60}= 0.0148
D_{50}= 0.0107 D_{30}= 0.0053 D_{15}= 0.0020
D_{10}= C_u= C_c=

Classification

USCS= CL-ML AASHTO= A-4(5)

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/12/12
Location: GT12-34 **Elev./Depth:** 52.22-52.37m

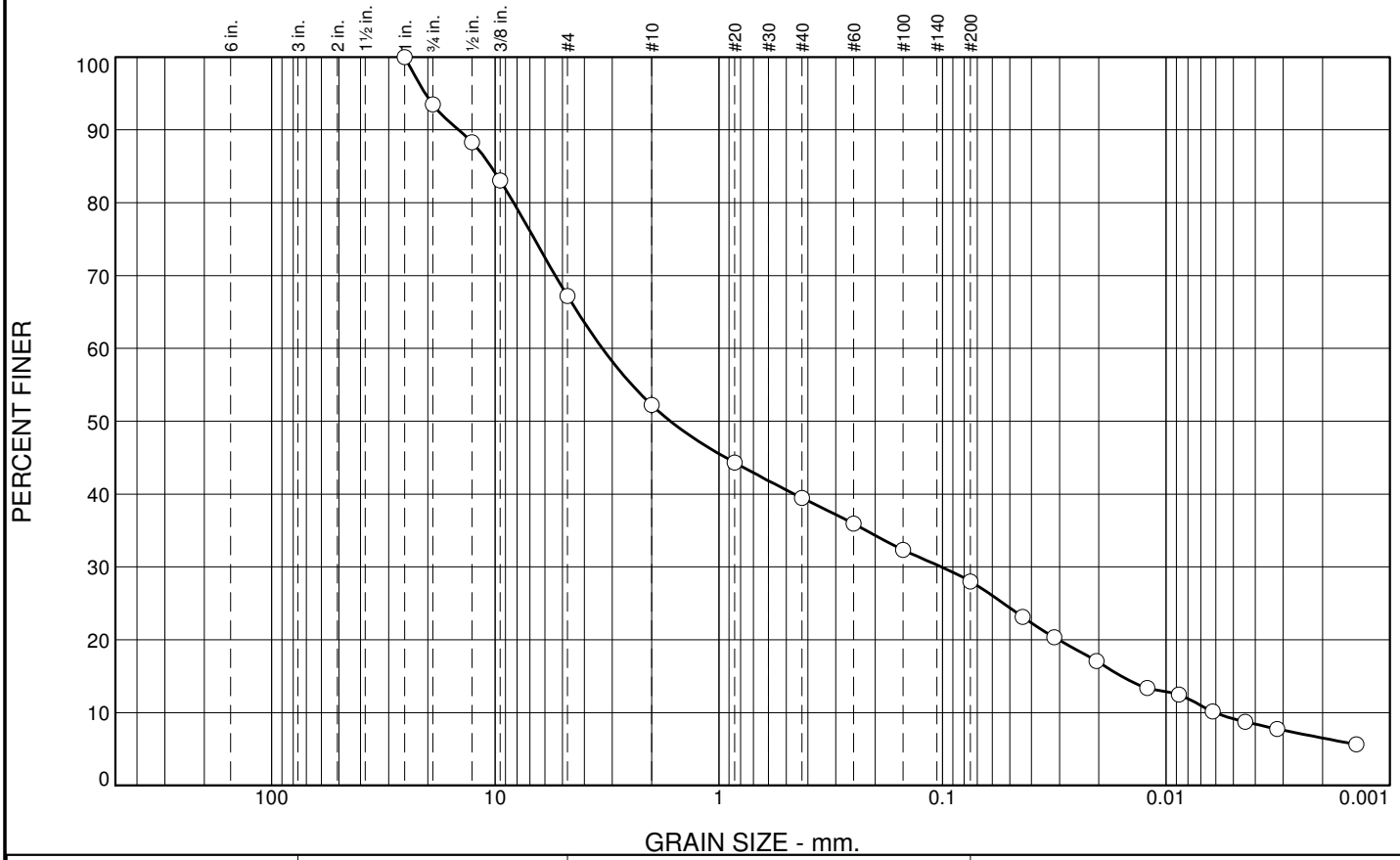
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.5	26.3	15.0	12.7	11.5	21.5	6.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	93.5		
.5	88.3		
.375	83.1		
#4	67.2		
#10	52.2		
#20	44.3		
#40	39.5		
#60	35.9		
#100	32.3		
#200	28.0		
0.0438 mm.	23.1		
0.0317 mm.	20.3		
0.0205 mm.	17.1		
0.0121 mm.	13.4		
0.0088 mm.	12.5		
0.0062 mm.	10.2		
0.0044 mm.	8.7		
0.0032 mm.	7.8		
0.0014 mm.	5.6		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 15 LL= 21 PI= 6

Coefficients

D_{90}= 14.5834 D_{85}= 10.4743 D_{60}= 3.3192
D_{50}= 1.6484 D_{30}= 0.1012 D_{15}= 0.0158
D_{10}= 0.0060 C_u= 550.63 C_c= 0.51

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/19/12
Location: GT12-35 **Elev./Depth:** 6.9-7.1m

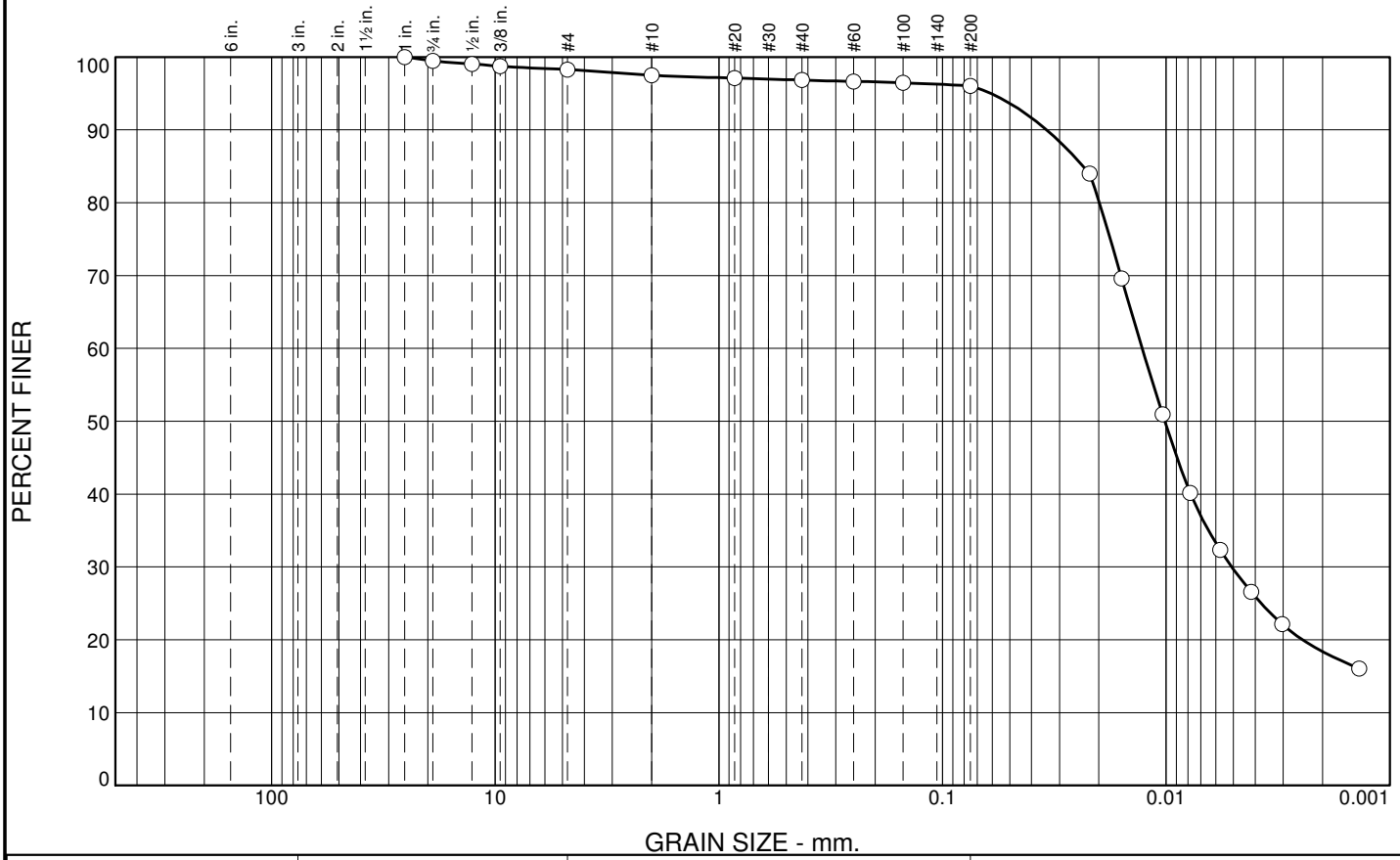
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.5	1.2	0.8	0.7	0.8	77.6	18.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	99.5		
.5	99.1		
.375	98.7		
#4	98.3		
#10	97.5		
#20	97.1		
#40	96.8		
#60	96.6		
#100	96.5		
#200	96.0		
0.0220 mm.	84.0		
0.0158 mm.	69.6		
0.0104 mm.	50.9		
0.0078 mm.	40.2		
0.0057 mm.	32.3		
0.0042 mm.	26.6		
0.0030 mm.	22.2		
0.0014 mm.	16.0		

* (no specification provided)

Soil Description

lean CLAY

Atterberg Limits

PL= 22 LL= 34 PI= 12

Coefficients

D_{90}= 0.0343 D_{85}= 0.0235 D_{60}= 0.0128
D_{50}= 0.0101 D_{30}= 0.0051 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(12)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/20/12
Location: GT12-35 **Elev./Depth:** 36.65-36.85m

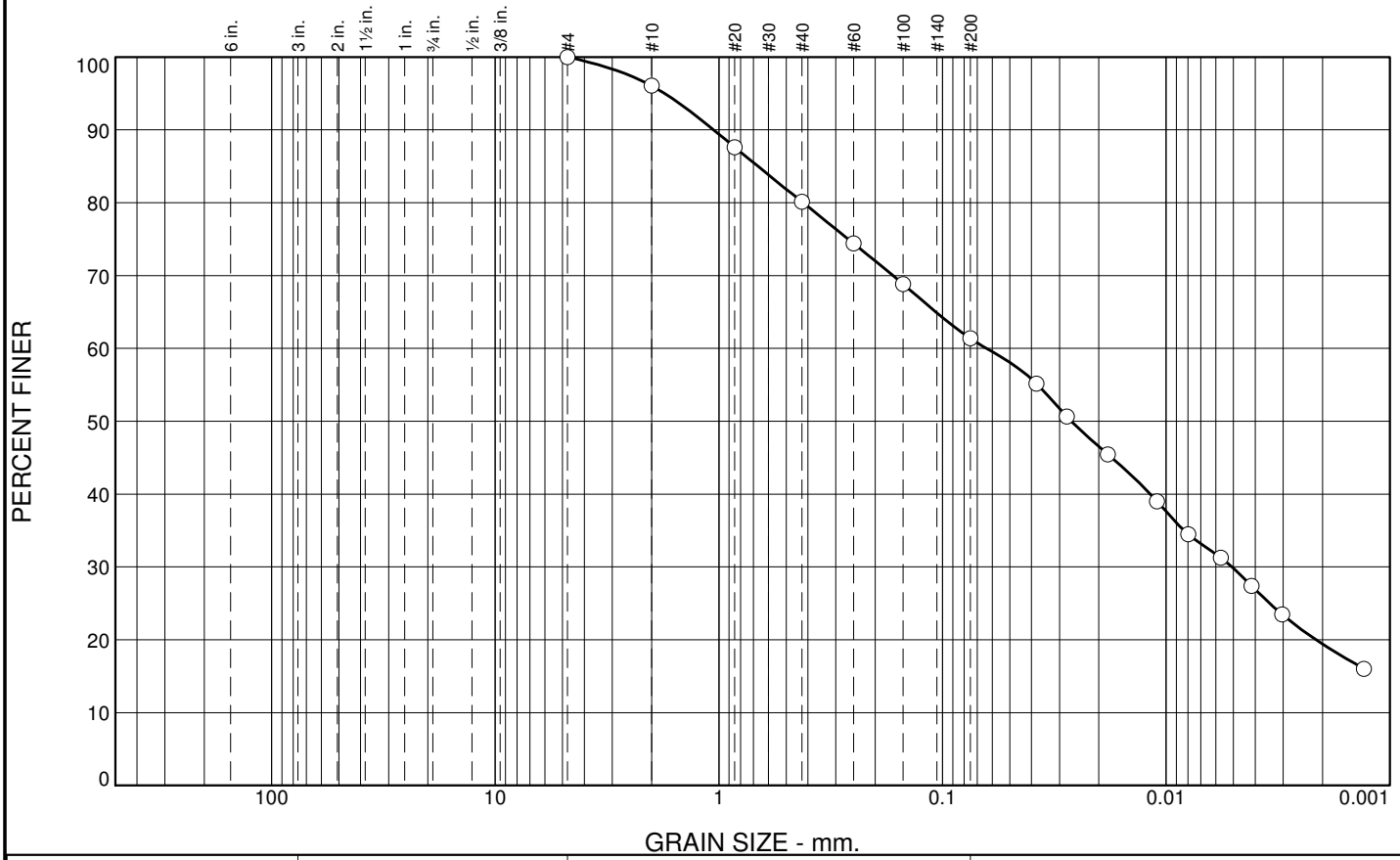
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	3.9	16.0	18.7	42.0	19.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	96.1		
#20	87.6		
#40	80.1		
#60	74.4		
#100	68.8		
#200	61.4		
0.0380 mm.	55.2		
0.0278 mm.	50.6		
0.0182 mm.	45.5		
0.0110 mm.	39.0		
0.0080 mm.	34.5		
0.0057 mm.	31.3		
0.0041 mm.	27.4		
0.0030 mm.	23.5		
0.0013 mm.	16.0		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 27 LL= 46 PI= 19

Coefficients

D_{90}= 1.0560 D_{85}= 0.6690 D_{60}= 0.0635
D_{50}= 0.0266 D_{30}= 0.0051 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(10)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/20/12
Location: GT12-35 **Elev./Depth:** 41.13-41.33m

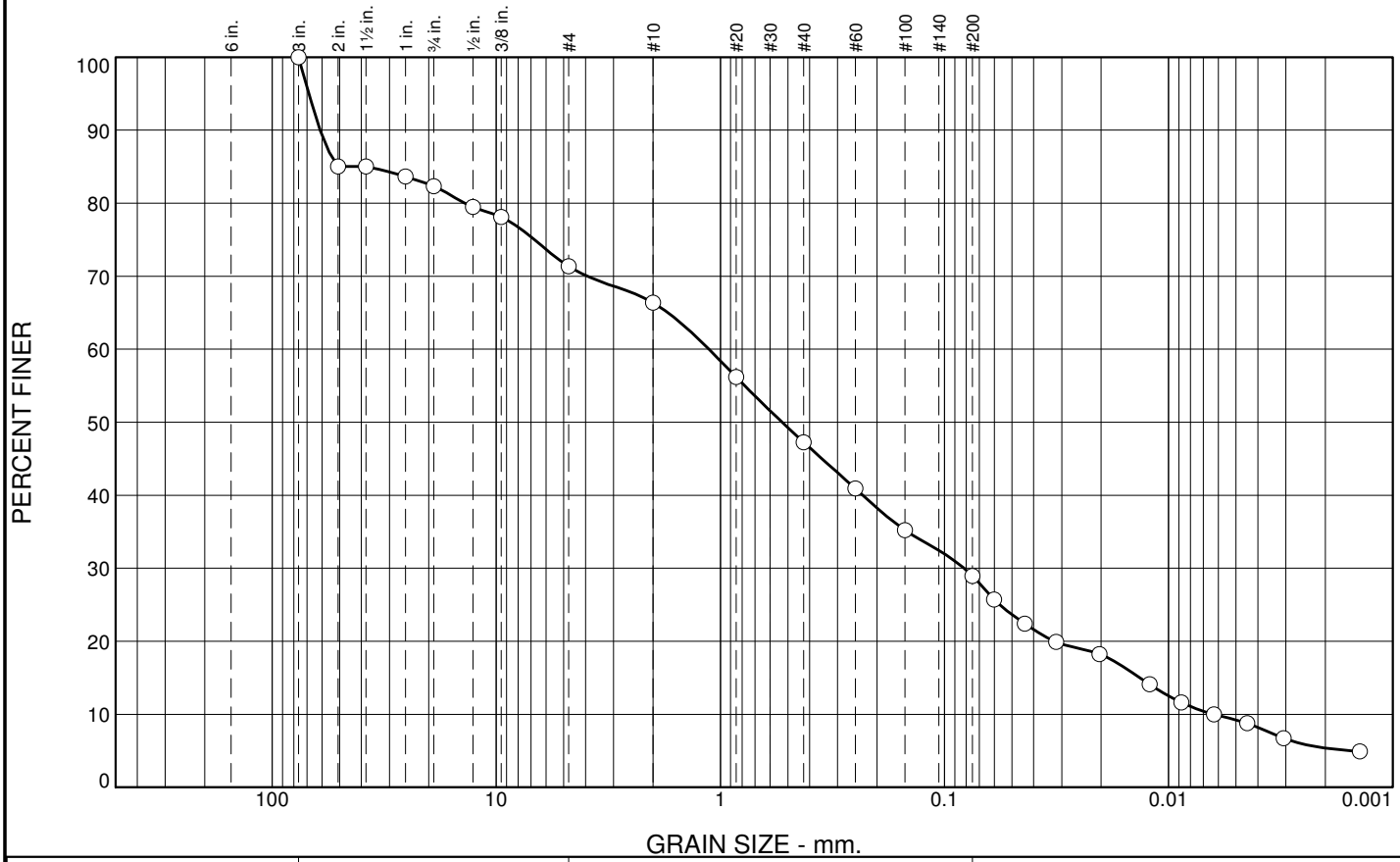
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	17.7	11.0	4.9	19.1	18.4	23.5	5.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	85.0		
1.5	85.0		
1	83.6		
.75	82.3		
.5	79.5		
.375	78.1		
#4	71.3		
#10	66.4		
#20	56.2		
#40	47.3		
#60	40.9		
#100	35.2		
#200	28.9		
0.0600 mm.	25.7		
0.0438 mm.	22.4		
0.0317 mm.	19.9		
0.0203 mm.	18.3		
0.0122 mm.	14.1		
0.0088 mm.	11.6		
0.0063 mm.	10.0		
0.0045 mm.	8.8		
0.0031 mm.	6.7		
0.0014 mm.	4.9		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 12 LL= 17 PI= 5

Coefficients

D_{90}= 61.0476 D_{85}= 38.0485 D_{60}= 1.1268
D_{50}= 0.5305 D_{30}= 0.0818 D_{15}= 0.0134
D_{10}= 0.0063 C_u= 178.85 C_c= 0.94

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/12/12
Location: GT12-36 **Elev./Depth:** 10.2-10.4m

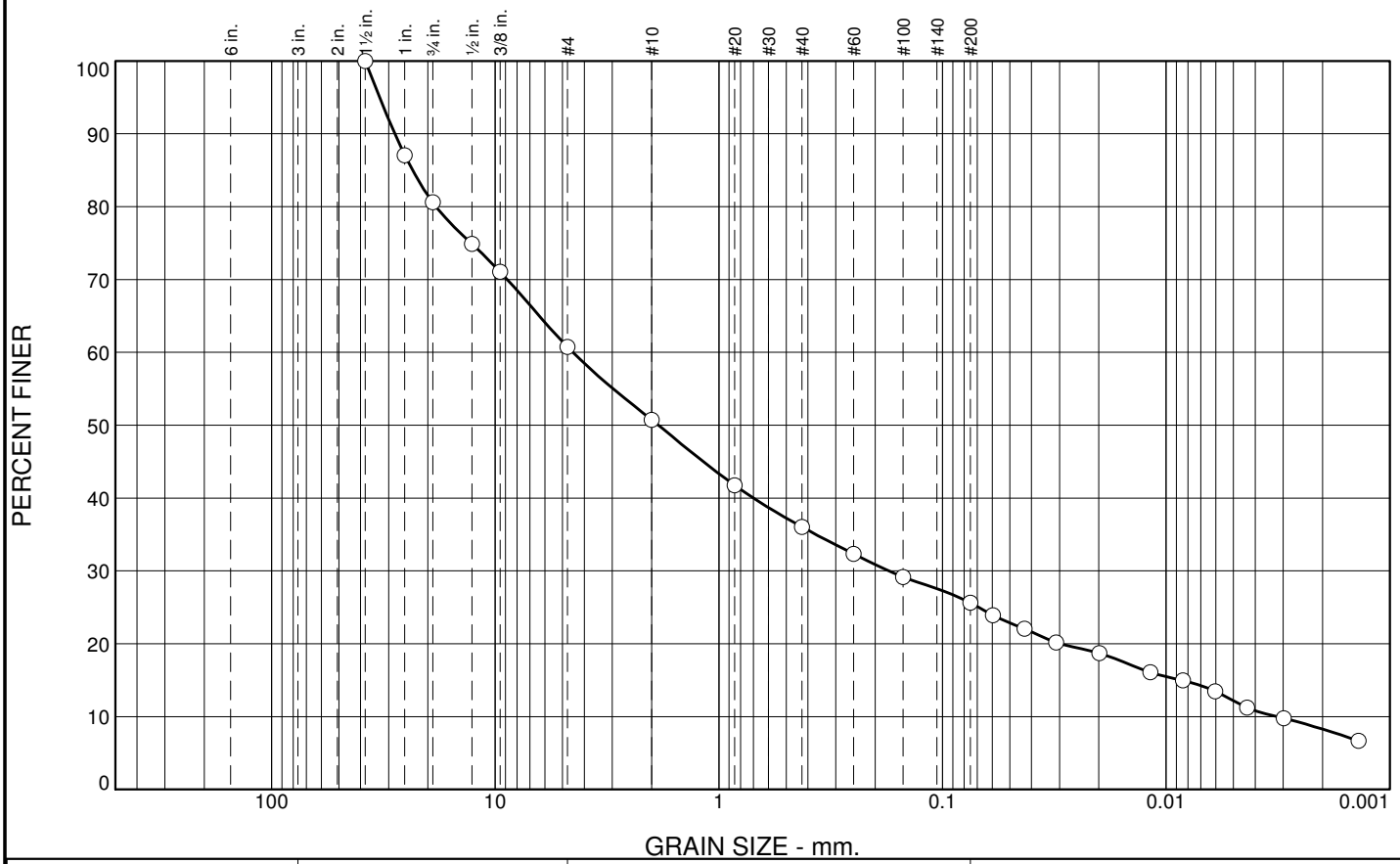
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	19.4	19.9	10.0	14.7	10.4	17.3	8.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	87.1		
.75	80.6		
.5	74.9		
.375	71.1		
#4	60.7		
#10	50.7		
#20	41.8		
#40	36.0		
#60	32.4		
#100	29.2		
#200	25.6		
0.0596 mm.	23.9		
0.0430 mm.	22.1		
0.0310 mm.	20.2		
0.0199 mm.	18.7		
0.0118 mm.	16.1		
0.0084 mm.	15.0		
0.0060 mm.	13.5		
0.0043 mm.	11.3		
0.0030 mm.	9.8		
0.0014 mm.	6.7		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 14 LL= 26 PI= 12

Coefficients

D_{90}= 28.1204 D_{85}= 23.4504 D_{60}= 4.4963
D_{50}= 1.8656 D_{30}= 0.1737 D_{15}= 0.0085
D_{10}= 0.0032 C_u= 1407.09 C_c= 2.10

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/12/12
Location: GT12-36 **Elev./Depth:** 41.18-41.32m

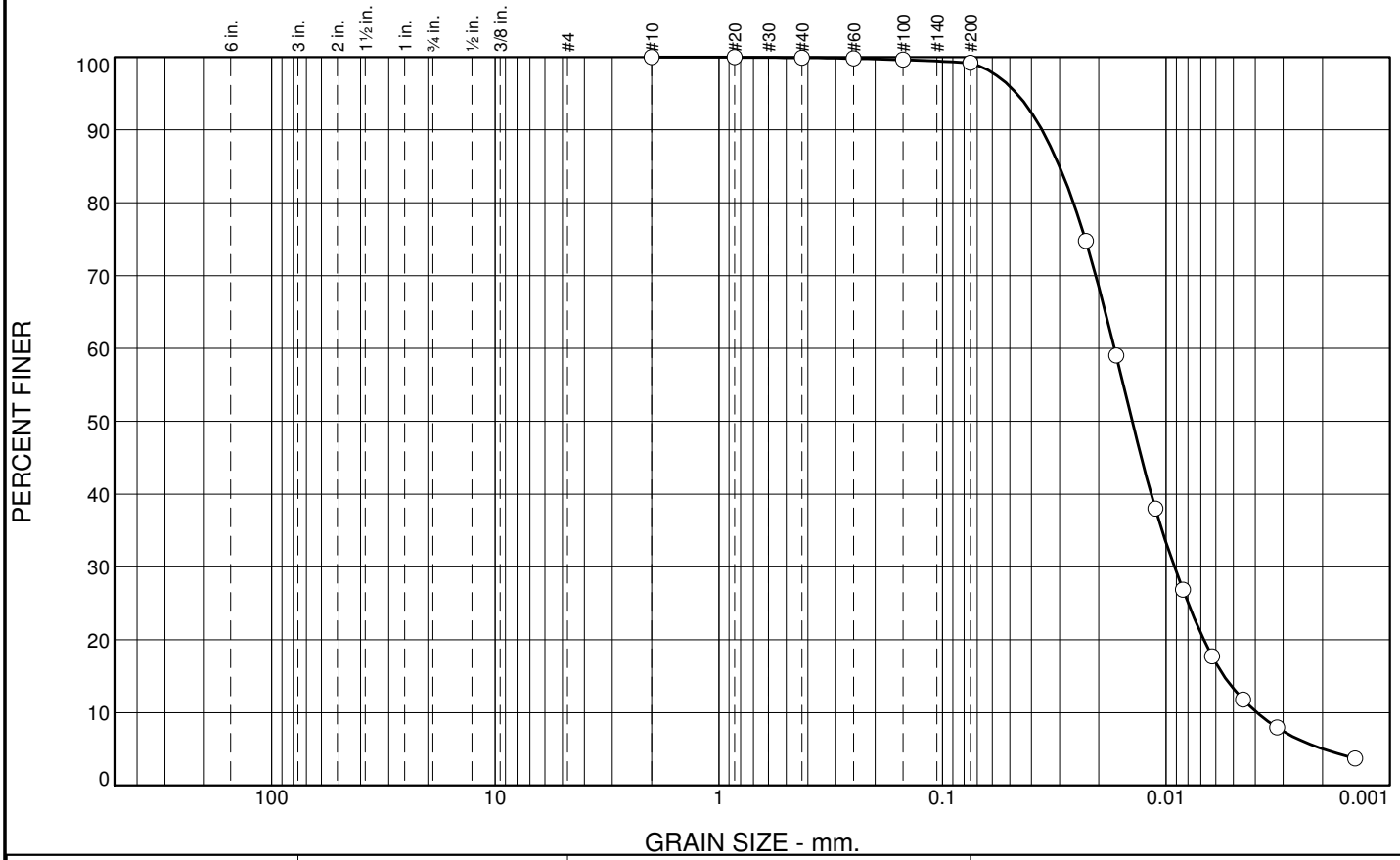
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.1	0.7	94.2	5.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	100.0		
#40	99.9		
#60	99.8		
#100	99.6		
#200	99.2		
0.0229 mm.	74.8		
0.0167 mm.	59.0		
0.0112 mm.	38.0		
0.0084 mm.	26.9		
0.0062 mm.	17.7		
0.0045 mm.	11.8		
0.0032 mm.	8.0		
0.0014 mm.	3.7		

* (no specification provided)

Soil Description

SILT

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.0360 D_{85}= 0.0300 D_{60}= 0.0170
D_{50}= 0.0142 D_{30}= 0.0092 D_{15}= 0.0055
D_{10}= 0.0039 C_u= 4.35 C_c= 1.26

Classification

USCS= ML AASHTO= A-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/12/12
Location: GT12-36 **Elev./Depth:** 53.3-53.5m

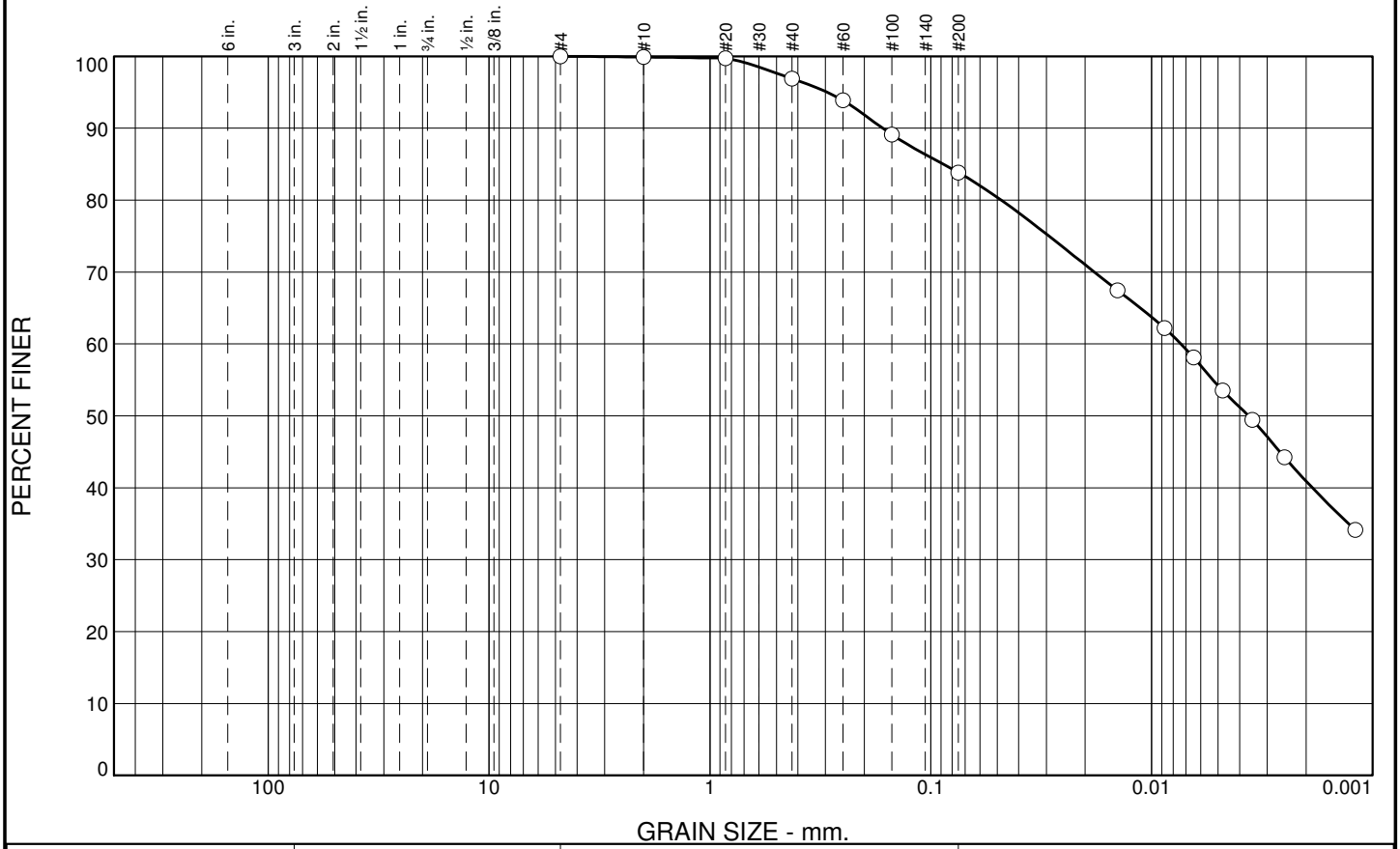
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	3.0	13.1	42.9	40.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#20	99.7		
#40	96.9		
#60	93.9		
#100	89.1		
#200	83.8		
0.0143 mm.	67.4		
0.0088 mm.	62.2		
0.0065 mm.	58.1		
0.0048 mm.	53.5		
0.0035 mm.	49.4		
0.0025 mm.	44.3		
0.0012 mm.	34.1		

* (no specification provided)

Soil Description

fat CLAY with sand

Atterberg Limits

PL= 27 LL= 55 PI= 28

Coefficients

D_{90}= 0.1653 D_{85}= 0.0877 D_{60}= 0.0074
D_{50}= 0.0036 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CH AASHTO= A-7-6(26)

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/12/12
Location: GT12-36 **Elev./Depth:** 78.35-78.55m

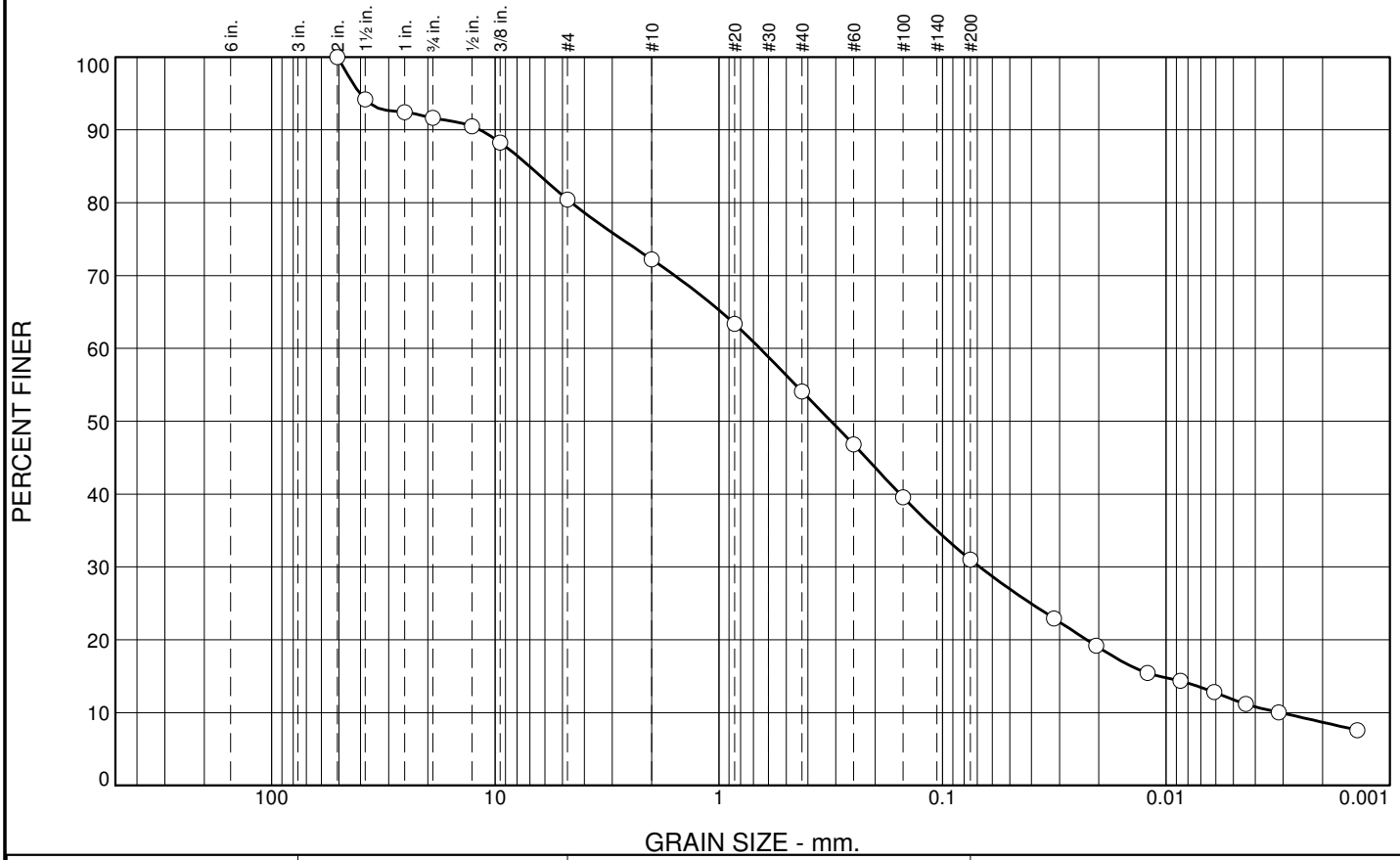
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.4	11.2	8.2	18.1	23.1	22.3	8.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	94.2		
1	92.4		
.75	91.6		
.5	90.5		
.375	88.3		
#4	80.4		
#10	72.2		
#20	63.3		
#40	54.1		
#60	46.8		
#100	39.6		
#200	31.0		
0.0317 mm.	22.9		
0.0206 mm.	19.2		
0.0121 mm.	15.5		
0.0086 mm.	14.4		
0.0061 mm.	12.8		
0.0044 mm.	11.2		
0.0031 mm.	10.1		
0.0014 mm.	7.6		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 19 PI= 6

Coefficients

D_{90}= 11.7432 D_{85}= 7.0391 D_{60}= 0.6551
D_{50}= 0.3145 D_{30}= 0.0682 D_{15}= 0.0107
D_{10}= 0.0031 C_u= 212.19 C_c= 2.30

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/20/12
Location: GT12-37 **Elev./Depth:** 3.75-3.9m

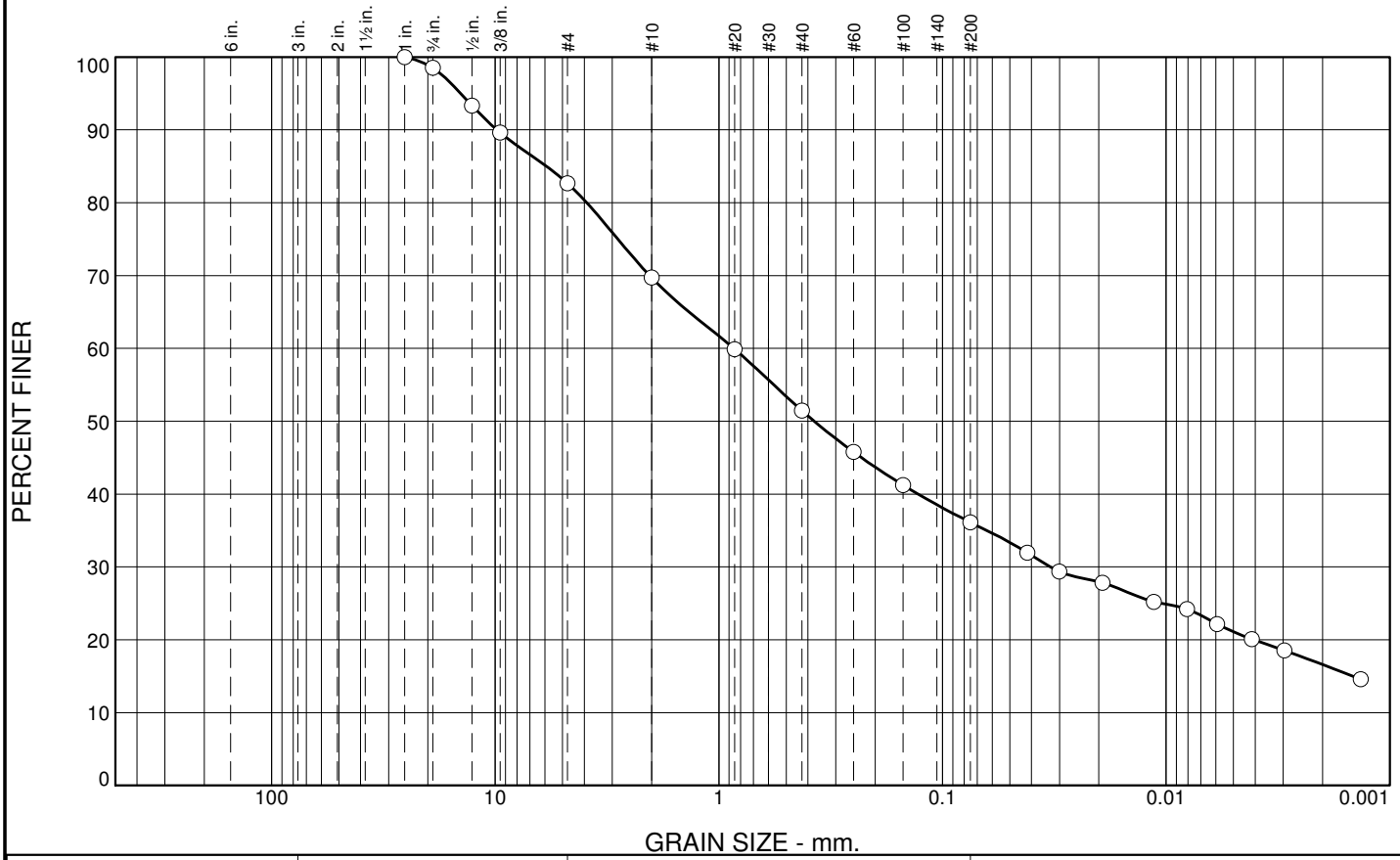
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.5	15.8	13.0	18.2	15.4	19.5	16.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	98.5		
.5	93.3		
.375	89.6		
#4	82.7		
#10	69.7		
#20	59.9		
#40	51.5		
#60	45.8		
#100	41.2		
#200	36.1		
0.0417 mm.	32.0		
0.0301 mm.	29.4		
0.0193 mm.	27.8		
0.0113 mm.	25.2		
0.0081 mm.	24.2		
0.0059 mm.	22.2		
0.0041 mm.	20.1		
0.0030 mm.	18.5		
0.0014 mm.	14.6		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 15 LL= 19 PI= 4

Coefficients

D_{90}= 9.8308 D_{85}= 5.9026 D_{60}= 0.8571
D_{50}= 0.3745 D_{30}= 0.0330 D_{15}= 0.0015
D_{10}= C_u= C_c=

Classification

USCS= SC-SM AASHTO= A-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/19/12
Location: GT12-37 **Elev./Depth:** 43.4-43.6m

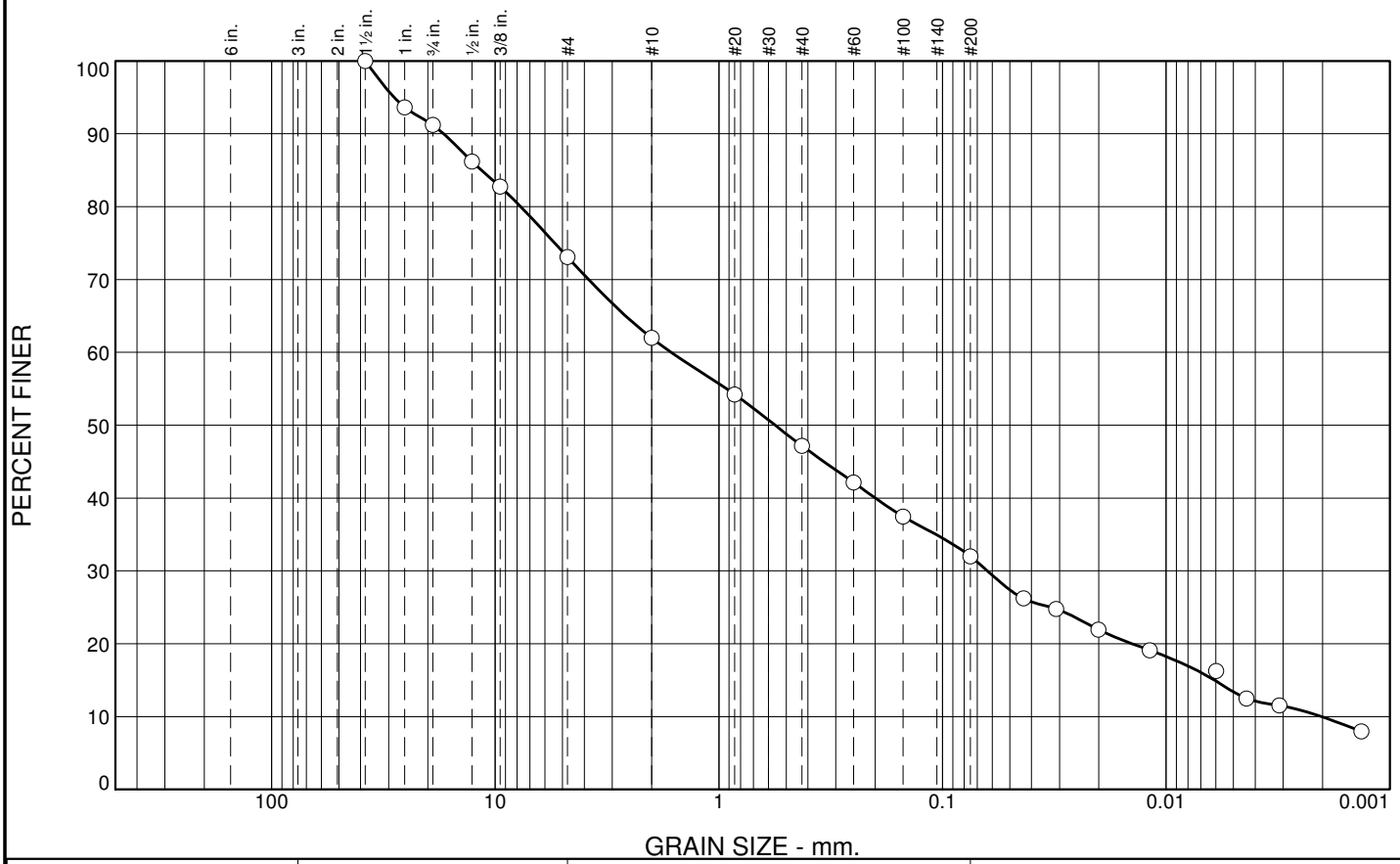
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.8	18.1	11.1	14.8	15.2	22.0	10.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	93.6		
.75	91.2		
.5	86.2		
.375	82.7		
#4	73.1		
#10	62.0		
#20	54.2		
#40	47.2		
#60	42.2		
#100	37.5		
#200	32.0		
0.0434 mm.	26.2		
0.0310 mm.	24.8		
0.0201 mm.	21.9		
0.0118 mm.	19.1		
0.0060 mm.	16.3		
0.0060 mm.	14.9		
0.0044 mm.	12.5		
0.0031 mm.	11.5		
0.0013 mm.	8.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 12 LL= 22 PI= 10

Coefficients

D_{90}= 16.9988 D_{85}= 11.5250 D_{60}= 1.6349
D_{50}= 0.5606 D_{30}= 0.0630 D_{15}= 0.0061
D_{10}= 0.0020 C_u= 811.04 C_c= 1.20

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/20/12
Location: GT12-38 **Elev./Depth:** 8.6-8.75m

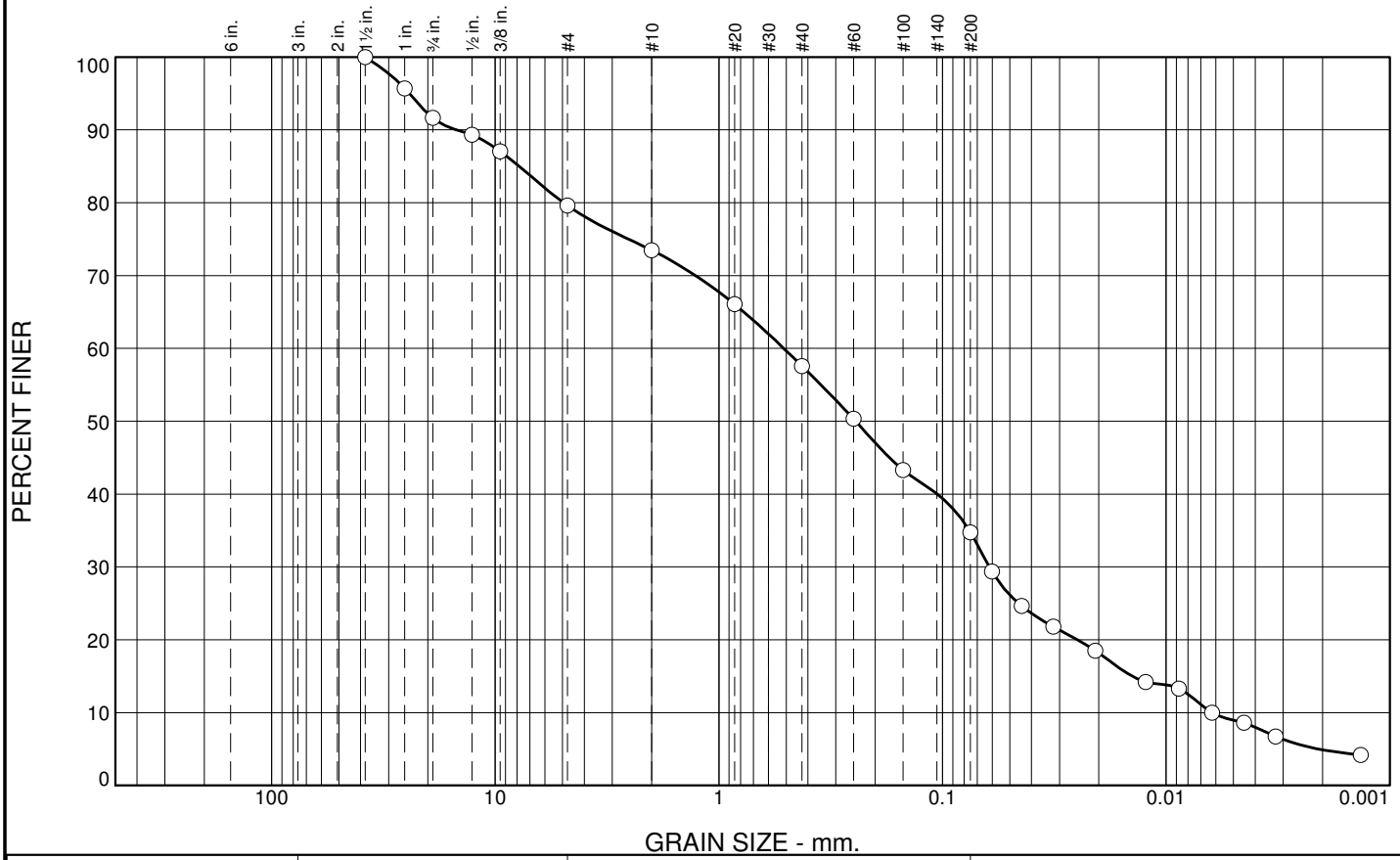
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.4	12.0	6.1	15.9	22.9	29.8	4.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	95.7		
.75	91.6		
.5	89.3		
.375	87.1		
#4	79.6		
#10	73.5		
#20	66.1		
#40	57.6		
#60	50.3		
#100	43.3		
#200	34.7		
0.0602 mm.	29.4		
0.0442 mm.	24.6		
0.0320 mm.	21.8		
0.0207 mm.	18.5		
0.0123 mm.	14.2		
0.0088 mm.	13.3		
0.0062 mm.	10.0		
0.0045 mm.	8.6		
0.0032 mm.	6.7		
0.0013 mm.	4.2		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 19 PI= 6

Coefficients

D_{90}= 14.8819 D_{85}= 7.8256 D_{60}= 0.5127
D_{50}= 0.2444 D_{30}= 0.0618 D_{15}= 0.0142
D_{10}= 0.0062 C_u= 82.33 C_c= 1.20

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/12/12
Location: GT12-38 **Elev./Depth:** 15.65-15.83m

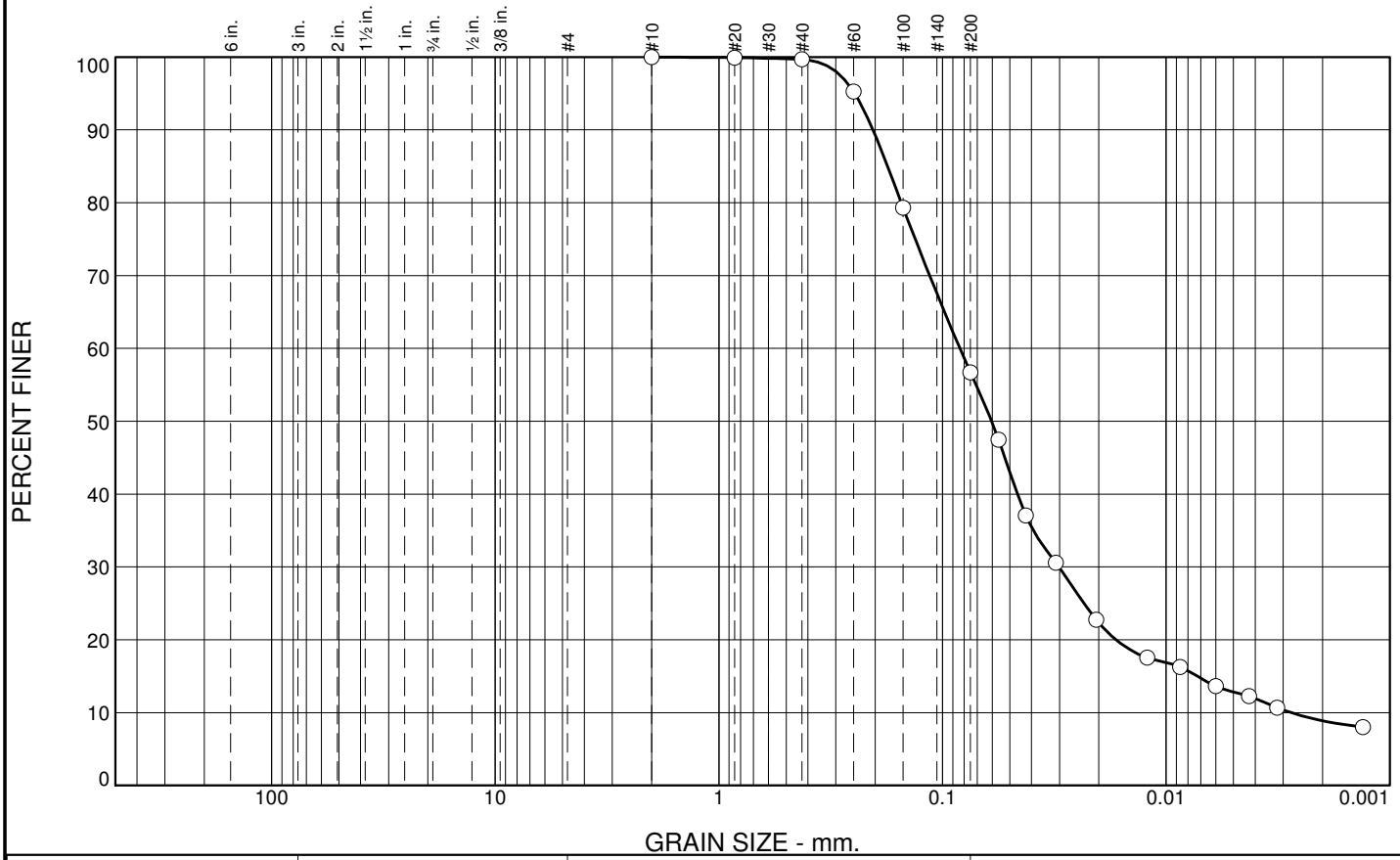
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	0.3	43.0	47.8	8.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	99.9		
#40	99.7		
#60	95.3		
#100	79.3		
#200	56.7		
0.0561 mm.	47.5		
0.0424 mm.	37.1		
0.0311 mm.	30.6		
0.0205 mm.	22.8		
0.0122 mm.	17.6		
0.0087 mm.	16.3		
0.0060 mm.	13.6		
0.0043 mm.	12.3		
0.0032 mm.	10.7		
0.0013 mm.	8.0		

* (no specification provided)

Soil Description

sandy SILT

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.2046 D_{85}= 0.1760 D_{60}= 0.0836
D_{50}= 0.0603 D_{30}= 0.0302 D_{15}= 0.0072
D_{10}= 0.0028 C_u= 30.23 C_c= 3.94

Classification

USCS= ML AASHTO= A-4(0)

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/20/12
Location: GT12-39 **Elev./Depth:** 16.6-16.75m

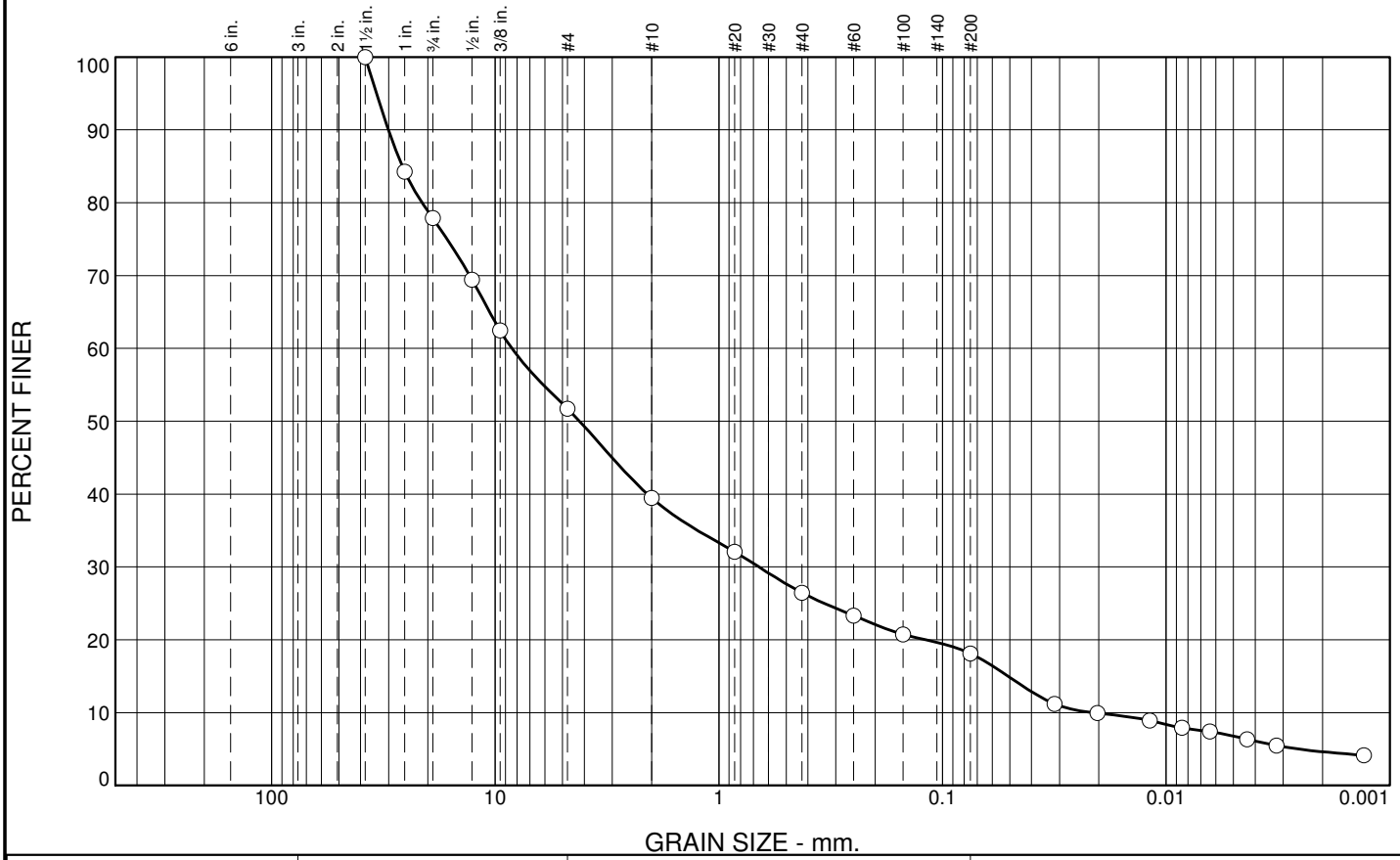
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	22.1	26.2	12.2	13.0	8.4	13.5	4.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	84.2		
.75	77.9		
.5	69.4		
.375	62.5		
#4	51.7		
#10	39.5		
#20	32.1		
#40	26.5		
#60	23.3		
#100	20.8		
#200	18.1		
0.0315 mm.	11.2		
0.0203 mm.	9.9		
0.0118 mm.	8.9		
0.0085 mm.	7.9		
0.0064 mm.	7.4		
0.0043 mm.	6.3		
0.0032 mm.	5.5		
0.0013 mm.	4.2		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 14 LL= 28 PI= 14

Coefficients

D_{90}= 30.0543 D_{85}= 26.0617 D_{60}= 8.4333
D_{50}= 4.2002 D_{30}= 0.6624 D_{15}= 0.0509
D_{10}= 0.0211 C_u= 398.77 C_c= 2.46

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/20/12
Location: GT12-39 **Elev./Depth:** 59.3-59.45m

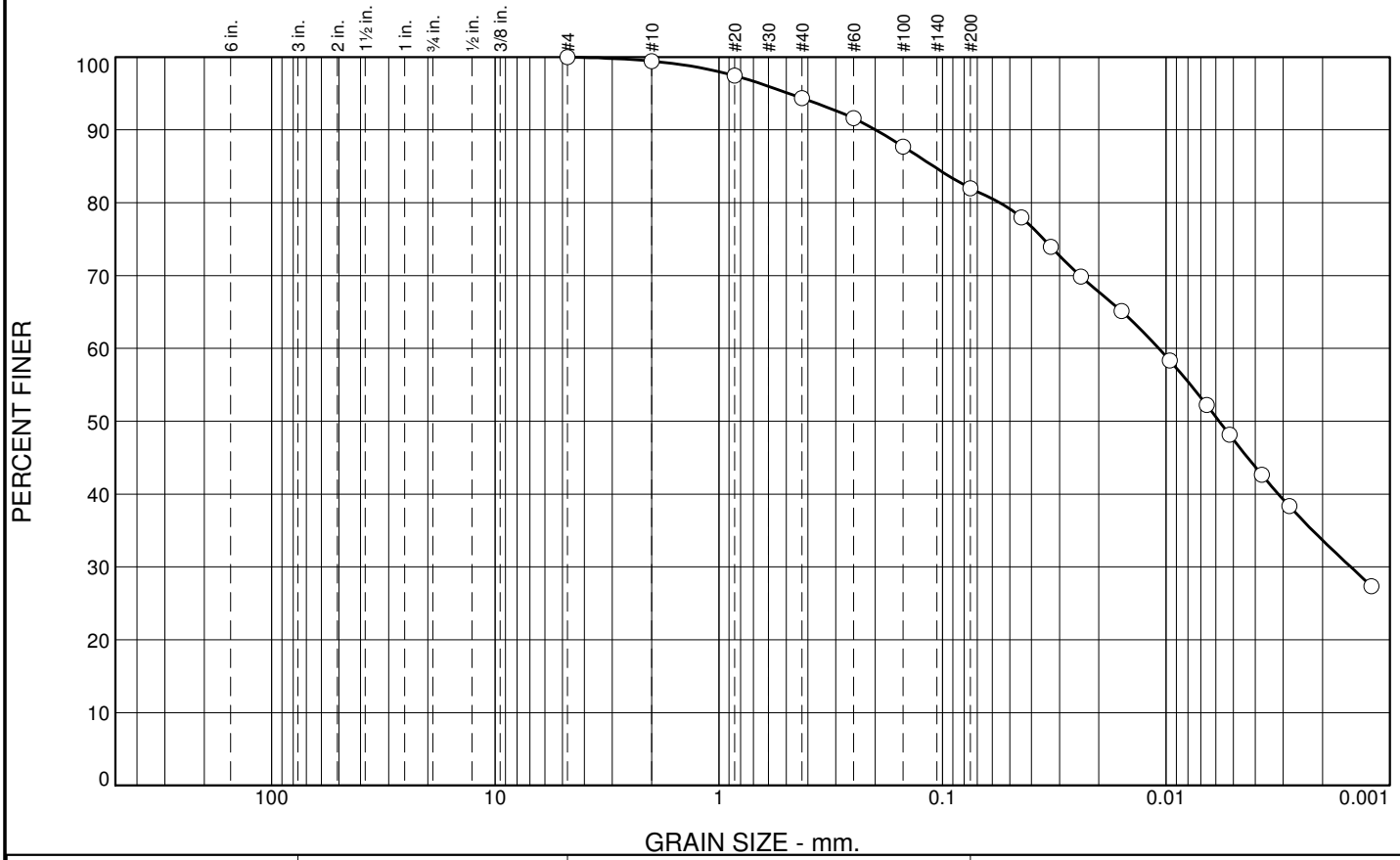
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.6	5.1	12.3	48.3	33.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.4		
#20	97.4		
#40	94.3		
#60	91.6		
#100	87.7		
#200	82.0		
0.0445 mm.	78.0		
0.0327 mm.	73.9		
0.0240 mm.	69.9		
0.0158 mm.	65.1		
0.0096 mm.	58.3		
0.0066 mm.	52.2		
0.0052 mm.	48.2		
0.0037 mm.	42.6		
0.0028 mm.	38.3		
0.0012 mm.	27.4		

* (no specification provided)

Soil Description

fat CLAY with sand

Atterberg Limits

PL= 27 LL= 60 PI= 33

Coefficients

D_{90}= 0.1990 D_{85}= 0.1098 D_{60}= 0.0108
D_{50}= 0.0058 D_{30}= 0.0015 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CH AASHTO= A-7-6(30)

Remarks

Sample No.: 6 **Source of Sample:** **Date:** 11/21/12
Location: GT12-39 **Elev./Depth:** 89.9-90.1m

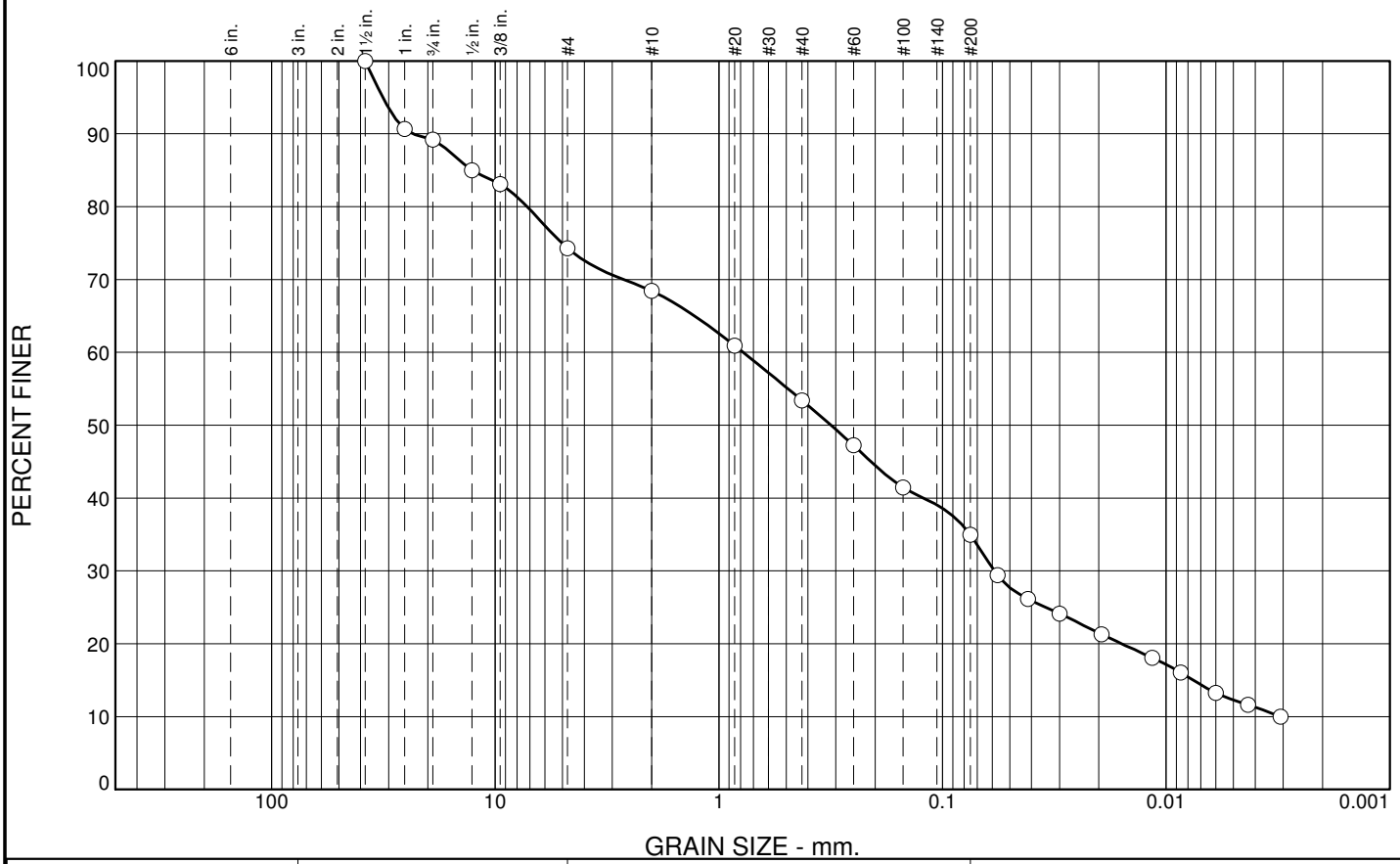
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.8	14.9	5.9	15.0	18.4	35.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	90.6		
.75	89.2		
.5	85.0		
.375	83.1		
#4	74.3		
#10	68.4		
#20	60.9		
#40	53.4		
#60	47.2		
#100	41.5		
#200	35.0		
0.0567 mm.	29.4		
0.0415 mm.	26.2		
0.0299 mm.	24.1		
0.0194 mm.	21.3		
0.0115 mm.	18.1		
0.0086 mm.	16.1		
0.0060 mm.	13.2		
0.0043 mm.	11.6		
0.0031 mm.	10.0		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 20 PI= 7

Coefficients

D_{90}= 23.4609 D_{85}= 12.7203 D_{60}= 0.7785
D_{50}= 0.3154 D_{30}= 0.0587 D_{15}= 0.0076
D_{10}= C_u= C_c=

Classification

USCS= SC-SM AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/8/12
Location: GT12-40 **Elev./Depth:** 7.35-7.5m

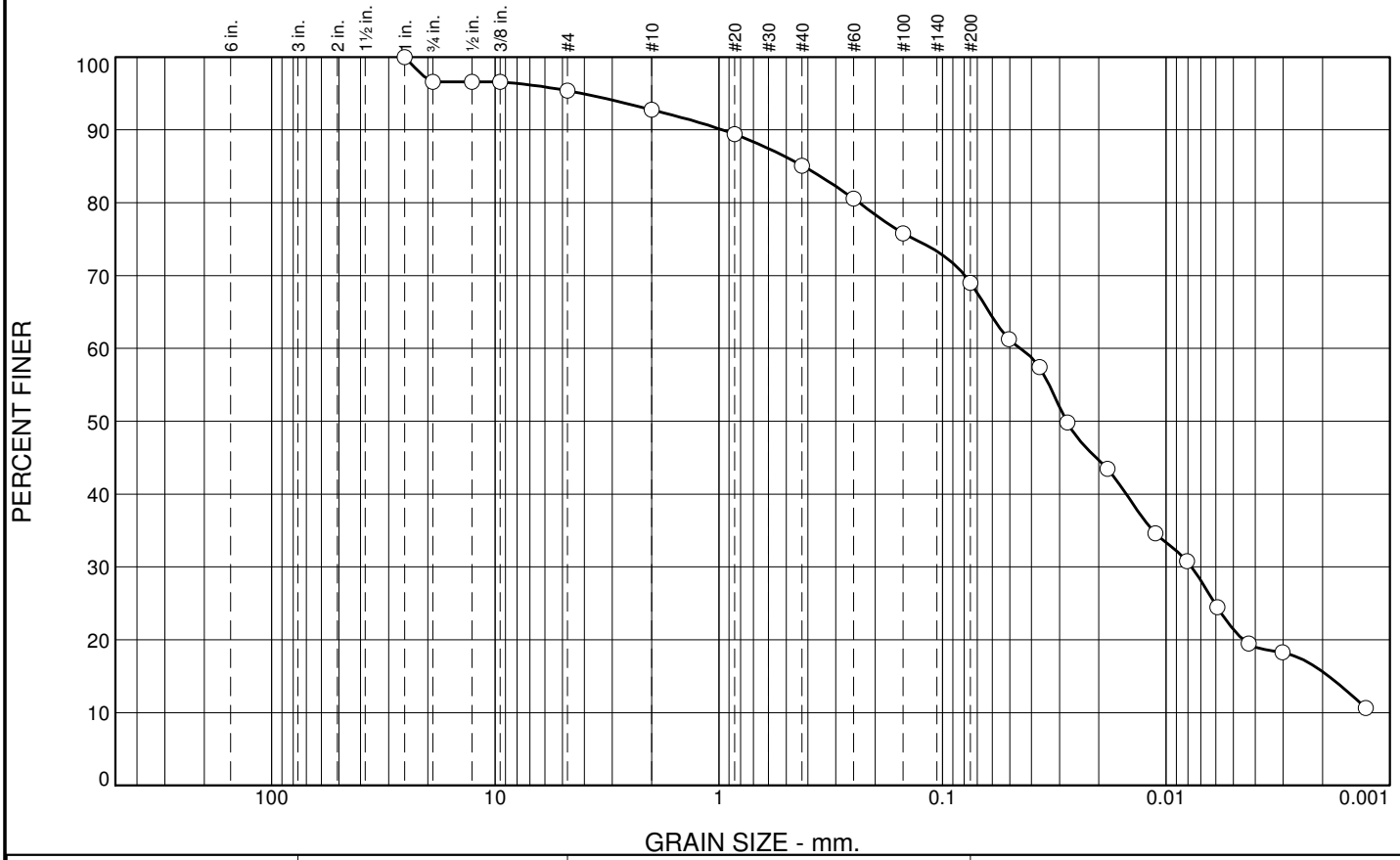
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.4	1.2	2.6	7.7	16.1	53.4	15.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	96.6		
.5	96.6		
.375	96.6		
#4	95.4		
#10	92.8		
#20	89.4		
#40	85.1		
#60	80.6		
#100	75.8		
#200	69.0		
0.0505 mm.	61.2		
0.0369 mm.	57.4		
0.0277 mm.	49.8		
0.0183 mm.	43.5		
0.0112 mm.	34.6		
0.0081 mm.	30.8		
0.0059 mm.	24.5		
0.0043 mm.	19.5		
0.0030 mm.	18.3		
0.0013 mm.	10.6		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 15 LL= 26 PI= 11

Coefficients

D_{90}= 0.9666 D_{85}= 0.4201 D_{60}= 0.0450
D_{50}= 0.0279 D_{30}= 0.0077 D_{15}= 0.0019
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(5)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/8/12
Location: GT12-40 **Elev./Depth:** 19.75-19.9m

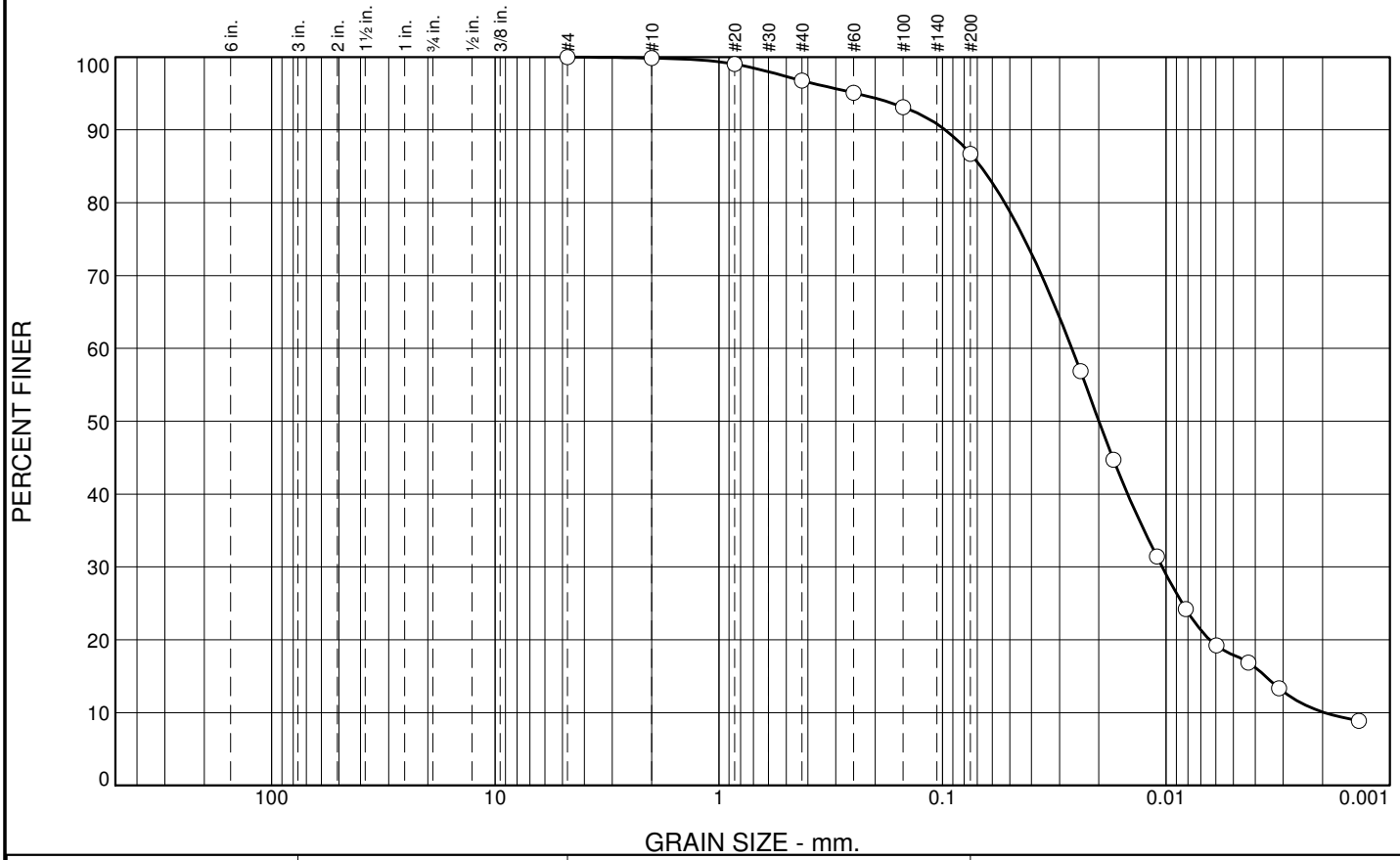
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.2	3.0	10.1	76.6	10.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.8		
#20	99.0		
#40	96.8		
#60	95.1		
#100	93.1		
#200	86.7		
0.0242 mm.	56.9		
0.0172 mm.	44.7		
0.0110 mm.	31.4		
0.0082 mm.	24.2		
0.0060 mm.	19.2		
0.0043 mm.	16.9		
0.0031 mm.	13.4		
0.0014 mm.	8.9		

* (no specification provided)

Soil Description

silty CLAY

Atterberg Limits

PL= 17 LL= 23 PI= 6

Coefficients

D_{90}= 0.0974 D_{85}= 0.0676 D_{60}= 0.0264
D_{50}= 0.0200 D_{30}= 0.0104 D_{15}= 0.0036
D_{10}= 0.0020 C_u= 13.50 C_c= 2.10

Classification

USCS= CL-ML AASHTO= A-4(3)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/8/12
Location: GT12-40 **Elev./Depth:** 24.4-24.6m

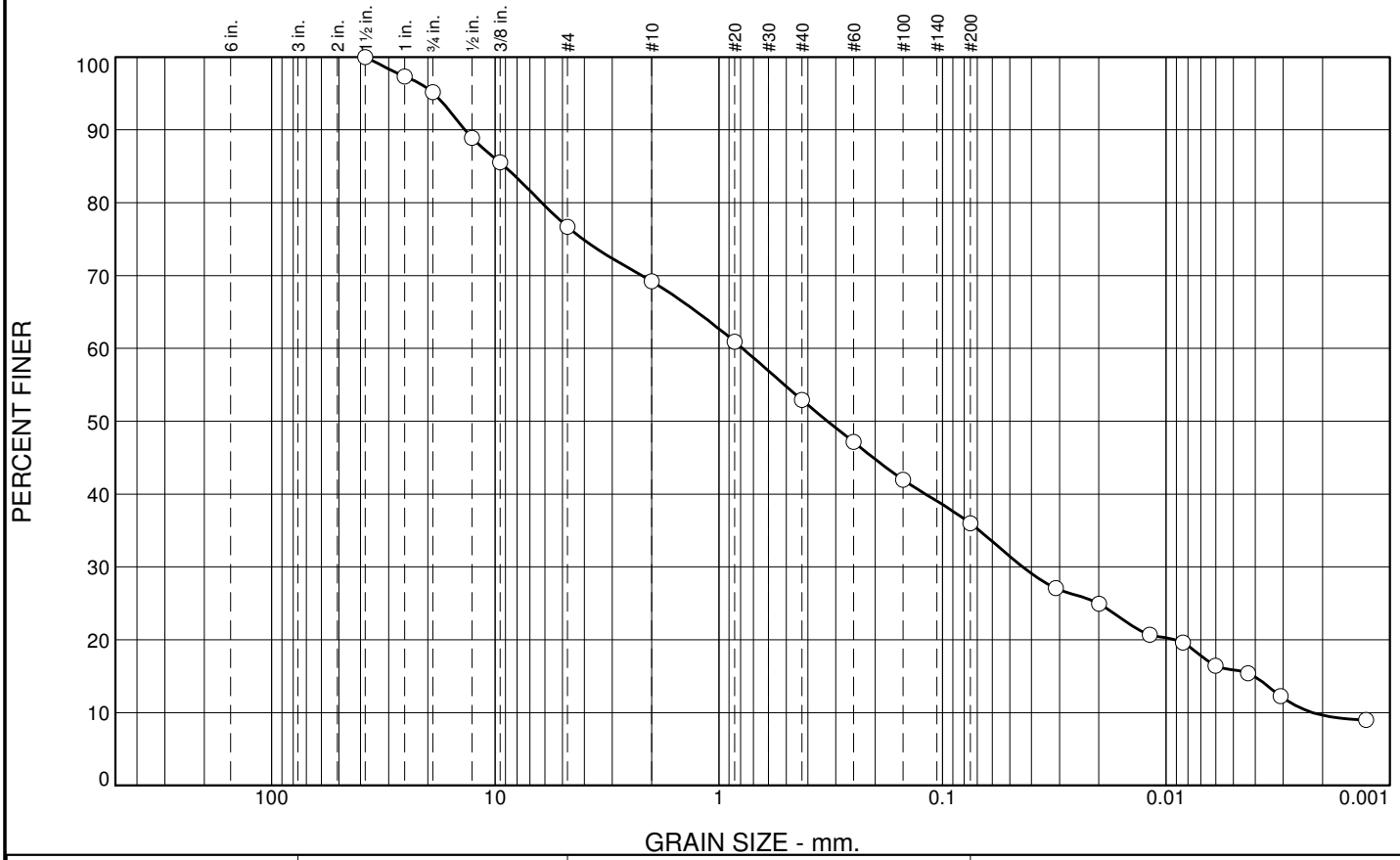
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.9	18.4	7.5	16.3	16.9	26.4	9.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.3		
.75	95.1		
.5	88.9		
.375	85.5		
#4	76.7		
#10	69.2		
#20	60.9		
#40	52.9		
#60	47.2		
#100	42.0		
#200	36.0		
0.0311 mm.	27.1		
0.0200 mm.	24.9		
0.0118 mm.	20.7		
0.0084 mm.	19.6		
0.0060 mm.	16.4		
0.0043 mm.	15.4		
0.0031 mm.	12.3		
0.0013 mm.	9.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 19 LL= 31 PI= 12

Coefficients

D_{90}= 13.6770 D_{85}= 9.0959 D_{60}= 0.7835
D_{50}= 0.3263 D_{30}= 0.0438 D_{15}= 0.0040
D_{10}= 0.0022 C_u= 354.93 C_c= 1.11

Classification

USCS= SC AASHTO= A-6(1)

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/8/12
Location: GT12-40 **Elev./Depth:** 57.5-57.7m

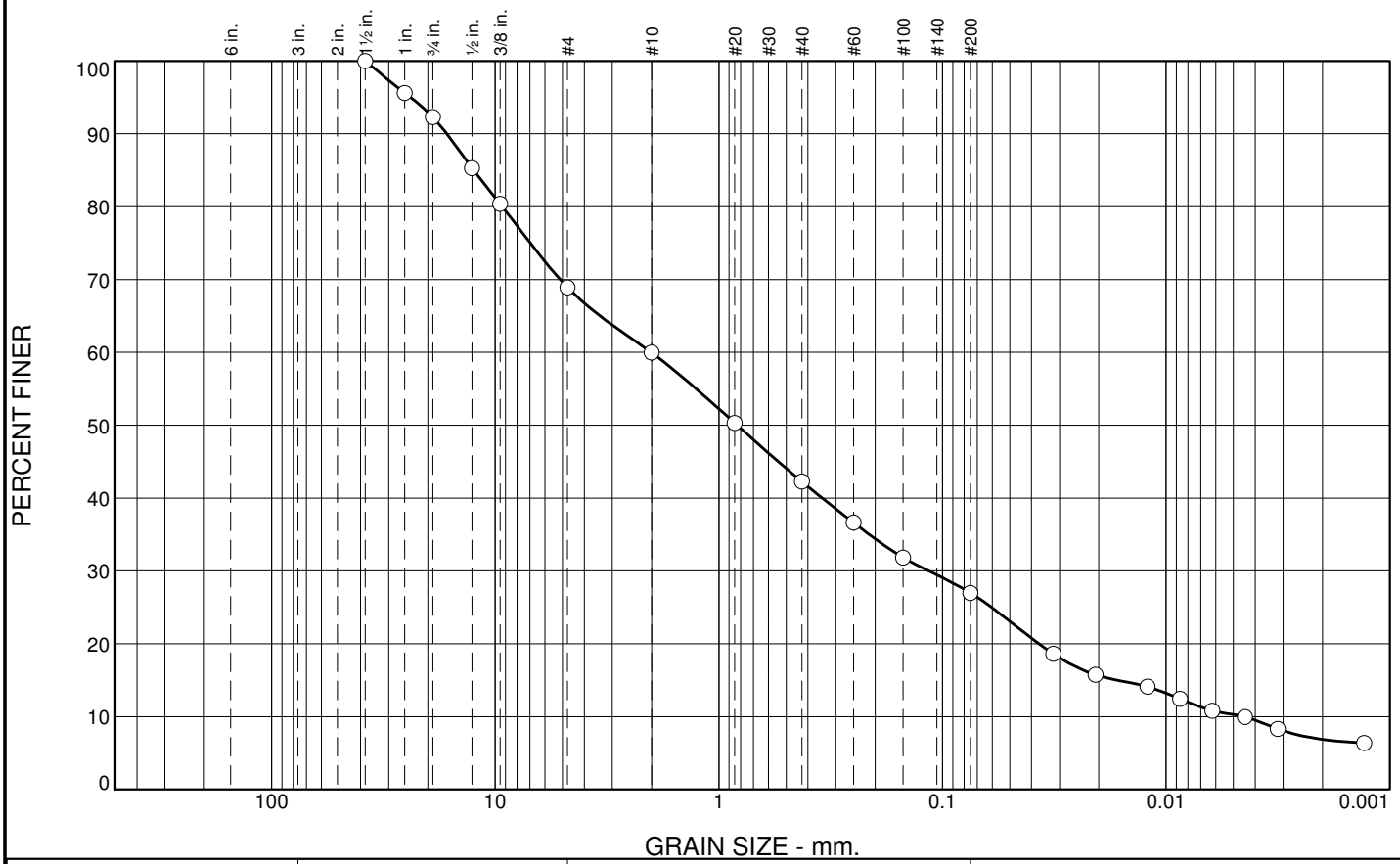
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.7	23.4	8.9	17.8	15.2	20.1	6.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	95.6		
.75	92.3		
.5	85.3		
.375	80.4		
#4	68.9		
#10	60.0		
#20	50.3		
#40	42.2		
#60	36.7		
#100	31.8		
#200	27.0		
0.0319 mm.	18.6		
0.0207 mm.	15.7		
0.0121 mm.	14.1		
0.0087 mm.	12.5		
0.0062 mm.	10.8		
0.0044 mm.	10.0		
0.0032 mm.	8.3		
0.0013 mm.	6.4		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 22 PI= 9

Coefficients

D_{90}= 16.4753 D_{85}= 12.4976 D_{60}= 2.0091
D_{50}= 0.8283 D_{30}= 0.1156 D_{15}= 0.0165
D_{10}= 0.0045 C_u= 448.40 C_c= 1.48

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/19/12
Location: GT12-41 **Elev./Depth:** 7m

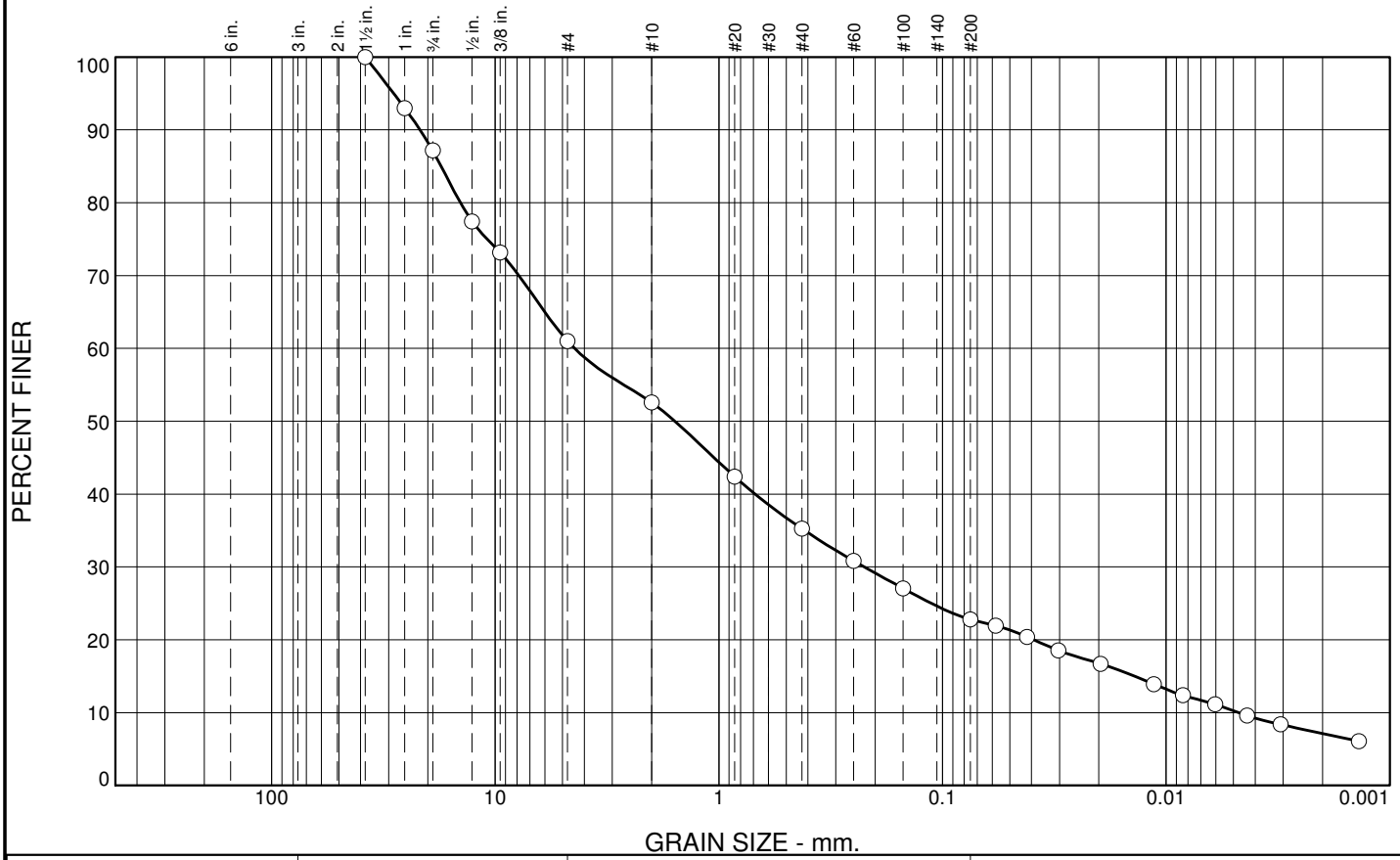
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.8	26.2	8.4	17.3	12.5	15.7	7.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	93.0		
.75	87.2		
.5	77.4		
.375	73.2		
#4	61.0		
#10	52.6		
#20	42.4		
#40	35.3		
#60	30.8		
#100	27.1		
#200	22.8		
0.0579 mm.	22.0		
0.0418 mm.	20.4		
0.0303 mm.	18.6		
0.0196 mm.	16.7		
0.0113 mm.	13.9		
0.0084 mm.	12.4		
0.0060 mm.	11.1		
0.0043 mm.	9.6		
0.0031 mm.	8.4		
0.0014 mm.	6.1		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 13 LL= 24 PI= 11

Coefficients

D_{90}= 21.7259 D_{85}= 17.4511 D_{60}= 4.4221
D_{50}= 1.5739 D_{30}= 0.2240 D_{15}= 0.0139
D_{10}= 0.0048 C_u= 930.80 C_c= 2.39

Classification

USCS= GC AASHTO= A-2-6(0)

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/12/12
Location: GT12-41 **Elev./Depth:** 10.0-10.2m

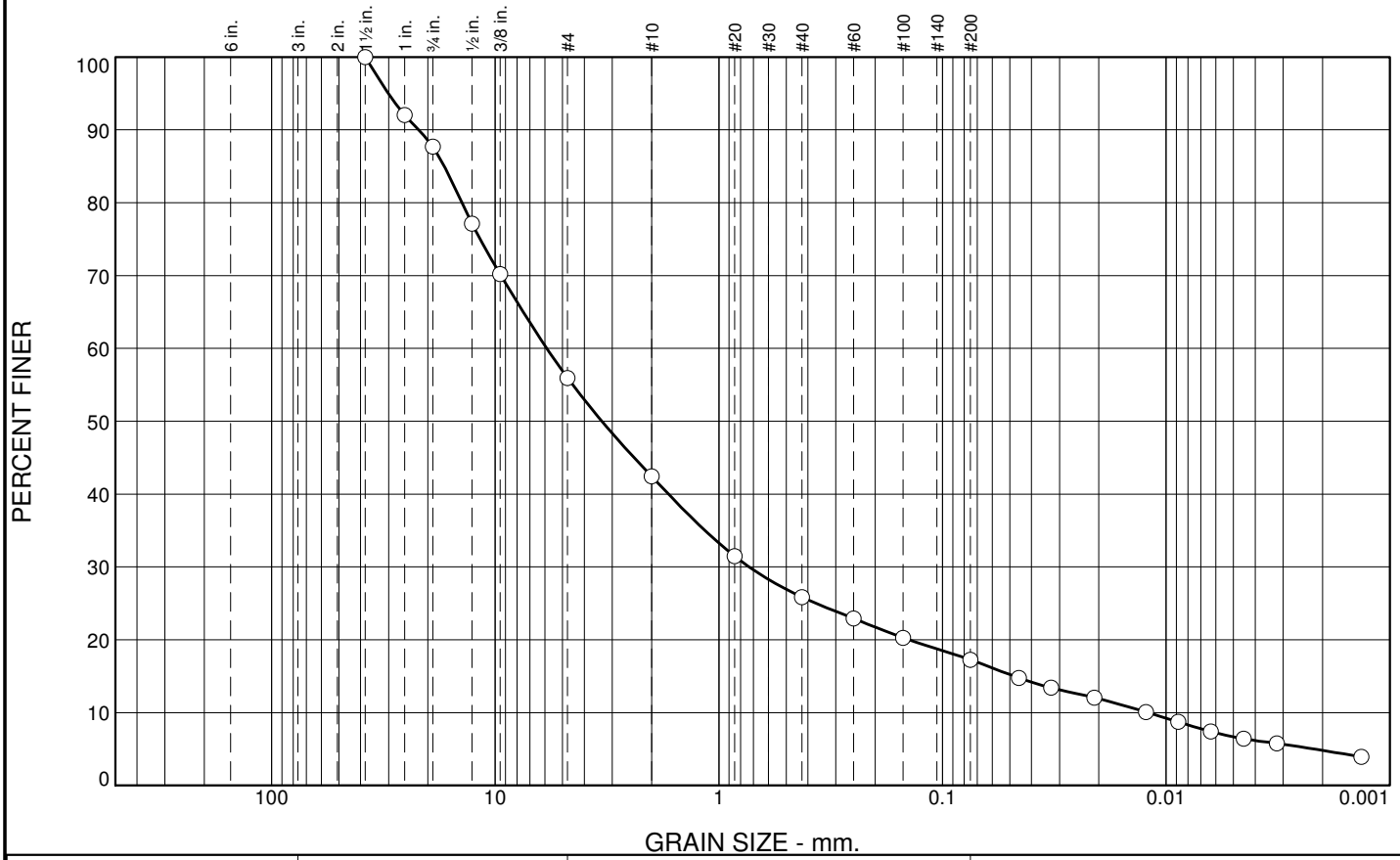
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.3	31.8	13.5	16.5	8.6	12.5	4.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	92.0		
.75	87.7		
.5	77.1		
.375	70.2		
#4	55.9		
#10	42.4		
#20	31.5		
#40	25.9		
#60	22.9		
#100	20.3		
#200	17.3		
0.0455 mm.	14.8		
0.0327 mm.	13.4		
0.0209 mm.	12.1		
0.0123 mm.	10.1		
0.0088 mm.	8.7		
0.0063 mm.	7.4		
0.0045 mm.	6.4		
0.0032 mm.	5.8		
0.0013 mm.	3.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 21.9920 D_{85}= 16.9171 D_{60}= 5.8813
D_{50}= 3.3372 D_{30}= 0.7311 D_{15}= 0.0477
D_{10}= 0.0121 C_u= 486.56 C_c= 7.52

Classification

USCS= AASHTO=

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/12/12
Location: GT12-41 **Elev./Depth:** 20.0-2.02m

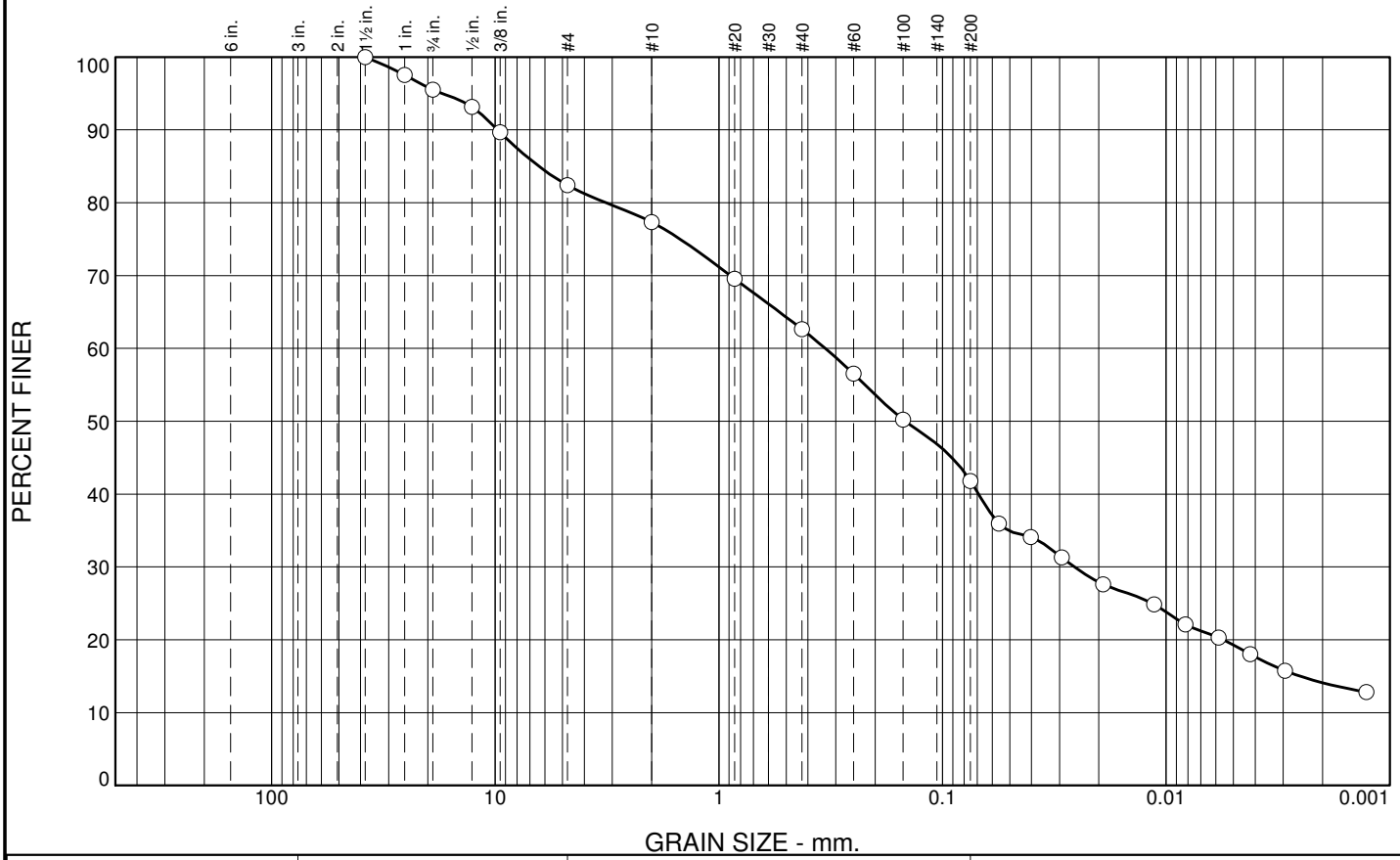
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.5	13.1	5.1	14.7	20.8	27.7	14.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	97.5		
.75	95.5		
.5	93.1		
.375	89.7		
#4	82.4		
#10	77.3		
#20	69.6		
#40	62.6		
#60	56.5		
#100	50.2		
#200	41.8		
0.0560 mm.	35.9		
0.0403 mm.	34.1		
0.0293 mm.	31.3		
0.0192 mm.	27.6		
0.0113 mm.	24.9		
0.0082 mm.	22.1		
0.0058 mm.	20.3		
0.0042 mm.	18.0		
0.0029 mm.	15.7		
0.0013 mm.	12.8		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 15 LL= 25 PI= 10

Coefficients

D_{90}= 9.7728 D_{85}= 6.3789 D_{60}= 0.3344
D_{50}= 0.1469 D_{30}= 0.0257 D_{15}= 0.0025
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-4(1)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/12/12
Location: GT12-41 **Elev./Depth:** 30.0-30.2m

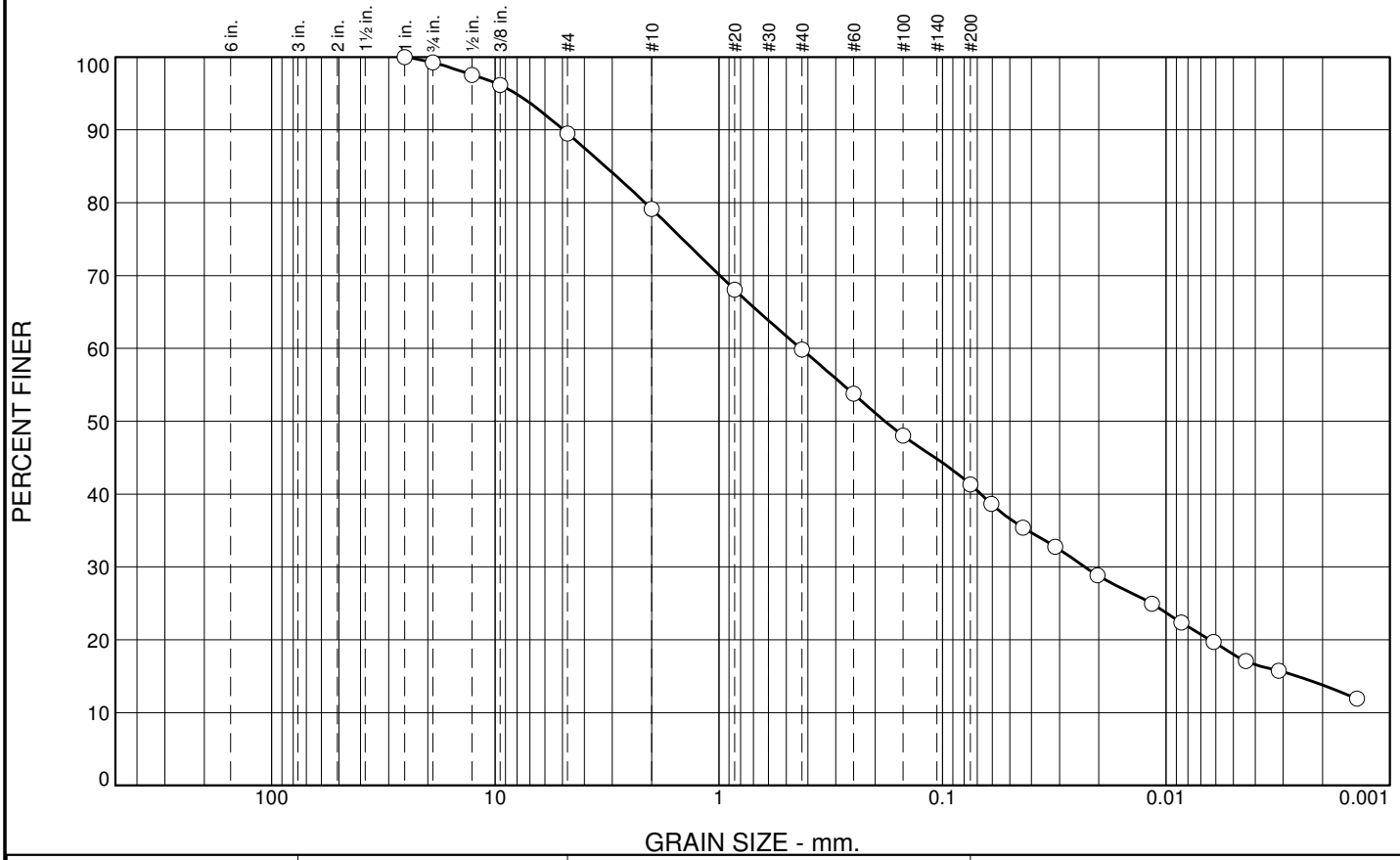
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.8	9.7	10.4	19.3	18.5	27.5	13.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	99.2		
.5	97.5		
.375	96.2		
#4	89.5		
#10	79.1		
#20	68.1		
#40	59.8		
#60	53.8		
#100	48.0		
#200	41.3		
0.0606 mm.	38.7		
0.0437 mm.	35.4		
0.0314 mm.	32.8		
0.0203 mm.	28.9		
0.0116 mm.	24.9		
0.0086 mm.	22.4		
0.0061 mm.	19.7		
0.0044 mm.	17.1		
0.0031 mm.	15.7		
0.0014 mm.	11.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 4.9592 D_{85}= 3.2248 D_{60}= 0.4309
D_{50}= 0.1809 D_{30}= 0.0231 D_{15}= 0.0026
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/13/12
Location: GT12-41 **Elev./Depth:** 40.0-40.17m

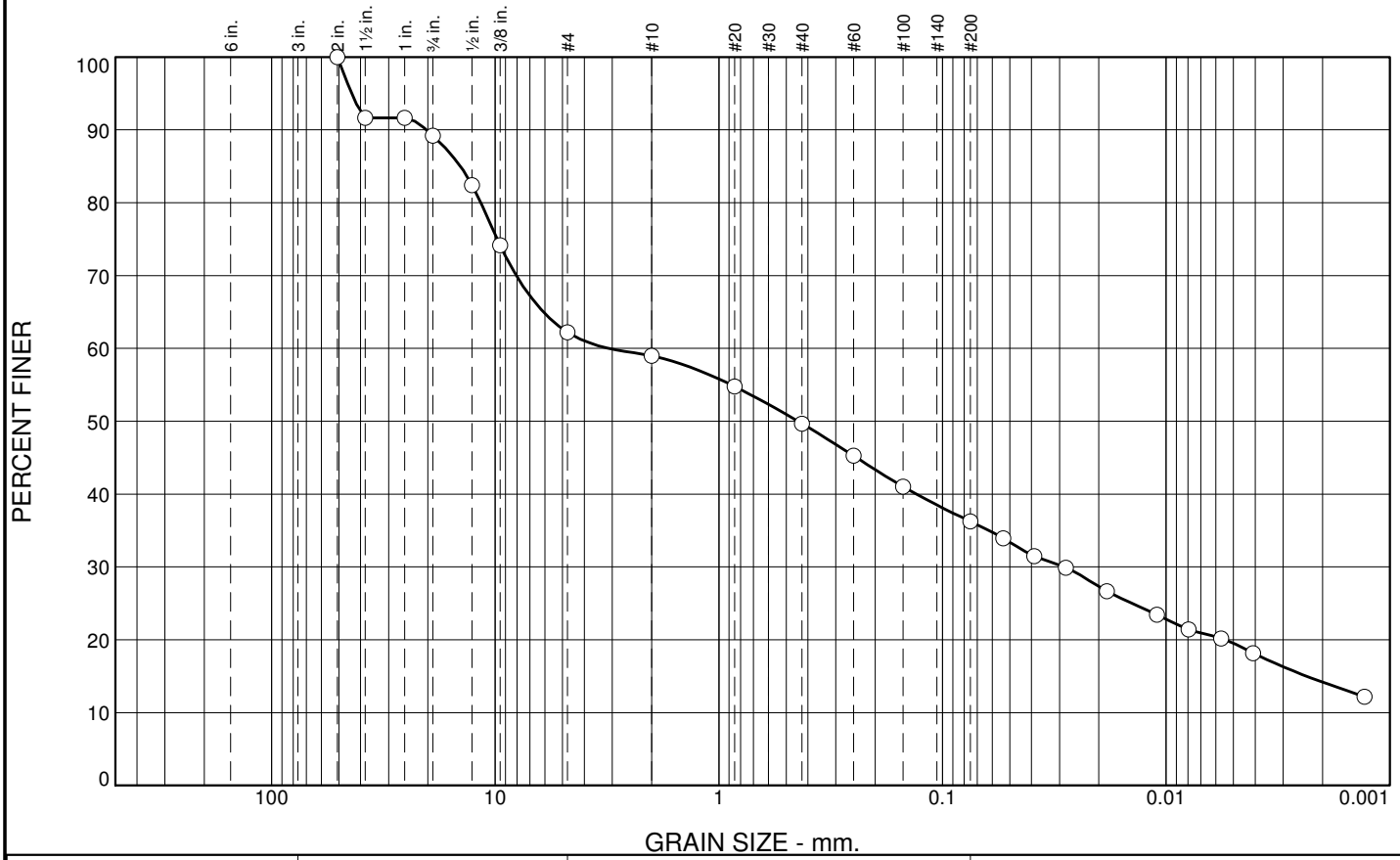
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.8	27.0	3.2	9.3	13.5	22.0	14.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	91.6		
1	91.6		
.75	89.2		
.5	82.4		
.375	74.2		
#4	62.2		
#10	59.0		
#20	54.8		
#40	49.7		
#60	45.3		
#100	41.0		
#200	36.2		
0.0534 mm.	33.9		
0.0389 mm.	31.5		
0.0280 mm.	29.9		
0.0184 mm.	26.7		
0.0110 mm.	23.5		
0.0079 mm.	21.4		
0.0057 mm.	20.2		
0.0041 mm.	18.2		
0.0013 mm.	12.2		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 19 LL= 34 PI= 15

Coefficients

D_{90}= 20.3345 D_{85}= 14.3236 D_{60}= 3.0975
D_{50}= 0.4428 D_{30}= 0.0286 D_{15}= 0.0024
D_{10}= C_u= C_c=

Classification

USCS= GC AASHTO= A-6(1)

Remarks

Sample No.: 6 **Source of Sample:** **Date:** 11/12/12
Location: GT12-41 **Elev./Depth:** 47m

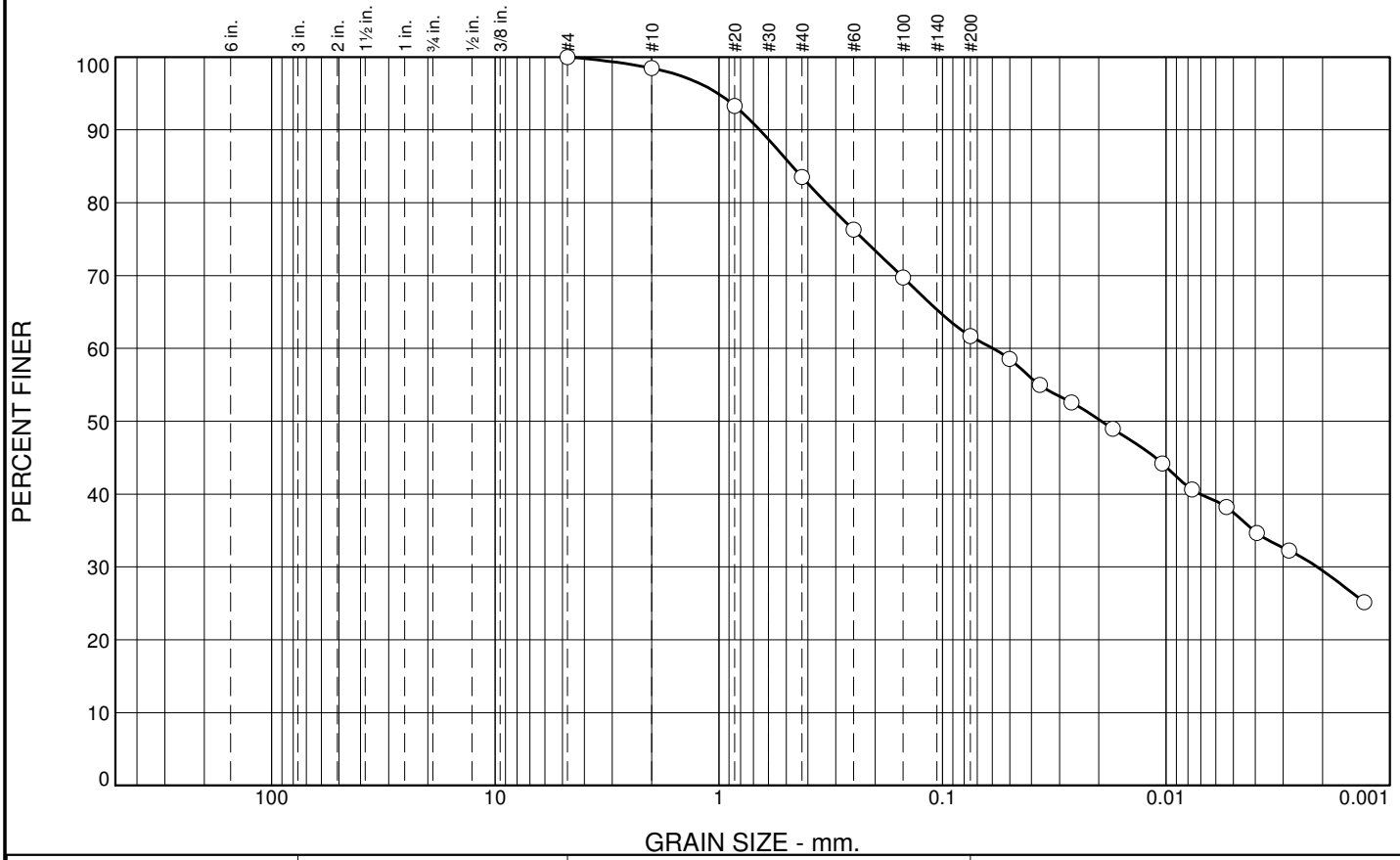
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.5	15.0	21.8	32.2	29.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.5		
#20	93.3		
#40	83.5		
#60	76.3		
#100	69.7		
#200	61.7		
0.0503 mm.	58.6		
0.0367 mm.	55.0		
0.0265 mm.	52.6		
0.0173 mm.	49.0		
0.0104 mm.	44.2		
0.0077 mm.	40.6		
0.0054 mm.	38.2		
0.0039 mm.	34.7		
0.0028 mm.	32.3		
0.0013 mm.	25.1		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 18 LL= 37 PI= 19

Coefficients

D_{90}= 0.6569 D_{85}= 0.4698 D_{60}= 0.0595
D_{50}= 0.0195 D_{30}= 0.0021 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(9)

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/13/12
Location: GT12-41 **Elev./Depth:** 50.0-50.2m

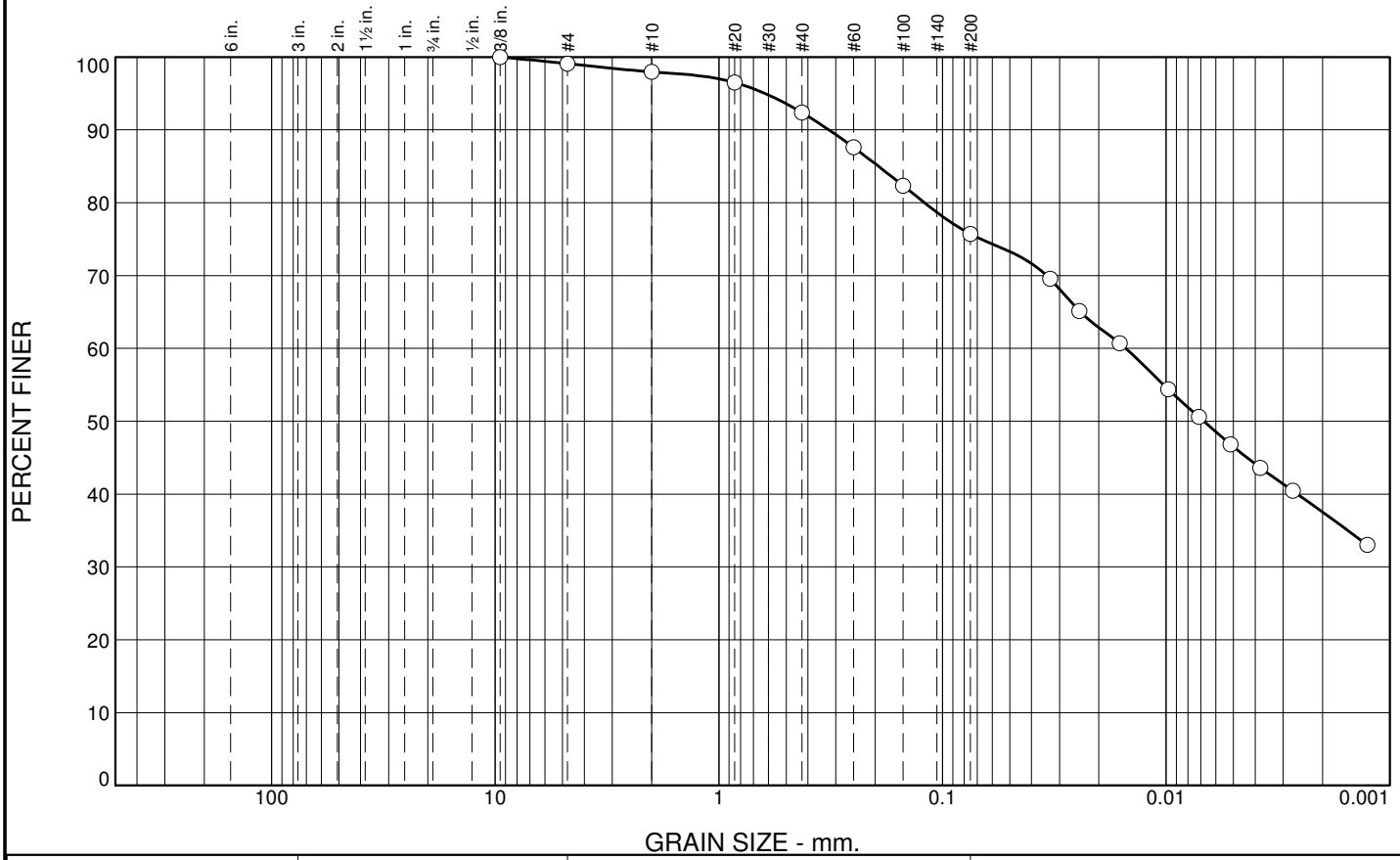
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.9	1.1	5.6	16.7	38.2	37.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.375	100.0		
#4	99.1		
#10	98.0		
#20	96.5		
#40	92.4		
#60	87.6		
#100	82.3		
#200	75.7		
0.0330 mm.	69.5		
0.0244 mm.	65.1		
0.0161 mm.	60.7		
0.0098 mm.	54.4		
0.0071 mm.	50.6		
0.0051 mm.	46.8		
0.0038 mm.	43.6		
0.0027 mm.	40.5		
0.0013 mm.	33.0		

* (no specification provided)

Soil Description

lean CLAY with sand

Atterberg Limits

PL= 26 LL= 48 PI= 22

Coefficients

D_{90}= 0.3221 D_{85}= 0.1933 D_{60}= 0.0152
D_{50}= 0.0068 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(17)

Remarks

Sample No.: 8 **Source of Sample:** **Date:** 11/13/12
Location: GT12-41 **Elev./Depth:** 57.1-57.3m

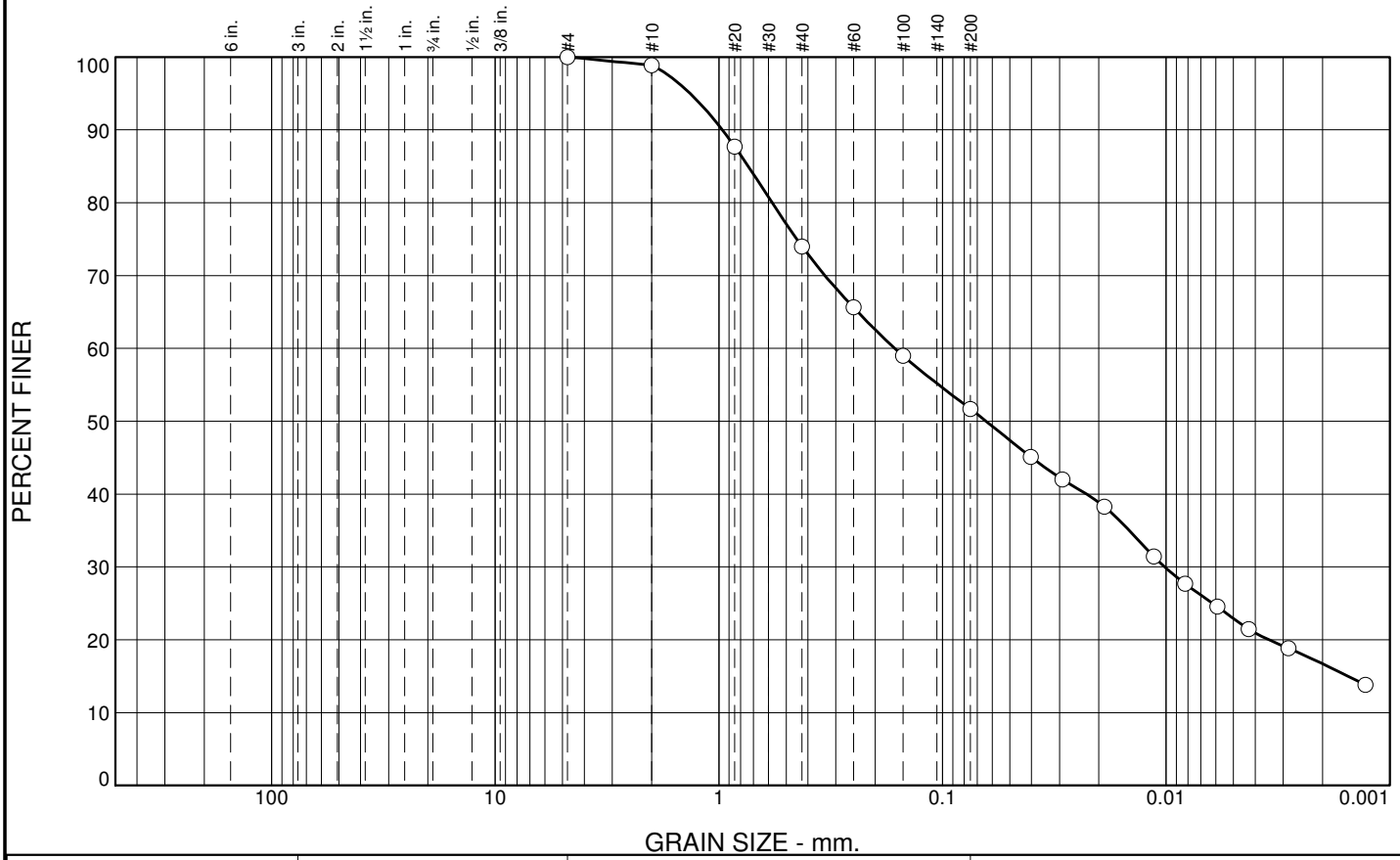
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.1	24.9	22.3	35.0	16.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.9		
#20	87.7		
#40	74.0		
#60	65.6		
#100	59.0		
#200	51.7		
0.0403 mm.	45.1		
0.0291 mm.	42.0		
0.0189 mm.	38.3		
0.0114 mm.	31.4		
0.0082 mm.	27.7		
0.0059 mm.	24.6		
0.0043 mm.	21.4		
0.0028 mm.	18.8		
0.0013 mm.	13.8		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 20 LL= 43 PI= 23

Coefficients

D_{90}= 0.9655 D_{85}= 0.7390 D_{60}= 0.1635
D_{50}= 0.0639 D_{30}= 0.0101 D_{15}= 0.0015
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-7-6(8)

Remarks

Sample No.: 9 **Source of Sample:** **Date:** 11/16/12
Location: GT12-41 **Elev./Depth:** 73.0-73.19m

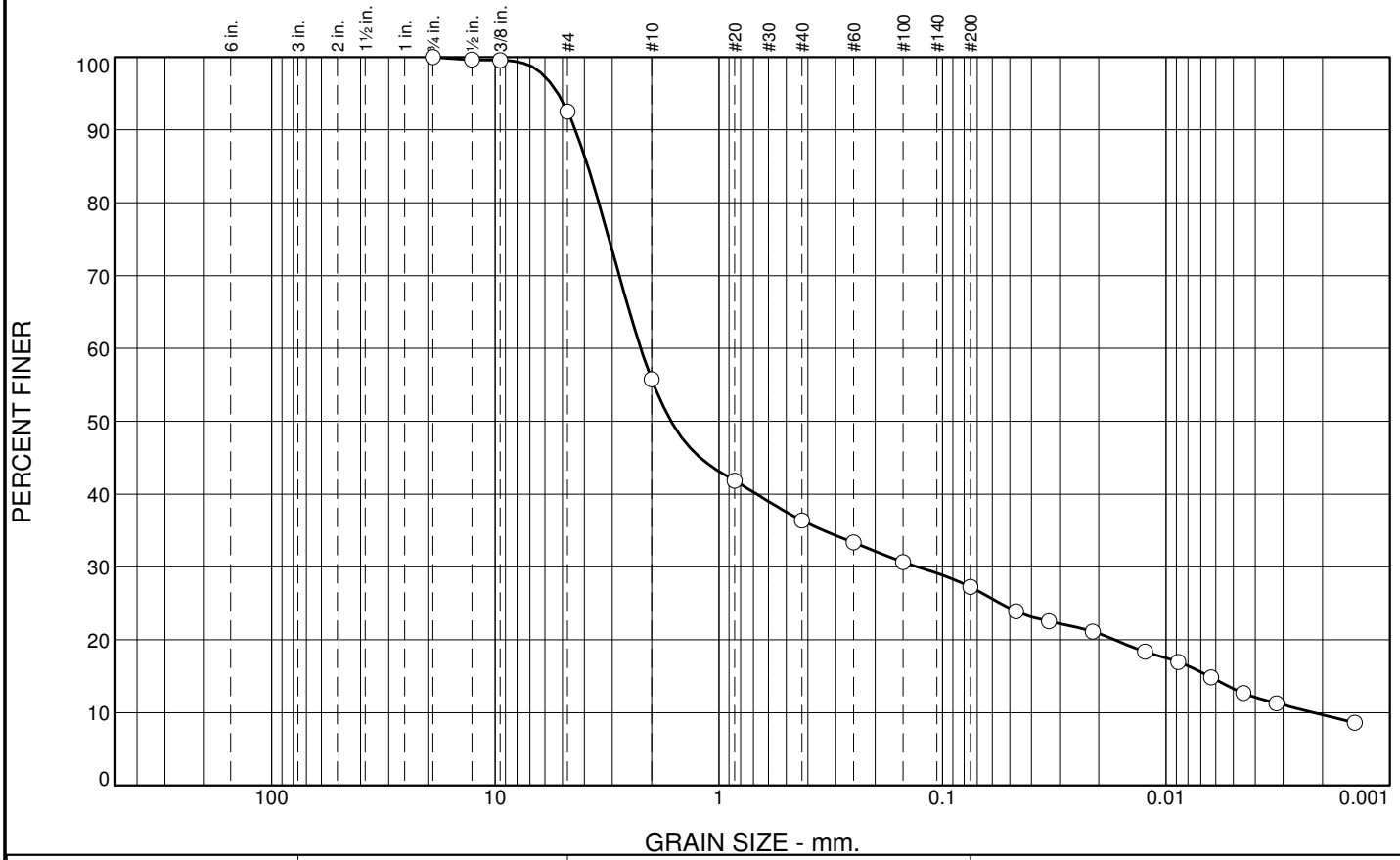
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	7.5	36.7	19.4	9.1	17.6	9.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	99.6		
.375	99.6		
#4	92.5		
#10	55.8		
#20	41.8		
#40	36.4		
#60	33.4		
#100	30.7		
#200	27.3		
0.0469 mm.	23.9		
0.0334 mm.	22.5		
0.0213 mm.	21.1		
0.0124 mm.	18.4		
0.0088 mm.	17.0		
0.0063 mm.	14.9		
0.0045 mm.	12.7		
0.0032 mm.	11.3		
0.0014 mm.	8.6		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 4.3932 D_{85}= 3.8596 D_{60}= 2.2358
D_{50}= 1.6357 D_{30}= 0.1293 D_{15}= 0.0064
D_{10}= 0.0022 C_u= 1022.34 C_c= 3.42

Classification

USCS= AASHTO=

Remarks

Sample No.: 10 **Source of Sample:** **Date:** 11/12/12
Location: GT12-41 **Elev./Depth:** 80.0-80.3m

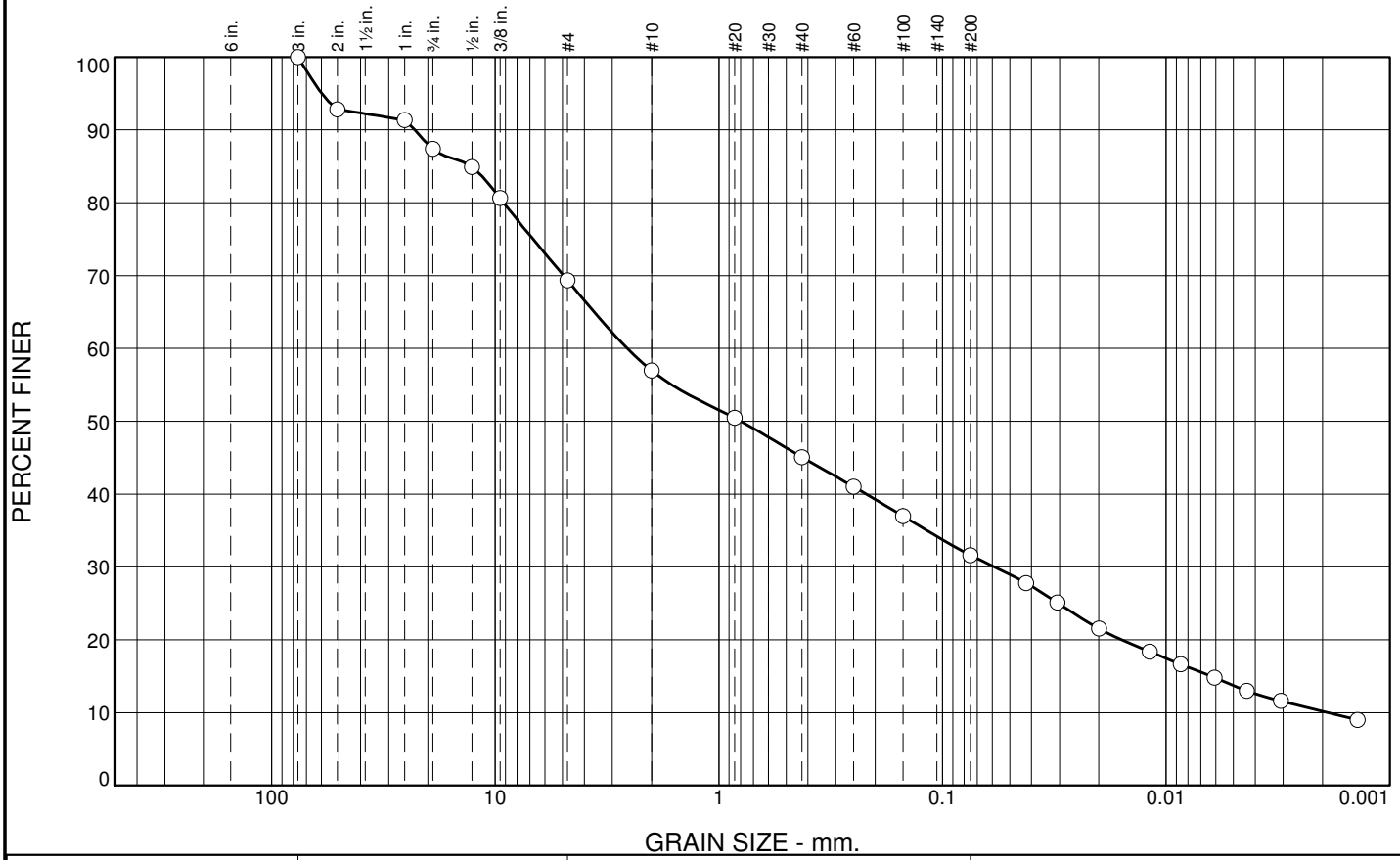
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: MF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.6	18.1	12.3	11.9	13.5	21.4	10.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	92.8		
1	91.3		
.75	87.4		
.5	84.9		
.375	80.6		
#4	69.3		
#10	57.0		
#20	50.5		
#40	45.1		
#60	41.0		
#100	37.0		
#200	31.6		
0.0423 mm.	27.8		
0.0307 mm.	25.1		
0.0200 mm.	21.5		
0.0118 mm.	18.4		
0.0086 mm.	16.6		
0.0061 mm.	14.8		
0.0044 mm.	13.0		
0.0031 mm.	11.6		
0.0014 mm.	9.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 22.9110 D_{85}= 12.8524 D_{60}= 2.5682
D_{50}= 0.7970 D_{30}= 0.0585 D_{15}= 0.0063
D_{10}= 0.0019 C_u= 1356.82 C_c= 0.70

Classification

USCS= AASHTO=

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/12/12
Location: GT12-42 **Elev./Depth:** 10.0-10.2m

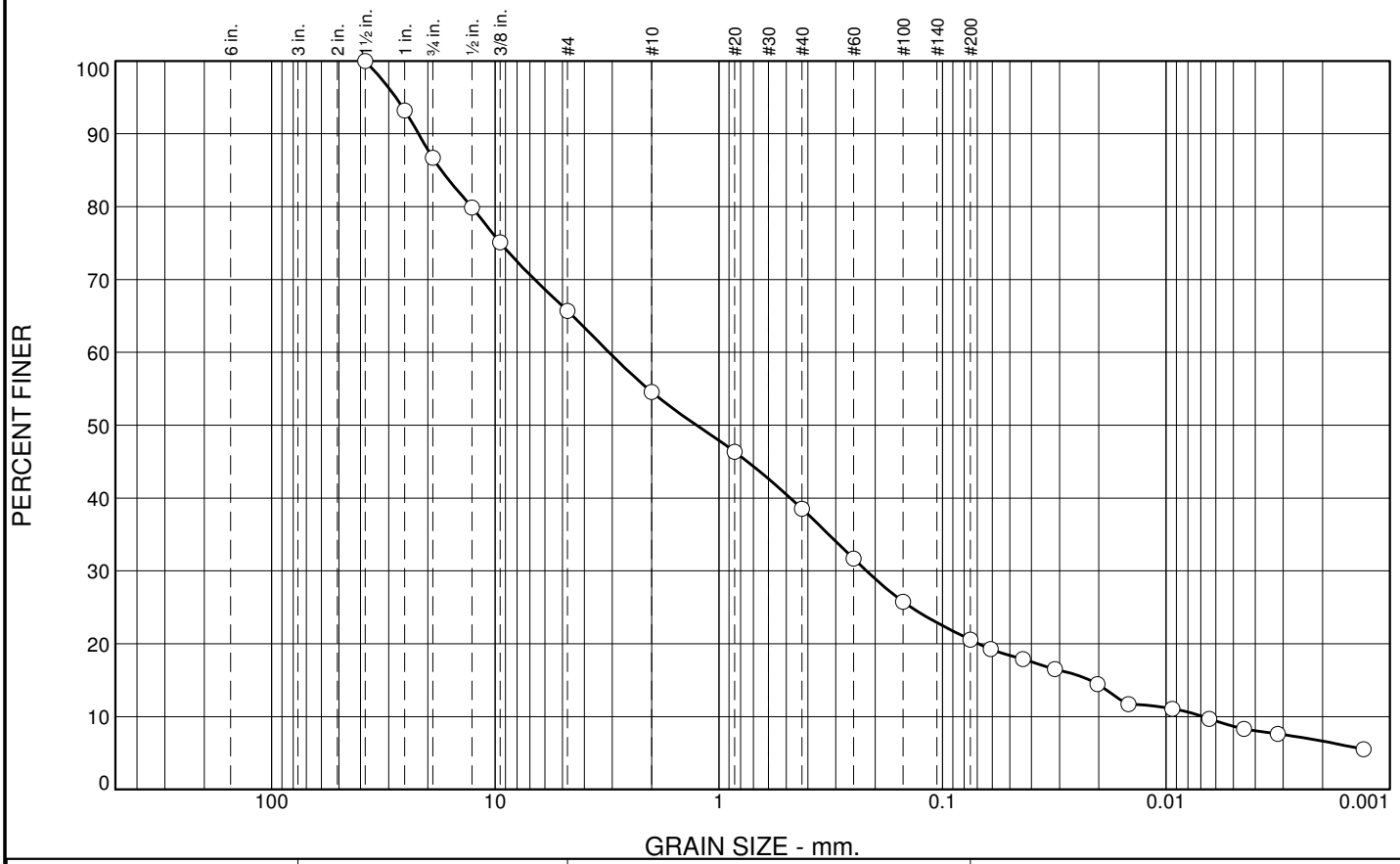
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.3	21.0	11.1	16.1	17.9	14.0	6.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	93.2		
.75	86.7		
.5	79.9		
.375	75.1		
#4	65.7		
#10	54.6		
#20	46.4		
#40	38.5		
#60	31.7		
#100	25.8		
#200	20.6		
0.0609 mm.	19.3		
0.0437 mm.	17.9		
0.0314 mm.	16.5		
0.0203 mm.	14.5		
0.0148 mm.	11.7		
0.0094 mm.	11.1		
0.0064 mm.	9.7		
0.0045 mm.	8.3		
0.0032 mm.	7.6		
0.0013 mm.	5.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 22.0528 D_{85}= 17.4391 D_{60}= 3.0992
D_{50}= 1.2575 D_{30}= 0.2184 D_{15}= 0.0218
D_{10}= 0.0069 C_u= 452.15 C_c= 2.25

Classification

USCS= AASHTO=

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 9.8-10.0m

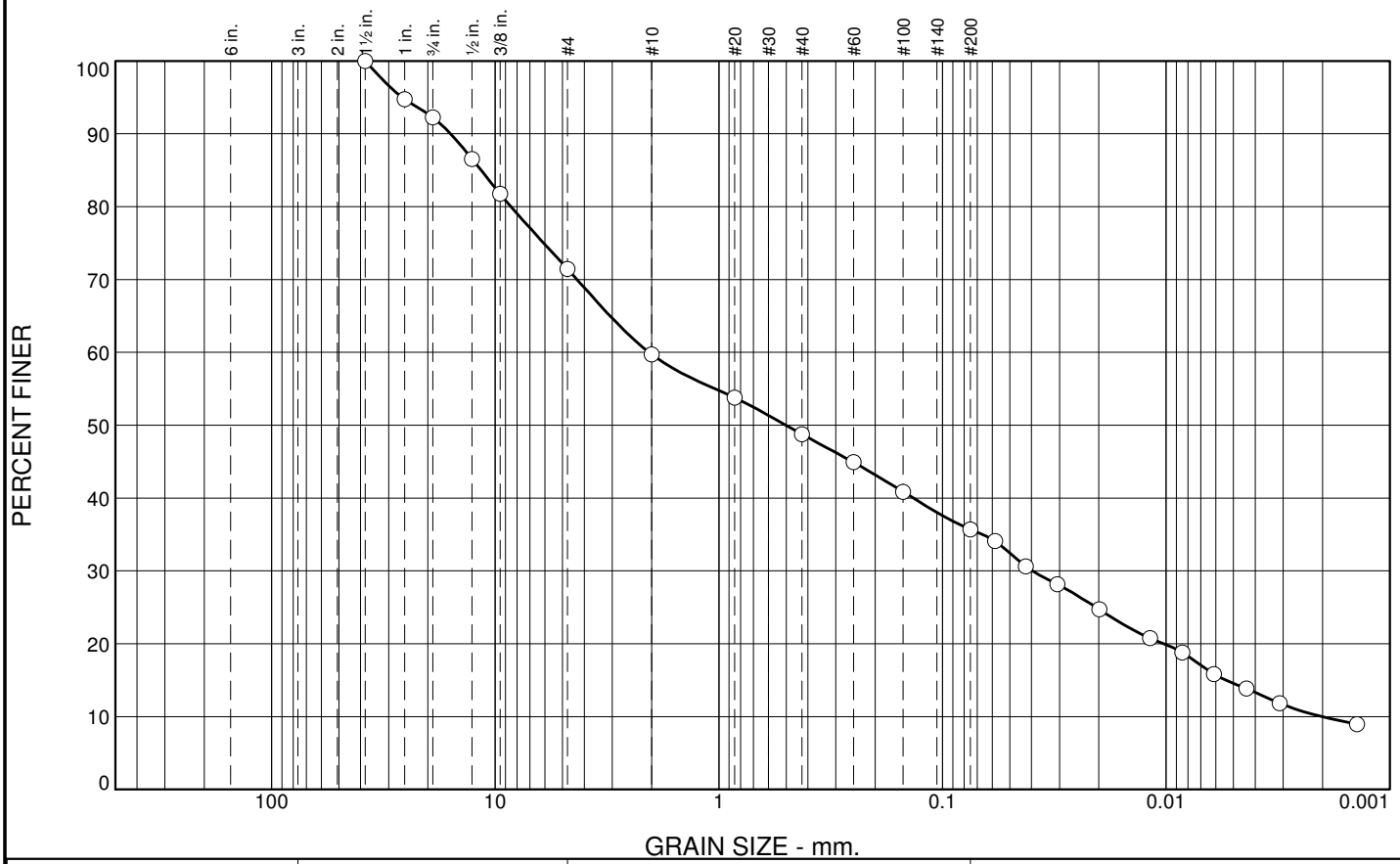
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.7	20.9	11.7	10.9	13.1	25.7	10.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	94.7		
.75	92.3		
.5	86.5		
.375	81.8		
#4	71.4		
#10	59.7		
#20	53.8		
#40	48.8		
#60	44.9		
#100	40.9		
#200	35.7		
0.0583 mm.	34.1		
0.0424 mm.	30.6		
0.0306 mm.	28.2		
0.0199 mm.	24.7		
0.0118 mm.	20.8		
0.0085 mm.	18.8		
0.0061 mm.	15.8		
0.0044 mm.	13.9		
0.0031 mm.	11.8		
0.0014 mm.	9.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 15.8569 D_{85}= 11.5822 D_{60}= 2.0529
D_{50}= 0.5020 D_{30}= 0.0396 D_{15}= 0.0054
D_{10}= 0.0020 C_u= 1022.85 C_c= 0.38

Classification

USCS= AASHTO=

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/13/12
Location: GT12-43 **Elev./Depth:** 21.5-21.7m

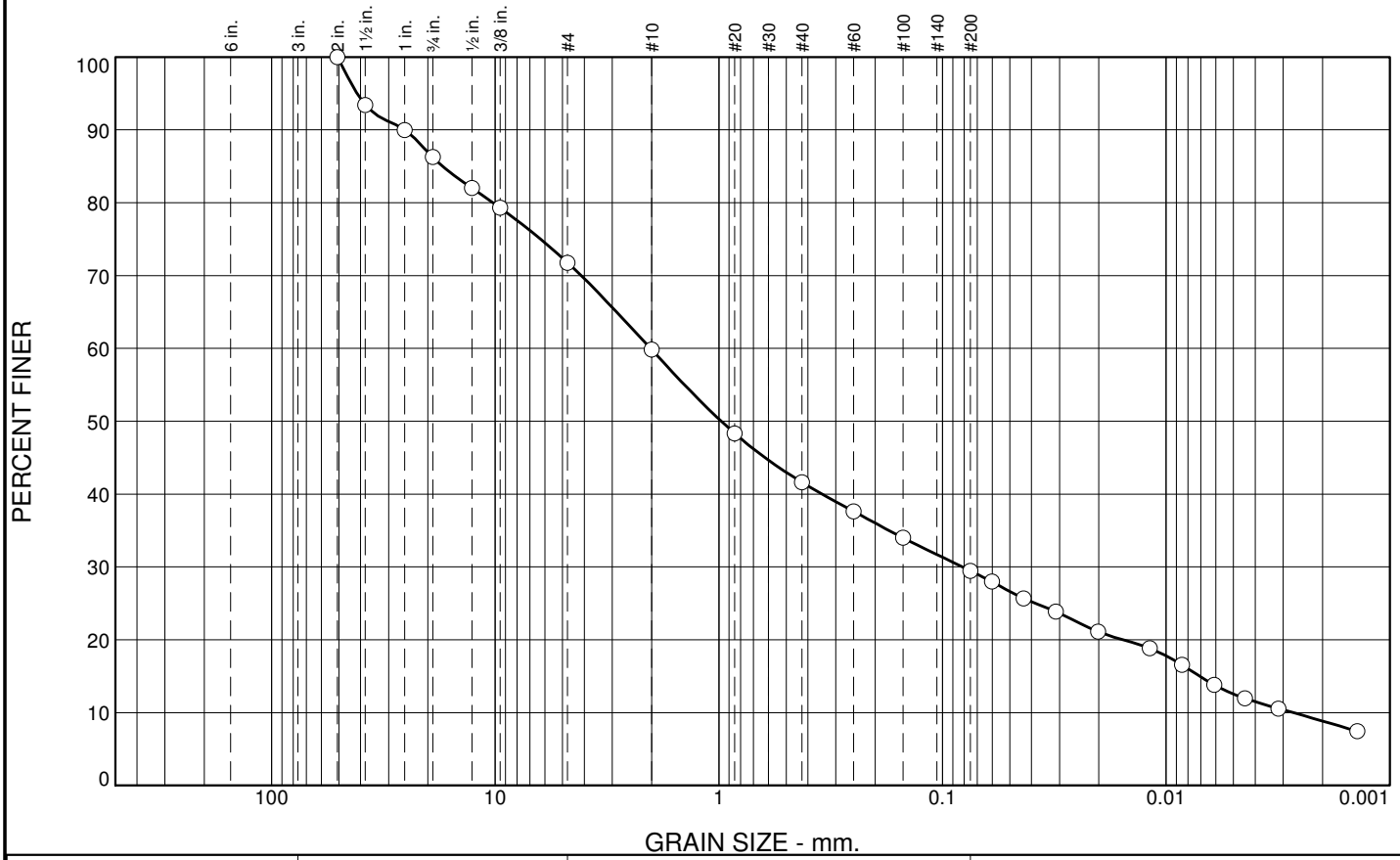
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.7	14.5	12.0	18.2	12.1	20.7	8.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	93.4		
1	90.0		
.75	86.3		
.5	82.0		
.375	79.3		
#4	71.8		
#10	59.8		
#20	48.3		
#40	41.6		
#60	37.6		
#100	34.0		
#200	29.5		
0.0602 mm.	28.0		
0.0434 mm.	25.7		
0.0312 mm.	23.9		
0.0202 mm.	21.1		
0.0118 mm.	18.8		
0.0085 mm.	16.6		
0.0061 mm.	13.8		
0.0044 mm.	12.0		
0.0031 mm.	10.6		
0.0014 mm.	7.5		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 15 LL= 24 PI= 9

Coefficients

D_{90}= 25.4422 D_{85}= 17.1886 D_{60}= 2.0234
D_{50}= 0.9766 D_{30}= 0.0813 D_{15}= 0.0071
D_{10}= 0.0027 C_u= 748.29 C_c= 1.21

Classification

USCS= SC AASHTO= A-2-4(0)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/13/12
Location: GT12-43 **Elev./Depth:** 25.0-25.2m

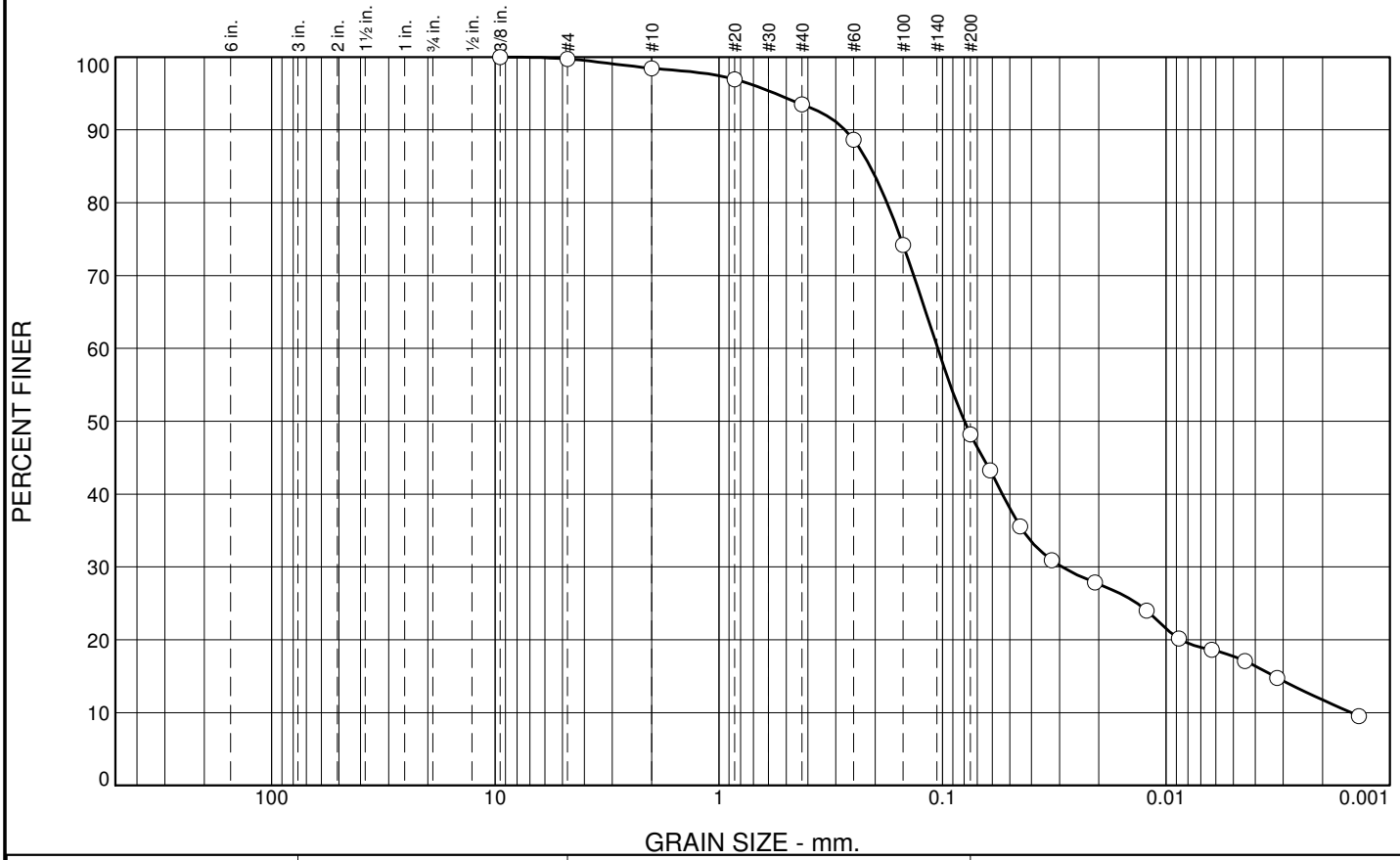
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.3	1.2	5.0	45.3	36.4	11.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.375	100.0		
#4	99.7		
#10	98.5		
#20	96.9		
#40	93.5		
#60	88.7		
#100	74.2		
#200	48.2		
0.0612 mm.	43.2		
0.0449 mm.	35.5		
0.0325 mm.	30.9		
0.0208 mm.	27.9		
0.0122 mm.	24.0		
0.0088 mm.	20.2		
0.0062 mm.	18.6		
0.0044 mm.	17.1		
0.0032 mm.	14.8		
0.0014 mm.	9.5		

* (no specification provided)

Soil Description

silty, clayey SAND

Atterberg Limits

PL= 14 LL= 18 PI= 4

Coefficients

D_{90}= 0.2728 D_{85}= 0.2108 D_{60}= 0.1052
D_{50}= 0.0798 D_{30}= 0.0291 D_{15}= 0.0033
D_{10}= 0.0015 C_u= 70.71 C_c= 5.43

Classification

USCS= SC-SM AASHTO= A-4(0)

Remarks

Sample No.: 4 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 30.0-30.2m

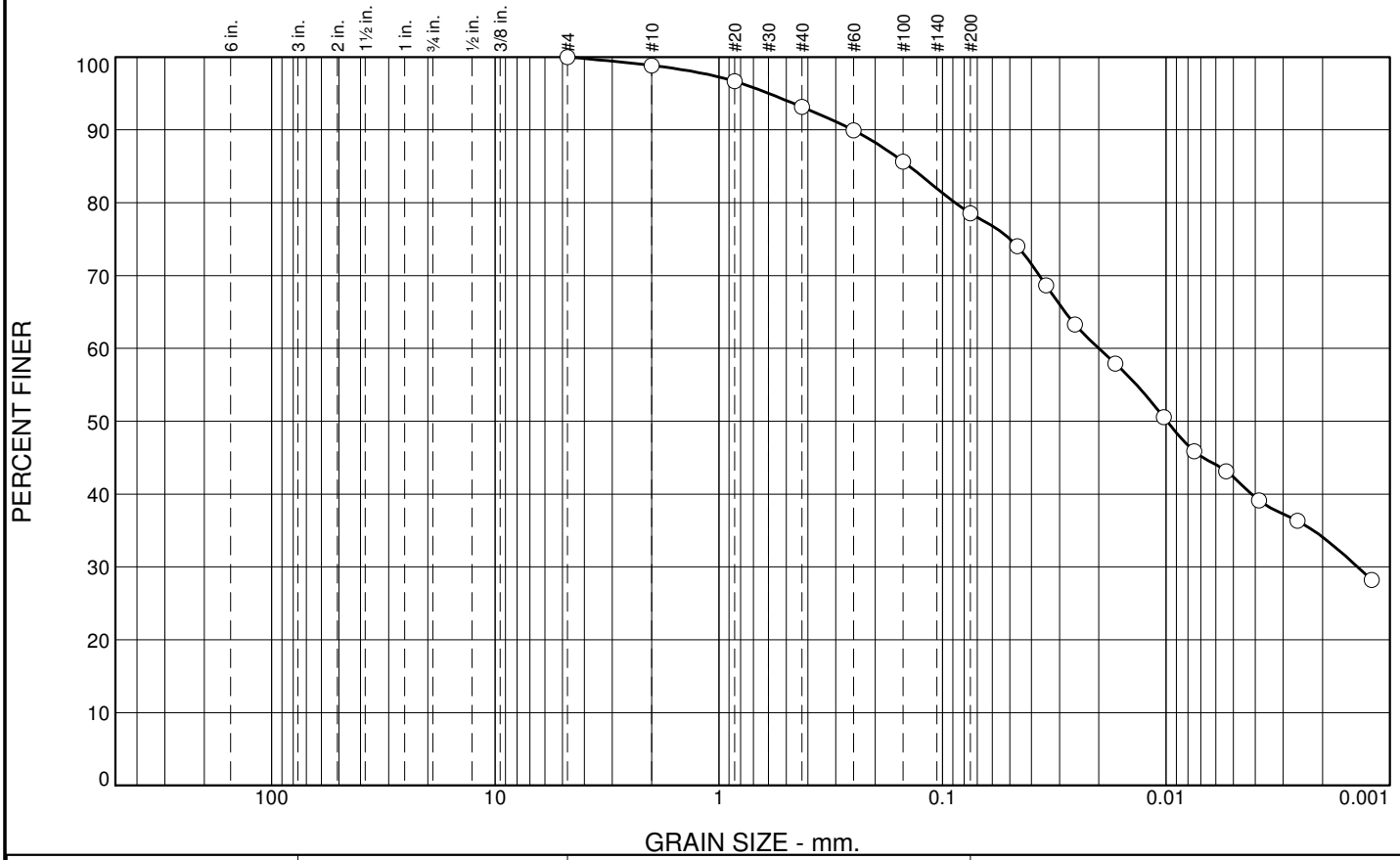
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	1.2	5.7	14.5	44.5	34.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	98.8		
#20	96.7		
#40	93.1		
#60	89.9		
#100	85.6		
#200	78.6		
0.0463 mm.	74.0		
0.0345 mm.	68.7		
0.0255 mm.	63.3		
0.0169 mm.	57.9		
0.0102 mm.	50.6		
0.0075 mm.	45.9		
0.0054 mm.	43.1		
0.0038 mm.	39.1		
0.0026 mm.	36.3		
0.0012 mm.	28.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.2525 D_{85}= 0.1409 D_{60}= 0.0200
D_{50}= 0.0099 D_{30}= 0.0014 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 43.8m

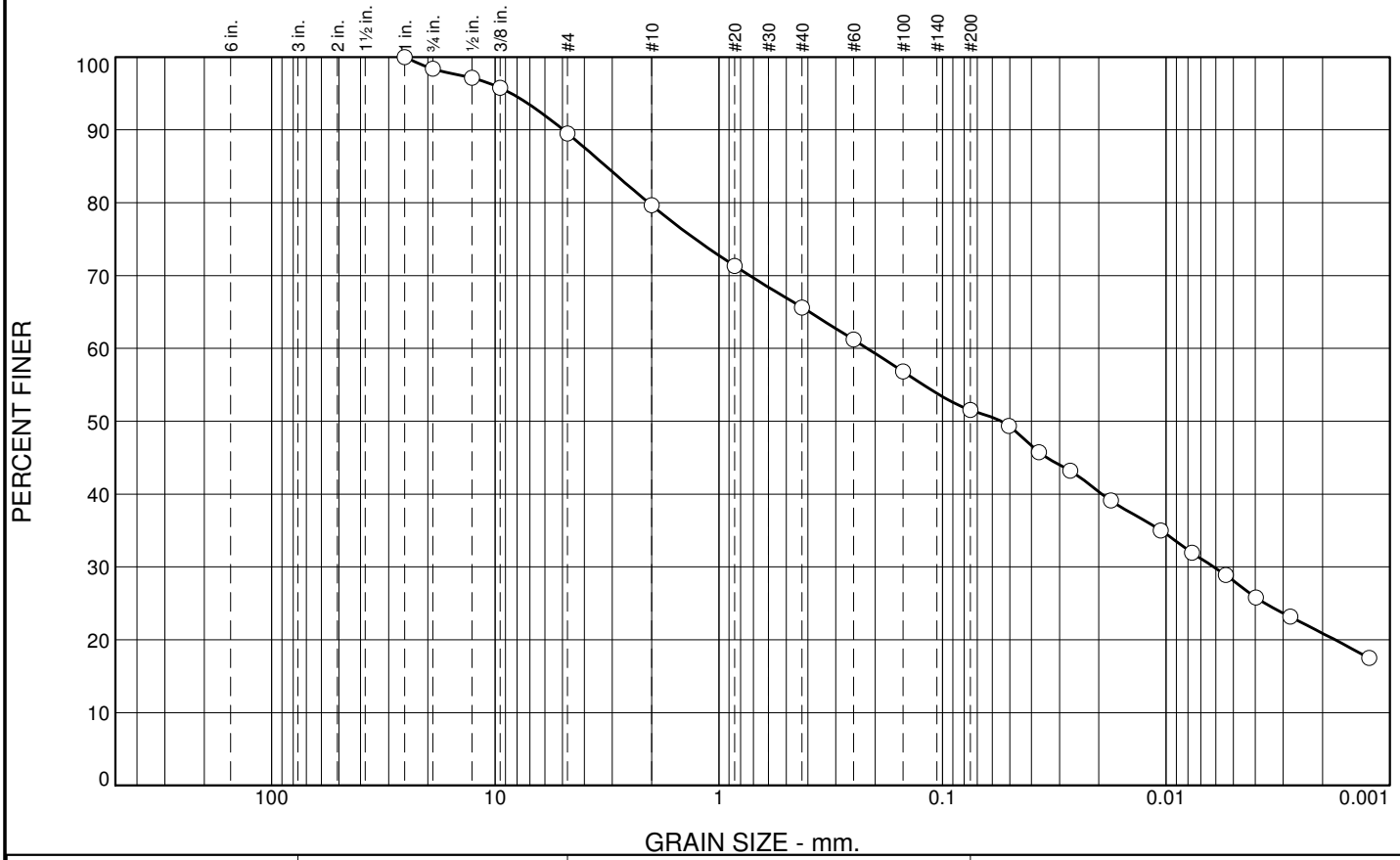
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.6	8.9	9.9	14.0	14.1	30.6	20.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	98.4		
.5	97.1		
.375	95.8		
#4	89.5		
#10	79.6		
#20	71.3		
#40	65.6		
#60	61.2		
#100	56.8		
#200	51.5		
0.0505 mm.	49.3		
0.0371 mm.	45.8		
0.0269 mm.	43.2		
0.0177 mm.	39.1		
0.0106 mm.	35.0		
0.0077 mm.	32.0		
0.0054 mm.	28.9		
0.0040 mm.	25.8		
0.0028 mm.	23.2		
0.0012 mm.	17.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 4.9674 D_{85}= 3.1965 D_{60}= 0.2170
D_{50}= 0.0547 D_{30}= 0.0061 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 6 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 50.0-50.2m

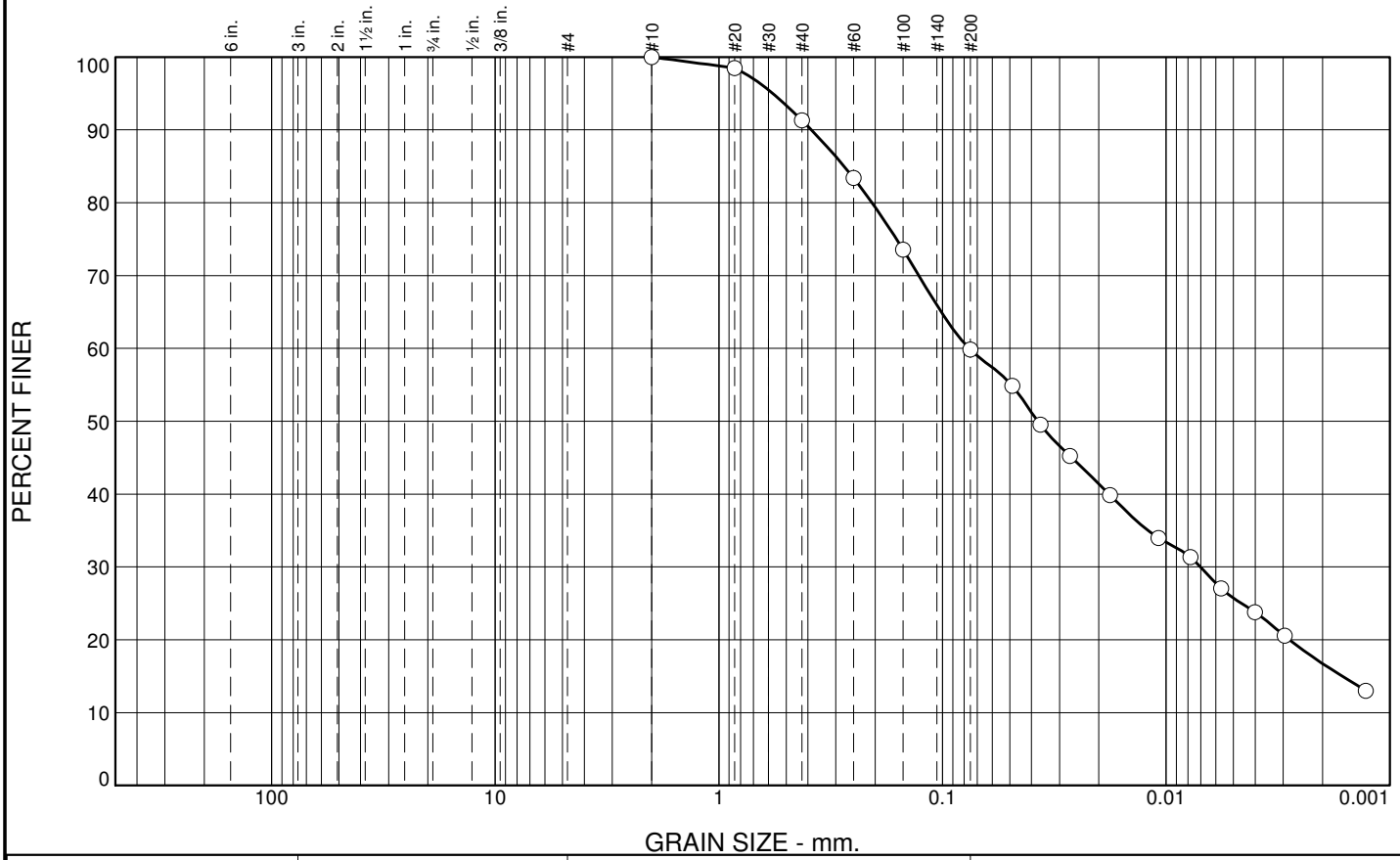
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	8.7	31.5	43.1	16.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#20	98.5		
#40	91.3		
#60	83.4		
#100	73.5		
#200	59.8		
0.0488 mm.	54.9		
0.0365 mm.	49.5		
0.0269 mm.	45.2		
0.0178 mm.	39.9		
0.0108 mm.	34.0		
0.0078 mm.	31.3		
0.0057 mm.	27.0		
0.0040 mm.	23.8		
0.0030 mm.	20.5		
0.0013 mm.	13.0		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 20 LL= 28 PI= 8

Coefficients

D_{90}= 0.3865 D_{85}= 0.2758 D_{60}= 0.0760
D_{50}= 0.0375 D_{30}= 0.0070 D_{15}= 0.0016
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-4(3)

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 53.0-53.2m

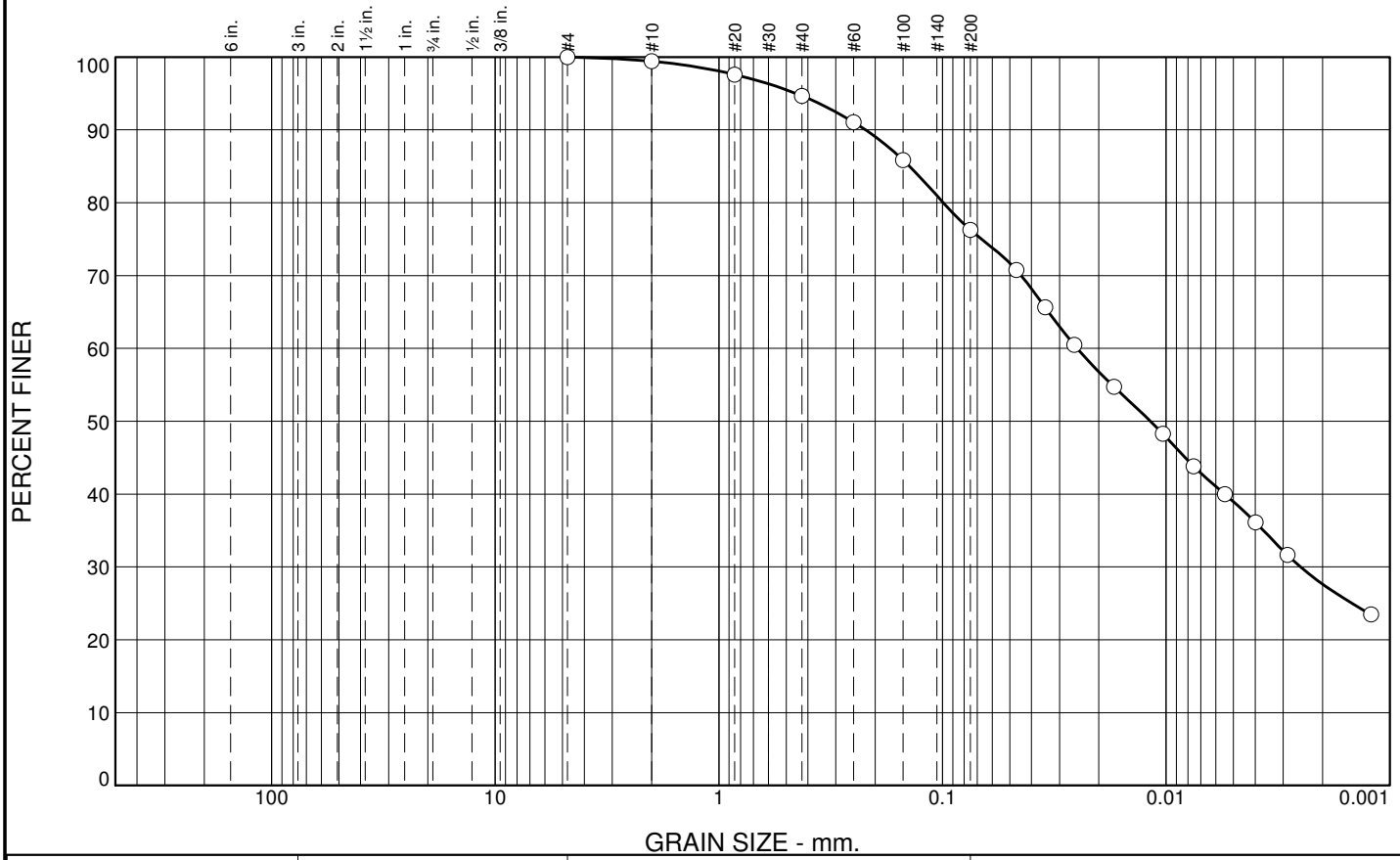
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.6	4.7	18.4	48.7	27.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.4		
#20	97.6		
#40	94.7		
#60	91.1		
#100	85.9		
#200	76.3		
0.0468 mm.	70.8		
0.0348 mm.	65.6		
0.0258 mm.	60.5		
0.0171 mm.	54.7		
0.0103 mm.	48.3		
0.0075 mm.	43.8		
0.0055 mm.	40.0		
0.0040 mm.	36.1		
0.0029 mm.	31.6		
0.0012 mm.	23.5		

* (no specification provided)

Soil Description

lean CLAY with sand

Atterberg Limits

PL= 18 LL= 34 PI= 16

Coefficients

D_{90}= 0.2209 D_{85}= 0.1406 D_{60}= 0.0250
D_{50}= 0.0118 D_{30}= 0.0025 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(11)

Remarks

Sample No.: 8 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 55.0-55.2m

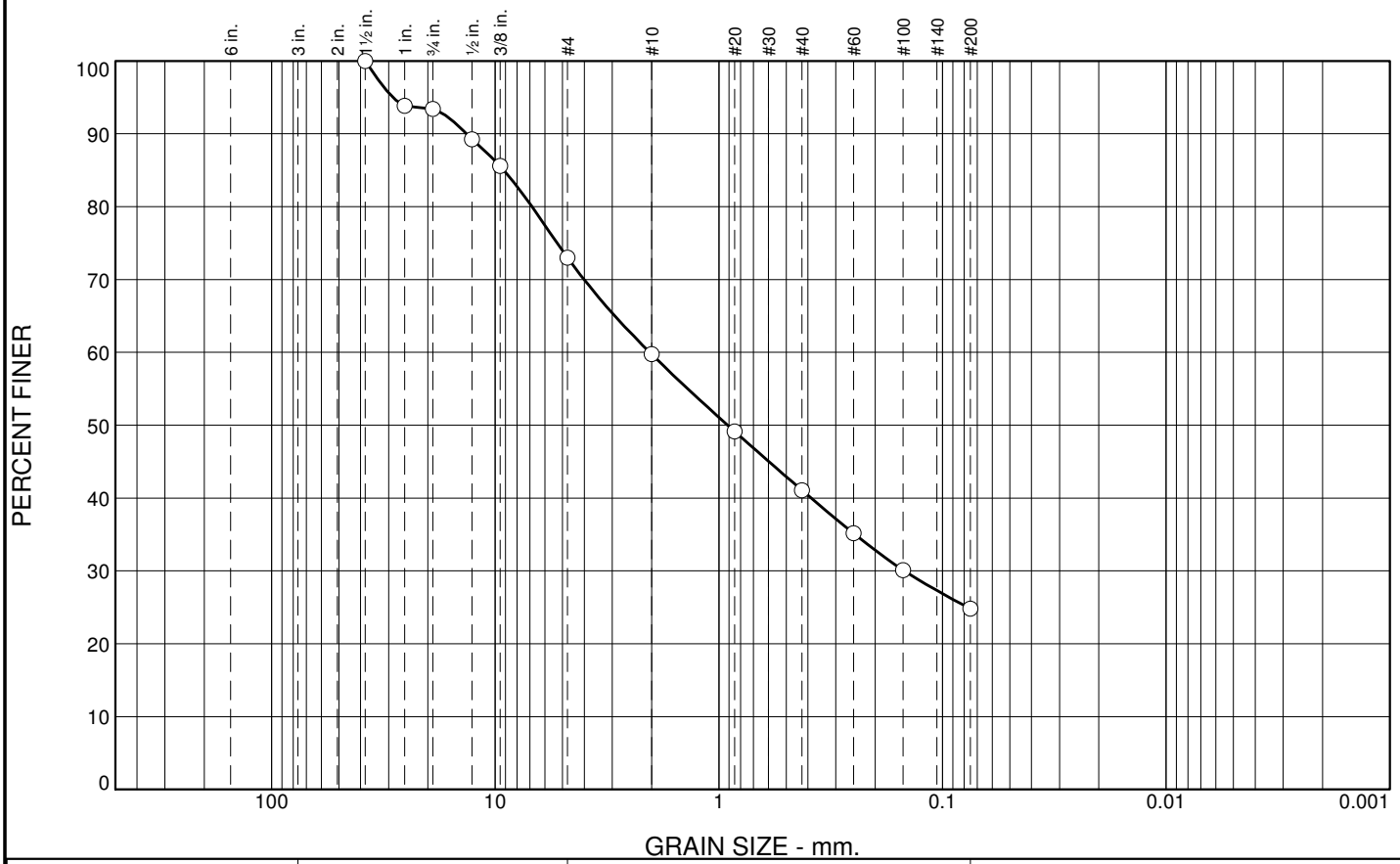
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.6	20.4	13.2	18.7	16.3	24.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	93.8		
.75	93.4		
.5	89.3		
.375	85.6		
#4	73.0		
#10	59.8		
#20	49.1		
#40	41.1		
#60	35.2		
#100	30.1		
#200	24.8		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 13.4517 D_{85}= 9.1653 D_{60}= 2.0378
D_{50}= 0.9140 D_{30}= 0.1482 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 9 **Source of Sample:** **Date:** 11/16/12
Location: GT12-43 **Elev./Depth:** 62.0-62.2m

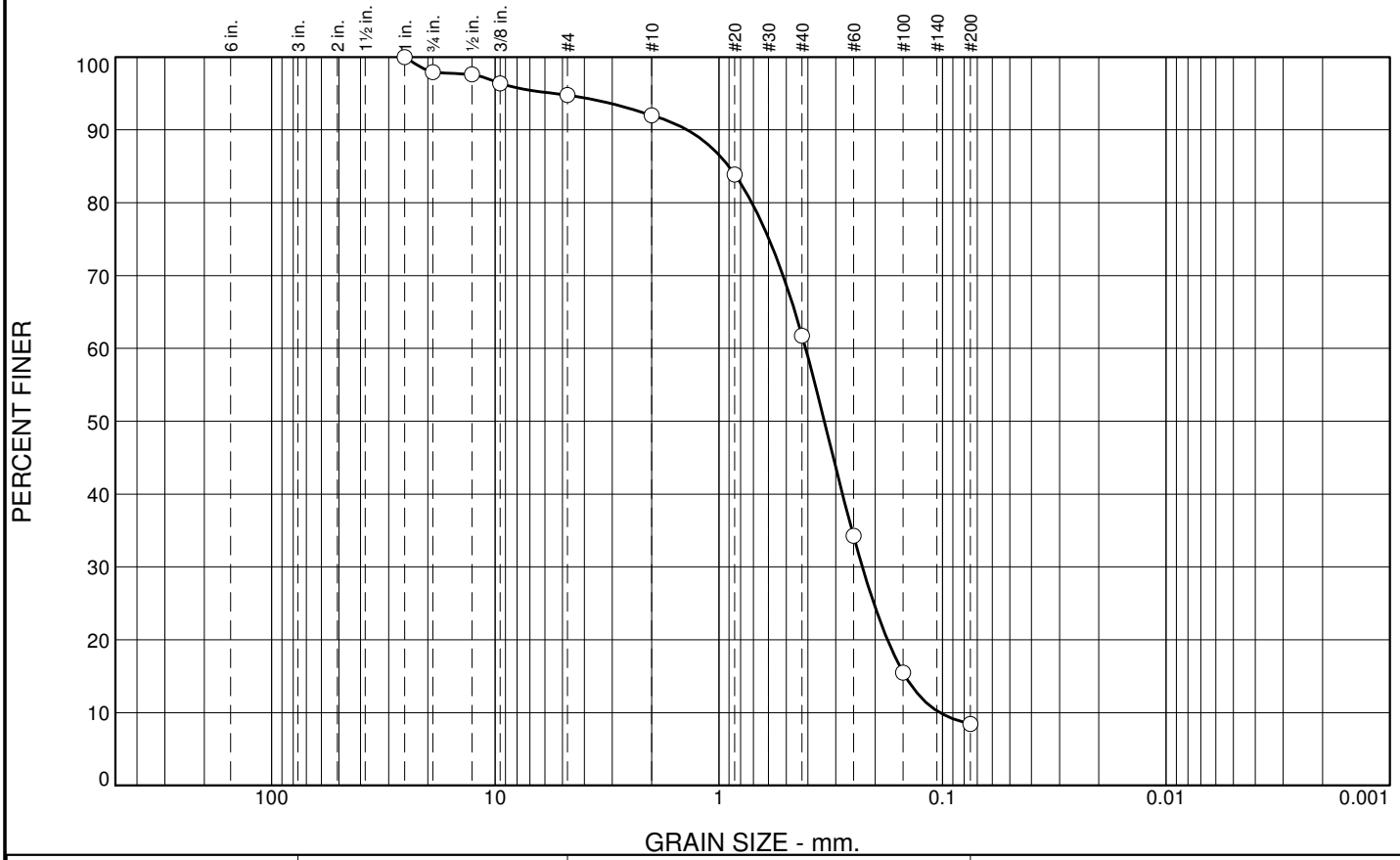
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.1	3.1	2.8	30.3	53.2	8.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	97.9		
.5	97.6		
.375	96.4		
#4	94.8		
#10	92.0		
#20	83.9		
#40	61.7		
#60	34.3		
#100	15.5		
#200	8.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.3878 D_{85}= 0.9046 D_{60}= 0.4098
D_{50}= 0.3376 D_{30}= 0.2282 D_{15}= 0.1468
D_{10}= 0.1028 C_u= 3.99 C_c= 1.24

Classification

USCS= AASHTO=

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/16/12
Location: GT12-44 **Elev./Depth:** 7.14-7.24m

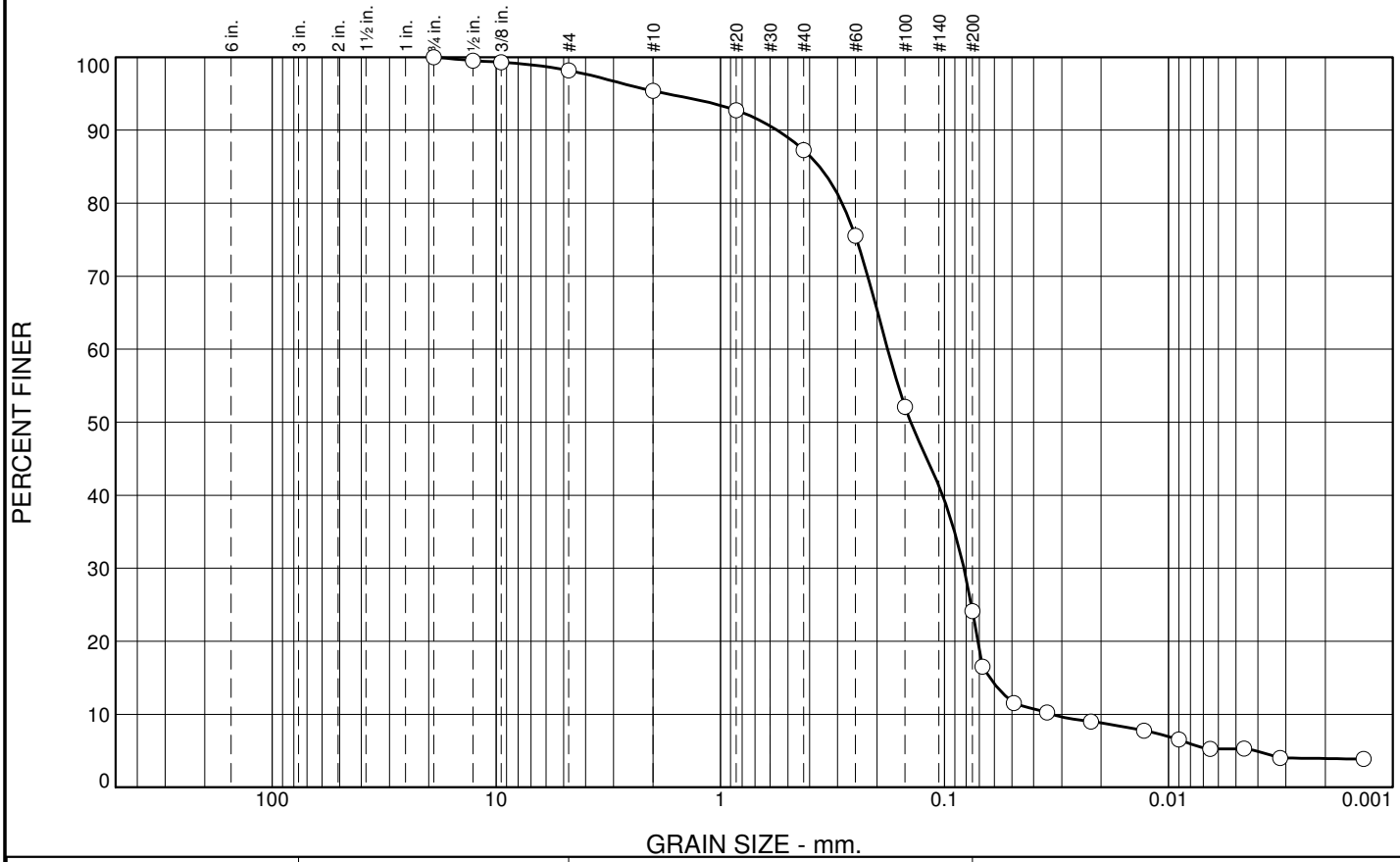
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.8	2.8	8.2	63.1	20.2	3.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	99.5		
.375	99.3		
#4	98.2		
#10	95.4		
#20	92.7		
#40	87.2		
#60	75.5		
#100	52.1		
#200	24.1		
0.0677 mm.	16.5		
0.0490 mm.	11.5		
0.0349 mm.	10.3		
0.0222 mm.	9.0		
0.0129 mm.	7.8		
0.0090 mm.	6.5		
0.0065 mm.	5.3		
0.0046 mm.	5.3		
0.0032 mm.	4.0		
0.0013 mm.	3.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.5576 D_{85}= 0.3610 D_{60}= 0.1793
D_{50}= 0.1415 D_{30}= 0.0819 D_{15}= 0.0627
D_{10}= 0.0330 C_u= 5.44 C_c= 1.13

Classification

USCS= AASHTO=

Remarks

Sample No.: 2 **Source of Sample:** **Date:** 11/16/12
Location: GT12-44 **Elev./Depth:** 13.2-13.4m

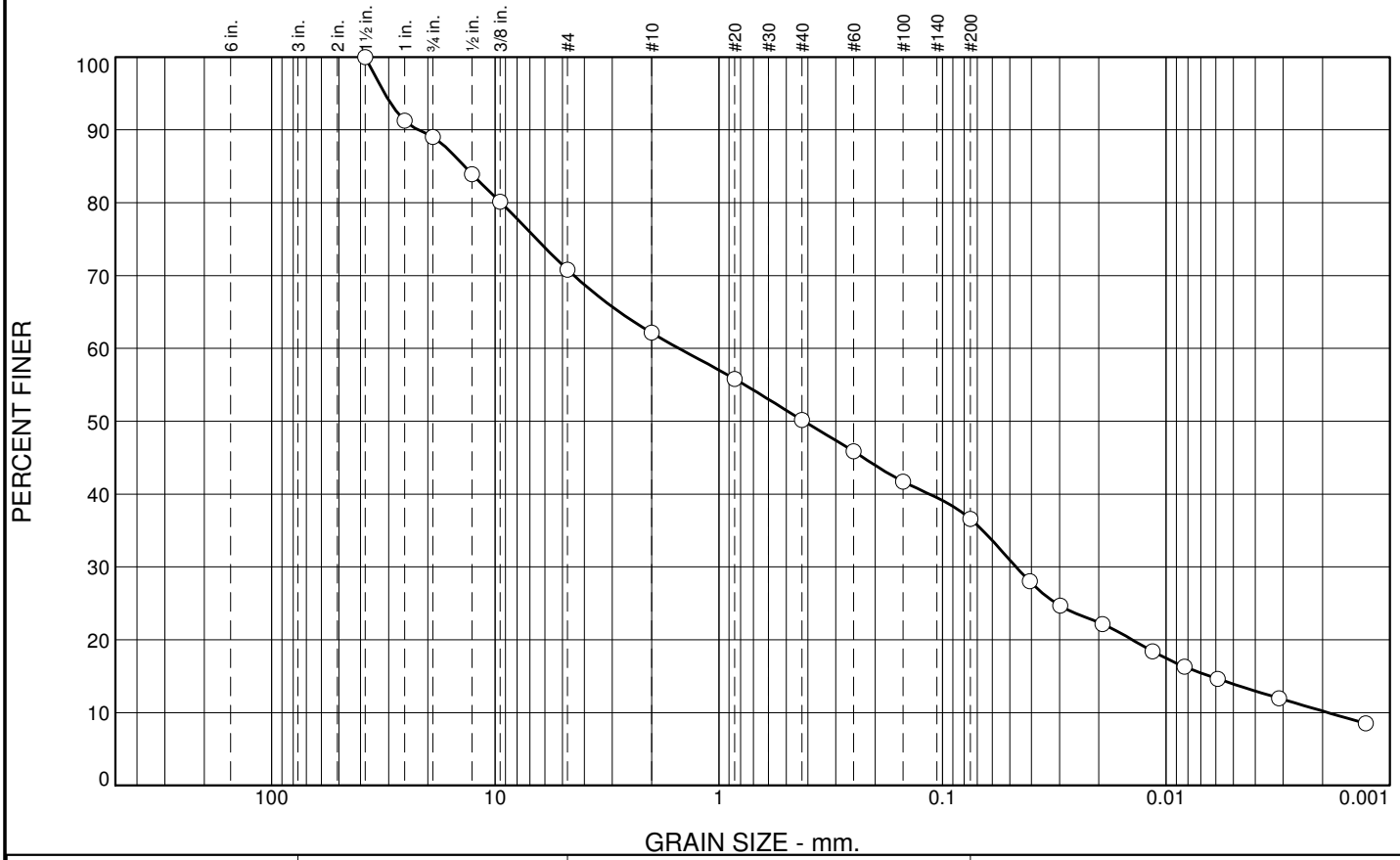
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	11.0	18.2	8.7	11.9	13.6	26.4	10.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	91.2		
.75	89.0		
.5	83.9		
.375	80.1		
#4	70.8		
#10	62.1		
#20	55.8		
#40	50.2		
#60	45.9		
#100	41.7		
#200	36.6		
0.0407 mm.	28.0		
0.0298 mm.	24.7		
0.0193 mm.	22.2		
0.0115 mm.	18.4		
0.0083 mm.	16.3		
0.0059 mm.	14.6		
0.0031 mm.	12.0		
0.0013 mm.	8.5		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 25 PI= 12

Coefficients

D_{90}= 22.0887 D_{85}= 13.7345 D_{60}= 1.5095
D_{50}= 0.4168 D_{30}= 0.0469 D_{15}= 0.0064
D_{10}= 0.0019 C_u= 800.07 C_c= 0.77

Classification

USCS= SC AASHTO= A-6(1)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/20/12
Location: GT12-44 **Elev./Depth:** 15.6-15.8m

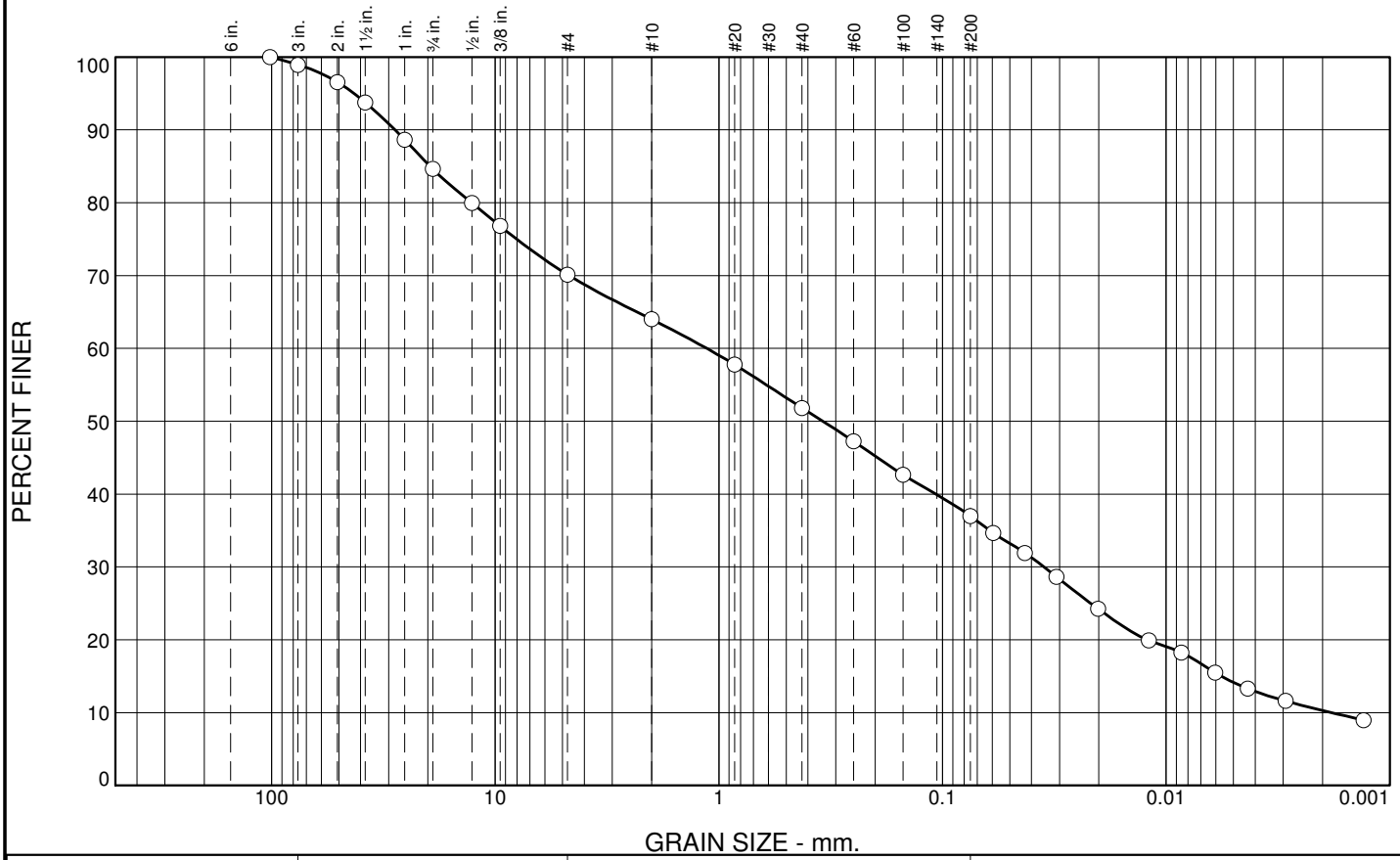
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
1.1	14.3	14.5	6.1	12.2	14.8	26.7	10.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
4	100.0		
3	98.9		
2	96.6		
1.5	93.7		
1	88.6		
.75	84.6		
.5	80.0		
.375	76.8		
#4	70.1		
#10	64.0		
#20	57.8		
#40	51.8		
#60	47.3		
#100	42.7		
#200	37.0		
0.0593 mm.	34.7		
0.0428 mm.	31.9		
0.0310 mm.	28.6		
0.0202 mm.	24.3		
0.0120 mm.	19.9		
0.0086 mm.	18.2		
0.0060 mm.	15.5		
0.0043 mm.	13.3		
0.0029 mm.	11.6		
0.0013 mm.	9.0		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 14 LL= 23 PI= 9

Coefficients

D_{90}= 28.0753 D_{85}= 19.6036 D_{60}= 1.1332
D_{50}= 0.3429 D_{30}= 0.0352 D_{15}= 0.0057
D_{10}= 0.0018 C_u= 621.43 C_c= 0.60

Classification

USCS= SC AASHTO= A-4(0)

Remarks

Sample No.: 1, 2, 3 **Source of Sample:** **Date:** 11/26/12
Location: GT12-45 **Elev./Depth:** 10.67-25.91m

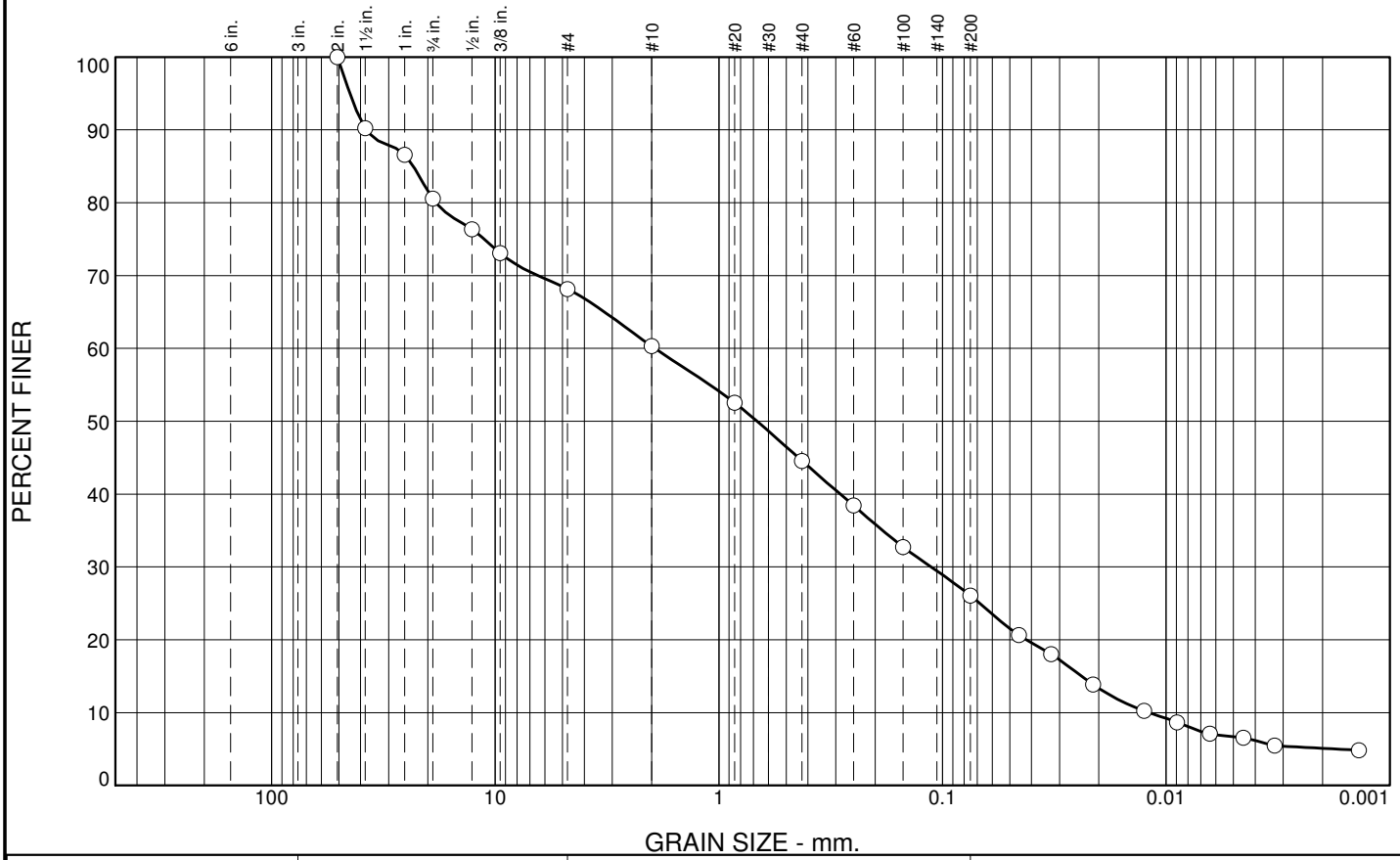
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	19.4	12.4	7.9	15.7	18.5	21.0	5.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	90.2		
1	86.6		
.75	80.6		
.5	76.4		
.375	73.1		
#4	68.2		
#10	60.3		
#20	52.5		
#40	44.6		
#60	38.4		
#100	32.7		
#200	26.1		
0.0455 mm.	20.6		
0.0327 mm.	18.0		
0.0212 mm.	13.9		
0.0125 mm.	10.2		
0.0089 mm.	8.7		
0.0064 mm.	7.1		
0.0045 mm.	6.5		
0.0033 mm.	5.5		
0.0014 mm.	4.8		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 37.6638 D_{85}= 23.2866 D_{60}= 1.9317
D_{50}= 0.6739 D_{30}= 0.1125 D_{15}= 0.0239
D_{10}= 0.0119 C_u= 161.95 C_c= 0.55

Classification

USCS= AASHTO=

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 5.6-5.8m

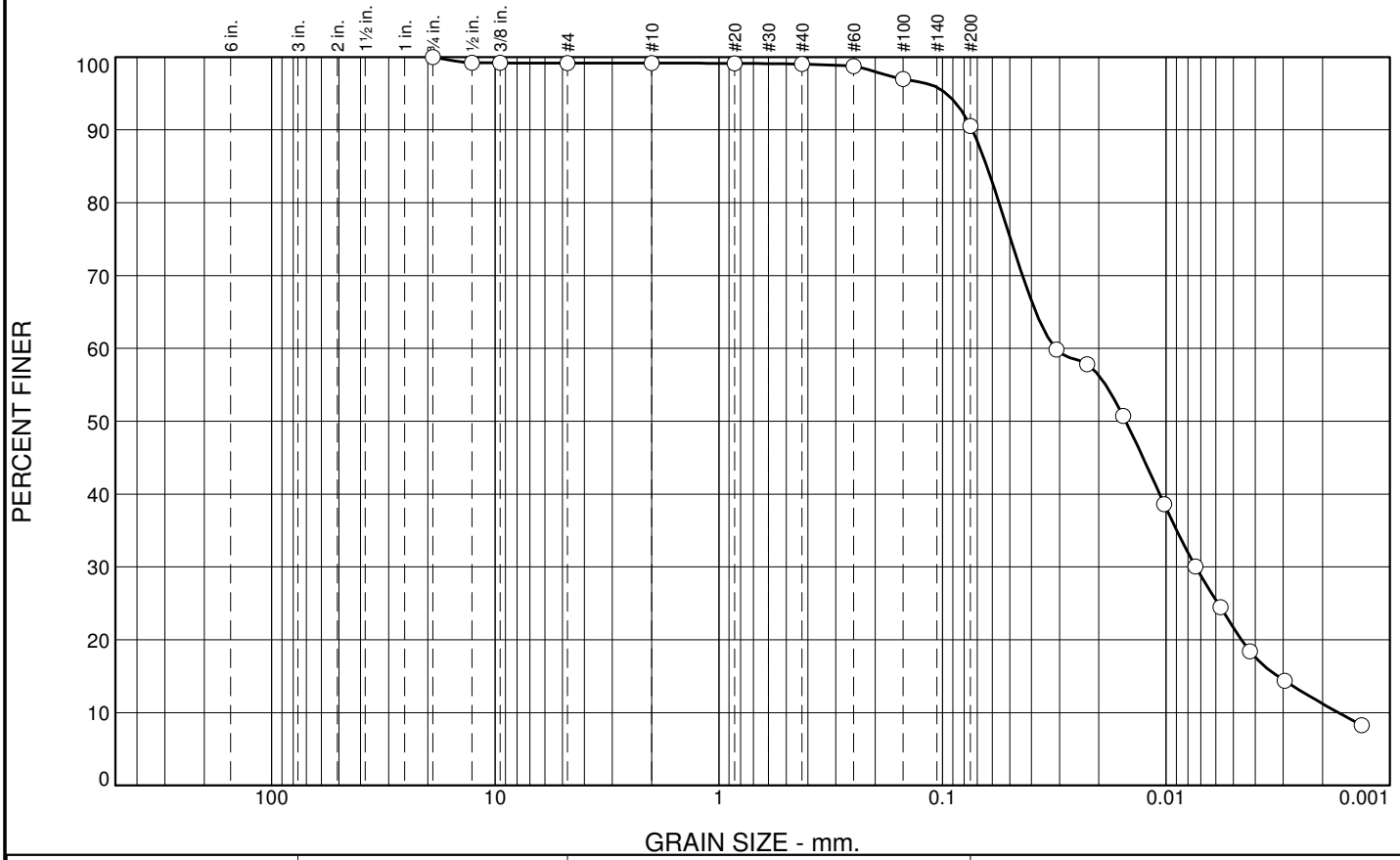
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.8	0.0	0.2	8.5	79.3	11.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	99.2		
.375	99.2		
#4	99.2		
#10	99.2		
#20	99.1		
#40	99.0		
#60	98.7		
#100	97.0		
#200	90.5		
0.0309 mm.	59.8		
0.0225 mm.	57.8		
0.0156 mm.	50.8		
0.0102 mm.	38.6		
0.0074 mm.	30.0		
0.0057 mm.	24.5		
0.0042 mm.	18.4		
0.0030 mm.	14.4		
0.0013 mm.	8.3		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0736 D_{85}= 0.0634 D_{60}= 0.0313
D_{50}= 0.0152 D_{30}= 0.0074 D_{15}= 0.0032
D_{10}= 0.0017 C_u= 18.45 C_c= 1.03

Classification

USCS= AASHTO=

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 30.05-30.2m

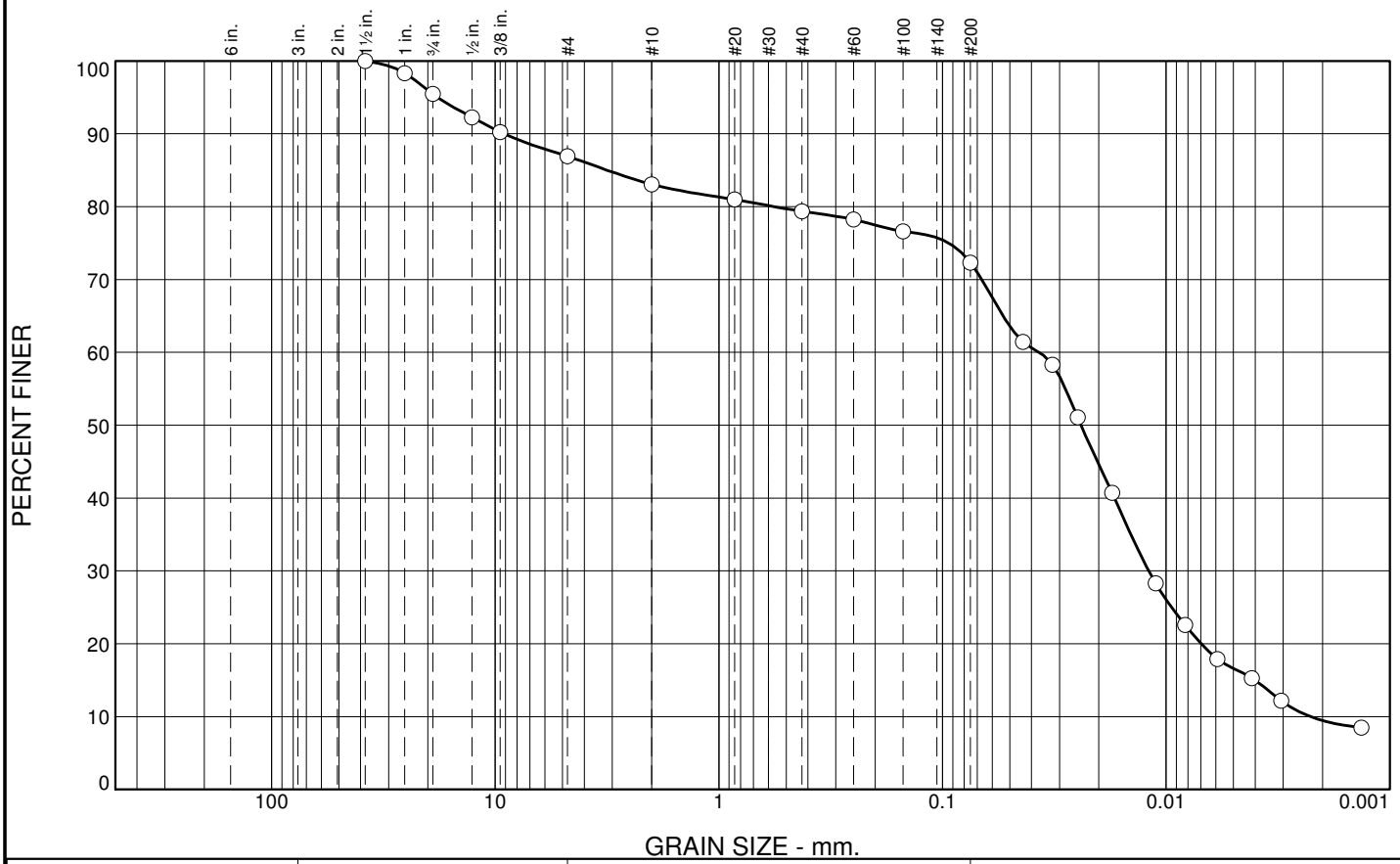
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.5	8.6	3.8	3.7	7.1	62.8	9.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.3		
.75	95.5		
.5	92.3		
.375	90.2		
#4	86.9		
#10	83.1		
#20	81.0		
#40	79.4		
#60	78.2		
#100	76.6		
#200	72.3		
0.0437 mm.	61.4		
0.0322 mm.	58.3		
0.0249 mm.	51.1		
0.0175 mm.	40.7		
0.0111 mm.	28.3		
0.0082 mm.	22.6		
0.0059 mm.	17.9		
0.0041 mm.	15.3		
0.0031 mm.	12.2		
0.0013 mm.	8.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 9.1645 D_{85}= 3.1627 D_{60}= 0.0369
D_{50}= 0.0240 D_{30}= 0.0120 D_{15}= 0.0040
D_{10}= 0.0023 C_u= 16.33 C_c= 1.72

Classification

USCS= AASHTO=

Remarks

Sample No.: 6 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 36-36.2m

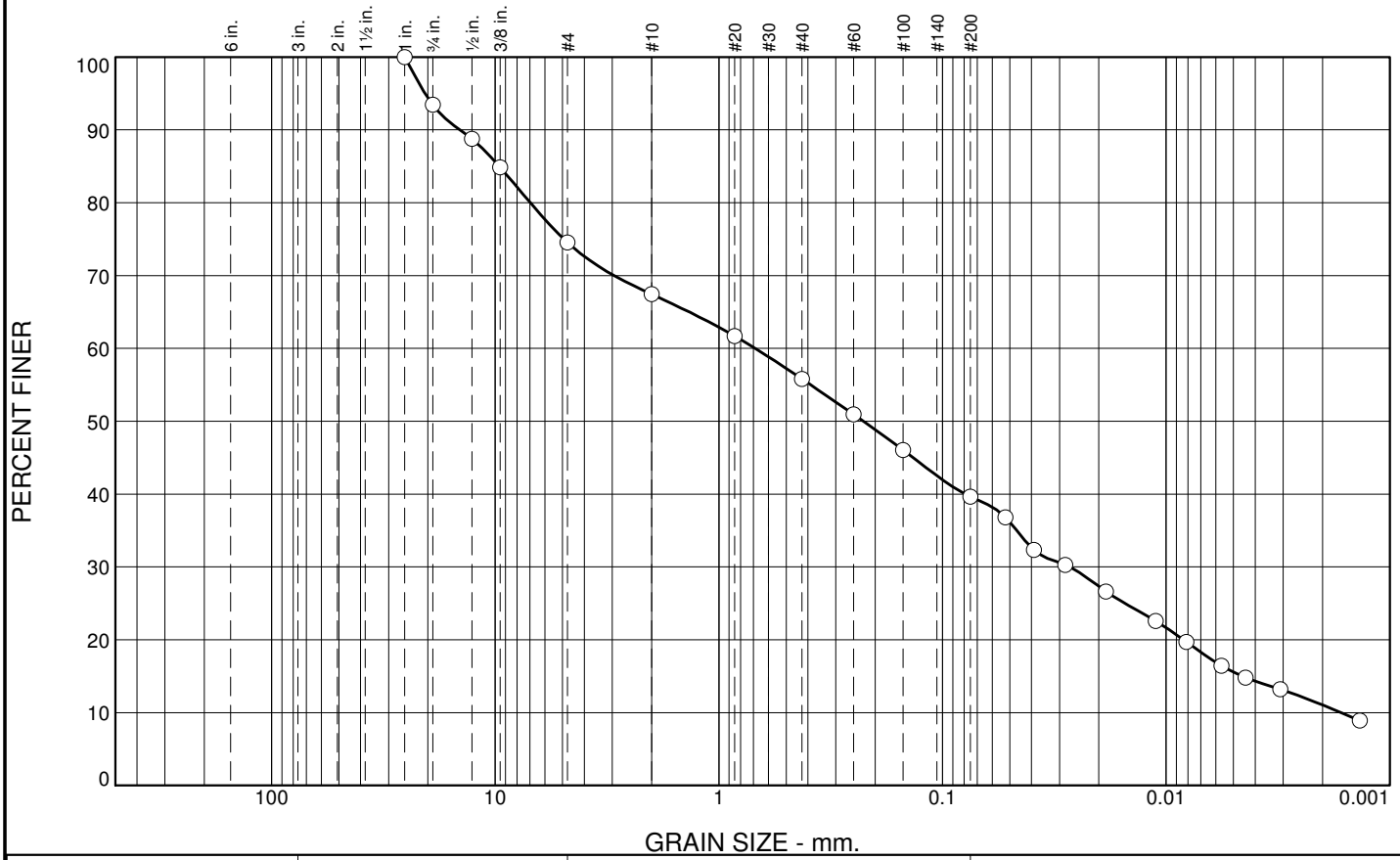
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.6	18.9	7.0	11.7	16.1	28.6	11.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	93.4		
.5	88.7		
.375	84.9		
#4	74.5		
#10	67.5		
#20	61.7		
#40	55.8		
#60	50.9		
#100	46.0		
#200	39.7		
0.0523 mm.	36.8		
0.0390 mm.	32.3		
0.0283 mm.	30.3		
0.0186 mm.	26.6		
0.0112 mm.	22.6		
0.0081 mm.	19.7		
0.0057 mm.	16.5		
0.0044 mm.	14.8		
0.0031 mm.	13.2		
0.0014 mm.	8.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 14.3839 D_{85}= 9.6163 D_{60}= 0.6875
D_{50}= 0.2260 D_{30}= 0.0270 D_{15}= 0.0046
D_{10}= 0.0016 C_u= 417.04 C_c= 0.64

Classification

USCS= AASHTO=

Remarks

Sample No.: 8 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 43.5-43.7m

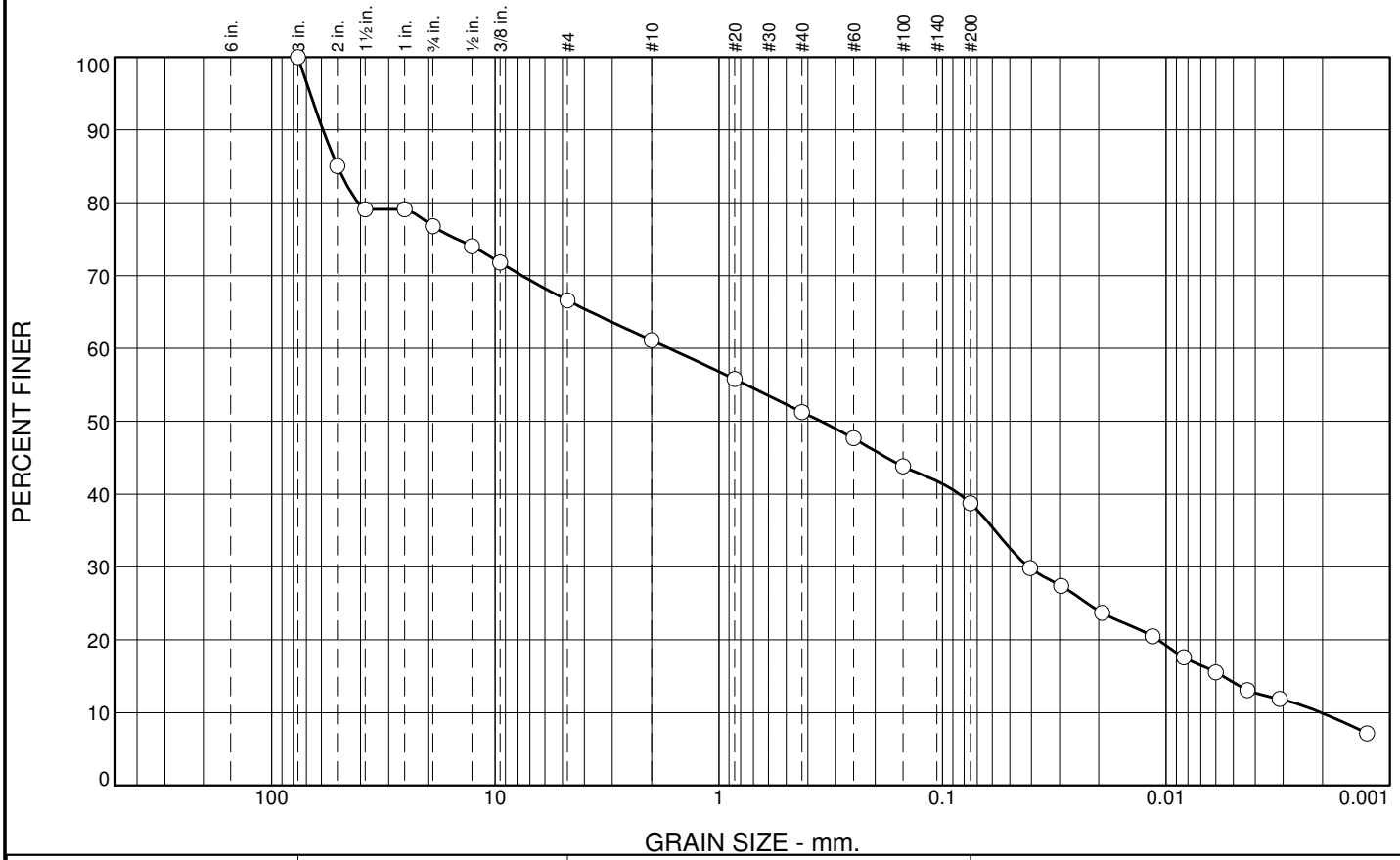
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	23.2	10.2	5.5	9.8	12.6	28.8	9.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	85.0		
1.5	79.1		
1	79.1		
.75	76.8		
.5	74.0		
.375	71.8		
#4	66.6		
#10	61.1		
#20	55.8		
#40	51.3		
#60	47.7		
#100	43.8		
#200	38.7		
0.0406 mm.	29.8		
0.0295 mm.	27.4		
0.0193 mm.	23.7		
0.0115 mm.	20.5		
0.0083 mm.	17.6		
0.0060 mm.	15.6		
0.0043 mm.	13.1		
0.0031 mm.	11.9		
0.0013 mm.	7.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 58.9649 D_{85}= 50.7761 D_{60}= 1.6667
D_{50}= 0.3499 D_{30}= 0.0412 D_{15}= 0.0056
D_{10}= 0.0020 C_u= 822.97 C_c= 0.50

Classification

USCS= AASHTO=

Remarks

Sample No.: 11 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 61.75-62m

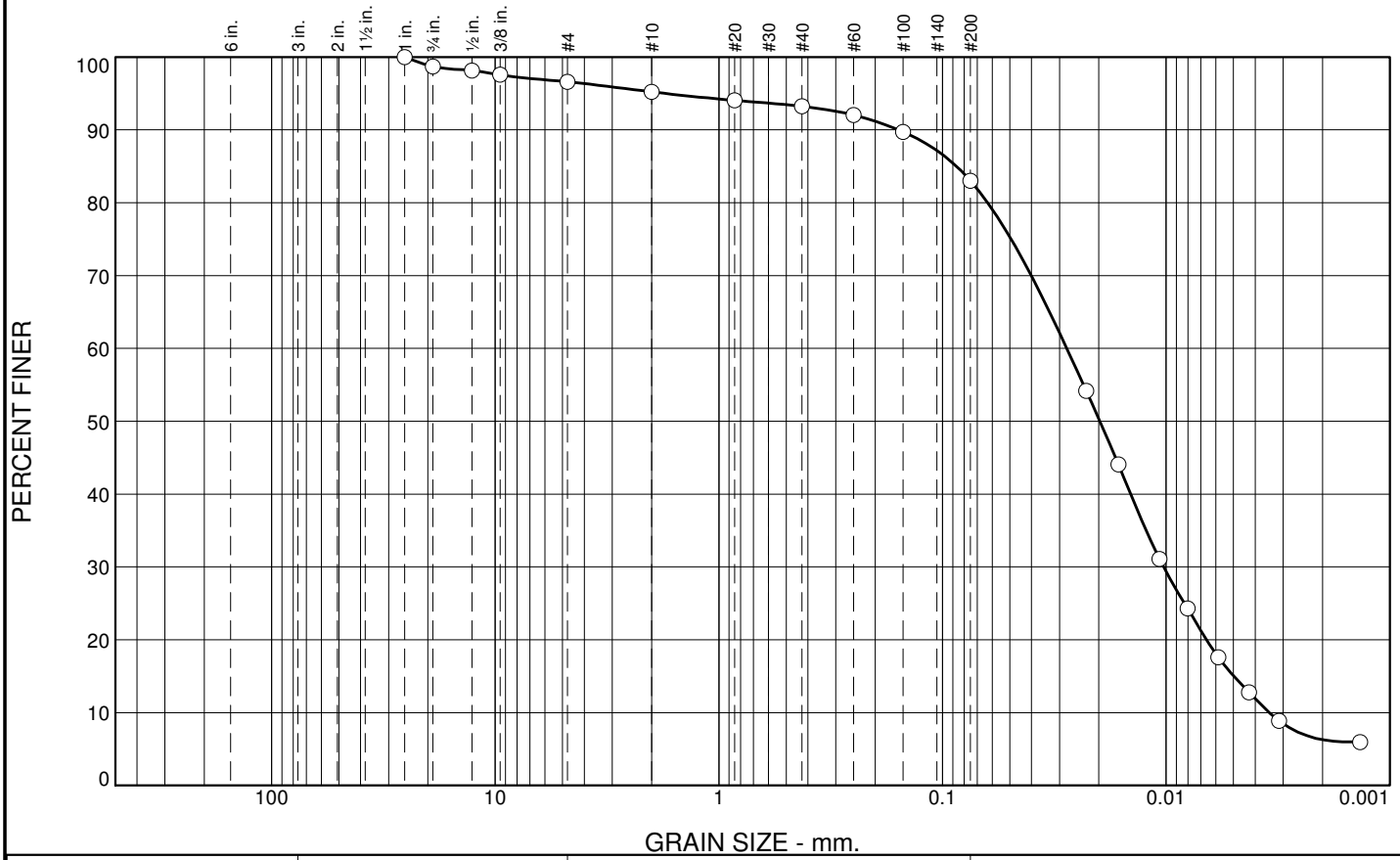
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	1.3	2.1	1.4	2.0	10.2	76.7	6.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	98.7		
.5	98.1		
.375	97.6		
#4	96.6		
#10	95.2		
#20	94.0		
#40	93.2		
#60	92.0		
#100	89.7		
#200	83.0		
0.0228 mm.	54.2		
0.0163 mm.	44.1		
0.0107 mm.	31.1		
0.0080 mm.	24.3		
0.0058 mm.	17.6		
0.0043 mm.	12.8		
0.0031 mm.	8.9		
0.0014 mm.	6.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.1573 D_{85}= 0.0867 D_{60}= 0.0278
D_{50}= 0.0198 D_{30}= 0.0103 D_{15}= 0.0050
D_{10}= 0.0035 C_u= 8.05 C_c= 1.10

Classification

USCS= AASHTO=

Remarks

Sample No.: 12 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 67.1-67.3m

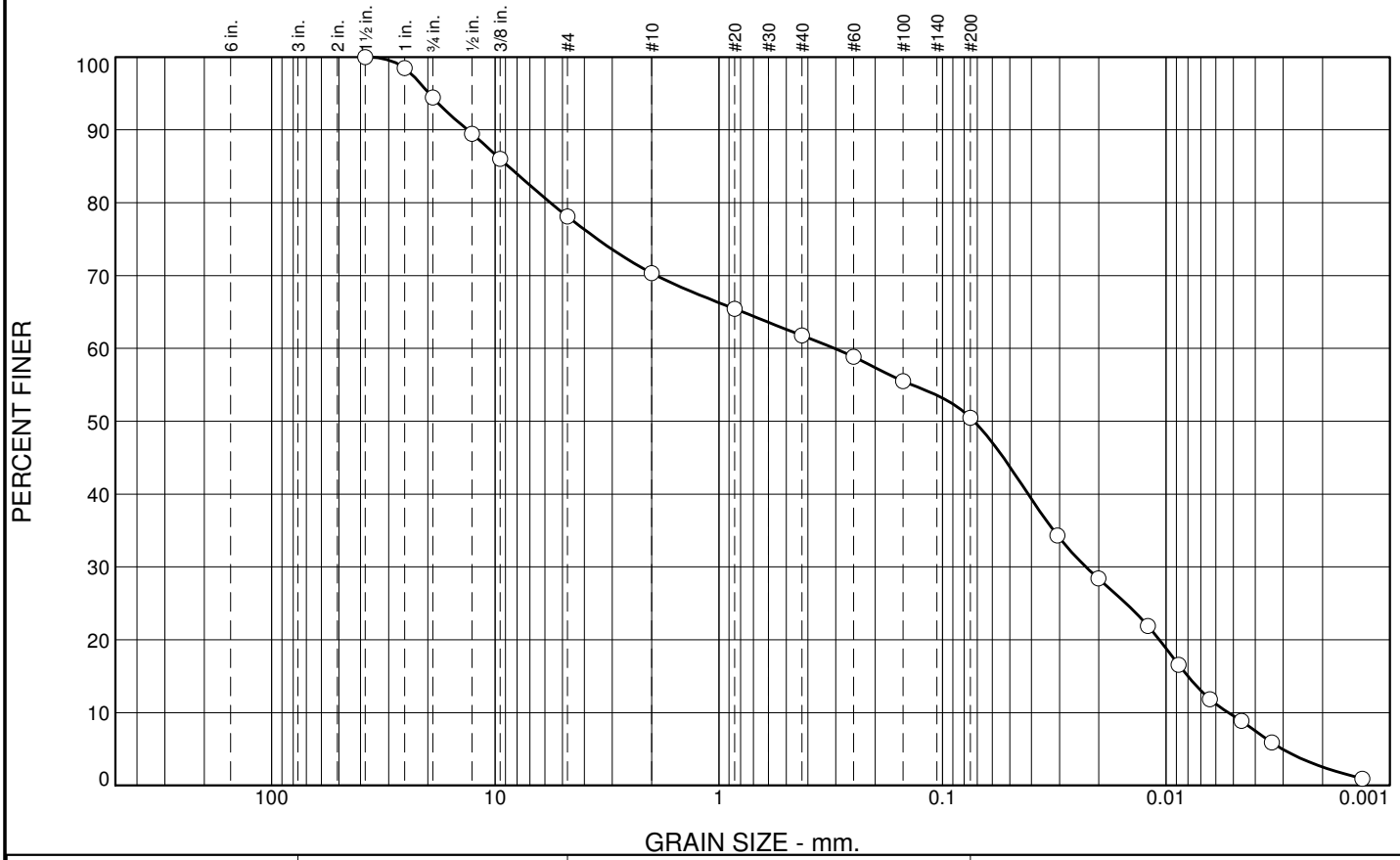
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.6	16.3	7.8	8.5	11.3	48.0	2.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.5		
.75	94.4		
.5	89.5		
.375	86.0		
#4	78.1		
#10	70.3		
#20	65.4		
#40	61.8		
#60	58.8		
#100	55.5		
#200	50.5		
0.0306 mm.	34.3		
0.0201 mm.	28.4		
0.0121 mm.	21.9		
0.0088 mm.	16.6		
0.0064 mm.	11.8		
0.0046 mm.	8.9		
0.0034 mm.	5.9		
0.0013 mm.	0.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 13.3126 D_{85}= 8.7461 D_{60}= 0.3040
D_{50}= 0.0723 D_{30}= 0.0228 D_{15}= 0.0080
D_{10}= 0.0053 C_u= 57.68 C_c= 0.32

Classification

USCS= AASHTO=

Remarks

Sample No.: 13 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 73.55-73.77m

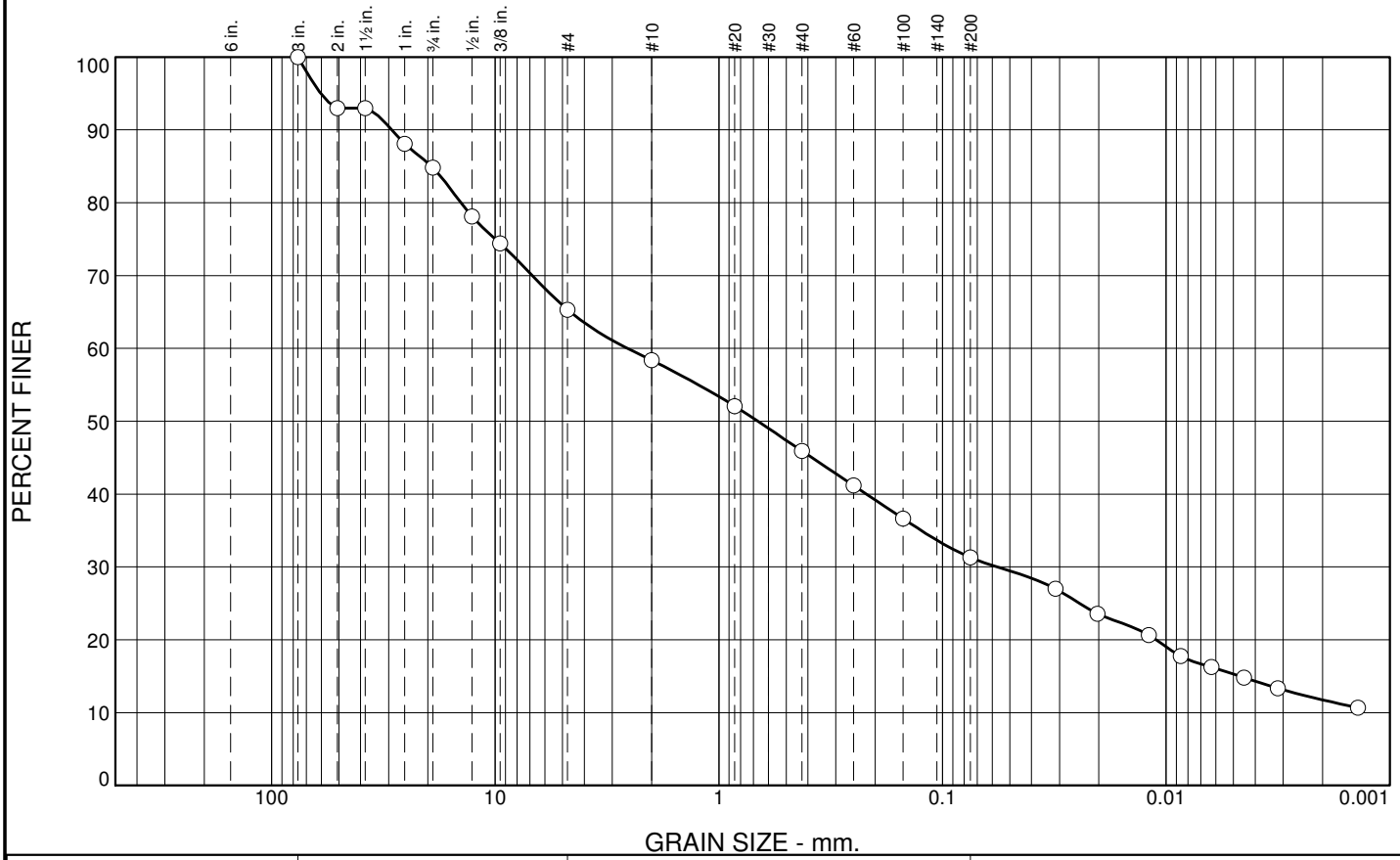
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.2	19.5	6.9	12.5	14.6	19.5	11.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	93.0		
1.5	93.0		
1	88.1		
.75	84.8		
.5	78.1		
.375	74.4		
#4	65.3		
#10	58.4		
#20	52.1		
#40	45.9		
#60	41.2		
#100	36.6		
#200	31.3		
0.0313 mm.	27.0		
0.0203 mm.	23.6		
0.0120 mm.	20.7		
0.0086 mm.	17.8		
0.0063 mm.	16.3		
0.0045 mm.	14.8		
0.0032 mm.	13.4		
0.0014 mm.	10.7		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 29.0317 D_{85}= 19.3001 D_{60}= 2.5559
D_{50}= 0.6687 D_{30}= 0.0571 D_{15}= 0.0047
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 21 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 14.55-14.75m

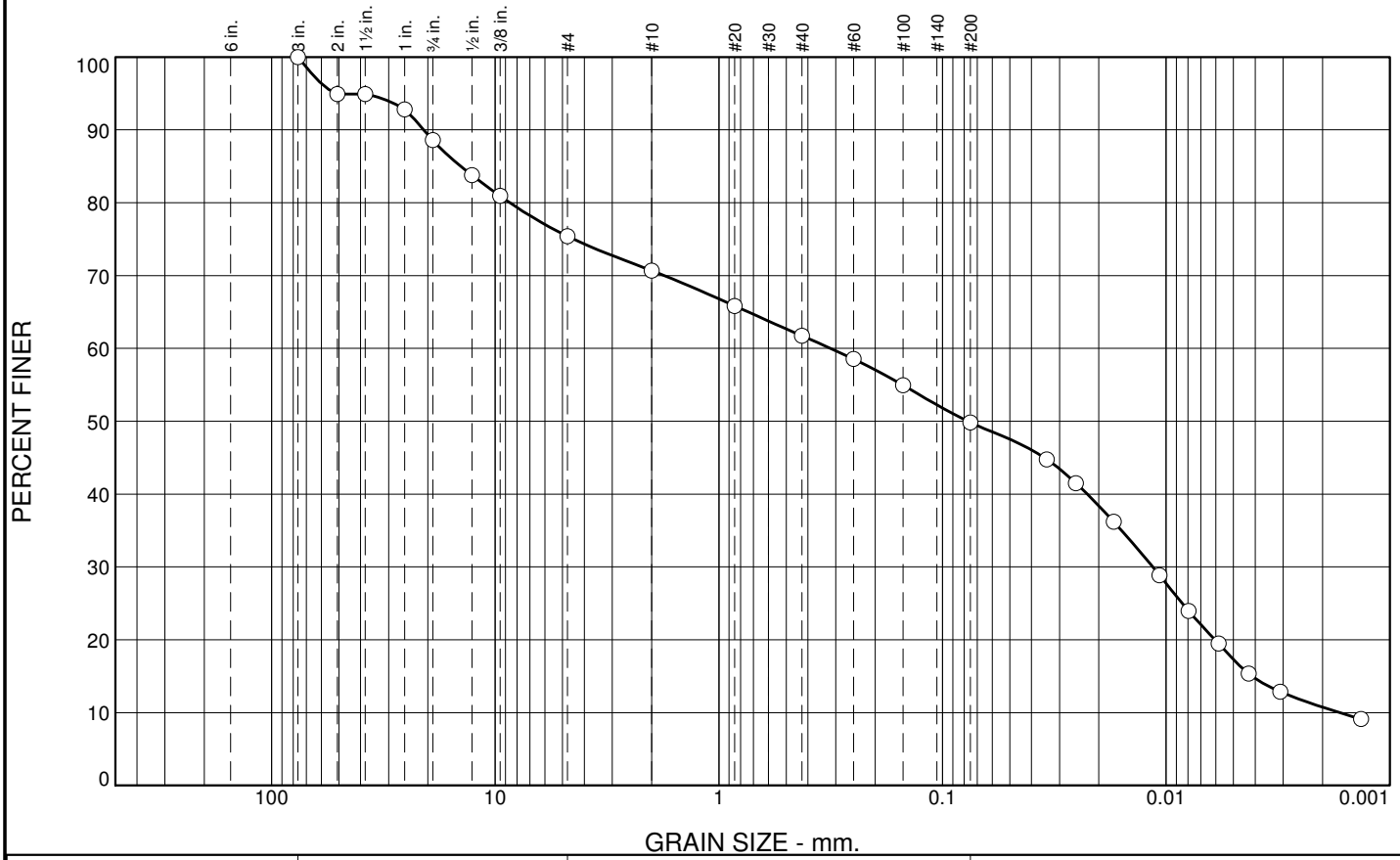
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	11.4	13.2	4.7	9.0	11.9	39.1	10.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	94.9		
1.5	94.9		
1	92.8		
.75	88.6		
.5	83.8		
.375	80.9		
#4	75.4		
#10	70.7		
#20	65.8		
#40	61.7		
#60	58.6		
#100	54.9		
#200	49.8		
0.0342 mm.	44.8		
0.0253 mm.	41.5		
0.0171 mm.	36.2		
0.0107 mm.	28.9		
0.0079 mm.	24.0		
0.0058 mm.	19.5		
0.0043 mm.	15.4		
0.0031 mm.	12.9		
0.0013 mm.	9.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 20.9102 D_{85}= 14.2726 D_{60}= 0.3164
D_{50}= 0.0771 D_{30}= 0.0115 D_{15}= 0.0041
D_{10}= 0.0017 C_u= 188.80 C_c= 0.25

Classification

USCS= AASHTO=

Remarks

Sample No.: 26 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 52.3-52.5m

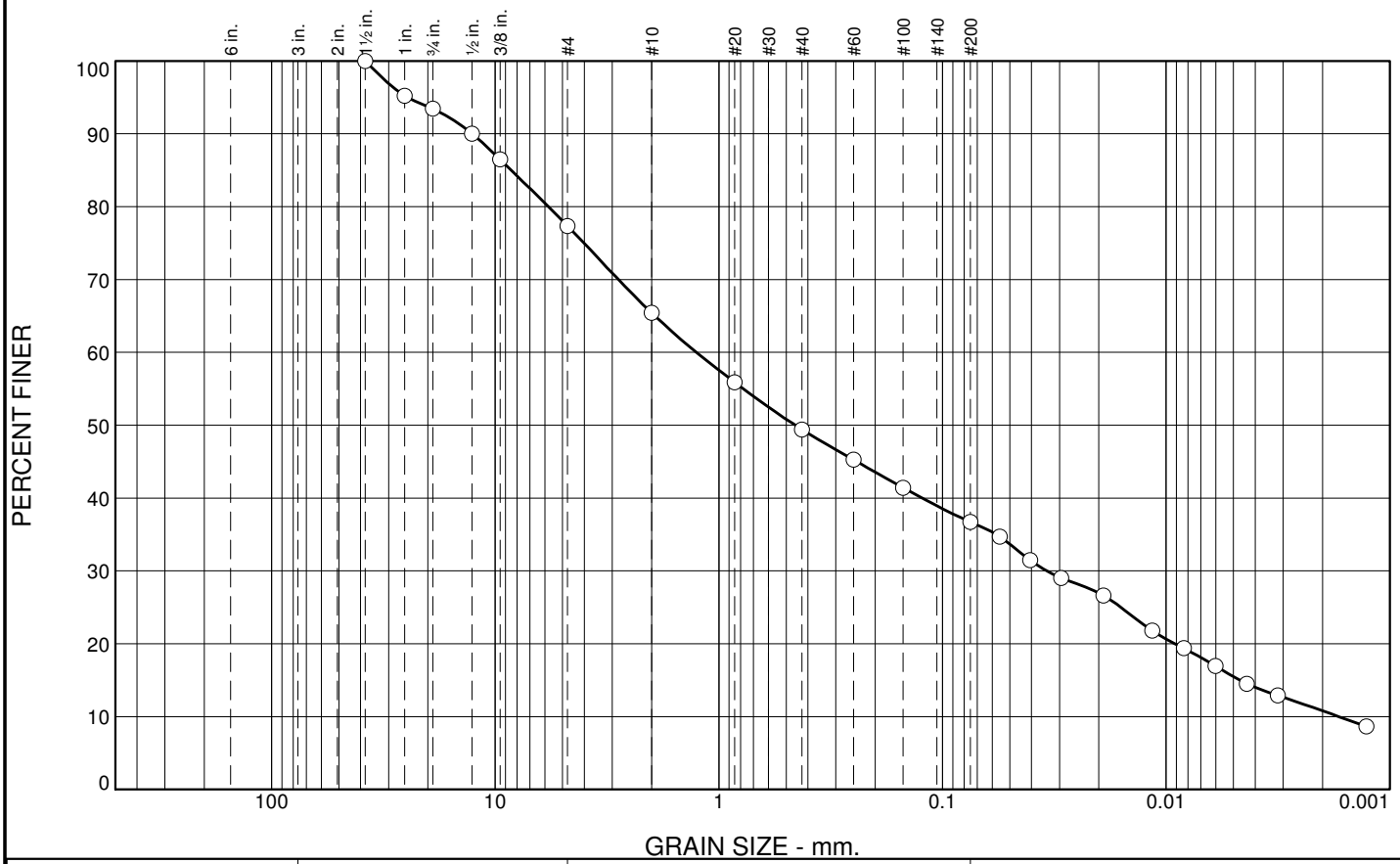
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.6	16.1	11.9	16.0	12.7	25.9	10.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	95.2		
.75	93.4		
.5	90.0		
.375	86.5		
#4	77.3		
#10	65.4		
#20	55.9		
#40	49.4		
#60	45.3		
#100	41.4		
#200	36.7		
0.0554 mm.	34.7		
0.0406 mm.	31.5		
0.0295 mm.	29.0		
0.0191 mm.	26.6		
0.0116 mm.	21.8		
0.0083 mm.	19.4		
0.0060 mm.	17.0		
0.0044 mm.	14.5		
0.0032 mm.	12.9		
0.0013 mm.	8.7		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 12.7006 D_{85}= 8.4972 D_{60}= 1.2602
D_{50}= 0.4554 D_{30}= 0.0342 D_{15}= 0.0047
D_{10}= 0.0017 C_u= 746.58 C_c= 0.55

Classification

USCS= AASHTO=

Remarks

Sample No.: 31 **Source of Sample:** **Date:** 12/05/12
Location: GT12-45 **Elev./Depth:** 81-81.2m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

PARTICLE-SIZE ANALYSIS REPORT

(Test Reference: ASTM D 422)

Sieve Analysis	Sieve	Diameter (mm)	% Finer
	3"	76.2	100
	2"	50.8	100
	1"	25.4	86
	3/4"	19.1	86
	3/8"	9.5	80
	# 4	4.75	72
	# 10	2.00	58
	# 20	0.850	51
	# 40	0.425	47
	# 60	0.250	44
	# 100	0.150	41
	# 200	0.075	37

Hydrometer Analysis		
	0.0642	34.8
	0.0464	31.6
Dispersing agent:	0.0333	29.2
Sodium Hexametaphosphate	0.0238	27.0
	0.0161	24.5
Dosage of dispersing agent:	0.0126	22.2
40 g/L	0.0091	18.8
	0.0065	15.6
	0.0046	13.5
	0.0033	11.5
	0.0028	10.7
	0.0015	8.4

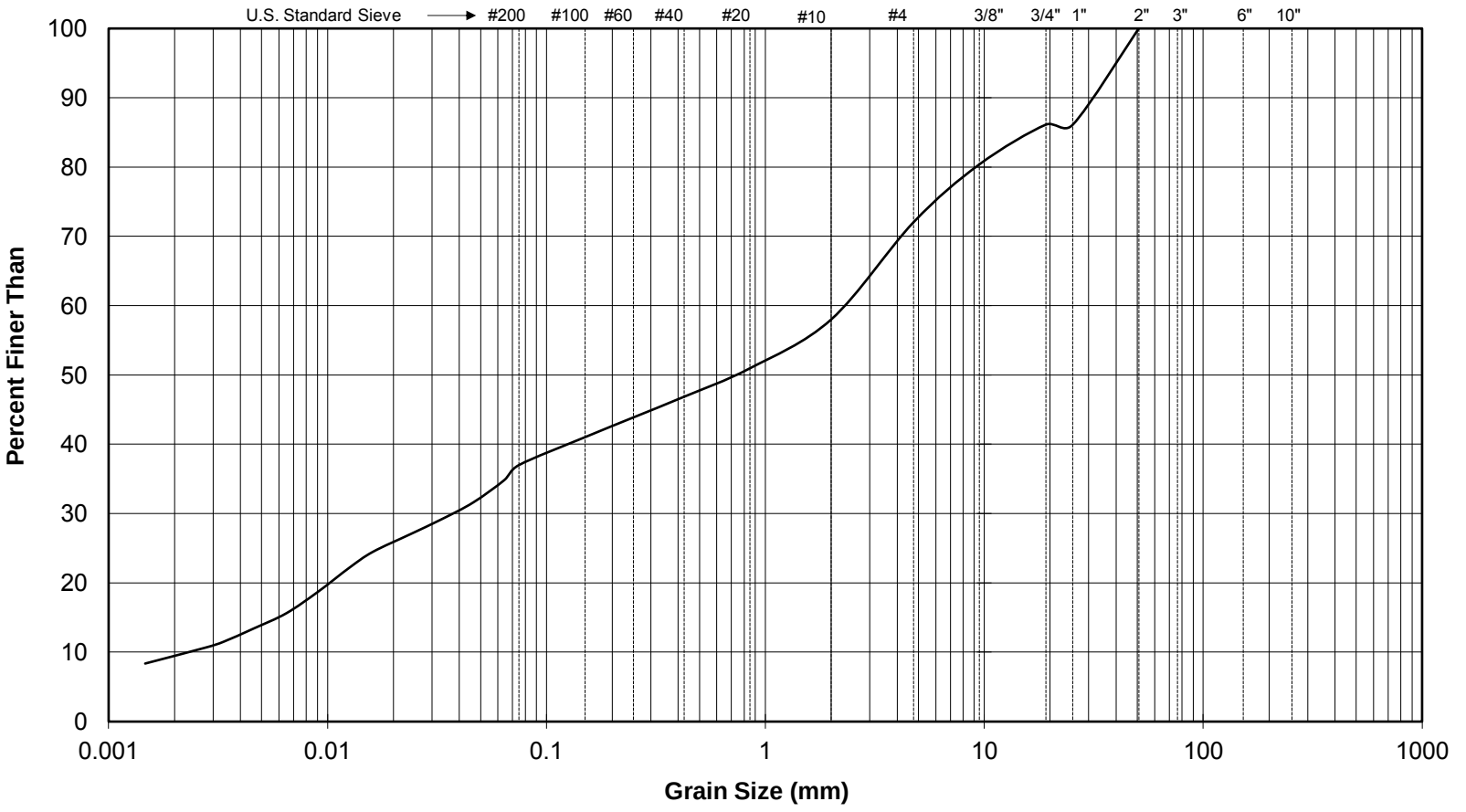
MDH ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

CLIENT:	Knight Piesold
PROJECT:	Blackwater
MDH Job No:	611748
SAMPLE:	GT12-45
DATE:	11-Dec-12

PARTICLE SIZE DISTRIBUTION SUMMARY

% GRAVEL	28
% SAND	35
% FINES (SILT, CLAY)	37

COMMENTS:



FINES (SILT, CLAY)	SAND			GRAVEL		COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse		

Unified Soil Classification System

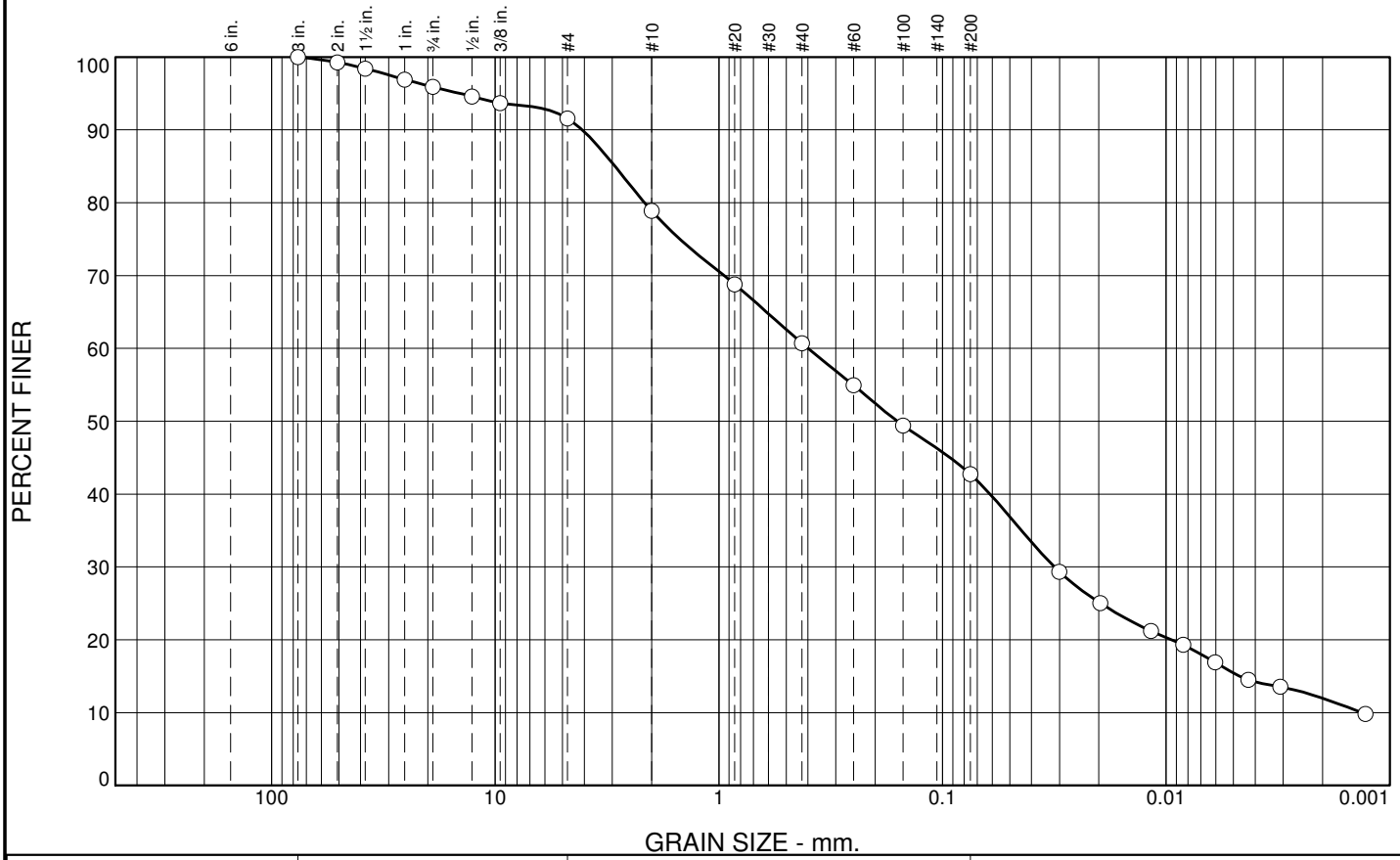
The testing services reported here have been performed in accordance with accepted local industry standards.

The results presented are for the sole use of the designated client only.

This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.1	4.4	12.6	18.2	18.0	30.7	12.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	99.2		
1.5	98.4		
1	96.9		
.75	95.9		
.5	94.6		
.375	93.7		
#4	91.5		
#10	78.9		
#20	68.8		
#40	60.7		
#60	54.9		
#100	49.4		
#200	42.7		
0.0301 mm.	29.3		
0.0197 mm.	25.0		
0.0117 mm.	21.2		
0.0084 mm.	19.3		
0.0060 mm.	16.9		
0.0043 mm.	14.5		
0.0031 mm.	13.5		
0.0013 mm.	9.8		

* (no specification provided)

Soil Description

clayey SAND

Atterberg Limits

PL= 13 LL= 23 PI= 10

Coefficients

D_{90}= 4.0908 D_{85}= 2.9143 D_{60}= 0.3989
D_{50}= 0.1591 D_{30}= 0.0316 D_{15}= 0.0047
D_{10}= 0.0013 C_u= 300.10 C_c= 1.88

Classification

USCS= SC AASHTO= A-4(1)

Remarks

Sample No.: 1, 2, 3 **Source of Sample:** **Date:** 11/19/12
Location: GT12-46 **Elev./Depth:** 10.67-35.05

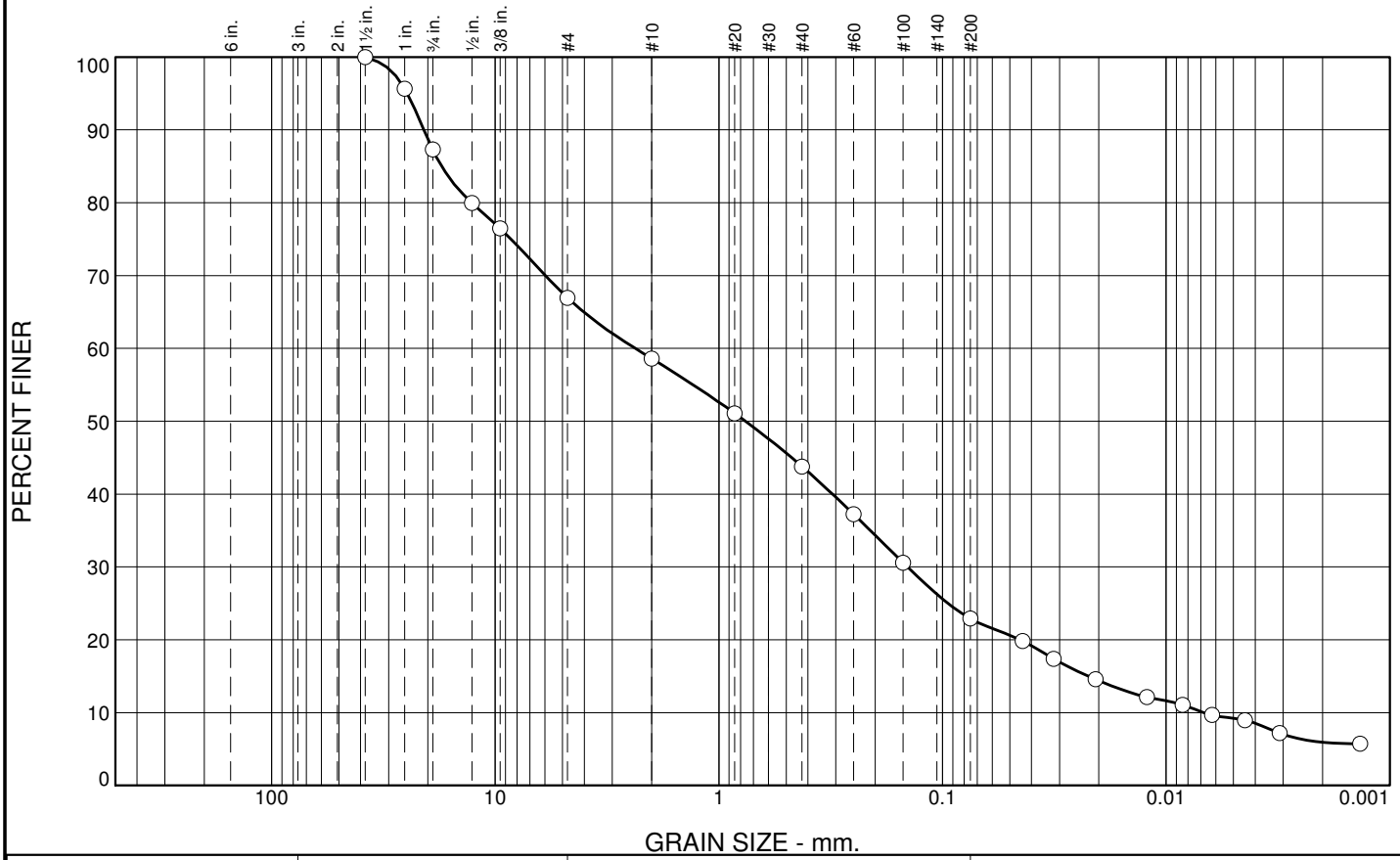
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.7	20.4	8.3	14.8	20.9	17.0	5.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	95.6		
.75	87.3		
.5	79.9		
.375	76.5		
#4	66.9		
#10	58.6		
#20	51.1		
#40	43.8		
#60	37.3		
#100	30.6		
#200	22.9		
0.0439 mm.	19.8		
0.0318 mm.	17.4		
0.0207 mm.	14.6		
0.0122 mm.	12.1		
0.0084 mm.	11.1		
0.0062 mm.	9.7		
0.0044 mm.	9.0		
0.0031 mm.	7.2		
0.0014 mm.	5.7		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 20.8846 D_{85}= 17.3624 D_{60}= 2.3630
D_{50}= 0.7598 D_{30}= 0.1434 D_{15}= 0.0222
D_{10}= 0.0068 C_u= 348.70 C_c= 1.28

Classification

USCS= AASHTO=

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 12/05/12
Location: GT12-46 **Elev./Depth:** 6.66-6.87m

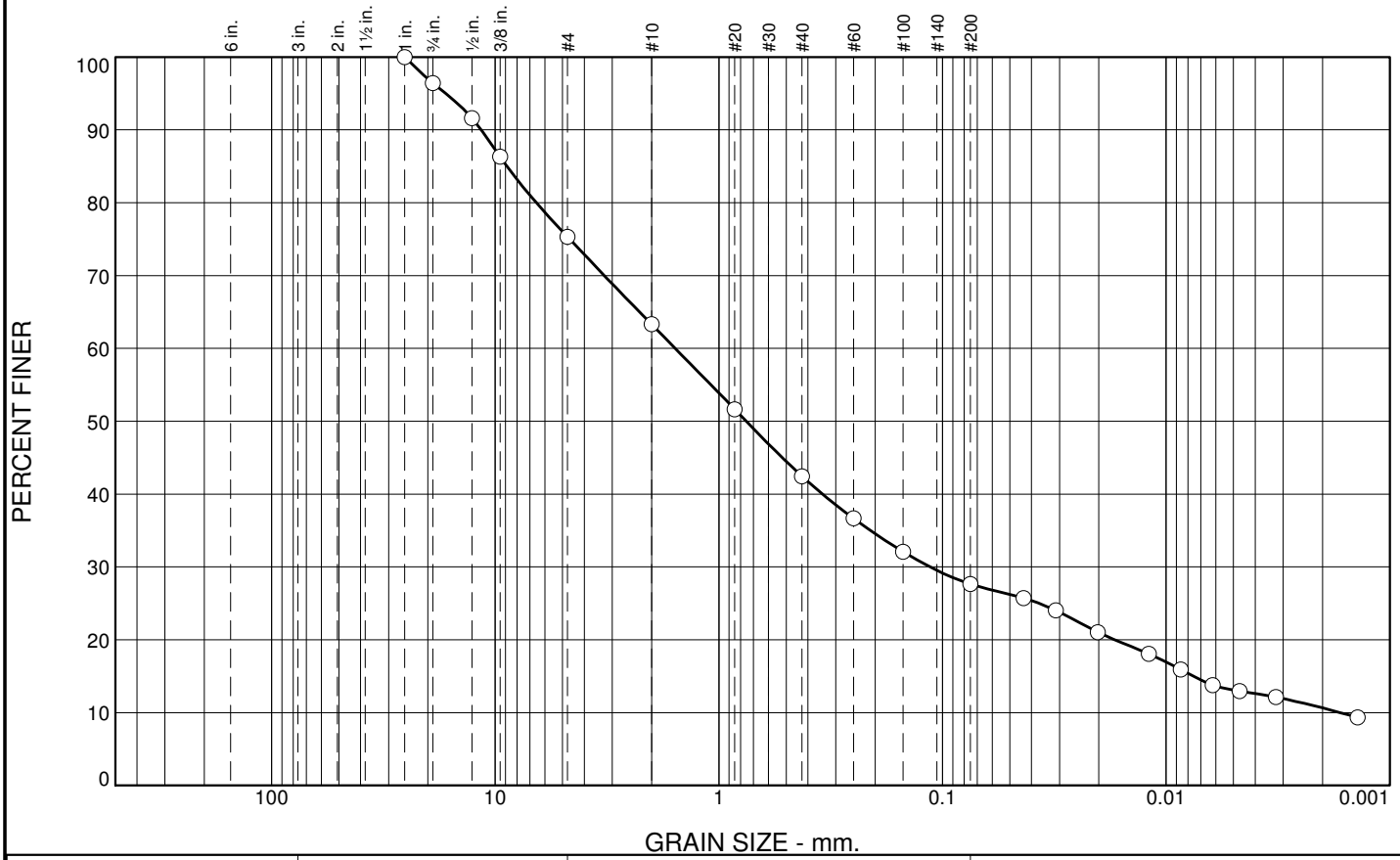
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.6	21.1	12.0	20.9	14.8	17.0	10.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	96.4		
.5	91.6		
.375	86.3		
#4	75.3		
#10	63.3		
#20	51.7		
#40	42.4		
#60	36.7		
#100	32.1		
#200	27.6		
0.0434 mm.	25.7		
0.0312 mm.	24.0		
0.0202 mm.	21.0		
0.0120 mm.	18.1		
0.0086 mm.	15.9		
0.0062 mm.	13.8		
0.0047 mm.	13.0		
0.0032 mm.	12.1		
0.0014 mm.	9.3		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 11.5680 D_{85}= 8.8712 D_{60}= 1.5690
D_{50}= 0.7539 D_{30}= 0.1137 D_{15}= 0.0076
D_{10}= 0.0017 C_u= 941.12 C_c= 4.94

Classification

USCS= AASHTO=

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 12/05/12
Location: GT12-46 **Elev./Depth:** 12.8-13m

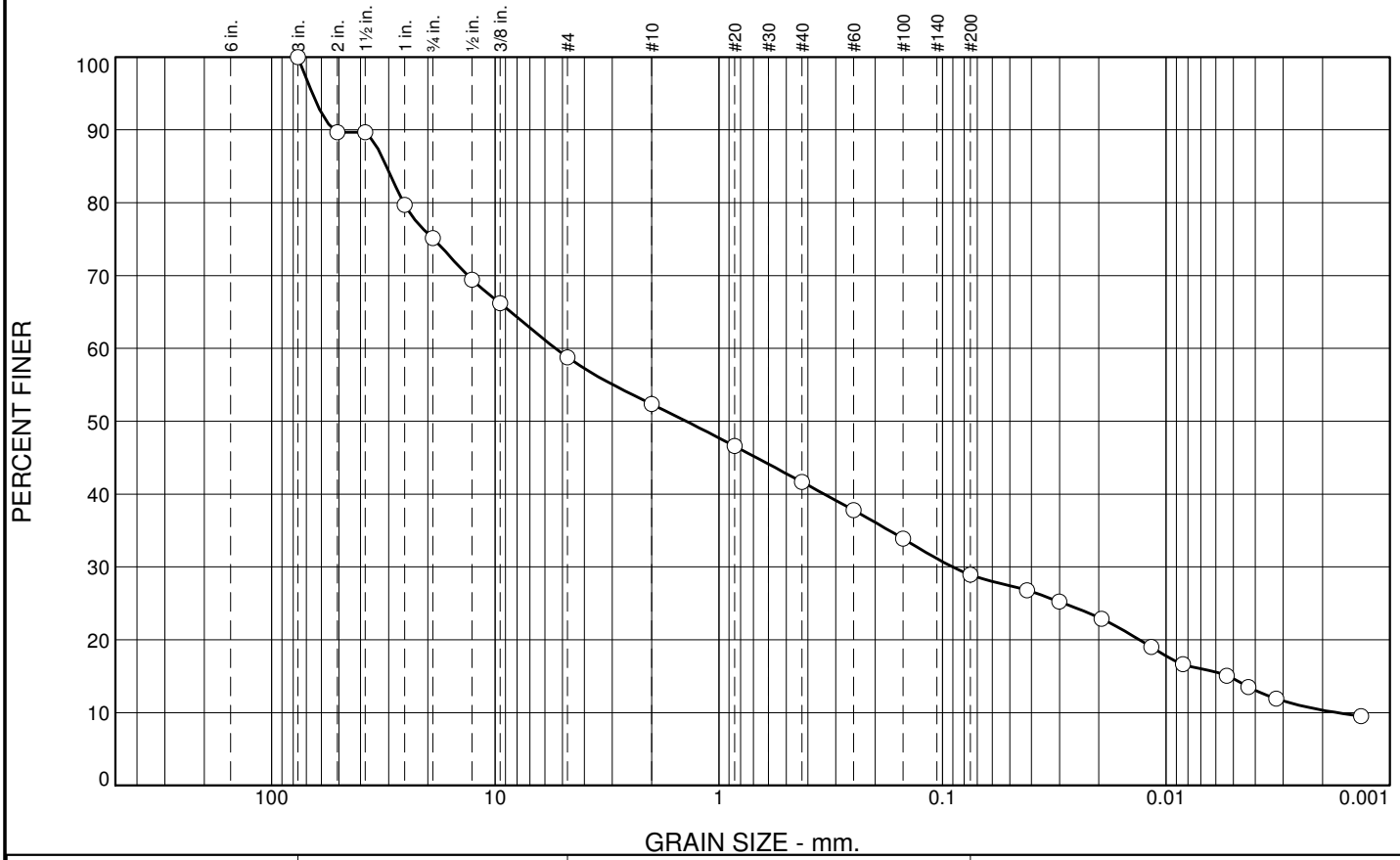
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	24.9	16.3	6.4	10.8	12.7	18.6	10.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	89.7		
1.5	89.7		
1	79.7		
.75	75.1		
.5	69.4		
.375	66.2		
#4	58.8		
#10	52.4		
#20	46.6		
#40	41.6		
#60	37.8		
#100	33.9		
#200	28.9		
0.0419 mm.	26.8		
0.0301 mm.	25.2		
0.0195 mm.	22.9		
0.0116 mm.	19.0		
0.0084 mm.	16.7		
0.0054 mm.	15.1		
0.0043 mm.	13.5		
0.0032 mm.	11.9		
0.0013 mm.	9.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 52.8241 D_{85}= 30.6575 D_{60}= 5.3783
D_{50}= 1.3995 D_{30}= 0.0901 D_{15}= 0.0053
D_{10}= 0.0017 C_u= 3126.87 C_c= 0.88

Classification

USCS= AASHTO=

Remarks

Sample No.: 10 **Source of Sample:** **Date:** 12/05/12
Location: GT12-46 **Elev./Depth:** 28.2-28.45m

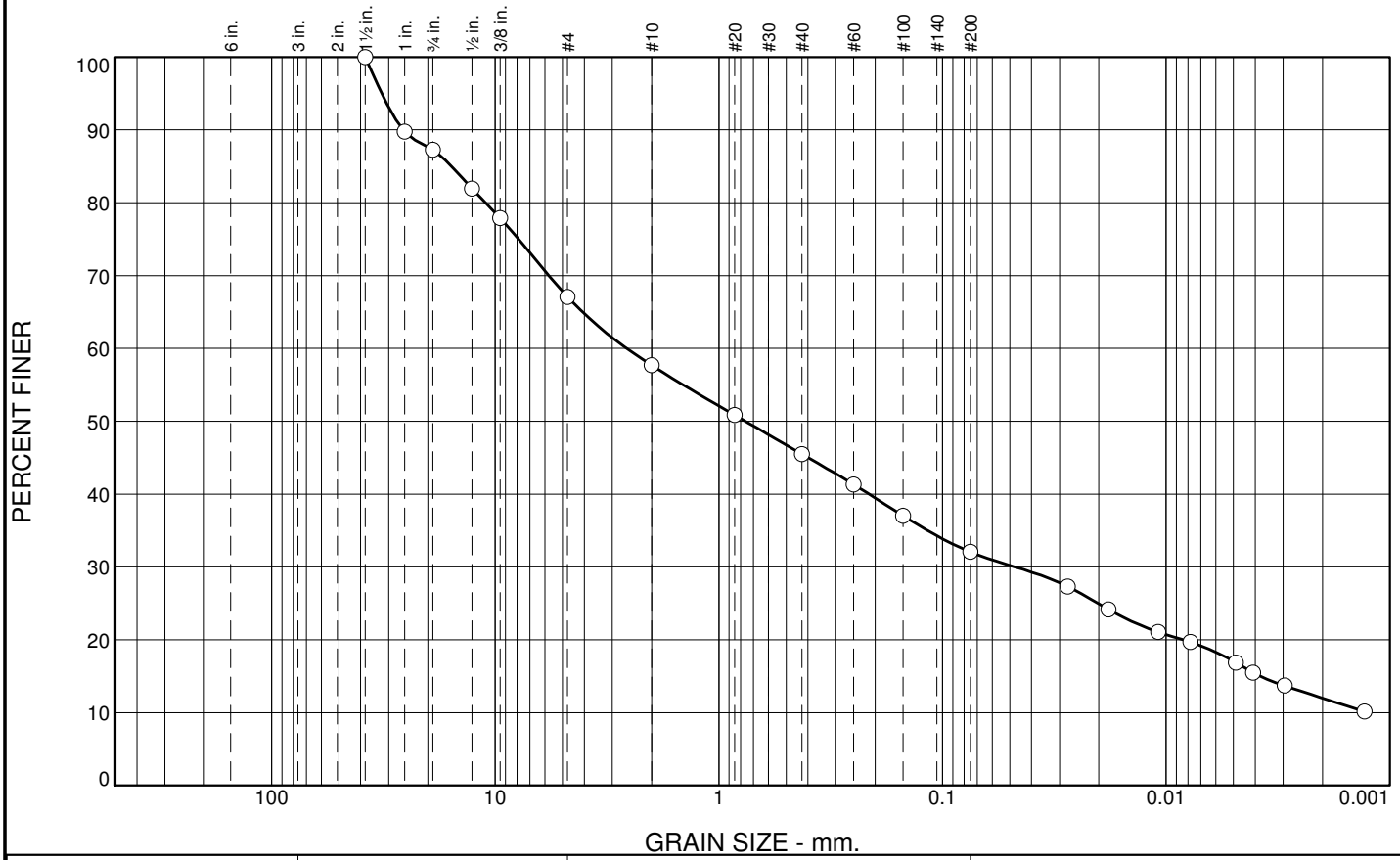
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.7	20.2	9.4	12.2	13.4	20.1	12.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	89.8		
.75	87.3		
.5	81.9		
.375	77.9		
#4	67.1		
#10	57.7		
#20	50.9		
#40	45.5		
#60	41.3		
#100	37.0		
#200	32.1		
0.0275 mm.	27.3		
0.0181 mm.	24.2		
0.0109 mm.	21.1		
0.0078 mm.	19.7		
0.0049 mm.	16.9		
0.0041 mm.	15.5		
0.0030 mm.	13.7		
0.0013 mm.	10.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 25.7959 D_{85}= 15.6894 D_{60}= 2.5833
D_{50}= 0.7613 D_{30}= 0.0474 D_{15}= 0.0038
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 16 **Source of Sample:** **Date:** 12/05/12
Location: GT12-46 **Elev./Depth:** 46.3-46.5m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: mf **Checked By:** rsh

PARTICLE-SIZE ANALYSIS REPORT

(Test Reference: ASTM D 422)

Sieve Analysis	Sieve	Diameter (mm)	% Finer
	3"	76.2	100
	2"	50.8	100
	1"	25.4	100
	3/4"	19.1	100
	3/8"	9.5	93
	# 4	4.75	86
	# 10	2.00	76
	# 20	0.850	65
	# 40	0.425	57
	# 60	0.250	52
	# 100	0.150	48
	# 200	0.075	43

Hydrometer Analysis		
	0.0640	39.3
	0.0459	36.1
Dispersing agent:	0.0328	33.8
Sodium Hexametaphosphate	0.0234	31.8
	0.0158	29.1
Dosage of dispersing agent:	0.0120	27.2
40 g/L	0.0089	24.5
	0.0064	22.4
	0.0045	19.7
	0.0032	18.3
	0.0027	16.1
	0.0014	13.7

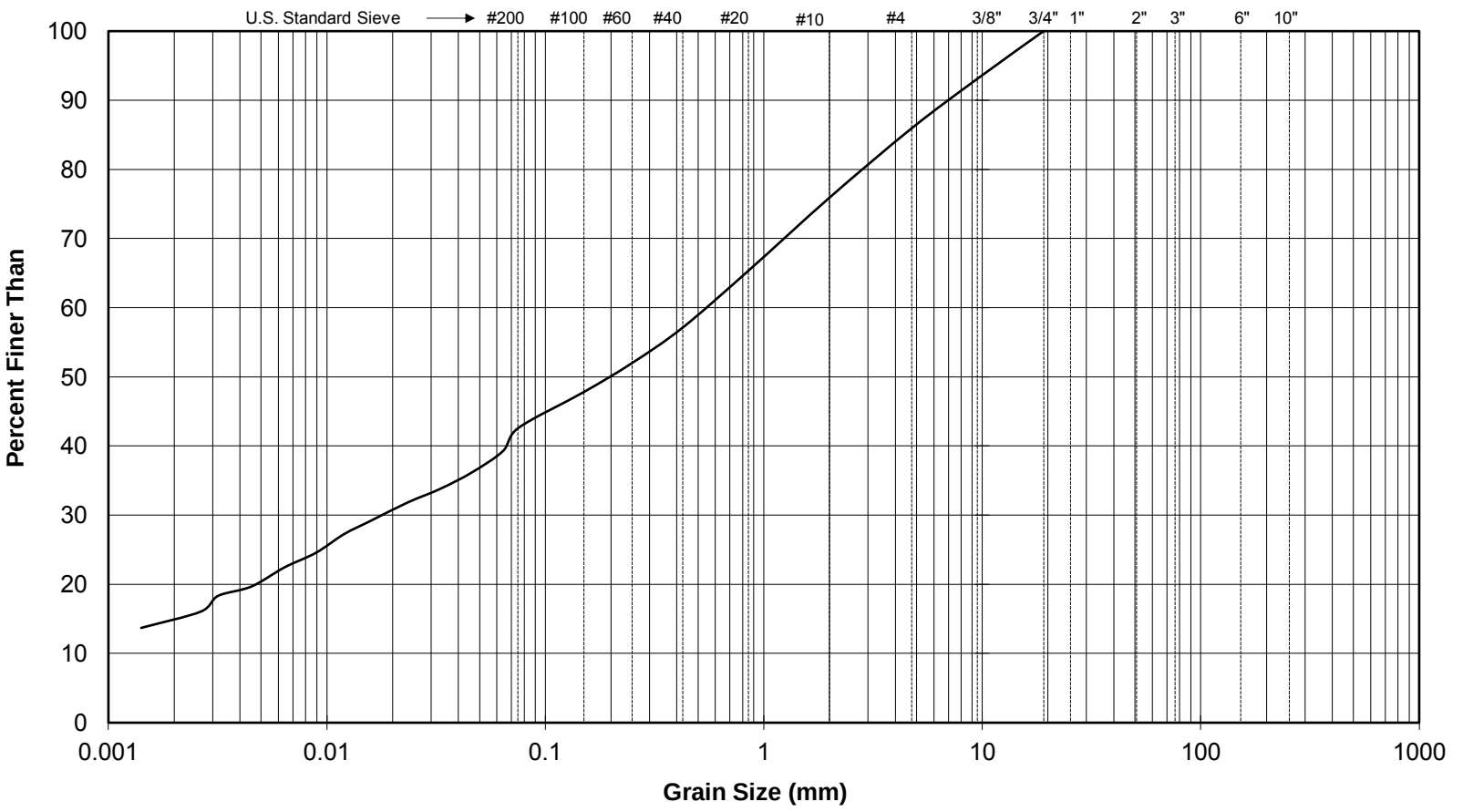
MDH ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

CLIENT:	Knight Piesold
PROJECT:	Blackwater
MDH Job No:	611748
SAMPLE:	GT12-46
DATE:	11-Dec-12

PARTICLE SIZE DISTRIBUTION SUMMARY

% GRAVEL	14
% SAND	43
% FINES (SILT, CLAY)	43

COMMENTS:



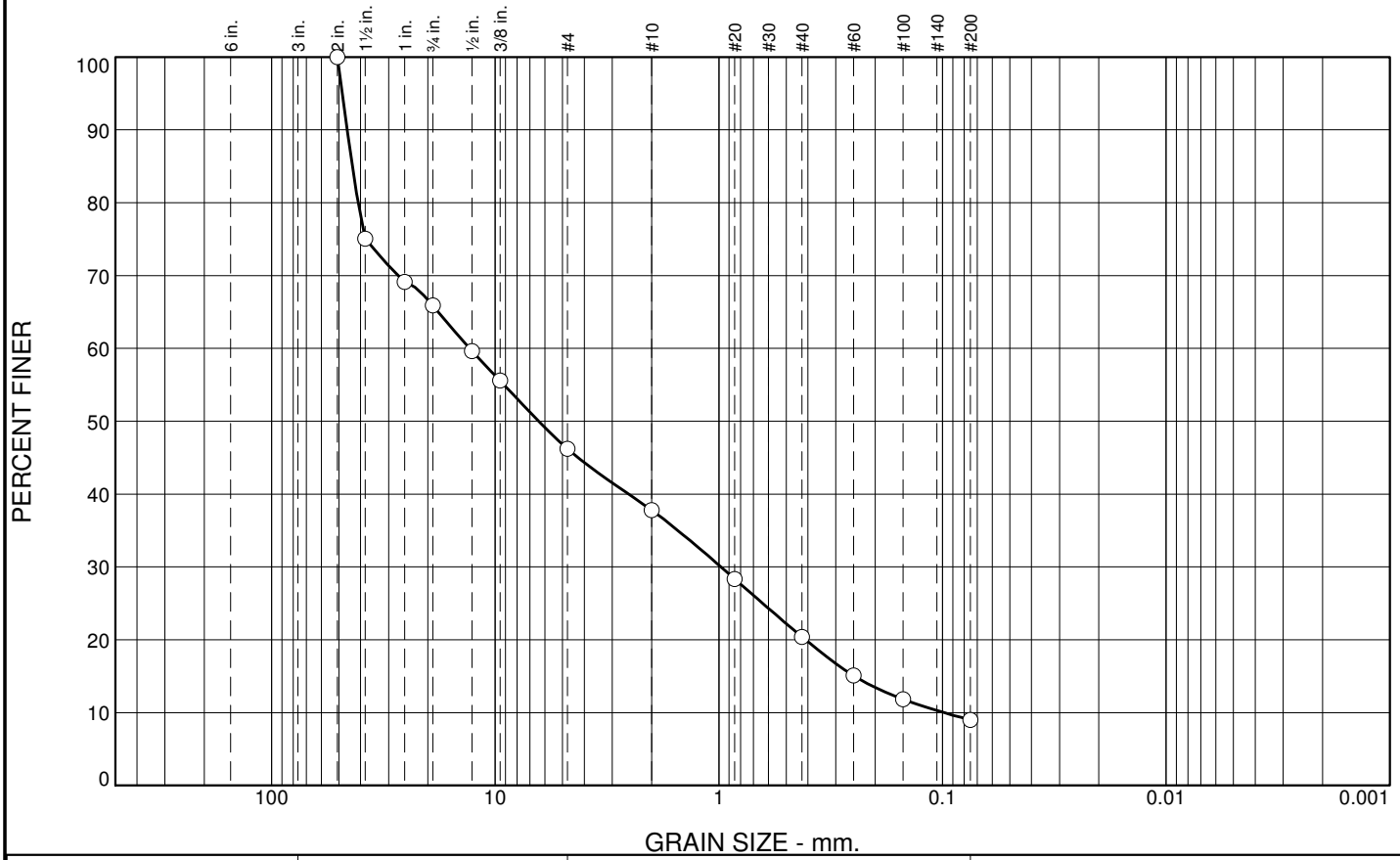
The testing services reported here have been performed in accordance with accepted local industry standards.

The results presented are for the sole use of the designated client only.

This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	34.1	19.7	8.4	17.4	11.4	9.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	75.1		
1	69.1		
.75	65.9		
.5	59.6		
.375	55.6		
#4	46.2		
#10	37.8		
#20	28.4		
#40	20.4		
#60	15.1		
#100	11.8		
#200	9.0		

* (no specification provided)

Soil Description

poorly graded GRAVEL with silt and sand

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 46.0063 D_{85}= 43.6083 D_{60}= 13.0332
D_{50}= 6.3925 D_{30}= 0.9790 D_{15}= 0.2471
D_{10}= 0.0984 C_u= 132.46 C_c= 0.75

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Sample No.: 1 **Source of Sample:** **Date:** 11/27/12
Location: GT12-47 **Elev./Depth:** 0m

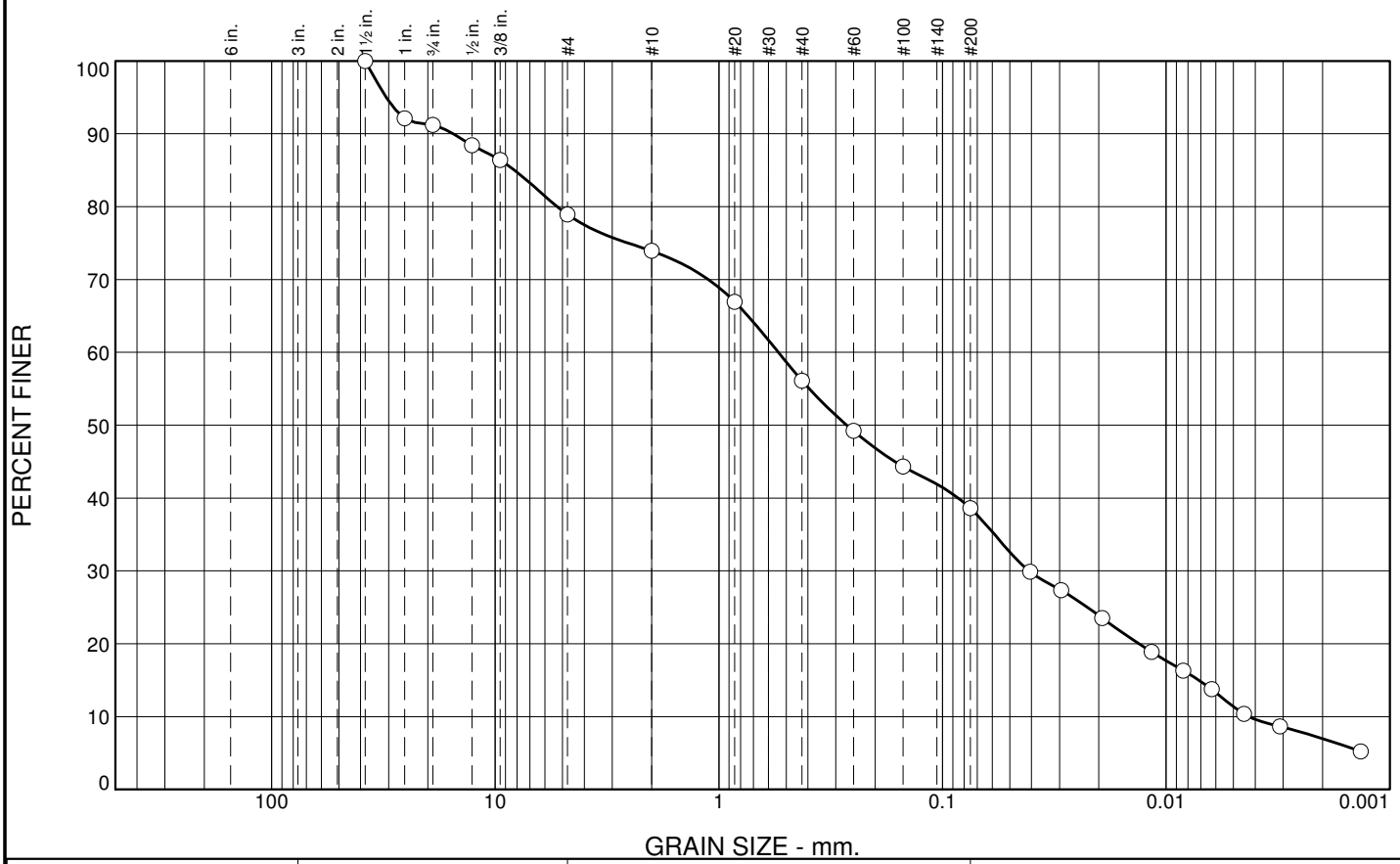
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.8	12.3	5.0	17.8	17.5	31.6	7.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	92.1		
.75	91.2		
.5	88.4		
.375	86.4		
#4	78.9		
#10	73.9		
#20	66.9		
#40	56.1		
#60	49.2		
#100	44.3		
#200	38.6		
0.0406 mm.	29.9		
0.0295 mm.	27.3		
0.0193 mm.	23.5		
0.0116 mm.	18.9		
0.0084 mm.	16.3		
0.0063 mm.	13.8		
0.0045 mm.	10.4		
0.0031 mm.	8.7		
0.0013 mm.	5.2		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 22 PI= 9

Coefficients

D_{90}= 15.4349 D_{85}= 8.2083 D_{60}= 0.5424
D_{50}= 0.2677 D_{30}= 0.0411 D_{15}= 0.0071
D_{10}= 0.0043 C_u= 127.35 C_c= 0.73

Classification

USCS= SC AASHTO= A-4(0)

Remarks

Sample No.: 3 **Source of Sample:** **Date:** 11/27/12
Location: GT12-47 **Elev./Depth:** 6.83-7.05m

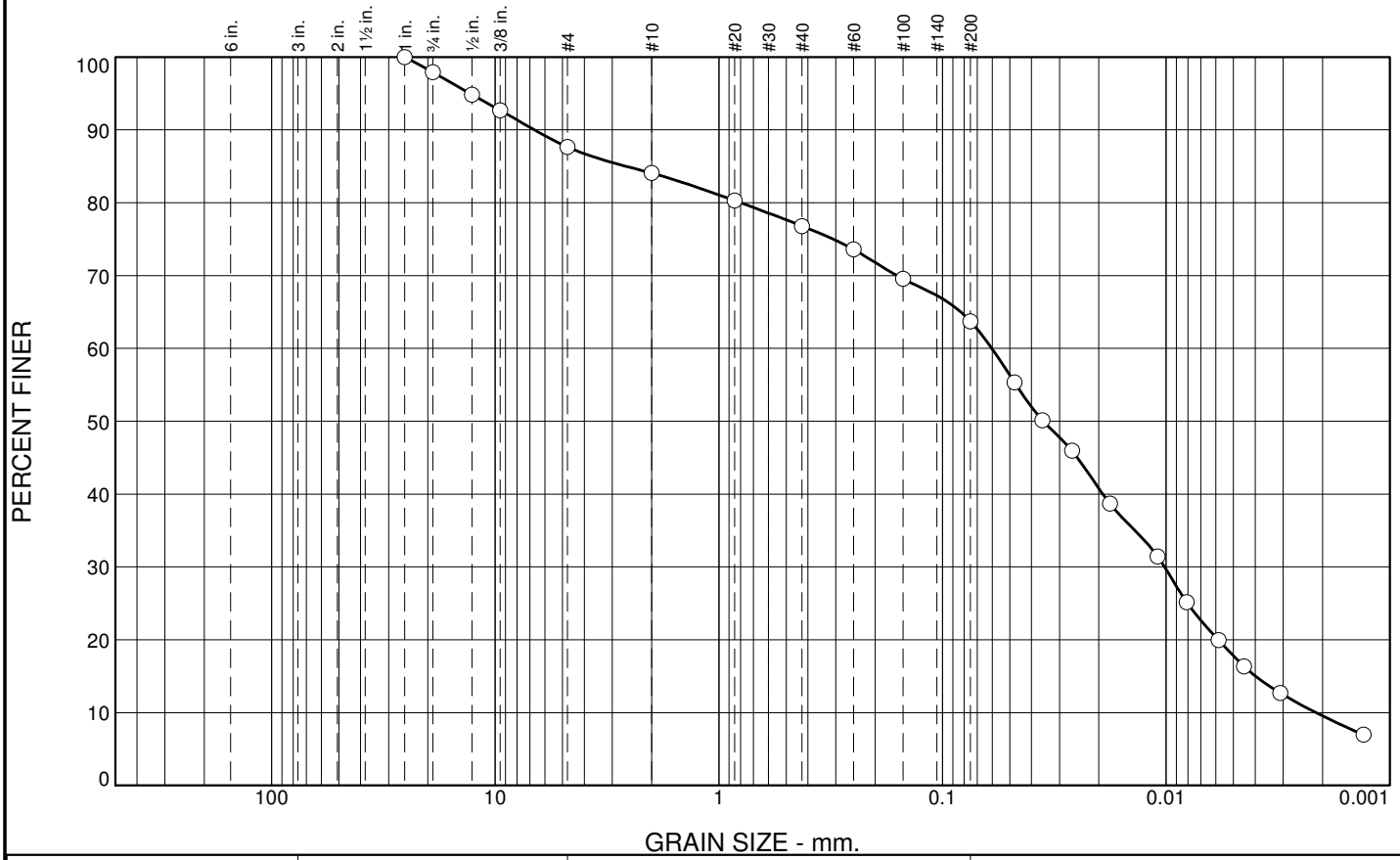
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: MF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.1	10.2	3.6	7.3	13.1	54.1	9.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	97.9		
.5	94.8		
.375	92.7		
#4	87.7		
#10	84.1		
#20	80.3		
#40	76.8		
#60	73.6		
#100	69.5		
#200	63.7		
0.0476 mm.	55.3		
0.0357 mm.	50.1		
0.0264 mm.	46.0		
0.0178 mm.	38.7		
0.0109 mm.	31.4		
0.0081 mm.	25.2		
0.0058 mm.	20.0		
0.0045 mm.	16.3		
0.0031 mm.	12.7		
0.0013 mm.	7.0		

* (no specification provided)

Soil Description

sandy lean CLAY

Atterberg Limits

PL= 17 LL= 29 PI= 12

Coefficients

D_{90}= 6.6956 D_{85}= 2.6011 D_{60}= 0.0603
D_{50}= 0.0355 D_{30}= 0.0102 D_{15}= 0.0040
D_{10}= 0.0021 C_u= 28.22 C_c= 0.80

Classification

USCS= CL AASHTO= A-6(5)

Remarks

Sample No.: 5 **Source of Sample:** **Date:** 11/27/12
Location: GT12-47 **Elev./Depth:** 12.9-13.1m

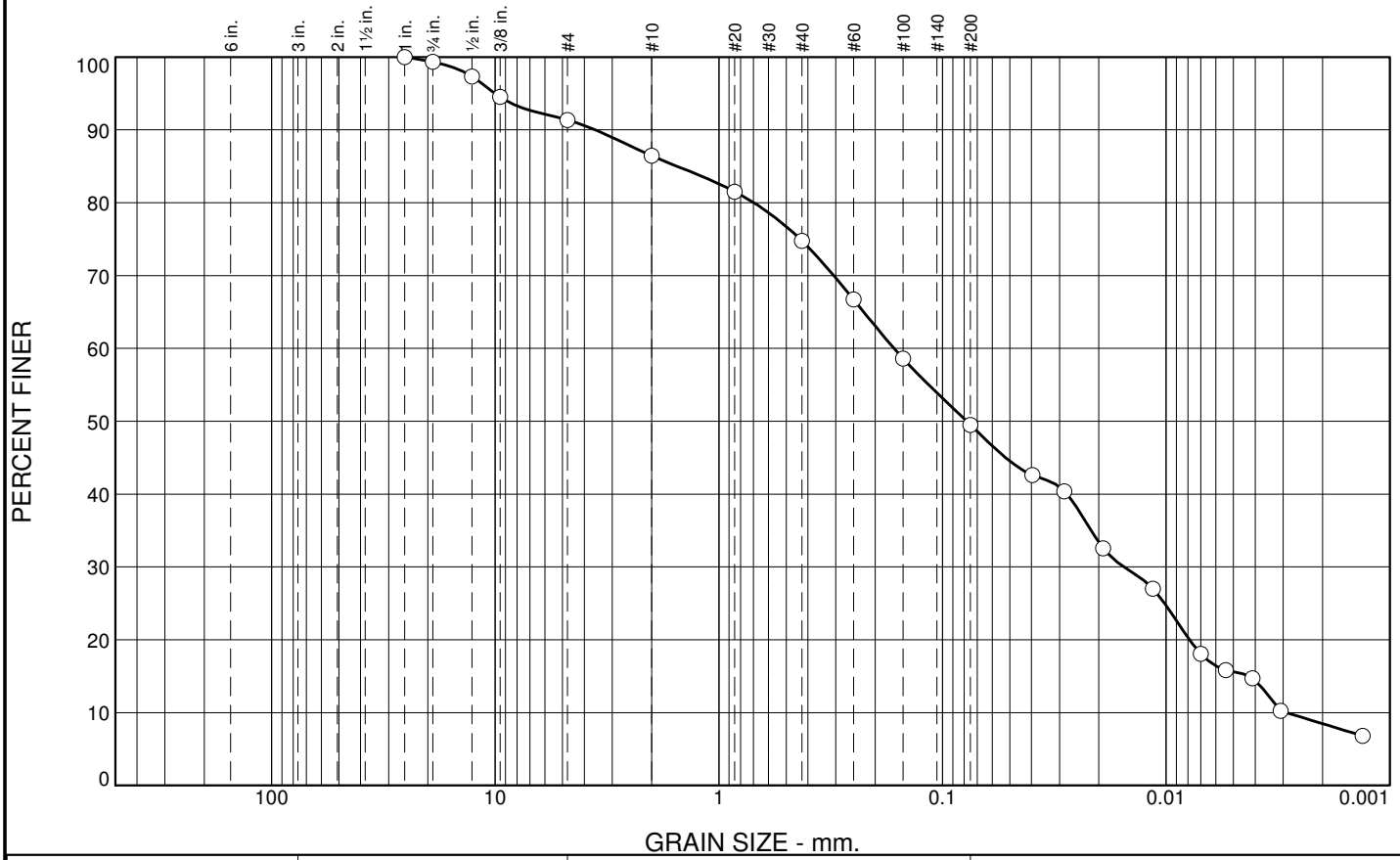
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.7	7.9	5.0	11.7	25.2	41.0	8.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
.75	99.3		
.5	97.3		
.375	94.5		
#4	91.4		
#10	86.4		
#20	81.5		
#40	74.7		
#60	66.7		
#100	58.6		
#200	49.5		
0.0396 mm.	42.6		
0.0285 mm.	40.4		
0.0191 mm.	32.6		
0.0115 mm.	27.0		
0.0070 mm.	18.1		
0.0054 mm.	15.8		
0.0041 mm.	14.7		
0.0031 mm.	10.2		
0.0013 mm.	6.8		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 3.5794 D_{85}= 1.5407 D_{60}= 0.1646
D_{50}= 0.0780 D_{30}= 0.0155 D_{15}= 0.0043
D_{10}= 0.0029 C_u= 56.77 C_c= 0.50

Classification

USCS= AASHTO=

Remarks

Sample No.: 7 **Source of Sample:** **Date:** 11/16/12
Location: GT12-47 **Elev./Depth:** 18.05-18.26m

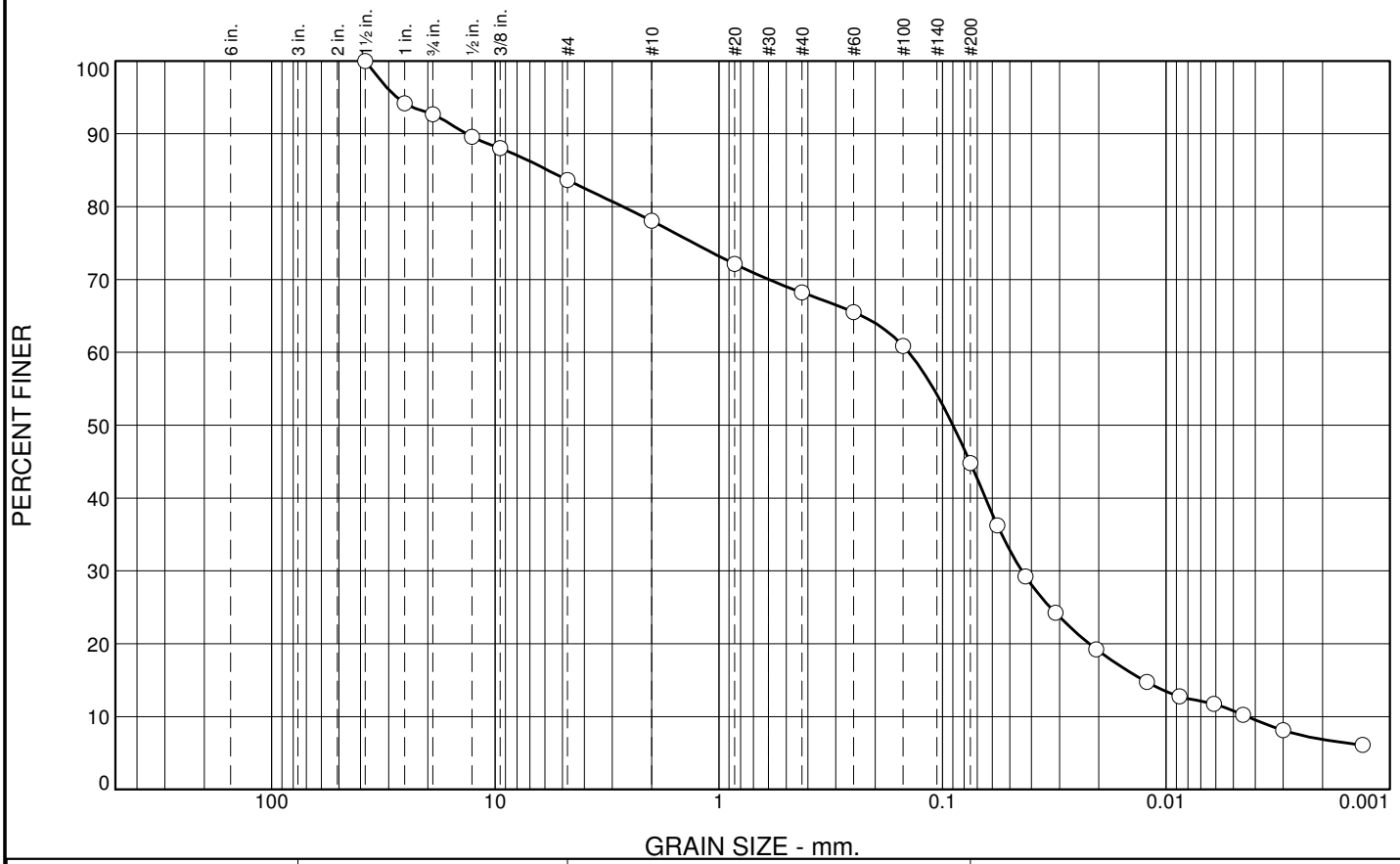
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.3	9.1	5.5	9.9	23.4	37.9	6.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	94.2		
.75	92.7		
.5	89.6		
.375	88.0		
#4	83.6		
#10	78.1		
#20	72.1		
#40	68.2		
#60	65.5		
#100	60.9		
#200	44.8		
0.0568 mm.	36.3		
0.0426 mm.	29.3		
0.0313 mm.	24.3		
0.0205 mm.	19.2		
0.0122 mm.	14.8		
0.0087 mm.	12.8		
0.0061 mm.	11.7		
0.0045 mm.	10.2		
0.0030 mm.	8.1		
0.0013 mm.	6.1		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 13.4830 D_{85}= 5.8158 D_{60}= 0.1417
D_{50}= 0.0898 D_{30}= 0.0442 D_{15}= 0.0126
D_{10}= 0.0043 C_u= 32.64 C_c= 3.17

Classification

USCS= AASHTO=

Remarks

Sample No.: 9 **Source of Sample:** **Date:** 11/16/12
Location: GT12-47 **Elev./Depth:** 23.5-23.75m

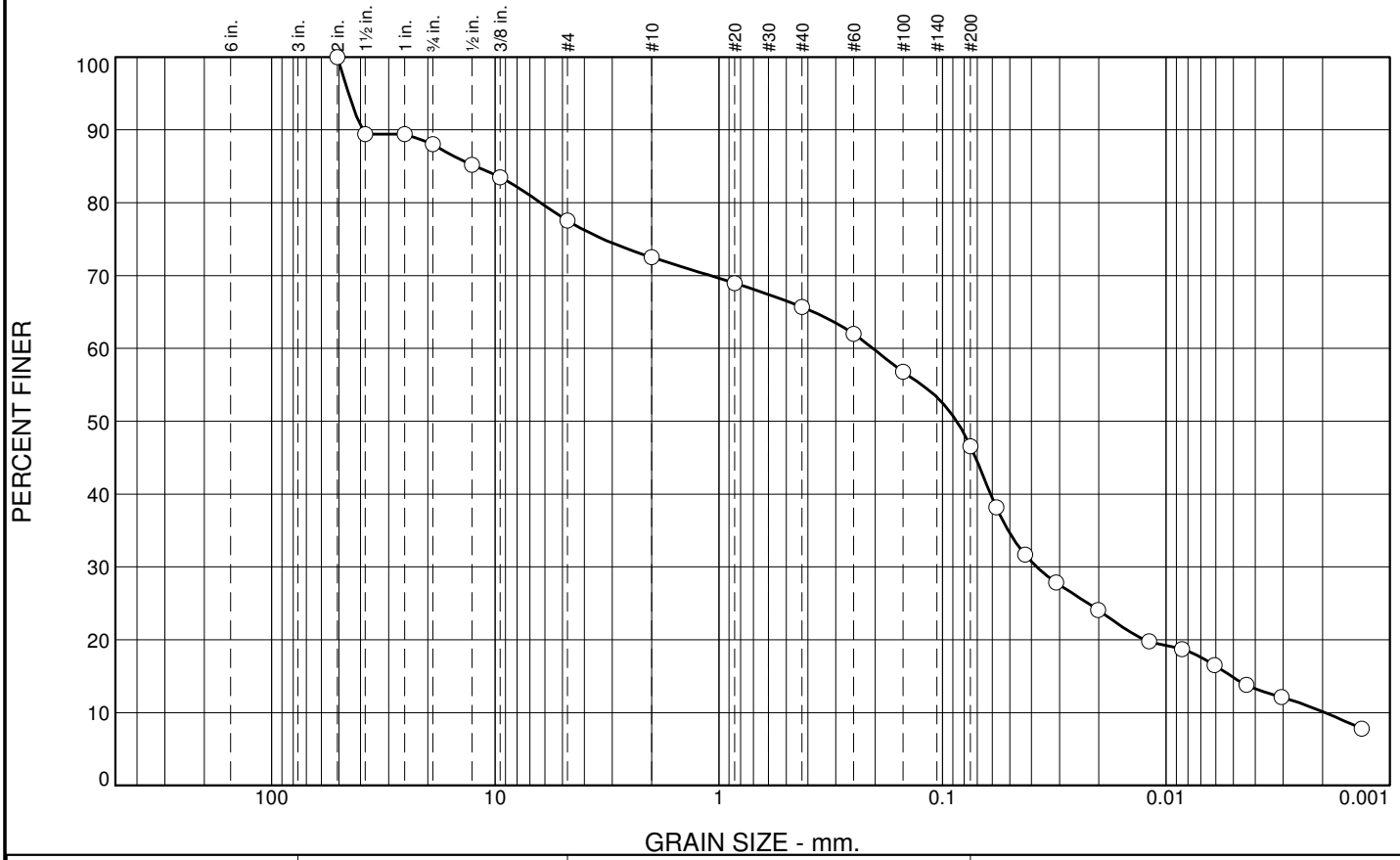
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.0	10.5	5.0	6.8	19.1	36.5	10.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	89.4		
1	89.4		
.75	88.0		
.5	85.2		
.375	83.5		
#4	77.5		
#10	72.5		
#20	69.0		
#40	65.7		
#60	62.0		
#100	56.8		
#200	46.6		
0.0575 mm.	38.2		
0.0427 mm.	31.7		
0.0311 mm.	27.9		
0.0201 mm.	24.1		
0.0119 mm.	19.8		
0.0085 mm.	18.7		
0.0061 mm.	16.5		
0.0044 mm.	13.8		
0.0030 mm.	12.1		
0.0013 mm.	7.8		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 15 LL= 25 PI= 10

Coefficients

D_{90}= 39.1753 D_{85}= 12.2943 D_{60}= 0.2047
D_{50}= 0.0864 D_{30}= 0.0379 D_{15}= 0.0051
D_{10}= 0.0020 C_u= 104.96 C_c= 3.60

Classification

USCS= SC AASHTO= A-4(2)

Remarks

Sample No.: 14 **Source of Sample:** **Date:** 11/27/12
Location: GT12-47 **Elev./Depth:** 34.33-34.53m

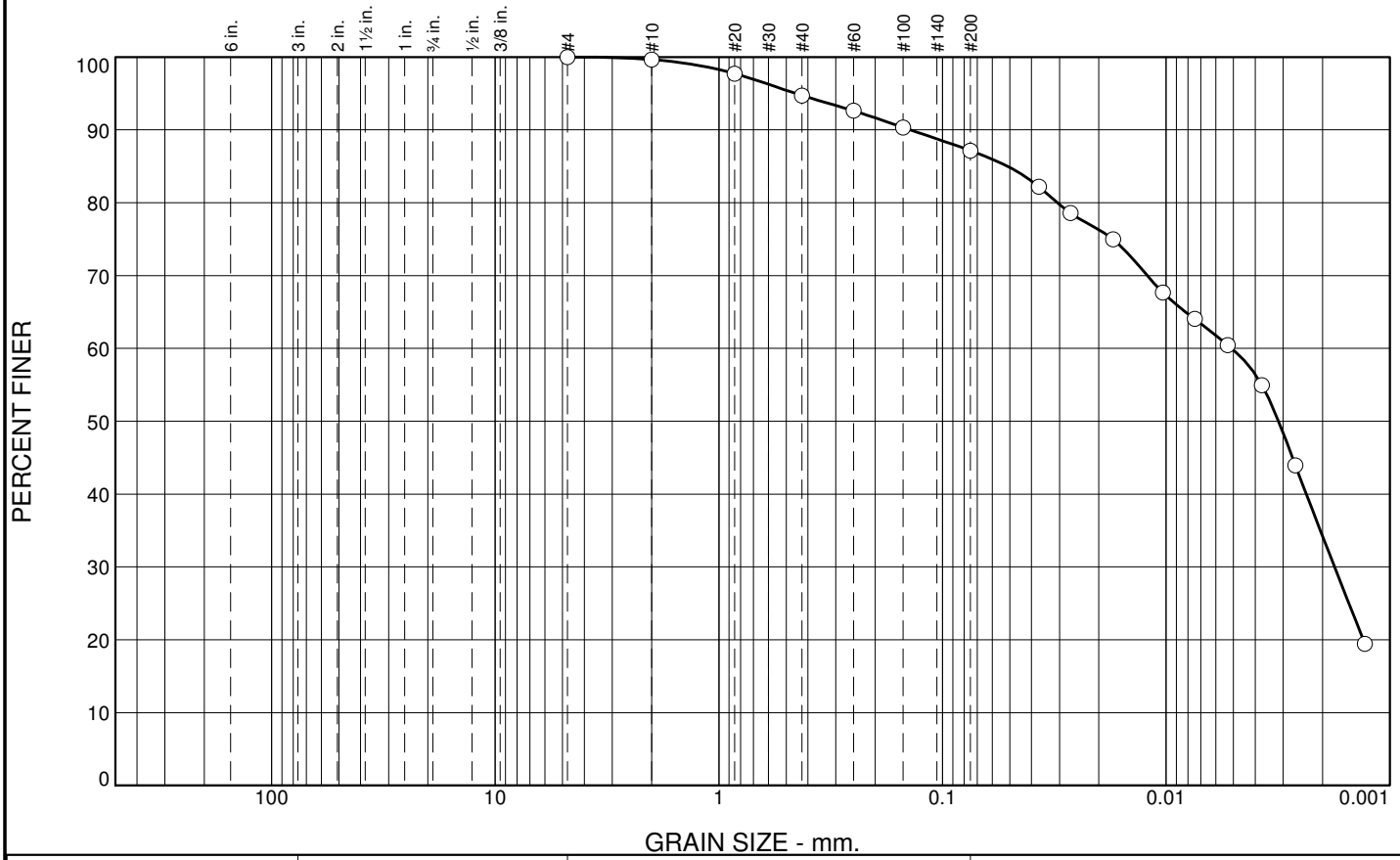
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.3	5.0	7.6	52.9	34.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.7		
#20	97.7		
#40	94.7		
#60	92.6		
#100	90.3		
#200	87.1		
0.0371 mm.	82.2		
0.0268 mm.	78.6		
0.0173 mm.	75.0		
0.0103 mm.	67.7		
0.0074 mm.	64.0		
0.0053 mm.	60.4		
0.0037 mm.	54.9		
0.0026 mm.	44.0		
0.0013 mm.	19.4		

* (no specification provided)

Soil Description

fat CLAY

Atterberg Limits

PL= 24 LL= 67 PI= 43

Coefficients

D_{90}= 0.1395 D_{85}= 0.0512 D_{60}= 0.0051
D_{50}= 0.0031 D_{30}= 0.0018 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CH AASHTO= A-7-6(41)

Remarks

Sample No.: 18 **Source of Sample:** **Date:** 11/16/12
Location: GT12-47 **Elev./Depth:** 43.3-43.5m

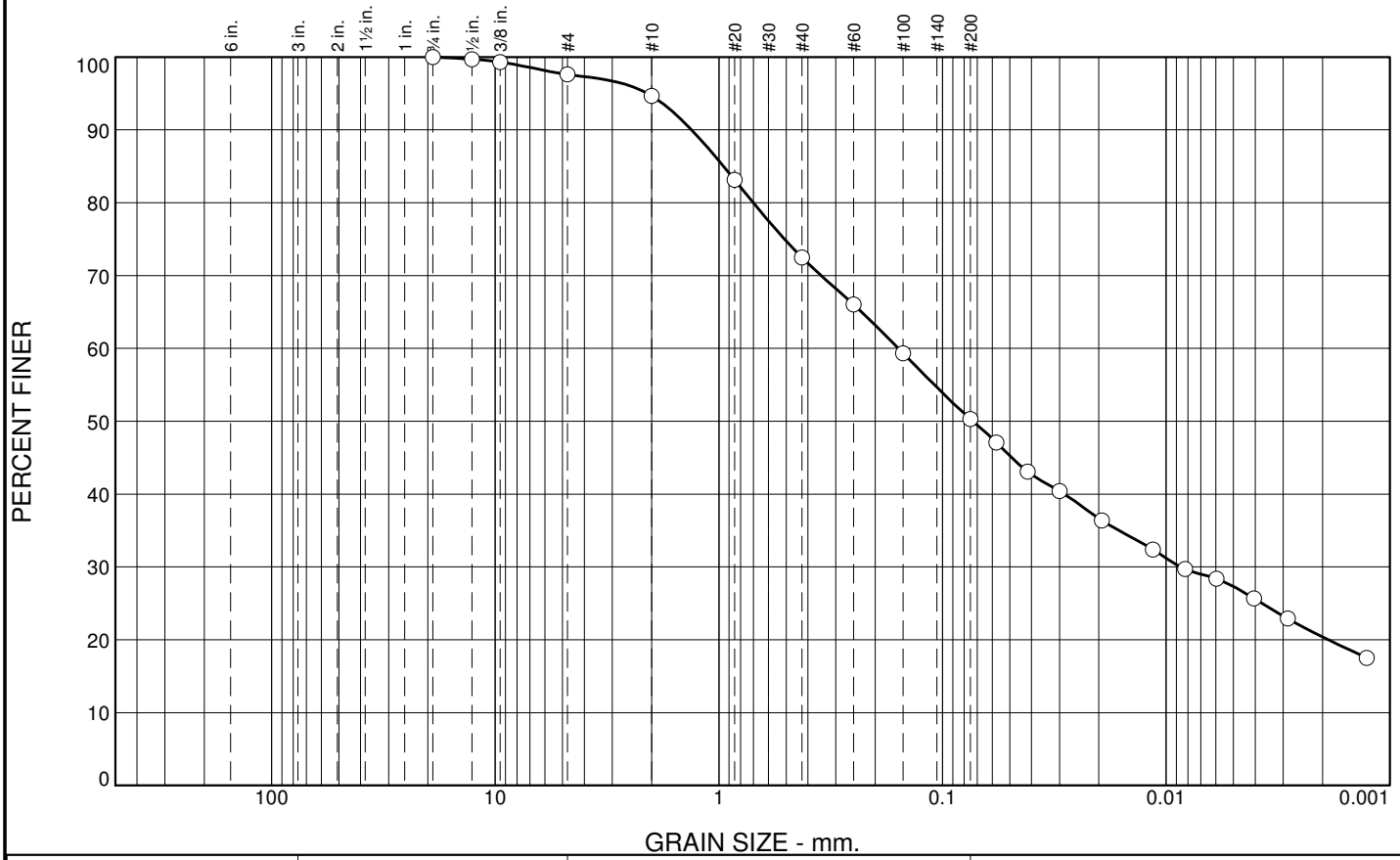
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: MF

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	2.9	22.2	22.2	29.9	20.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
.75	100.0		
.5	99.7		
.375	99.3		
#4	97.6		
#10	94.7		
#20	83.1		
#40	72.5		
#60	66.0		
#100	59.3		
#200	50.3		
0.0575 mm.	47.1		
0.0417 mm.	43.1		
0.0300 mm.	40.4		
0.0194 mm.	36.4		
0.0115 mm.	32.4		
0.0082 mm.	29.7		
0.0059 mm.	28.4		
0.0040 mm.	25.7		
0.0029 mm.	22.9		
0.0013 mm.	17.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.3258 D_{85}= 0.9542 D_{60}= 0.1576
D_{50}= 0.0732 D_{30}= 0.0086 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 22 **Source of Sample:** **Date:** 11/16/12
Location: GT12-47 **Elev./Depth:** 58.42-58.67m

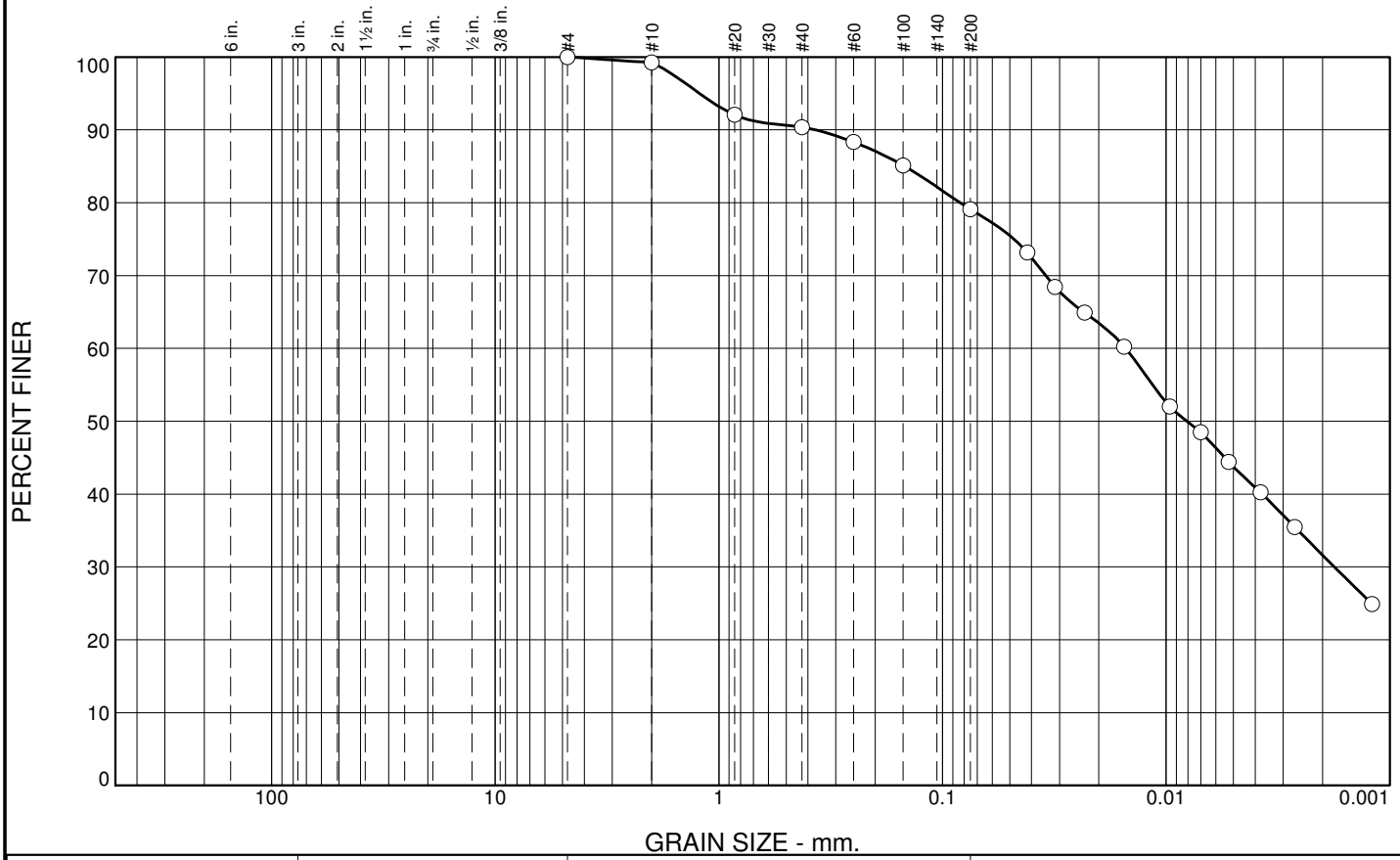
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.8	8.8	11.3	47.5	31.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.2		
#20	92.1		
#40	90.4		
#60	88.3		
#100	85.1		
#200	79.1		
0.0418 mm.	73.2		
0.0314 mm.	68.4		
0.0232 mm.	64.9		
0.0154 mm.	60.2		
0.0096 mm.	52.0		
0.0070 mm.	48.5		
0.0052 mm.	44.4		
0.0038 mm.	40.2		
0.0027 mm.	35.5		
0.0012 mm.	24.9		

* (no specification provided)

Soil Description

elastic SILT with sand

Atterberg Limits

PL= 31 LL= 57 PI= 26

Coefficients

D_{90}= 0.3714 D_{85}= 0.1479 D_{60}= 0.0152
D_{50}= 0.0081 D_{30}= 0.0018 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= MH AASHTO= A-7-5(23)

Remarks

Sample No.: 25 **Source of Sample:** **Date:** 11/16/12
Location: **Elev./Depth:** 64.8-64.97m

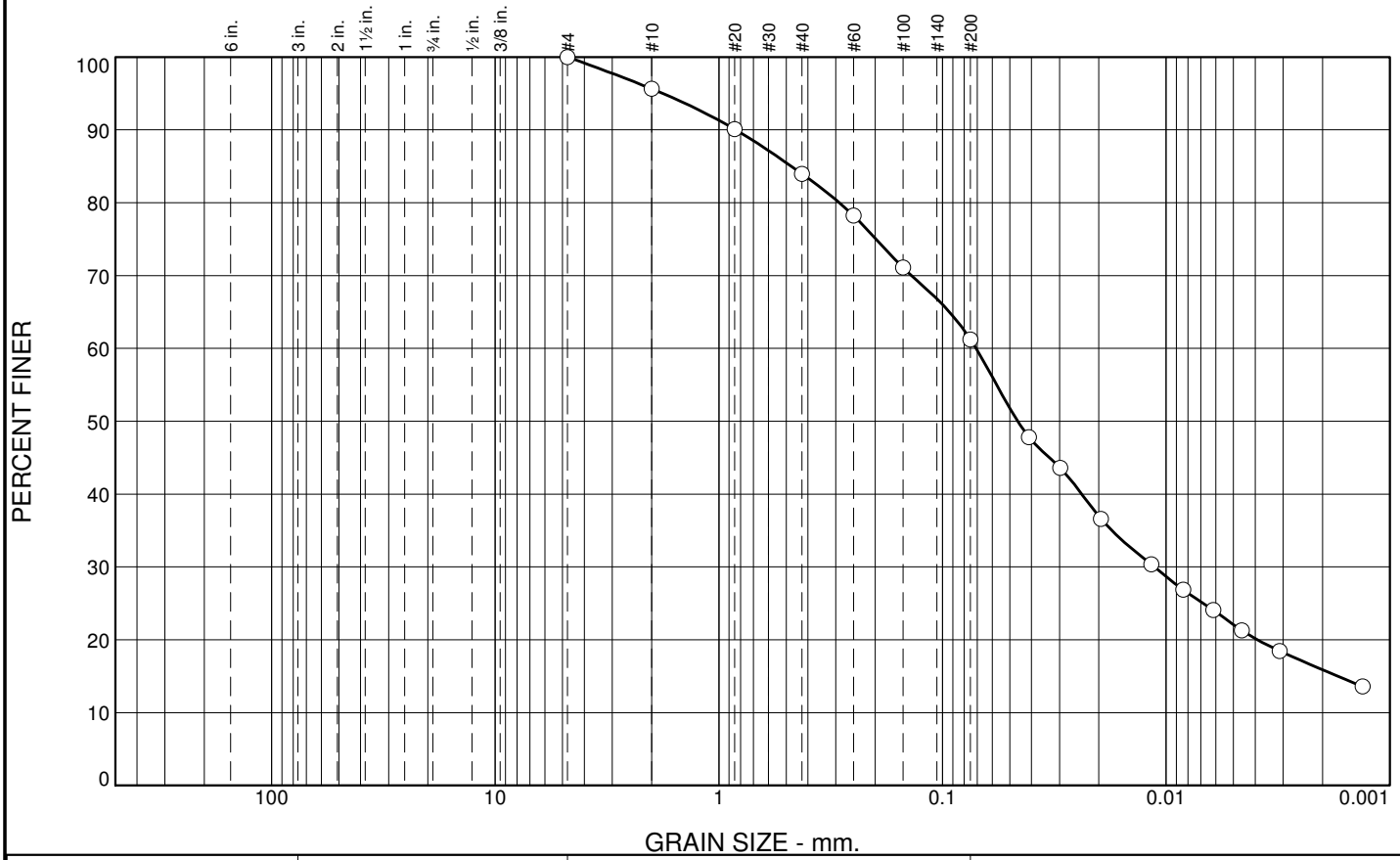
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	4.4	11.7	22.7	45.3	15.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	95.6		
#20	90.1		
#40	83.9		
#60	78.2		
#100	71.1		
#200	61.2		
0.0410 mm.	47.8		
0.0297 mm.	43.6		
0.0196 mm.	36.6		
0.0117 mm.	30.4		
0.0084 mm.	26.9		
0.0062 mm.	24.1		
0.0046 mm.	21.3		
0.0031 mm.	18.5		
0.0013 mm.	13.6		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.8415 D_{85}= 0.4750 D_{60}= 0.0708
D_{50}= 0.0462 D_{30}= 0.0113 D_{15}= 0.0017
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 30 **Source of Sample:** **Date:** 11/27/12
Location: GT12-47 **Elev./Depth:** 88.62-88.79m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

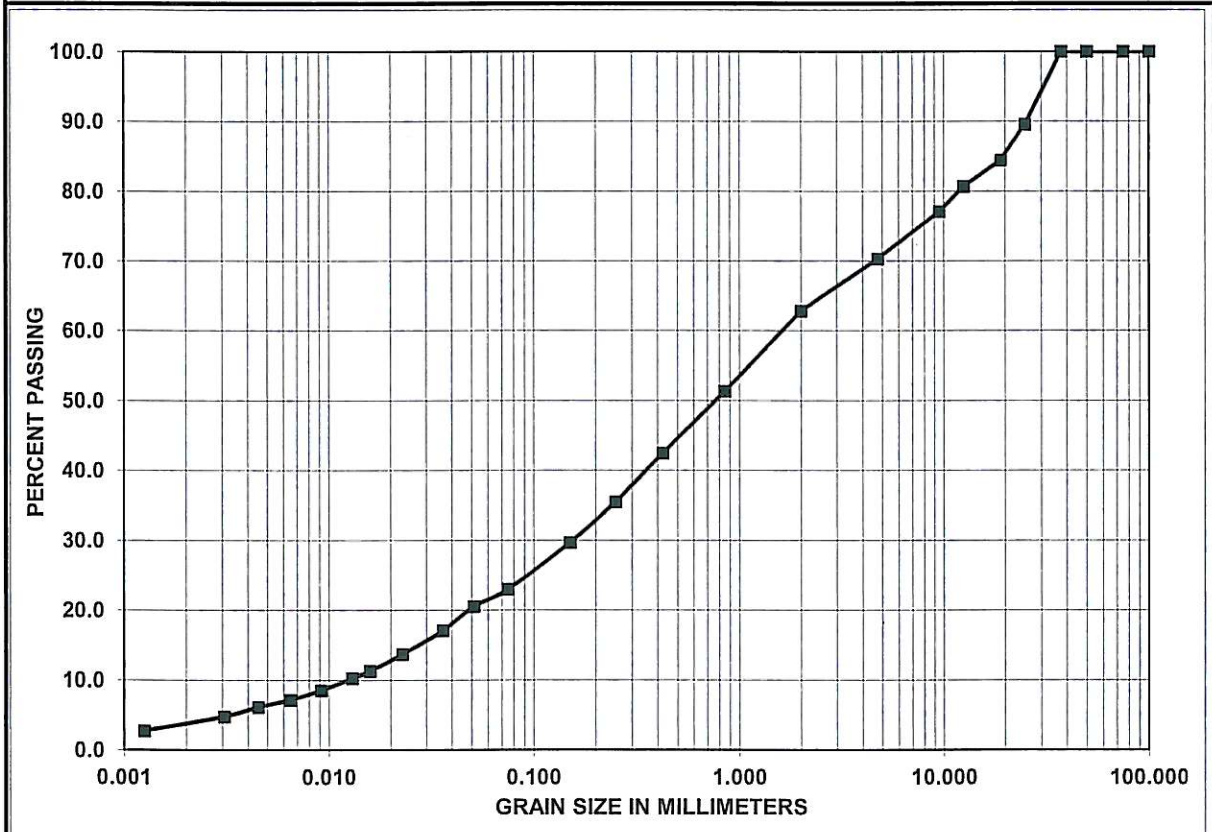
SAMPLED BY: Client

DATE SAMPLED: 10-Aug-12

SOURCE: TP12-31, sample S5

DATE TESTED: 7-Sep-12

DEPTH: 4.0m - 4.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	89.5
19.0	84.4
12.5	80.6
9.5	77.1
4.75	70.3
2.00	62.8
0.850	51.3
0.425	42.4
0.250	35.5
0.150	29.7
0.075	23.0
0.0511	20.5
0.0362	17.1
0.0229	13.7
0.0159	11.3
0.0130	10.2
0.0092	8.5
0.0065	7.2
0.0045	6.1
0.0031	4.8
0.0013	2.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	29.72%
SAND	47.32%
SILT	19.39%
CLAY	3.58%

TECHNICIAN: JY Michaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

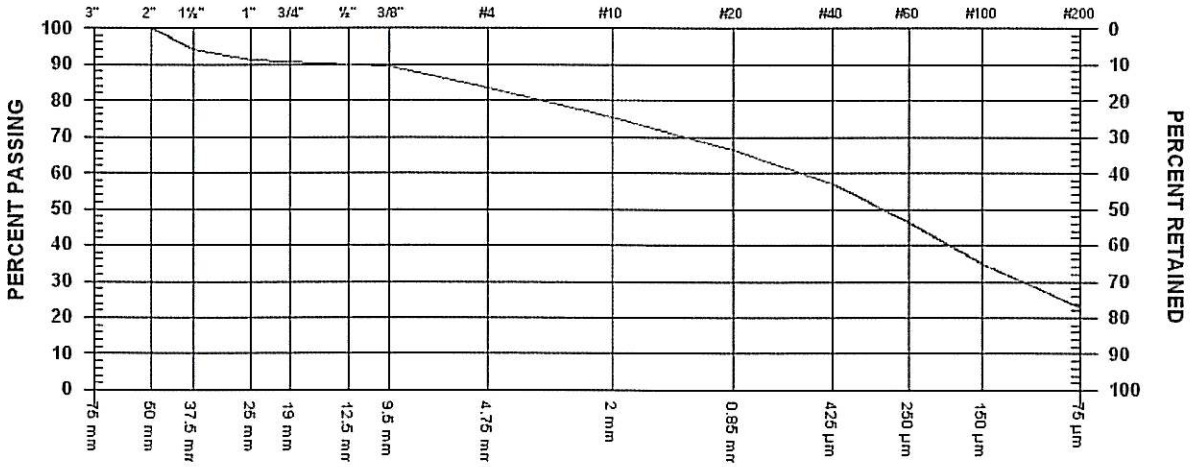
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 11 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.17 DATE SAMPLED 2012.Aug.11

SUPPLIER
SOURCE 5.0m - 5.2m
SPECIFICATION
MATERIAL TYPE TP12-40, sample S13

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm	100.0	
1 1/2"	37.5 mm	94.2	
1"	25 mm	91.3	
3/4"	19 mm		
1/2"	12.5 mm		
3/8"	9.5 mm	89.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	83.4	
No. 10	2.00 mm	75.5	
No. 20	850 µm	66.5	
No. 40	425 µm	56.9	
No. 60	250 µm	46.6	
No. 100	150 µm	35.1	
No. 200	75 µm	23.0	

MOISTURE CONTENT 13.0%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

amec

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 15-Nov-12

TEST No:

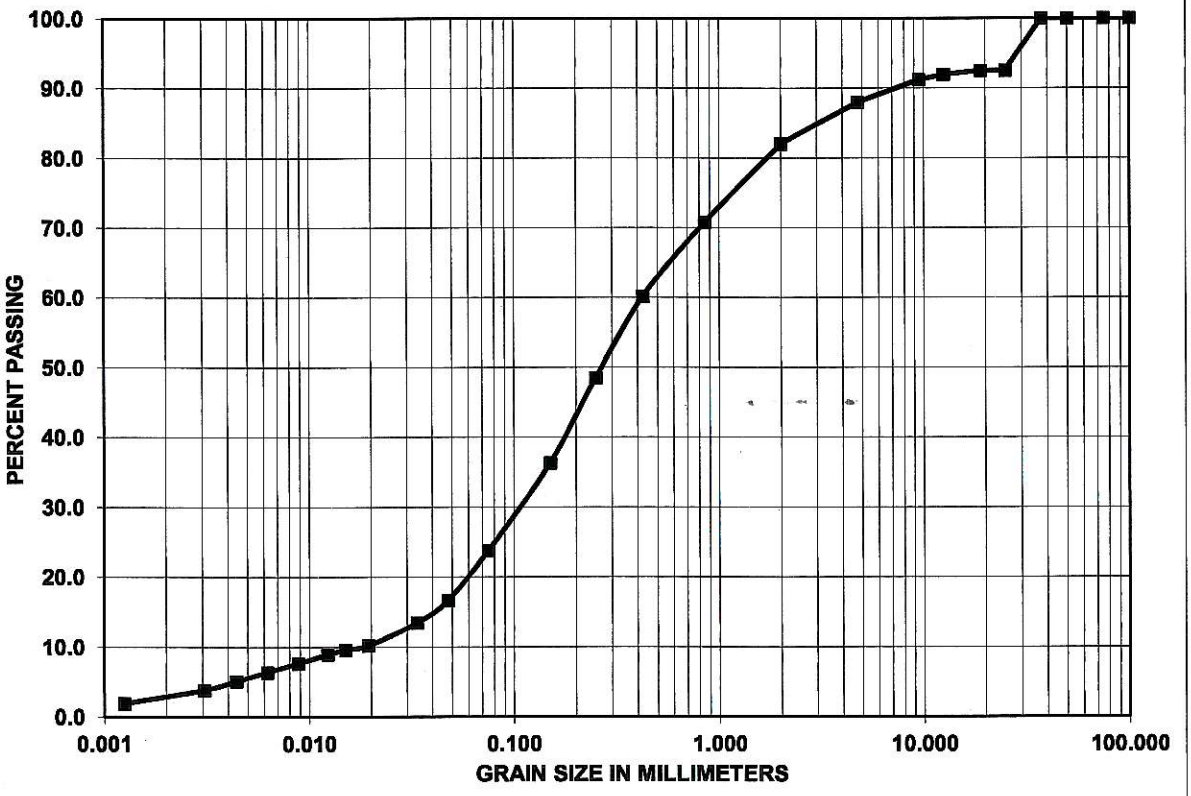
SAMPLED BY: Client

DATE SAMPLED: 29-Aug-12

SOURCE: TP12-40, sample S13

DATE TESTED: 28-Oct-12

DEPTH: 5.0m - 5.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	92.5
19.0	92.5
12.5	91.9
9.5	91.2
4.75	87.9
2.00	82.0
0.850	70.7
0.425	60.1
0.250	48.5
0.150	36.3
0.075	23.8
0.0476	16.6
0.0337	13.4
0.0194	10.2
0.0151	9.6
0.0123	8.9
0.0088	7.7
0.0062	6.4
0.0044	5.1
0.0031	3.8
0.0012	1.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	12.08%
SAND	64.16%
SILT	21.05%
CLAY	2.71%

TECHNICIAN: YMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

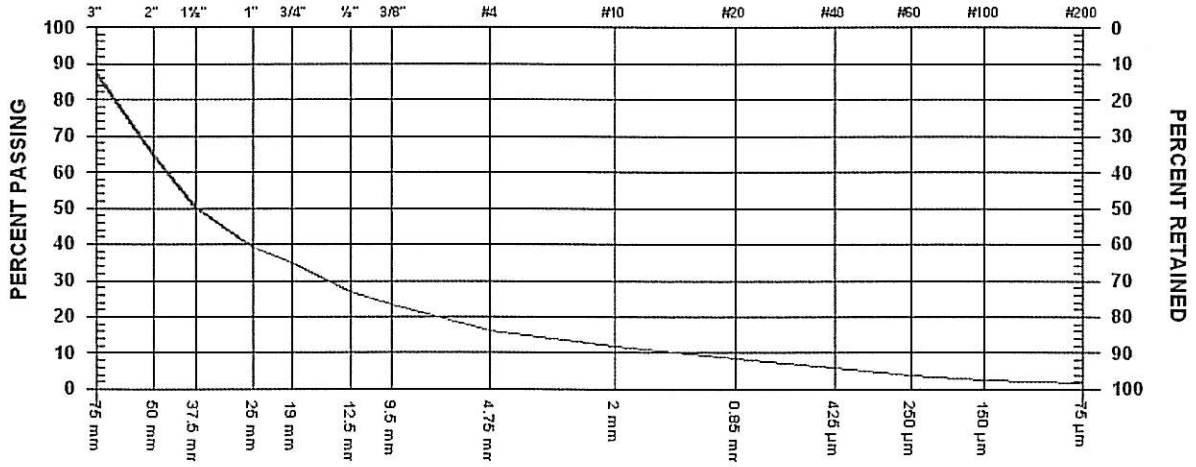
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 12 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.17 DATE SAMPLED 2012.Aug.11

SUPPLIER
SOURCE 5.0m - 5.2m
SPECIFICATION
MATERIAL TYPE TP12-45, sample S14

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	87.3	
2"	50 mm	64.6	
1 1/2"	37.5 mm	50.3	
1"	25 mm	39.3	
3/4"	19 mm	34.7	
1/2"	12.5 mm	26.7	
3/8"	9.5 mm	23.3	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	16.3	
No. 10	2.00 mm	11.9	
No. 20	850 µm	8.5	
No. 40	425 µm	5.8	
No. 60	250 µm	3.7	
No. 100	150 µm	2.6	
No. 200	75 µm	1.9	

MOISTURE CONTENT 4.6%

COMMENTS
1 rock <100mm rtainedd on the 75mm screen.

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. MMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

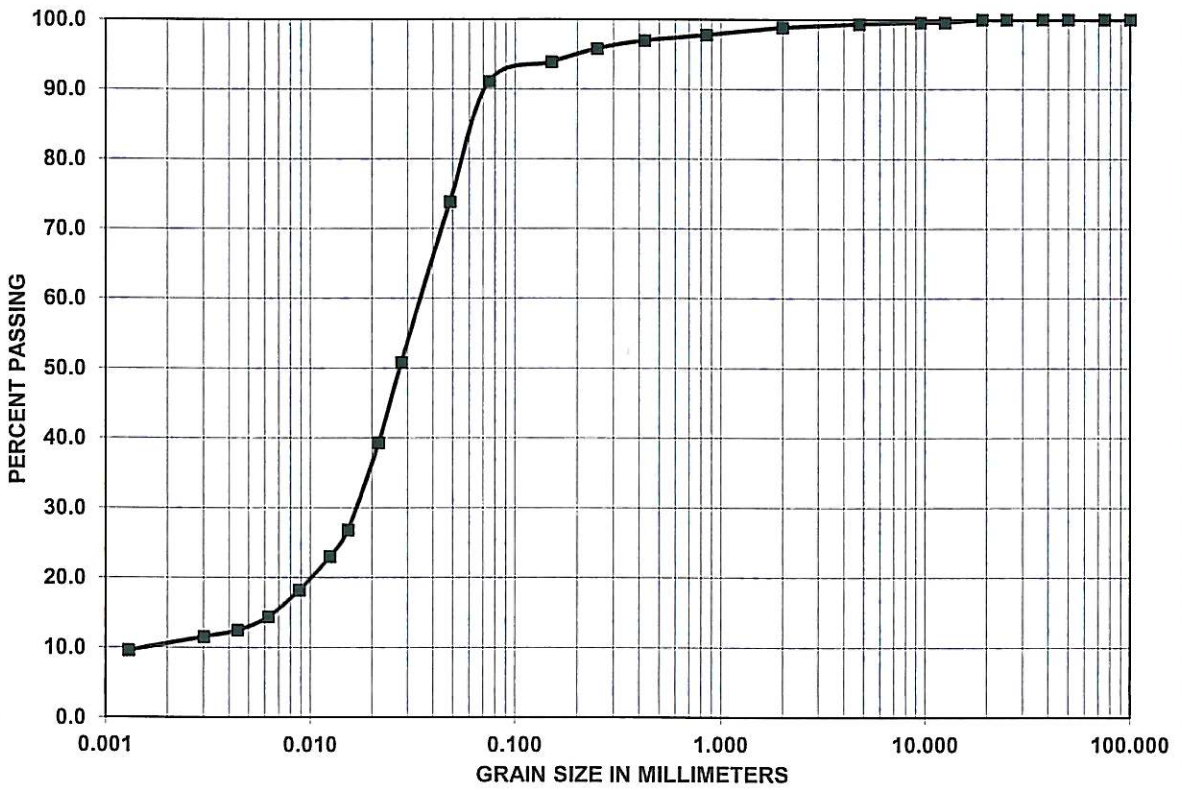
SAMPLED BY: Client

DATE SAMPLED: 12-Aug-12

SOURCE: TP12-48, sample S15

DATE TESTED: 6-Sep-12

DEPTH: 4.8m - 5.0m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.6
9.5	99.6
4.75	99.4
2.00	98.9
0.850	97.8
0.425	97.0
0.250	95.8
0.150	93.9
0.075	91.1
0.0485	73.8
0.0280	50.8
0.0217	39.3
0.0153	26.8
0.0125	23.0
0.0089	18.2
0.0063	14.4
0.0044	12.5
0.0030	11.5
0.0013	9.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.64%
SAND	8.30%
SILT	80.69%
CLAY	10.37%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

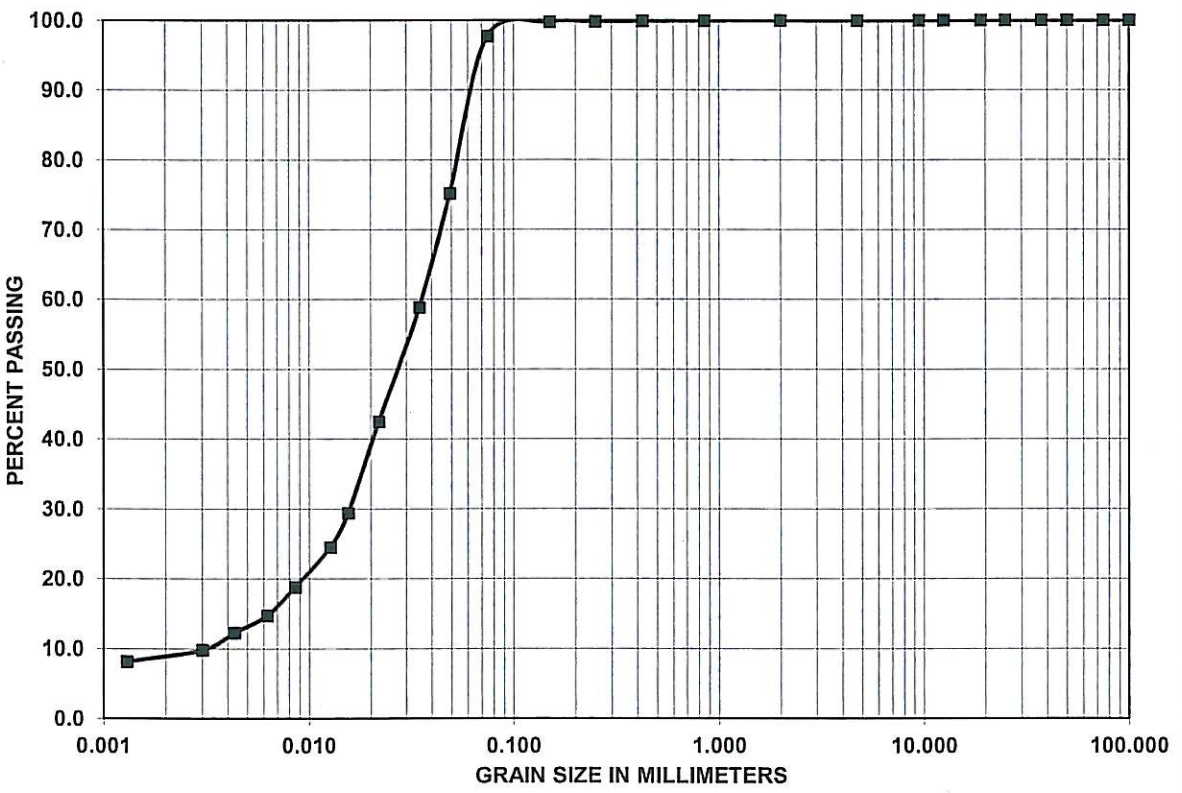
SAMPLED BY: Client

DATE SAMPLED: 12-Aug-12

SOURCE: TP12-49, sample S16

DATE TESTED: 6-Sep-12

DEPTH: 4.0m - 4.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	100.0
4.75	100.0
2.00	100.0
0.850	99.9
0.425	99.9
0.250	99.8
0.150	99.8
0.075	97.7
0.0492	75.2
0.0348	58.8
0.0220	42.5
0.0156	29.4
0.0127	24.5
0.0086	18.8
0.0063	14.7
0.0043	12.3
0.0030	9.8
0.0013	8.2

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.02%
SAND	2.29%
SILT	88.85%
CLAY	8.84%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

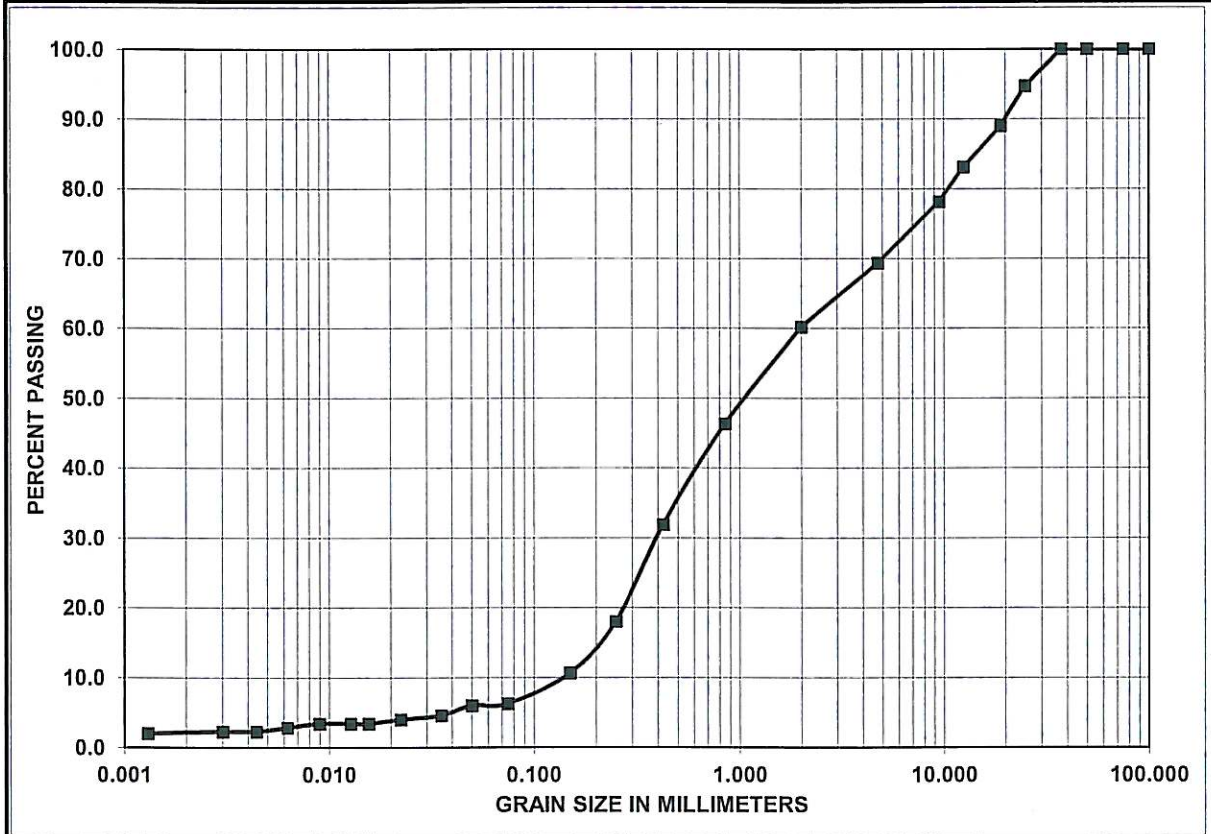
SAMPLED BY: Client

DATE SAMPLED: 12-Aug-12

SOURCE: TP12-55, sample S17

DATE TESTED: 6-Sep-12

DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	94.7
19.0	89.0
12.5	83.0
9.5	78.1
4.75	69.3
2.00	60.2
0.850	46.3
0.425	31.9
0.250	18.0
0.150	10.7
0.075	6.3
0.0502	6.0
0.0355	4.6
0.0224	4.0
0.0156	3.4
0.0128	3.4
0.0090	3.4
0.0063	2.9
0.0044	2.3
0.0030	2.3
0.0013	2.0

REMARKS:

D_{10} =	0.14
D_{30} =	0.18
D_{60} =	0.09
C_U =	0.7
C_c =	2.8

GRAVEL	30.66%
SAND	63.06%
SILT	4.15%
CLAY	2.13%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

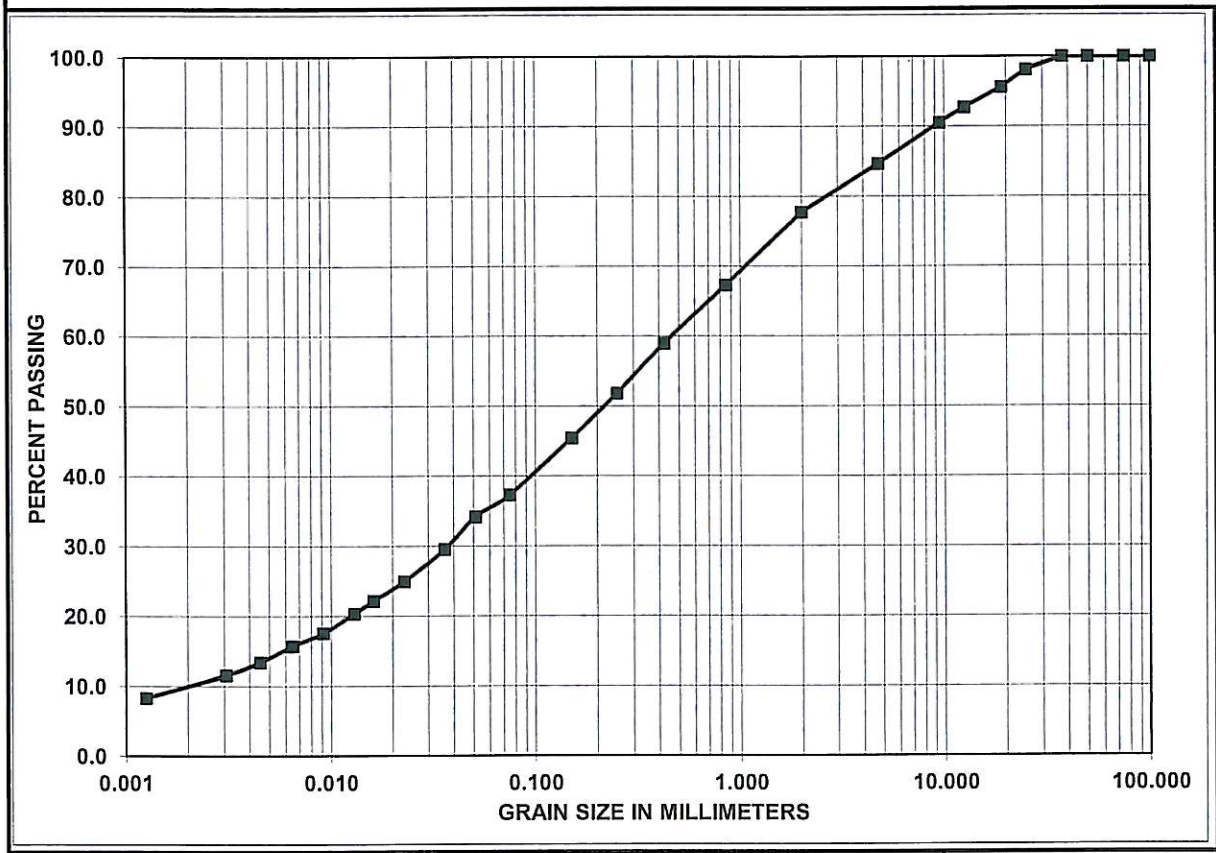
SAMPLED BY: Client

DATE SAMPLED: 12-Aug-12

SOURCE: TP12-57, sample S18

DATE TESTED: 7-Sep-12

DEPTH: 3.8m - 4.0m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	98.1
19.0	95.6
12.5	92.7
9.5	90.5
4.75	84.6
2.00	77.7
0.850	67.3
0.425	58.9
0.250	51.8
0.150	45.4
0.075	37.3
0.0511	34.2
0.0362	29.5
0.0229	24.9
0.0162	22.2
0.0130	20.3
0.0092	17.5
0.0065	15.7
0.0045	13.4
0.0031	11.5
0.0013	8.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	15.40%
SAND	47.32%
SILT	27.63%
CLAY	9.64%

TECHNICIAN: M Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 30-Sep-12

PROJECT NAME: Blackwater

TEST No:

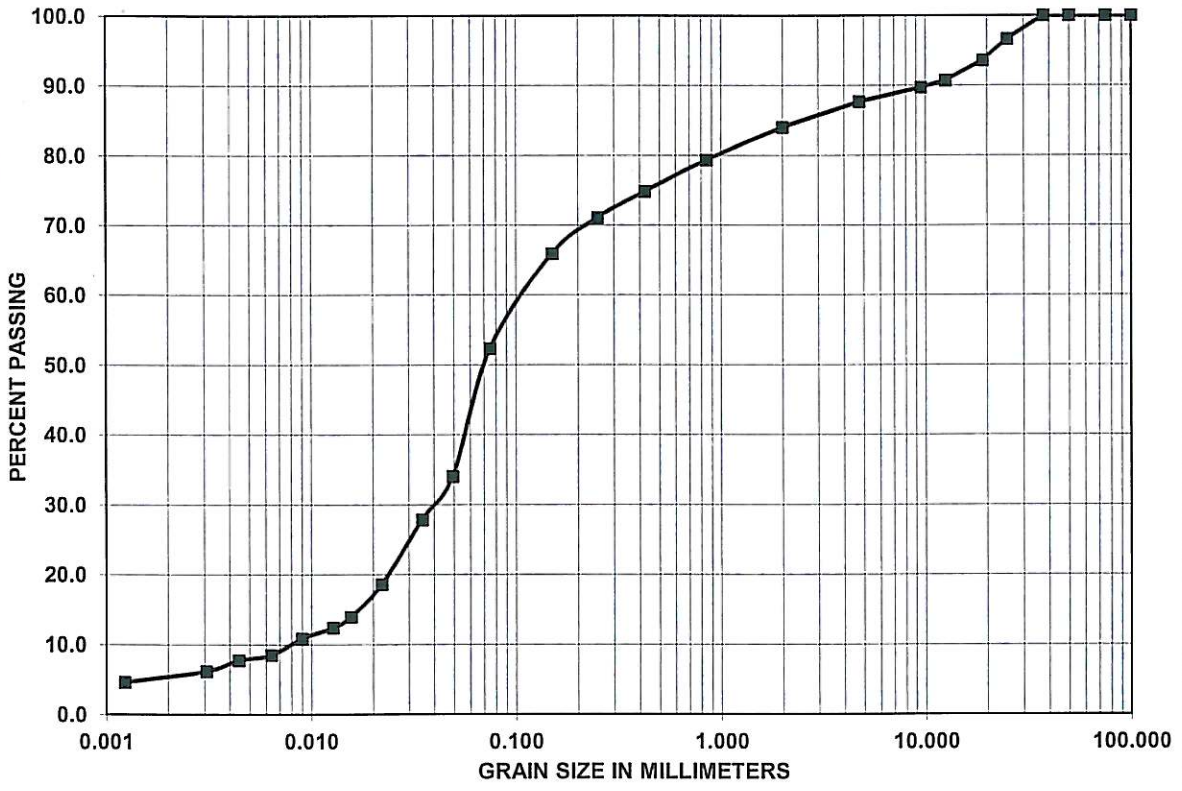
SAMPLED BY: Client

DATE SAMPLED: 13-Aug-12

SOURCE: TP12-61, sample S19

DATE TESTED: 23-Sep-12

DEPTH: 2.5m - 2.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	96.6
19.0	93.5
12.5	90.7
9.5	89.7
4.75	87.6
2.00	84.0
0.850	79.3
0.425	74.8
0.250	71.0
0.150	65.9
0.075	52.3
0.0494	34.0
0.0349	27.8
0.0221	18.6
0.0156	13.9
0.0128	12.4
0.0090	10.8
0.0064	8.5
0.0044	7.7
0.0031	6.2
0.0012	4.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	12.36%
SAND	35.30%
SILT	47.05%
CLAY	5.29%

TECHNICIAN: M Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

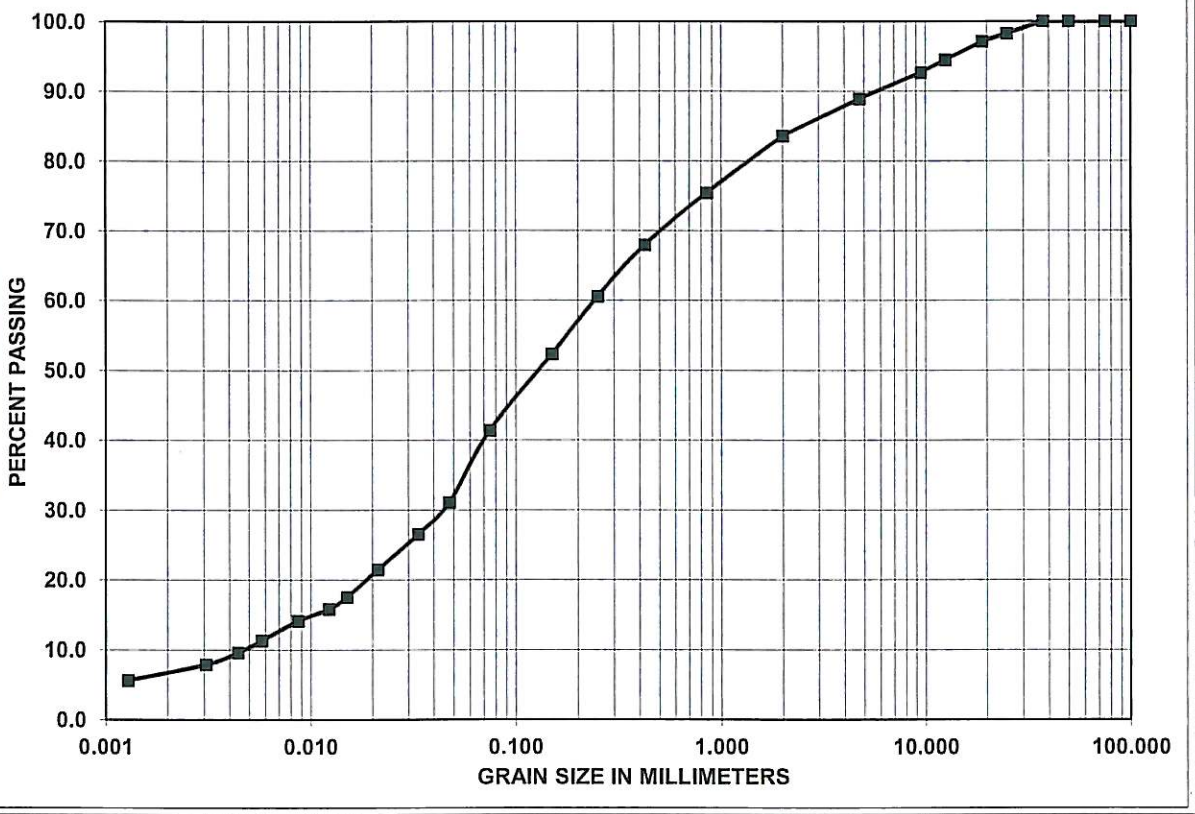
SAMPLED BY: Client

DATE SAMPLED: 13-Aug-12

SOURCE: TP12-62, sample S20

DATE TESTED: 26-Sep-12

DEPTH: 3.0m - 3.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	98.3
19.0	97.1
12.5	94.5
9.5	92.6
4.75	88.9
2.00	83.6
0.850	75.4
0.425	67.9
0.250	60.5
0.150	52.3
0.075	41.4
0.0476	31.1
0.0337	26.6
0.0213	21.5
0.0151	17.5
0.0123	15.8
0.0087	14.1
0.0058	11.3
0.0044	9.6
0.0031	7.9
0.0013	5.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	11.12%
SAND	47.50%
SILT	34.82%
CLAY	6.56%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

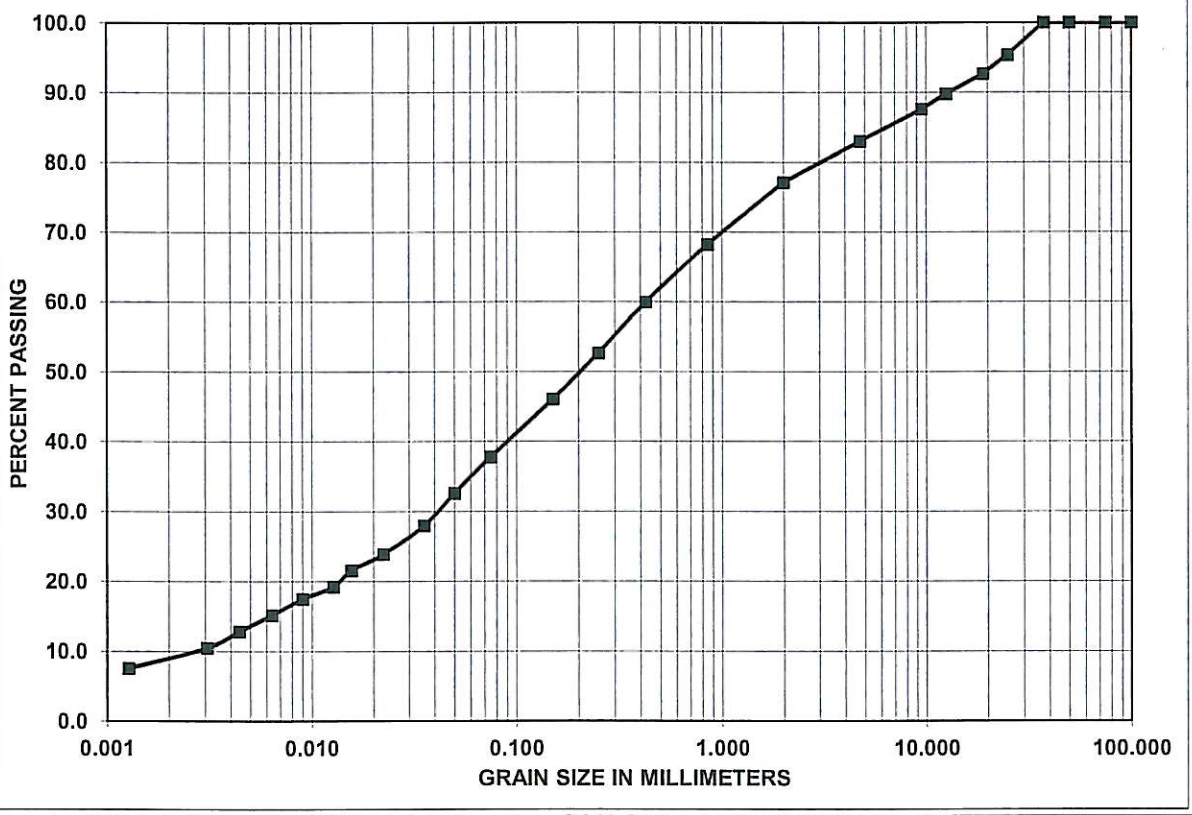
SAMPLED BY: Client

DATE SAMPLED: 13-Aug-12

SOURCE: TP12-65, sample S21

DATE TESTED: 24-Sep-12

DEPTH: 4.0m - 4.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	95.3
19.0	92.6
12.5	89.7
9.5	87.6
4.75	83.0
2.00	77.1
0.850	68.2
0.425	59.9
0.250	52.7
0.150	46.1
0.075	37.7
0.0502	32.6
0.0355	27.9
0.0224	23.9
0.0156	21.5
0.0128	19.2
0.0090	17.5
0.0064	15.1
0.0044	12.8
0.0031	10.5
0.0013	7.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	17.03%
SAND	45.22%
SILT	29.00%
CLAY	8.75%

TECHNICIAN: M Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

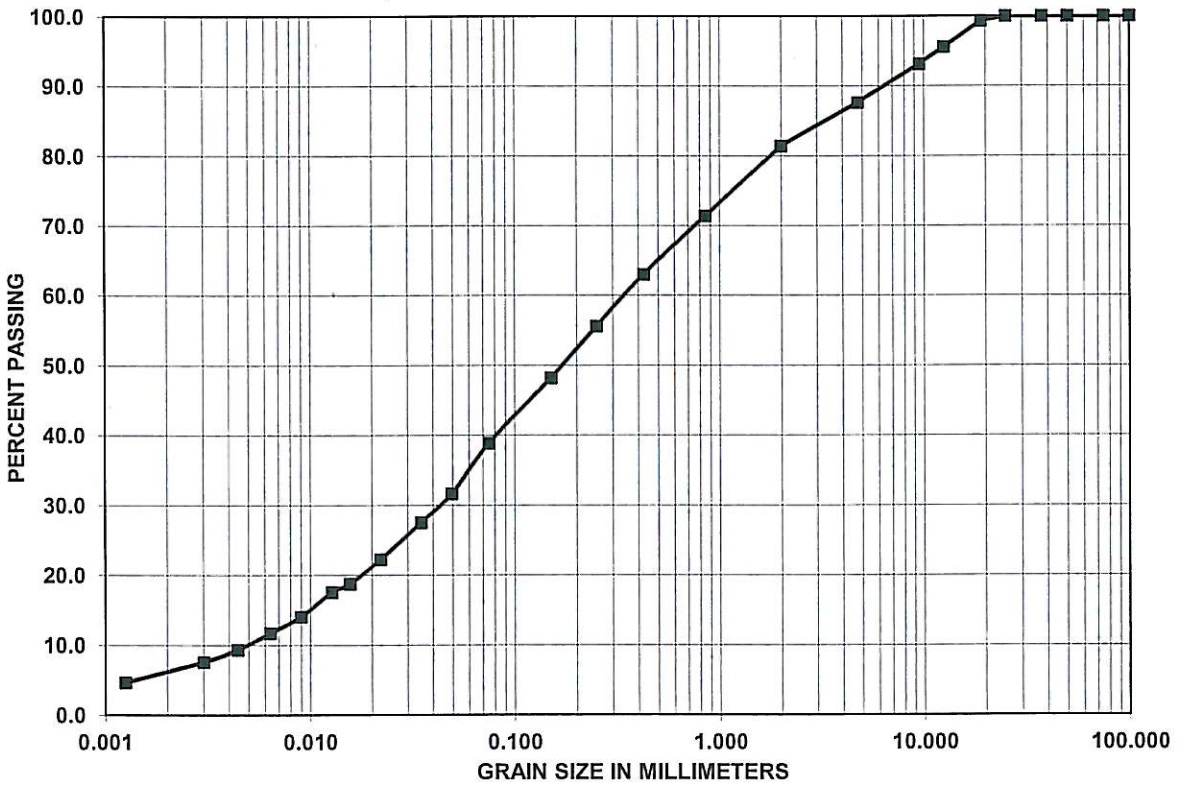
SAMPLED BY: Client

DATE SAMPLED: 13-Aug-12

SOURCE: TP12-67 sample S22

DATE TESTED: 25-Sep-12

DEPTH: 3.5m - 3.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	99.3
12.5	95.5
9.5	93.1
4.75	87.6
2.00	81.4
0.850	71.4
0.425	63.0
0.250	55.6
0.150	48.2
0.075	38.9
0.0494	31.6
0.0349	27.5
0.0221	22.3
0.0156	18.7
0.0128	17.6
0.0090	14.1
0.0064	11.7
0.0044	9.4
0.0030	7.6
0.0013	4.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	12.42%
SAND	48.73%
SILT	32.91%
CLAY	5.94%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

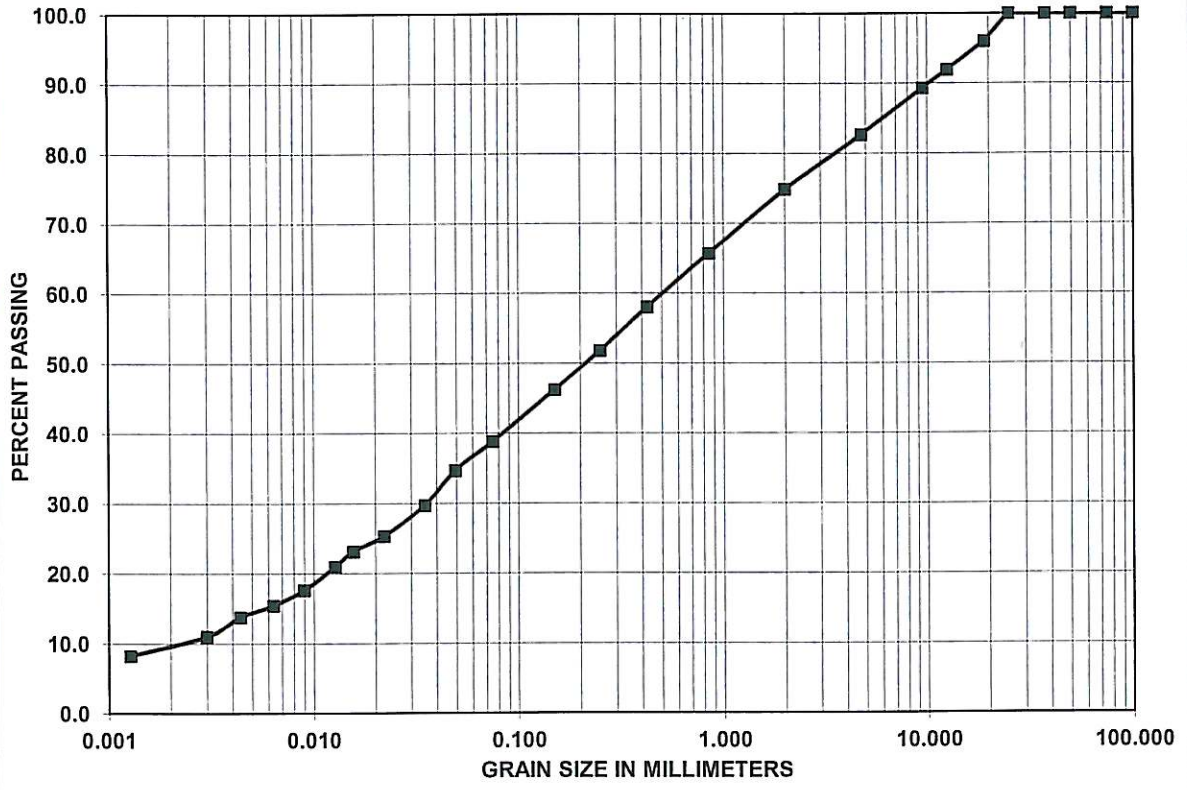
SAMPLED BY: Client

DATE SAMPLED: 14-Aug-12

SOURCE: TP12-72, sample S23

DATE TESTED: 26-Sep-12

DEPTH: 4.0m - 4.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	96.0
12.5	91.9
9.5	89.3
4.75	82.6
2.00	74.8
0.850	65.7
0.425	58.0
0.250	51.8
0.150	46.2
0.075	38.8
0.0494	34.7
0.0349	29.7
0.0221	25.3
0.0156	23.1
0.0127	20.9
0.0090	17.6
0.0064	15.4
0.0044	13.8
0.0030	11.0
0.0013	8.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	17.38%
SAND	43.82%
SILT	29.38%
CLAY	9.42%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

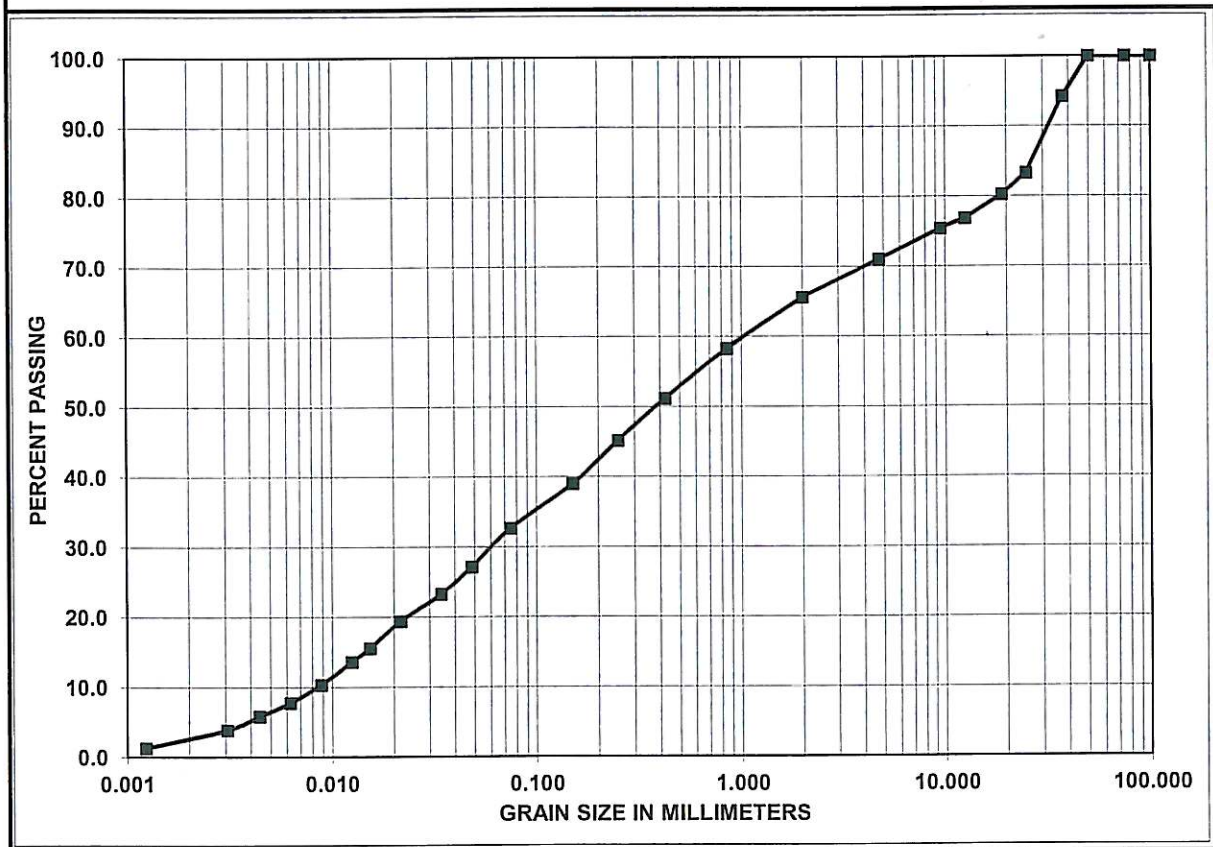
OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 30-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client

DATE SAMPLED: 15-Aug-12
SOURCE: TP12-77, sample S25

DATE TESTED: 23-Sep-12
DEPTH: 4.5m - 4.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	94.2
25.0	83.2
19.0	80.2
12.5	76.8
9.5	75.4
4.75	71.0
2.00	65.6
0.850	58.2
0.425	51.1
0.250	45.1
0.150	38.9
0.075	32.6
0.0485	27.1
0.0343	23.2
0.0217	19.4
0.0153	15.5
0.0125	13.6
0.0089	10.3
0.0063	7.7
0.0044	5.8
0.0031	3.9
0.0012	1.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	29.01%
SAND	38.36%
SILT	30.26%
CLAY	2.37%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

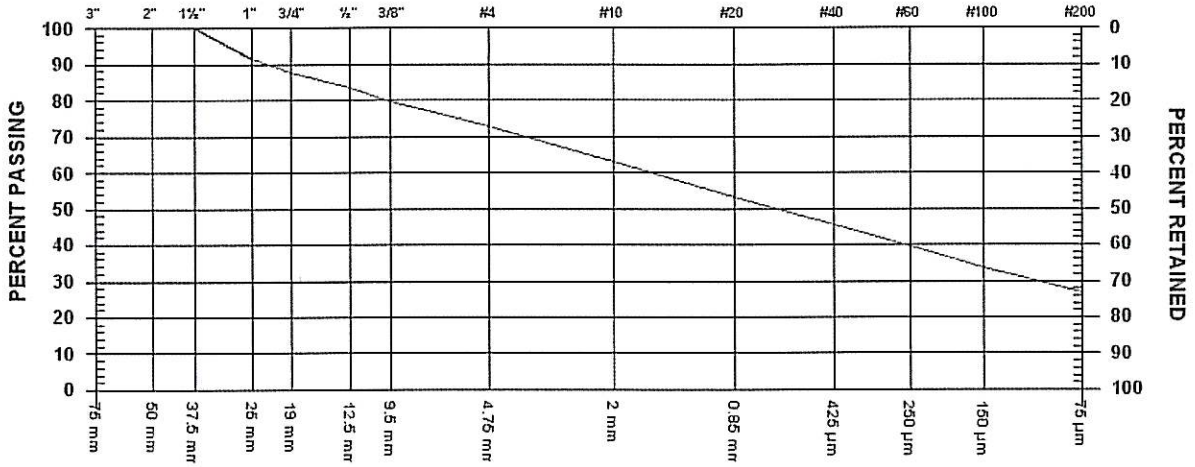
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 13 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.17 DATE SAMPLED 2012.Aug.15

SUPPLIER
SOURCE 5.5m - 5.7m
SPECIFICATION
MATERIAL TYPE TP12-85, sample S27

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES			PERCENT PASSING	GRADATION LIMITS
3"	75	mm		
2"	50	mm		
1 1/2"	37.5	mm	100.0	
1"	25	mm	91.5	
3/4"	19	mm	87.7	
1/2"	12.5	mm	83.3	
3/8"	9.5	mm	79.8	

SAND SIZES AND FINES			PERCENT PASSING	GRADATION LIMITS
No. 4	4.75	mm	72.8	
No. 10	2.00	mm	62.8	
No. 20	850	µm	53.3	
No. 40	425	µm	45.7	
No. 60	250	µm	39.6	
No. 100	150	µm	33.7	
No. 200	75	µm	27.0	

MOISTURE CONTENT 7.6%

COMMENTS

 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.
Report System Software Registered to AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

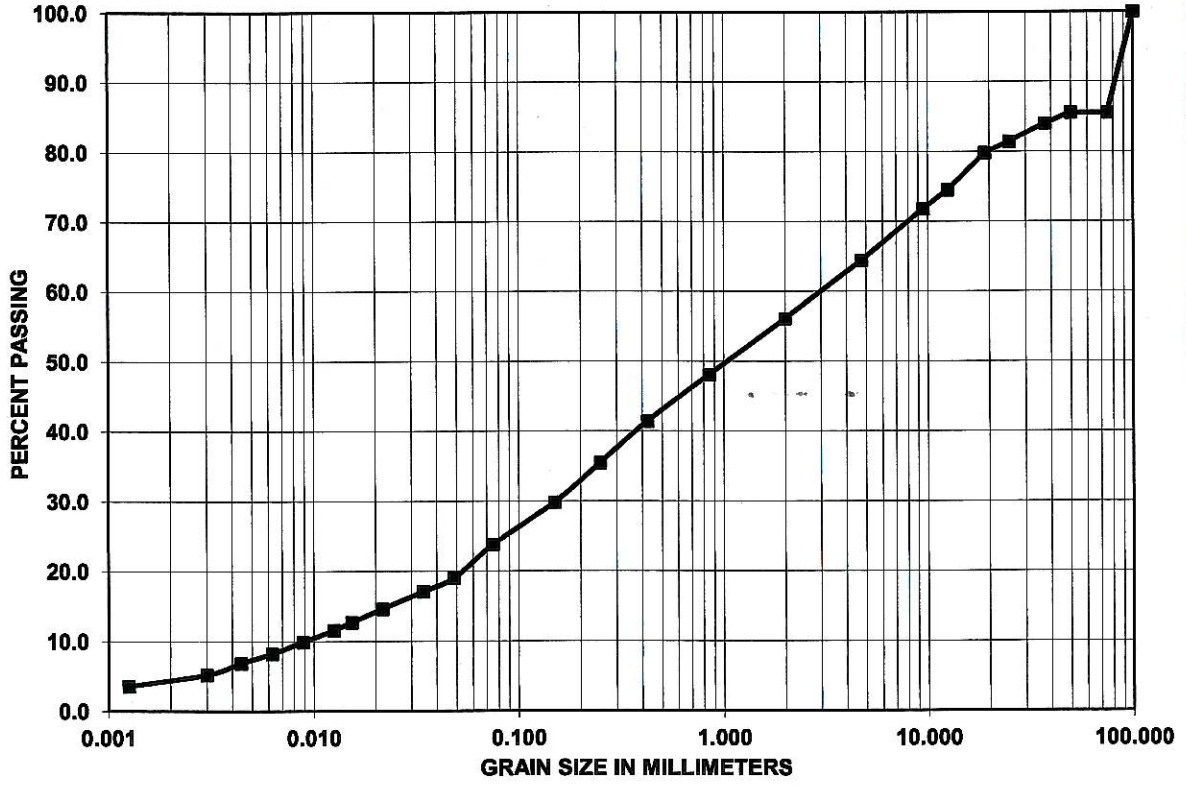
Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 18-Oct-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 15-Aug-12
SOURCE: TP12-85, sample S27
DATE TESTED: 17-Oct-12
DEPTH: 5.5m - 5.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	85.5
50.0	85.5
37.5	83.9
25.0	81.4
19.0	79.8
12.5	74.5
9.5	71.8
4.75	64.4
2.00	56.1
0.850	48.0
0.425	41.4
0.250	35.4
0.150	29.8
0.075	23.7
0.0485	19.0
0.0343	17.1
0.0217	14.6
0.0153	12.7
0.0125	11.6
0.0089	9.9
0.0063	8.3
0.0044	6.9
0.0030	5.2
0.0013	3.6

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	35.61%
SAND	40.64%
SILT	19.47%
CLAY	4.28%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

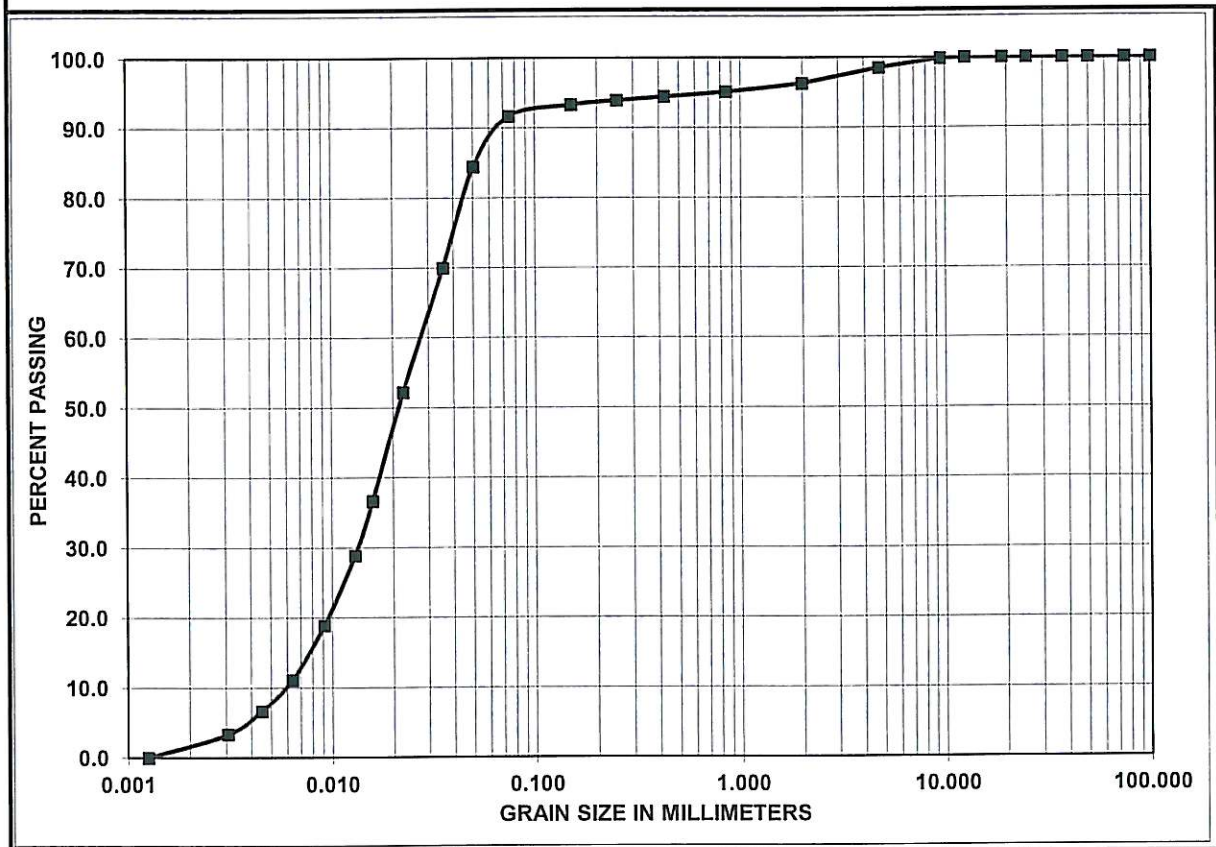
SAMPLED BY: Client

DATE SAMPLED: 15-Aug-12

SOURCE: TP12-87, sample S28

DATE TESTED: 25-Sep-12

DEPTH: 5.7m - 5.9m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.9
4.75	98.5
2.00	96.3
0.850	95.1
0.425	94.4
0.250	93.9
0.150	93.3
0.075	91.6
0.0503	84.4
0.0356	69.9
0.0225	52.2
0.0159	36.6
0.0130	28.9
0.0092	18.9
0.0064	11.1
0.0045	6.7
0.0031	3.3
0.0013	0.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.51%
SAND	6.85%
SILT	90.26%
CLAY	1.37%

TECHNICIAN: H Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

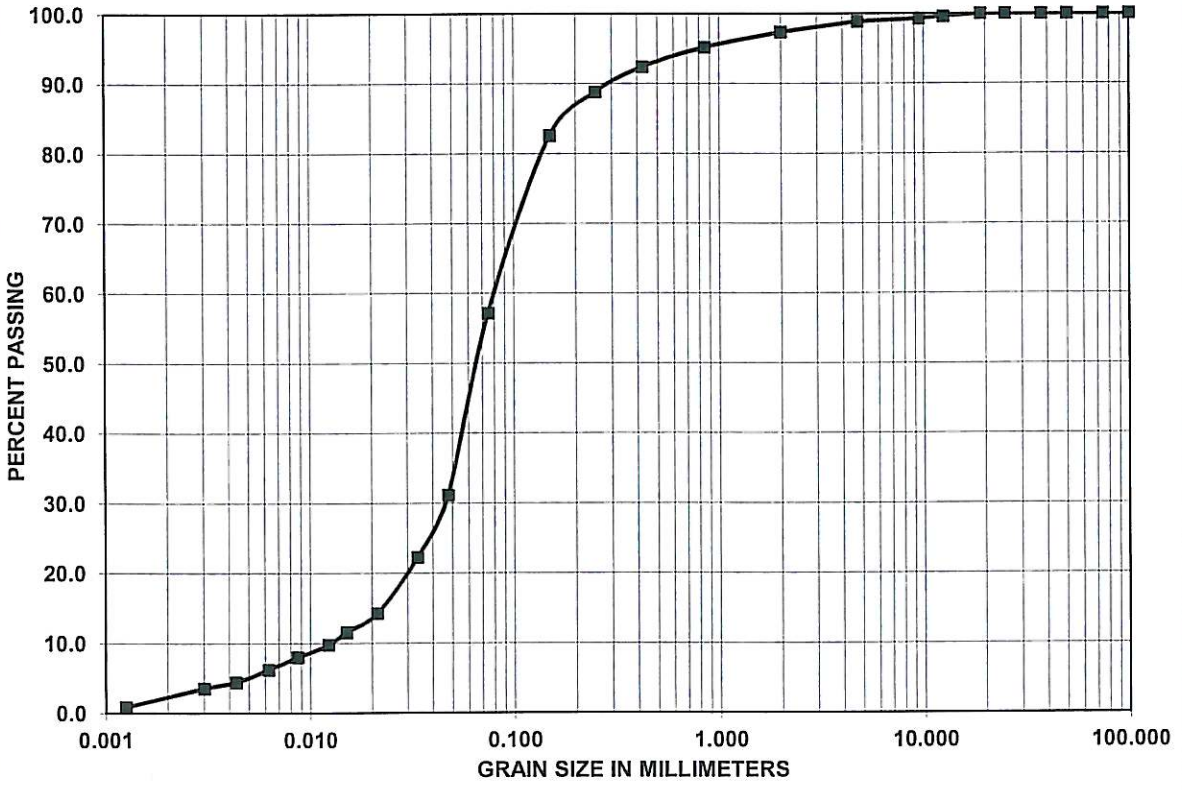
OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 30-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client

DATE SAMPLED: 16-Aug-12
SOURCE: TP12-88, sample S29

DATE TESTED: 27-Sep-12
DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.6
9.5	99.3
4.75	98.9
2.00	97.4
0.850	95.2
0.425	92.4
0.250	88.8
0.150	82.5
0.075	57.2
0.0476	31.1
0.0337	22.2
0.0213	14.2
0.0151	11.6
0.0123	9.8
0.0087	8.0
0.0062	6.2
0.0043	4.4
0.0030	3.6
0.0013	0.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.12%
SAND	41.71%
SILT	55.14%
CLAY	2.02%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

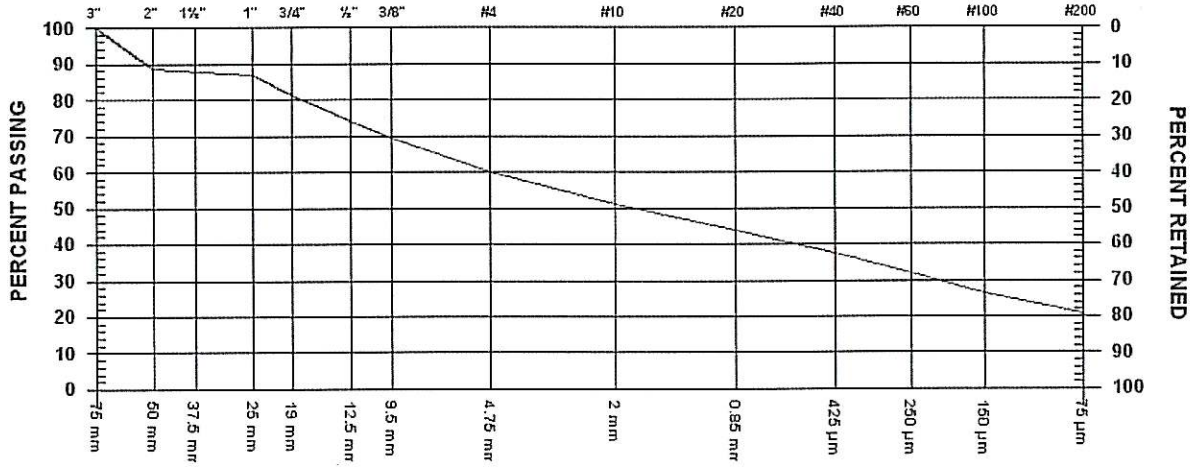
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 14 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.19 DATE SAMPLED 2012.Aug.16

SUPPLIER
SOURCE 3.0m - 3.2m
SPECIFICATION
MATERIAL TYPE TP12-89, sample S30

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	88.4	
1 1/2"	37.5 mm		
1"	25 mm	86.8	
3/4"	19 mm	81.1	
1/2"	12.5 mm	74.0	
3/8"	9.5 mm	69.4	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	60.2	
No. 10	2.00 mm	51.1	
No. 20	850 µm	43.8	
No. 40	425 µm	37.5	
No. 60	250 µm	31.9	
No. 100	150 µm	26.6	
No. 200	75 µm	20.9	

MOISTURE CONTENT 7.3%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. M Richard

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.
Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 15-Nov-12

TEST No:

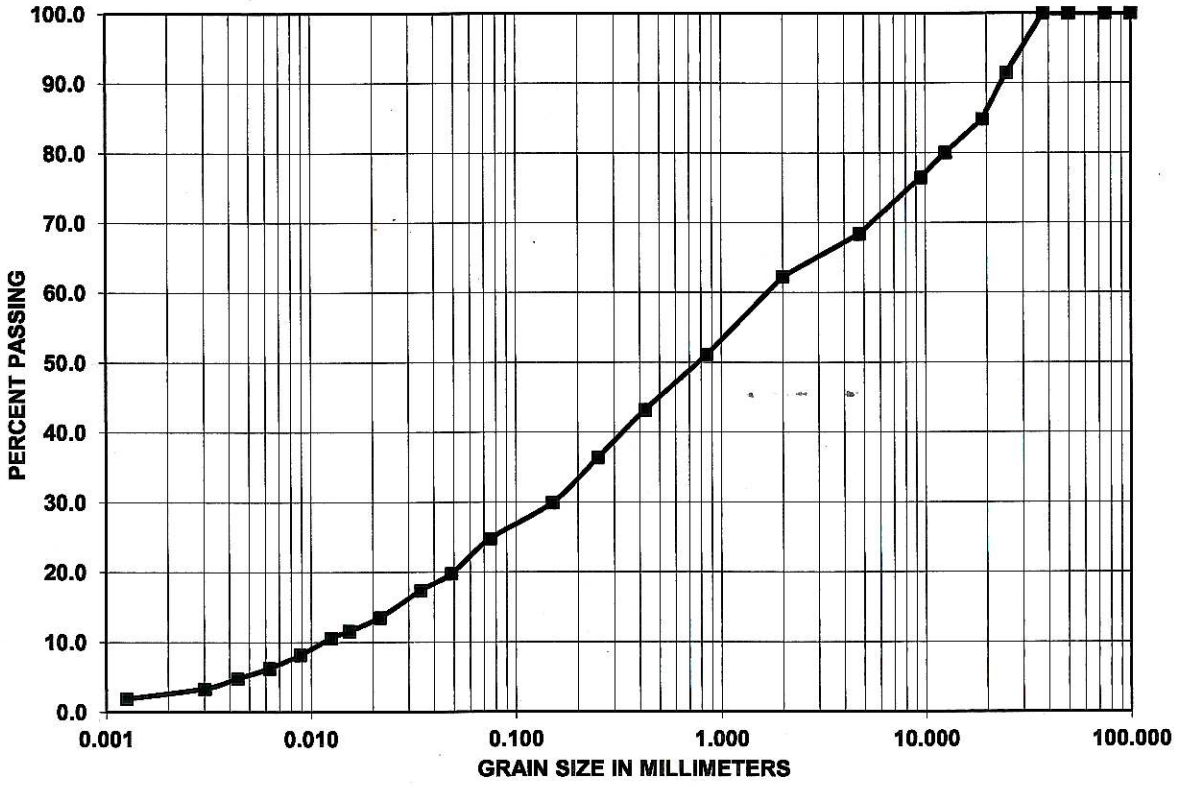
SAMPLED BY: Client

DATE SAMPLED: 16-Aug-12

SOURCE: TP12-89, sample S30

DATE TESTED: 28-Oct-12

DEPTH: 3.0m - 3.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	91.5
19.0	84.8
12.5	80.0
9.5	76.5
4.75	68.4
2.00	62.2
0.850	51.1
0.425	43.1
0.250	36.3
0.150	29.9
0.075	24.7
0.0485	19.8
0.0343	17.4
0.0217	13.5
0.0153	11.6
0.0125	10.6
0.0089	8.2
0.0063	6.3
0.0044	4.8
0.0030	3.4
0.0013	1.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	31.62%
SAND	43.63%
SILT	22.20%
CLAY	2.54%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering Interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

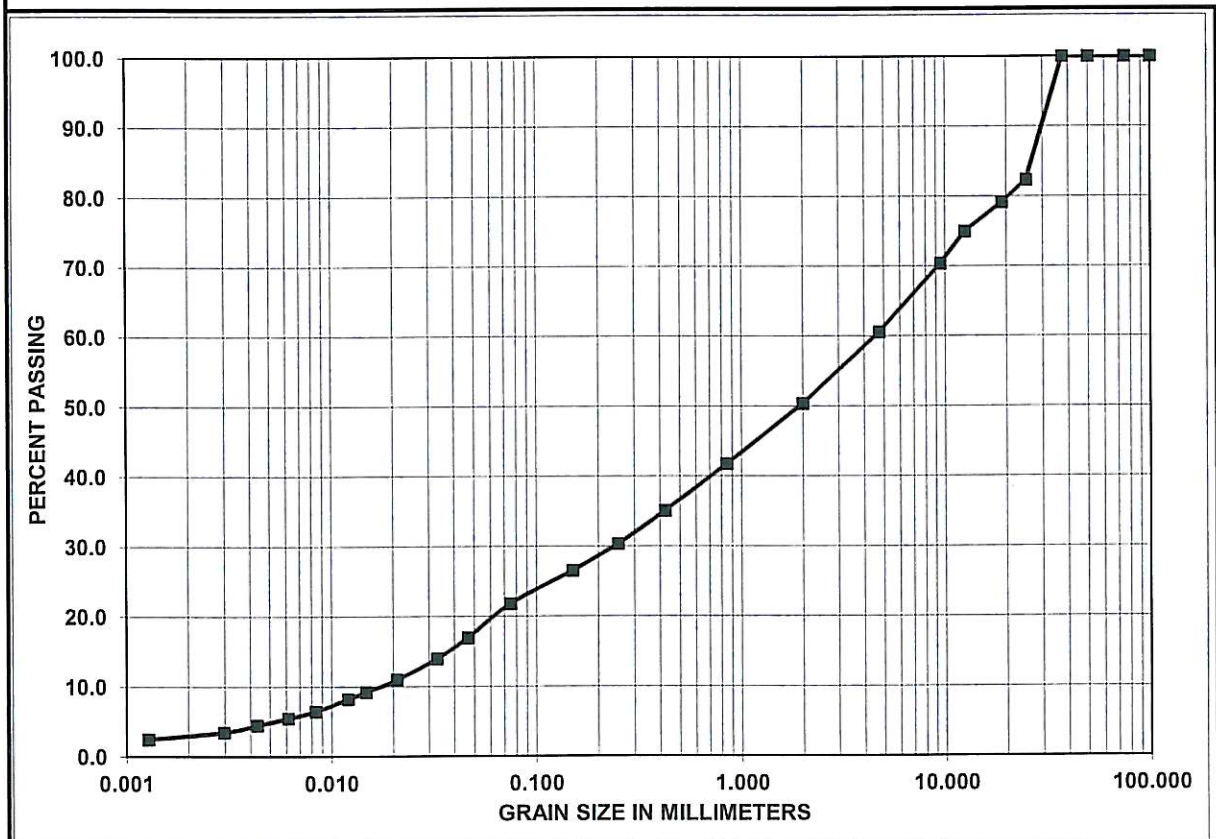
SAMPLED BY: Client

DATE SAMPLED: 16-Aug-12

SOURCE: TP12-90, sample S31

DATE TESTED: 24-Sep-12

DEPTH: 5.5m - 5.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	82.3
19.0	79.1
12.5	74.9
9.5	70.4
4.75	60.5
2.00	50.4
0.850	41.7
0.425	35.1
0.250	30.3
0.150	26.5
0.075	21.8
0.0466	16.9
0.0329	13.9
0.0209	11.0
0.0148	9.2
0.0121	8.2
0.0084	6.5
0.0061	5.5
0.0043	4.5
0.0030	3.5
0.0013	2.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	39.48%
SAND	38.74%
SILT	18.87%
CLAY	2.91%

TECHNICIAN: H Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

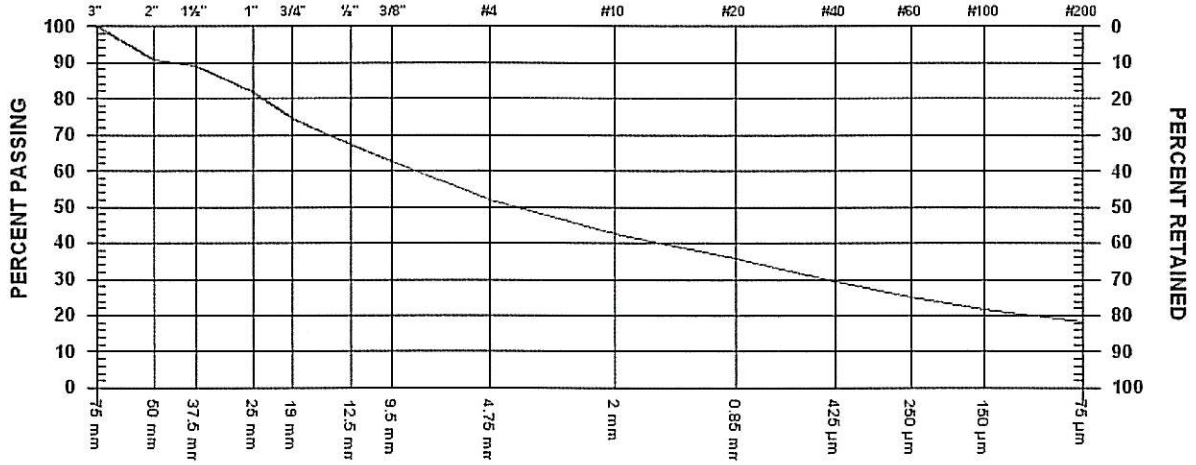
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 15 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.19 DATE SAMPLED 2012.Aug.16

SUPPLIER
SOURCE 4.5m - 4.7m
SPECIFICATION
MATERIAL TYPE TP12-92, sample S32

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	90.7	
1 1/2"	37.5 mm	89.0	
1"	25 mm	81.8	
3/4"	19 mm	74.4	
1/2"	12.5 mm	67.2	
3/8"	9.5 mm	62.5	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	52.1	
No. 10	2.00 mm	42.5	
No. 20	850 µm	35.6	
No. 40	425 µm	29.3	
No. 60	250 µm	25.0	
No. 100	150 µm	21.9	
No. 200	75 µm	18.5	

COMMENTS
Sample was supersaturated. Unable to prep for a hydrometer.

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. H. Michaud

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation of test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

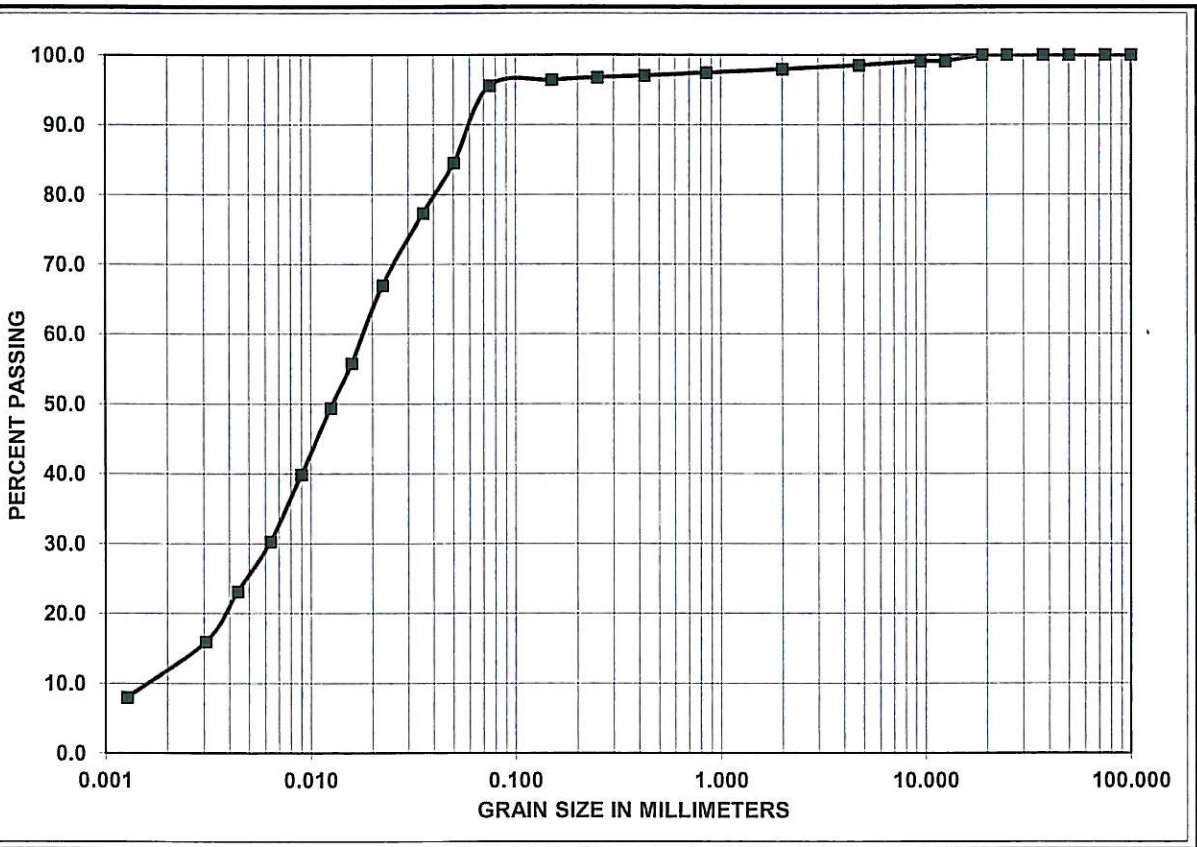
SAMPLED BY: Client

DATE SAMPLED: 16-Aug-12

SOURCE: TP12-95, sample S33

DATE TESTED: 25-Sep-12

DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	99.1
9.5	99.1
4.75	98.5
2.00	98.0
0.850	97.5
0.425	97.0
0.250	96.8
0.150	96.4
0.075	95.6
0.0503	84.5
0.0356	77.3
0.0225	66.9
0.0159	55.8
0.0125	49.4
0.0090	39.8
0.0064	30.3
0.0044	23.1
0.0031	15.9
0.0013	8.0

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	1.48%
SAND	2.96%
SILT	84.36%
CLAY	11.20%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 18-Oct-12

TEST No:

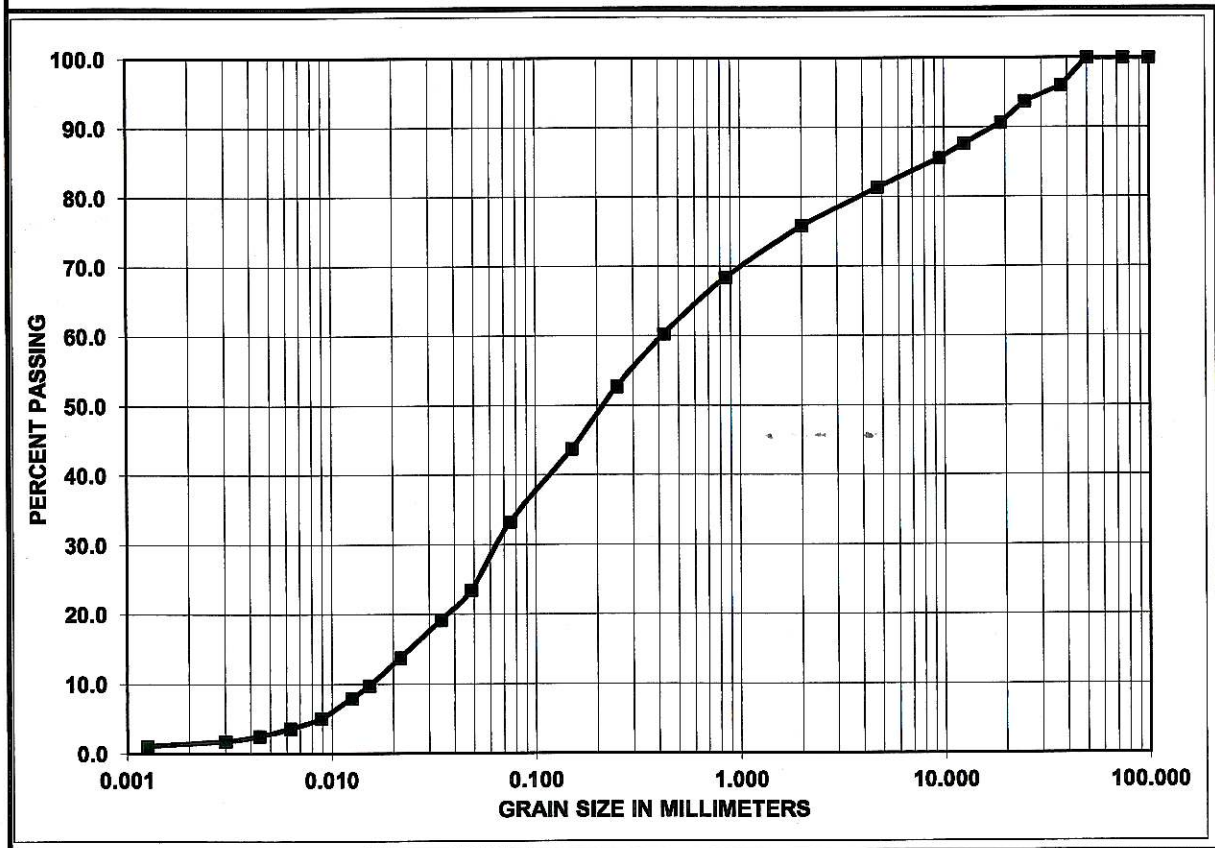
DATE SAMPLED: 16-Aug-12

DATE TESTED: 17-Oct-12

SAMPLED BY: Client

SOURCE: TP12-96, sample S34

DEPTH: 7.0m - 7.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	96.0
25.0	93.7
19.0	90.6
12.5	87.6
9.5	85.5
4.75	81.4
2.00	75.9
0.850	68.4
0.425	60.3
0.250	52.7
0.150	43.7
0.075	33.2
0.0485	23.5
0.0343	19.1
0.0217	13.7
0.0153	9.8
0.0125	7.9
0.0089	5.1
0.0063	3.6
0.0044	2.5
0.0030	1.8
0.0013	1.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	18.63%
SAND	48.13%
SILT	31.85%
CLAY	1.39%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

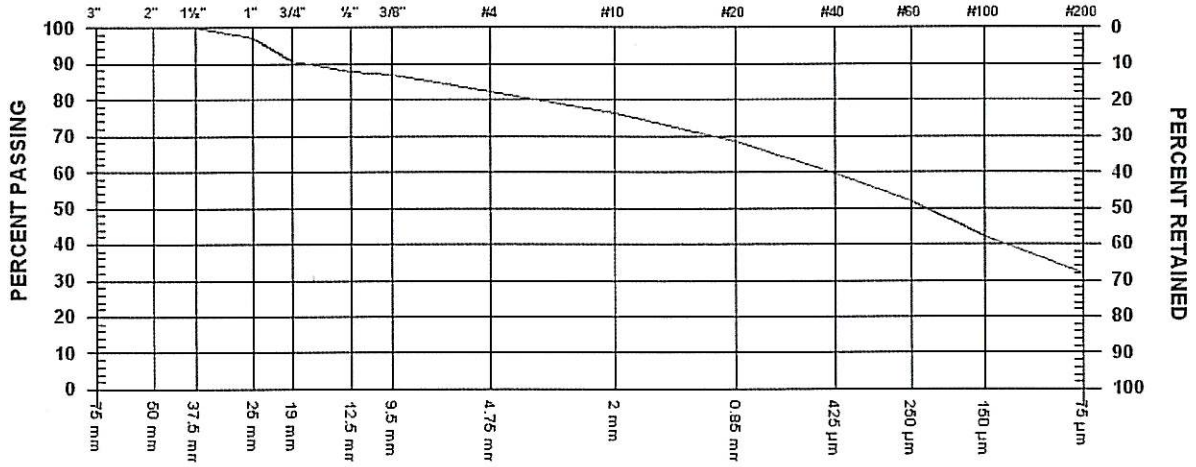
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 16 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.19 DATE SAMPLED 2012.Aug.16

SUPPLIER
SOURCE 7.0m - 7.2m
SPECIFICATION
MATERIAL TYPE TP12-96, sample S34

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	96.9	
3/4"	19 mm	90.5	
1/2"	12.5 mm	87.8	
3/8"	9.5 mm	86.7	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	82.1	
No. 10	2.00 mm	76.4	
No. 20	850 µm	68.6	
No. 40	425 µm	59.8	
No. 60	250 µm	51.9	
No. 100	150 µm	42.1	
No. 200	75 µm	32.0	

MOISTURE CONTENT 10.0%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to AMEC Earth & Environmental, Prince George

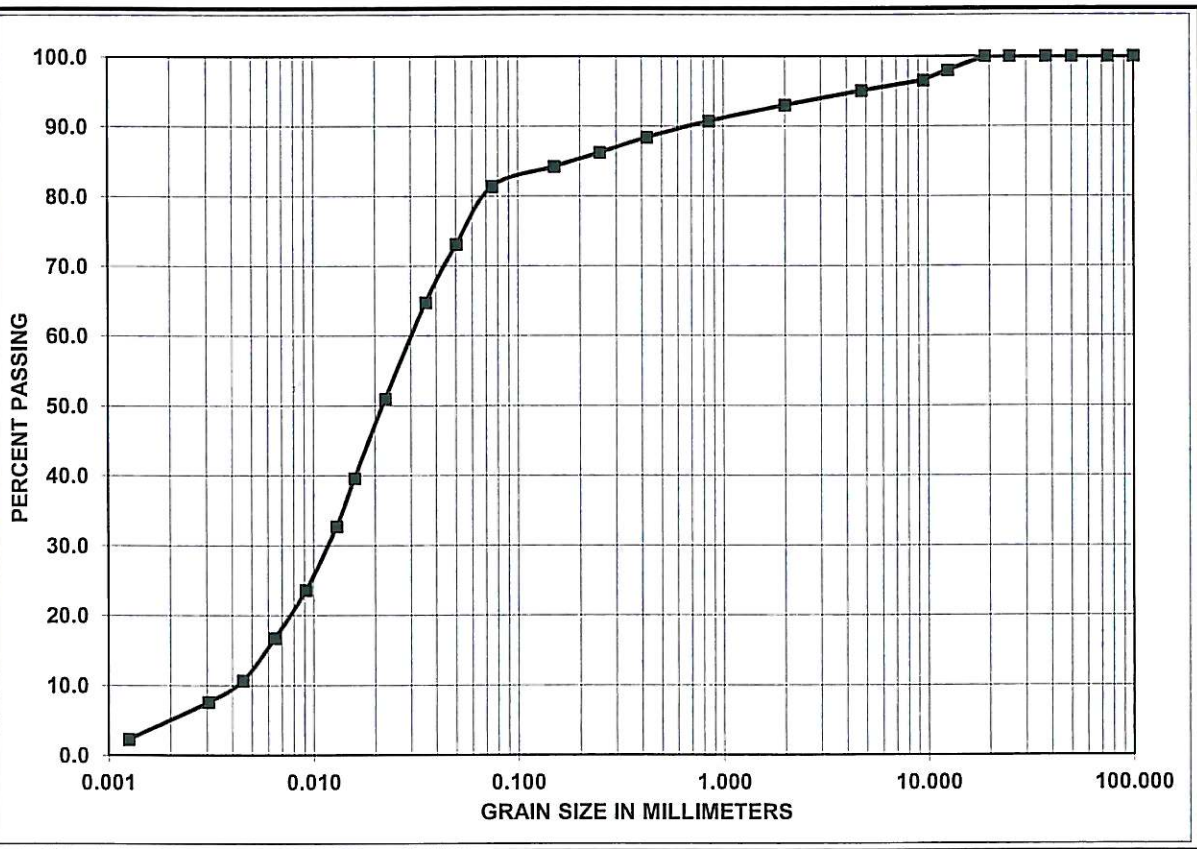
GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 17-Aug-12
SOURCE: TP12-99, sample S35
DATE TESTED: 25-Sep-12
DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	98.0
9.5	96.5
4.75	95.1
2.00	93.0
0.850	90.7
0.425	88.4
0.250	86.2
0.150	84.2
0.075	81.4
0.0503	73.1
0.0356	64.7
0.0225	51.0
0.0159	39.6
0.0130	32.7
0.0092	23.6
0.0065	16.8
0.0045	10.7
0.0031	7.6
0.0013	2.3

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	4.95%
SAND	13.68%
SILT	76.88%
CLAY	4.49%

TECHNICIAN: G Michaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

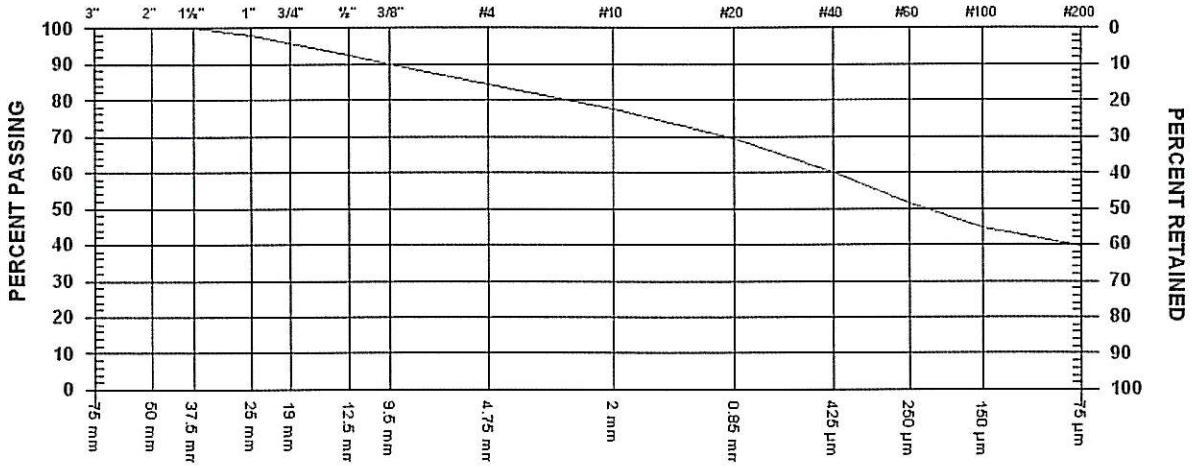
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 17 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.19 DATE SAMPLED 2012.Aug.17

SUPPLIER
SOURCE 5.5m - 5.7m
SPECIFICATION
MATERIAL TYPE TP12-102, sample S36

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm		
2"	50 mm		
1 1/2"	37.5 mm	100.0	
1"	25 mm	97.7	
3/4"	19 mm		
1/2"	12.5 mm	92.3	
3/8"	9.5 mm	89.8	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	84.4	
No. 10	2.00 mm	77.4	
No. 20	850 µm	69.3	
No. 40	425 µm	60.0	
No. 60	250 µm	51.6	
No. 100	150 µm	44.8	
No. 200	75 µm	39.5	

MOISTURE CONTENT 11.6%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

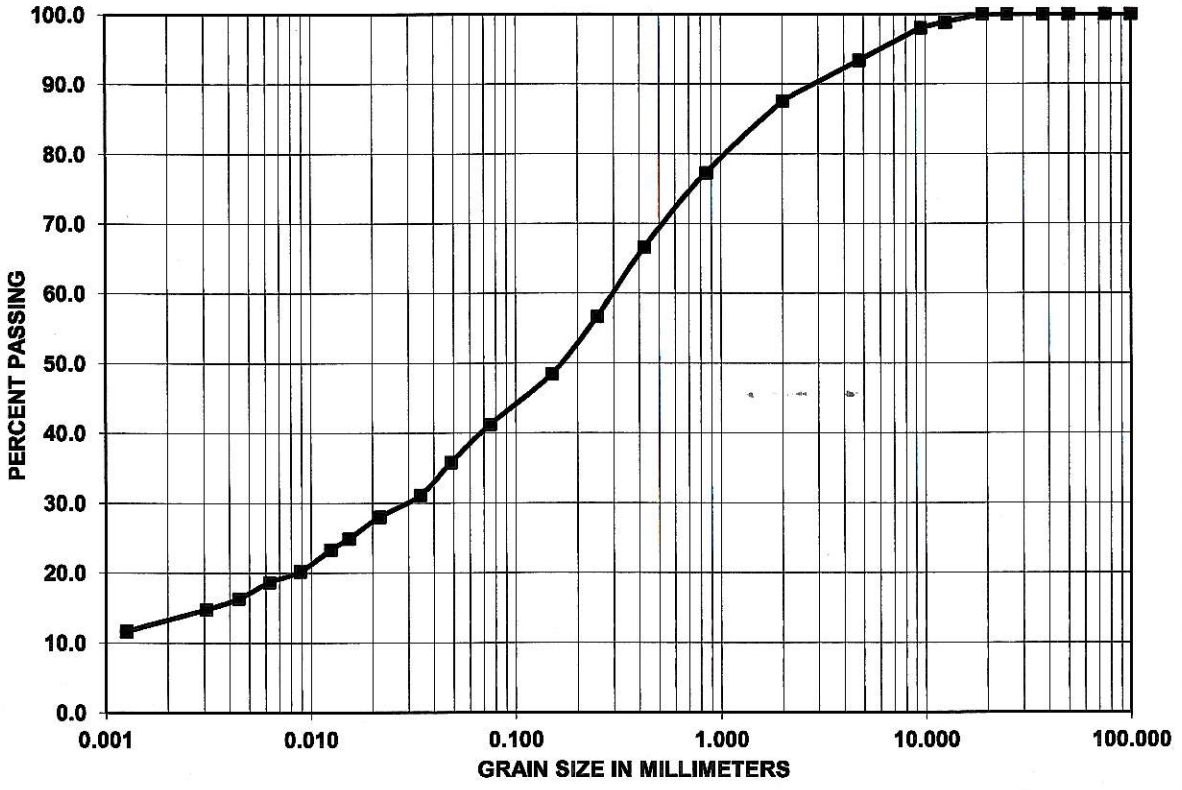
Knight Piesold
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 15-Nov-12

PROJECT NAME: Blackwater

TEST No:
SAMPLED BY: Client
DATE SAMPLED: 17-Aug-12
SOURCE: TP12-102, sample S36
DATE TESTED: 28-Oct-12
DEPTH: 5.5m - 5.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	98.9
9.5	98.0
4.75	93.4
2.00	87.5
0.850	77.3
0.425	66.6
0.250	56.7
0.150	48.4
0.075	41.2
0.0485	35.8
0.0343	31.1
0.0217	28.0
0.0153	24.9
0.0125	23.3
0.0089	20.2
0.0063	18.7
0.0044	16.3
0.0031	14.8
0.0013	11.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	6.63%
SAND	52.20%
SILT	28.22%
CLAY	12.95%

TECHNICIAN: JMichaud

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AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

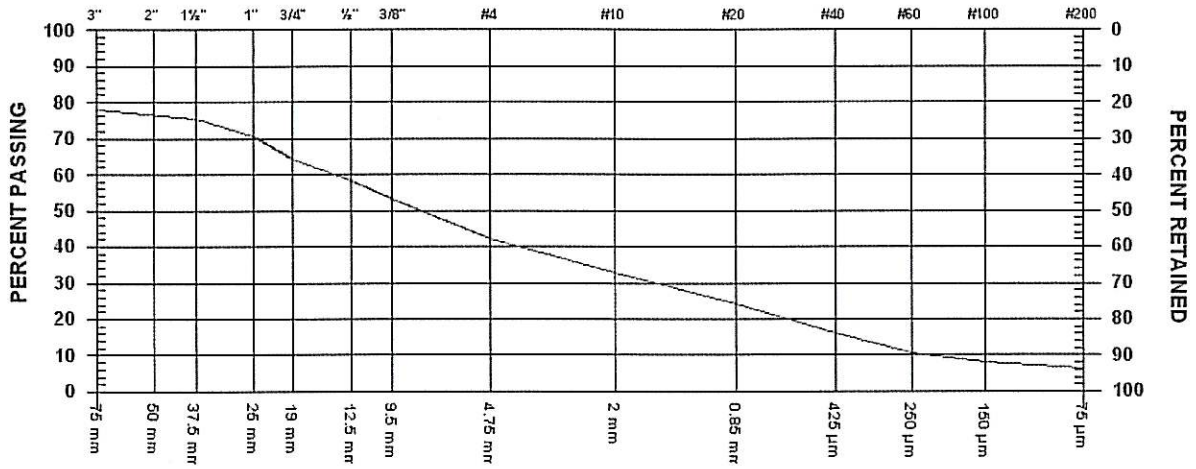
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 18 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.24 DATE SAMPLED 2012.Aug.17

SUPPLIER
SOURCE 6.5m - 6.7m
SPECIFICATION
MATERIAL TYPE TP12-103, sample S37

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	77.9	
2"	50 mm		
1 1/2"	37.5 mm	75.3	
1"	25 mm	70.7	
3/4"	19 mm	64.4	
1/2"	12.5 mm	58.4	
3/8"	9.5 mm	53.2	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	42.1	
No. 10	2.00 mm	32.8	
No. 20	850 µm	24.3	
No. 40	425 µm	16.1	
No. 60	250 µm	10.6	
No. 100	150 µm	8.1	
No. 200	75 µm	6.5	

MOISTURE CONTENT 5.4%

COMMENTS
1 rock <100mm retained on the 75mm screen.

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

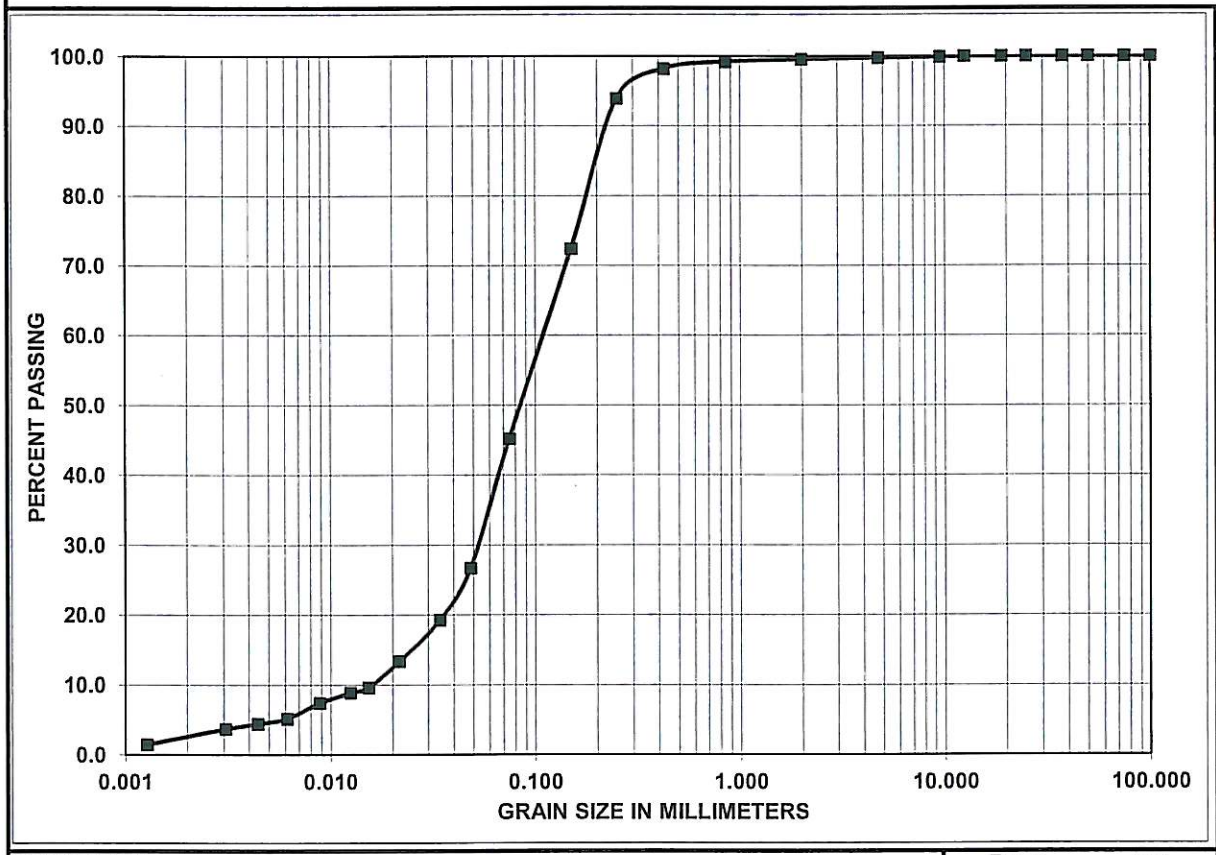
SAMPLED BY: Client

DATE SAMPLED: 17-Aug-12

SOURCE: TP12-106, sample S38

DATE TESTED: 26-Sep-12

DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	100.0
9.5	99.9
4.75	99.7
2.00	99.5
0.850	99.2
0.425	98.2
0.250	93.9
0.150	72.4
0.075	45.2
0.0485	26.7
0.0343	19.3
0.0217	13.3
0.0153	9.6
0.0125	8.9
0.0089	7.4
0.0061	5.2
0.0044	4.4
0.0031	3.7
0.0013	1.5

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	0.25%
SAND	54.55%
SILT	42.81%
CLAY	2.38%

TECHNICIAN: JMichaud

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Engineering interpretation or evaluation of the test results is provided only on written request.

AMEC Environment & Infrastructure
A division of AMEC Americas Limited
3456 Opie Crescent, Prince George, BC, V2N 2P9

SIEVE ANALYSIS REPORT
10 20 40 60 SERIES

PROJECT NO. KX05349
CLIENT Knight Piesold Ltd.
C.C.

TO
Knight Piesold Ltd.
1400 - 750 West Pender
Vancouver, BC
V6C 2T8

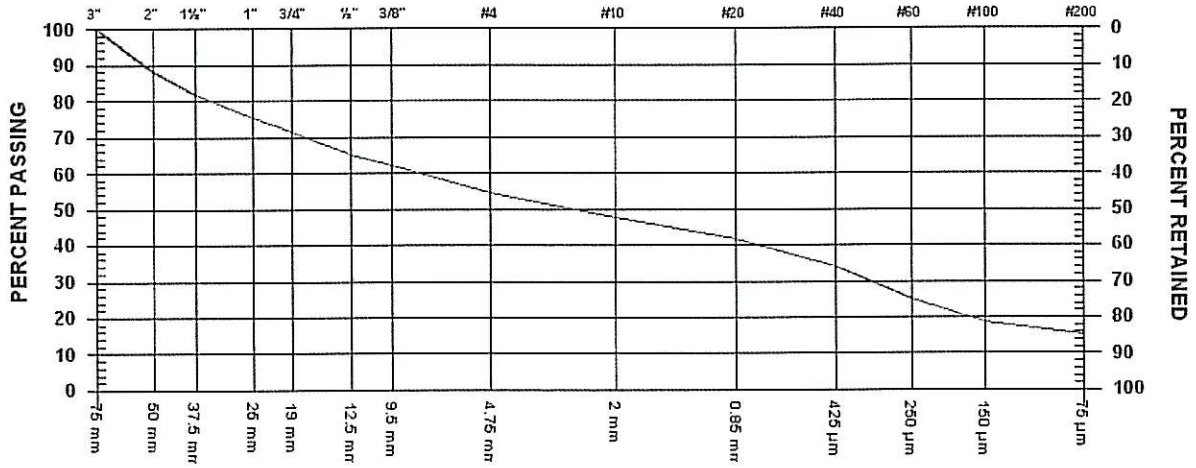
ATTN: Josie Speed

PROJECT Blackwater Project
Materials Testing
CONTRACTOR

SIEVE TEST NO. 19 DATE RECEIVED 2012.Aug.29 DATE TESTED 2012.Sep.24 DATE SAMPLED 2012.Aug.18

SUPPLIER
SOURCE 6.5m - 6.7m
SPECIFICATION
MATERIAL TYPE TP12-108, sample S39

SAMPLED BY Client
TESTED BY AMEC lab
TEST METHOD WASHED



GRAVEL SIZES		PERCENT PASSING	GRADATION LIMITS
3"	75 mm	100.0	
2"	50 mm	88.1	
1 1/2"	37.5 mm	81.8	
1"	25 mm	75.3	
3/4"	19 mm	71.7	
1/2"	12.5 mm	65.3	
3/8"	9.5 mm	62.0	

SAND SIZES AND FINES		PERCENT PASSING	GRADATION LIMITS
No. 4	4.75 mm	54.5	
No. 10	2.00 mm	47.9	
No. 20	850 µm	41.9	
No. 40	425 µm	34.2	
No. 60	250 µm	25.2	
No. 100	150 µm	18.6	
No. 200	75 µm	15.4	

MOISTURE CONTENT 4.7%

COMMENTS

Page 1 of 1 2012.Sep.28 AMEC Environment & Infrastructure PER. JMichaud

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Report System Software Registered to: AMEC Earth & Environmental, Prince George

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

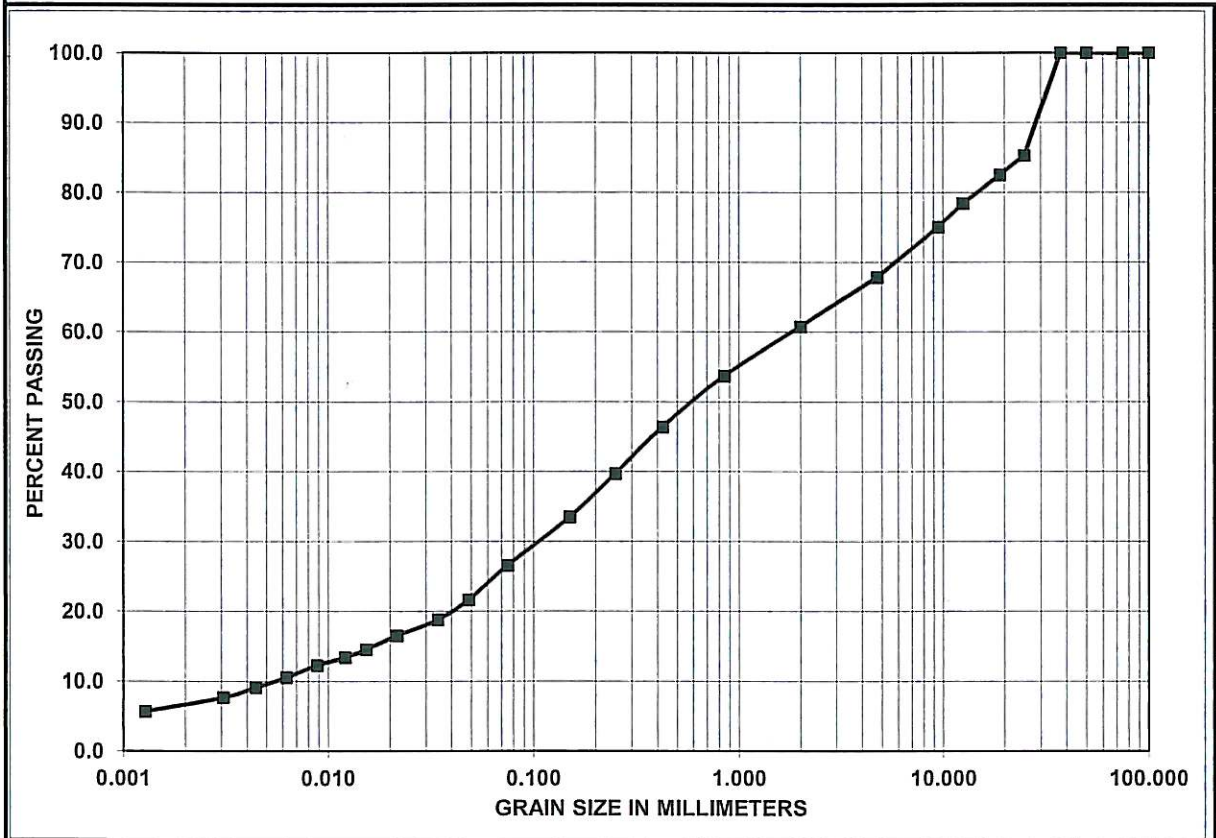
SAMPLED BY: Client

DATE SAMPLED: 18-Aug-12

SOURCE: TP12-114, sample S41

DATE TESTED: 24-Sep-12

DEPTH: 5.5m - 5.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	85.2
19.0	82.5
12.5	78.4
9.5	75.0
4.75	67.8
2.00	60.7
0.850	53.7
0.425	46.4
0.250	39.7
0.150	33.5
0.075	26.6
0.0485	21.6
0.0343	18.8
0.0217	16.5
0.0153	14.5
0.0121	13.4
0.0089	12.2
0.0063	10.5
0.0044	9.1
0.0031	7.7
0.0013	5.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	32.16%
SAND	41.29%
SILT	20.05%
CLAY	6.50%

TECHNICIAN: G Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

GRAIN SIZE DISTRIBUTION

Knight Piesold

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 28-Sep-12

PROJECT NAME: Blackwater

TEST No:

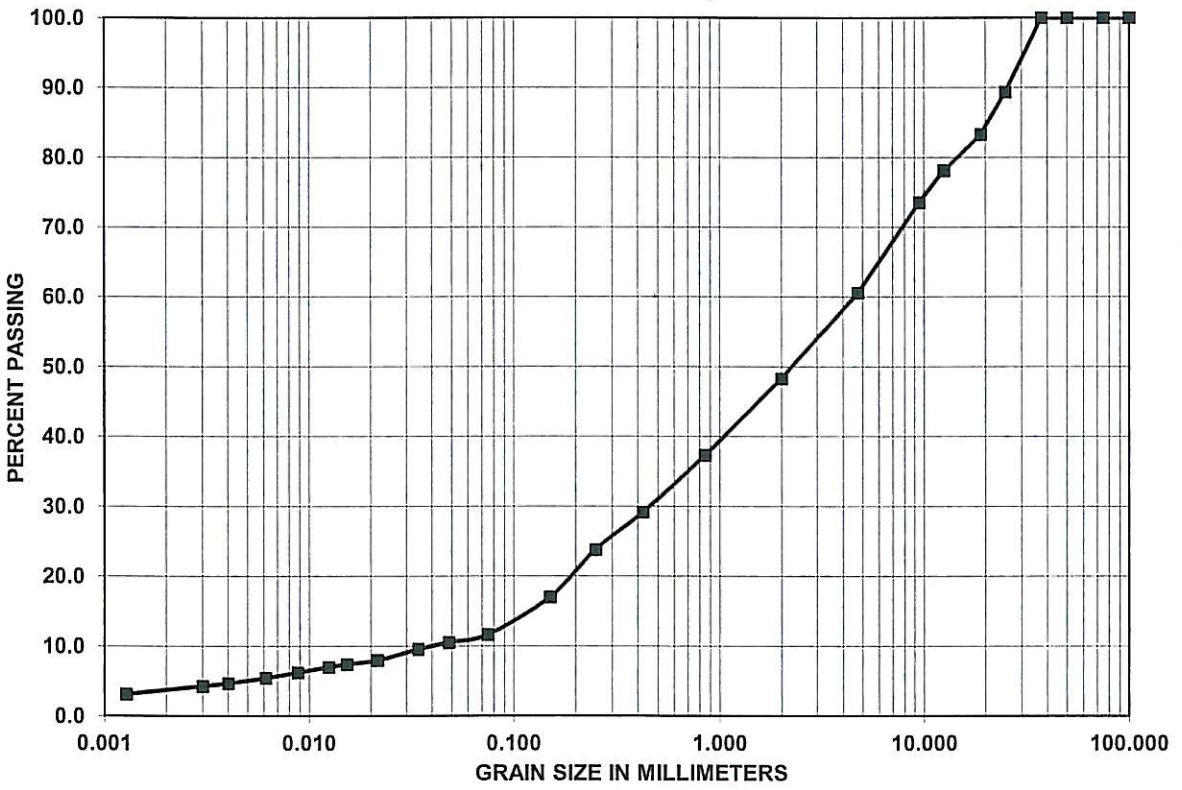
SAMPLED BY: Client

DATE SAMPLED: 19-Aug-12

SOURCE: TP12-117, sample S42

DATE TESTED: 24-Sep-12

DEPTH: 6.0m - 6.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	89.3
19.0	83.2
12.5	78.1
9.5	73.5
4.75	60.6
2.00	48.3
0.850	37.3
0.425	29.1
0.250	23.8
0.150	17.0
0.075	11.6
0.0485	10.5
0.0343	9.5
0.0217	8.0
0.0153	7.4
0.0125	7.0
0.0088	6.2
0.0061	5.4
0.0040	4.7
0.0030	4.3
0.0013	3.1

REMARKS:

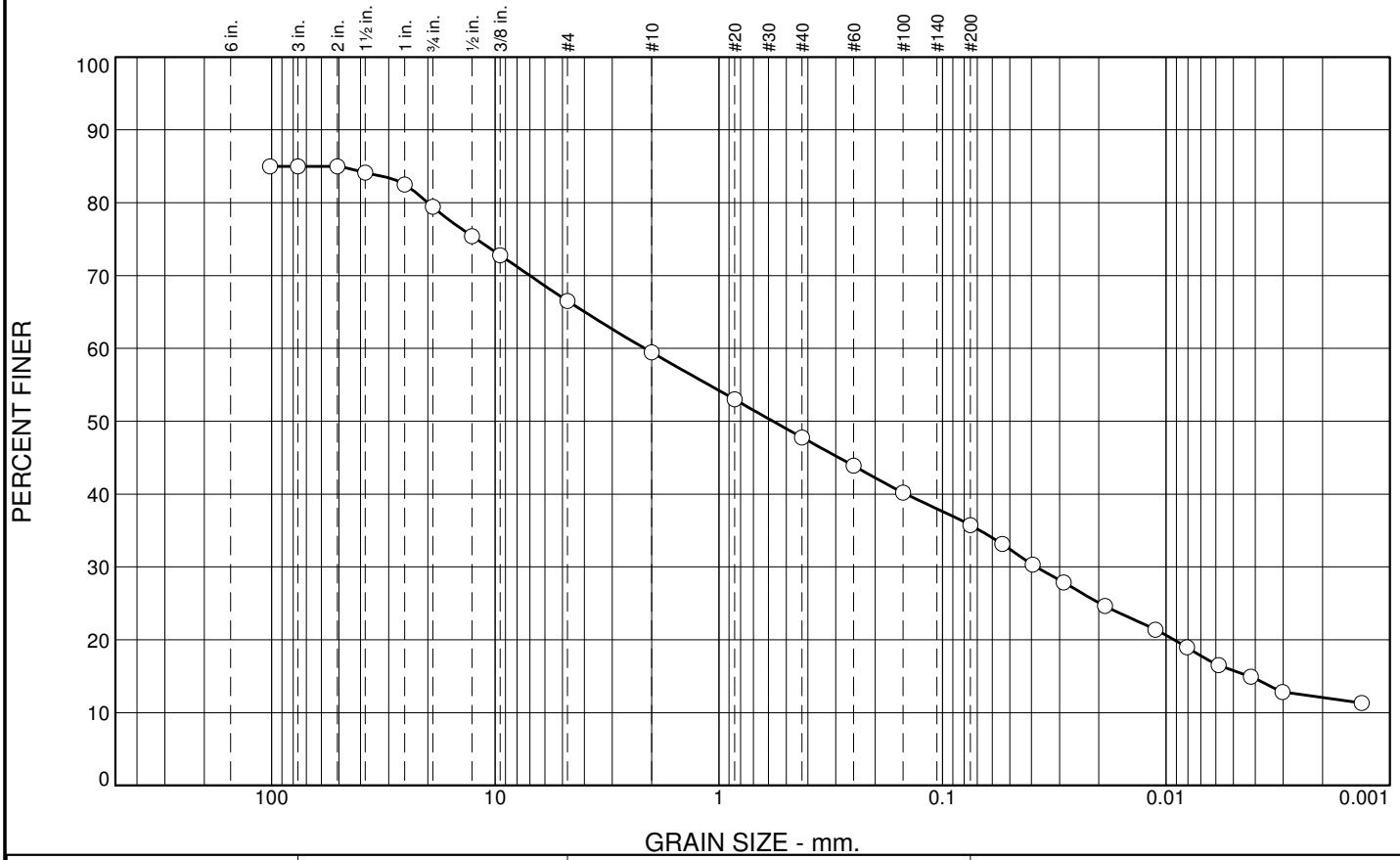
D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	39.44%
SAND	48.96%
SILT	8.00%
CLAY	3.59%

TECHNICIAN: M Michaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
	5.6	12.9	7.0	11.7	12.1	23.6	12.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
4	85.0		
3	85.0		
2	85.0		
1.5	84.1		
1	82.5		
.75	79.4		
.5	75.4		
.375	72.8		
#4	66.5		
#10	59.5		
#20	53.0		
#40	47.8		
#60	43.9		
#100	40.2		
#200	35.7		
0.0541 mm.	33.1		
0.0395 mm.	30.3		
0.0287 mm.	27.9		
0.0188 mm.	24.6		
0.0112 mm.	21.4		
0.0081 mm.	19.0		
0.0058 mm.	16.5		
0.0042 mm.	14.9		
0.0030 mm.	12.8		
0.0013 mm.	11.3		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= D_{85}= D_{60}= 2.1442
D_{50}= 0.5735 D_{30}= 0.0381 D_{15}= 0.0042
D_{10}= C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-121 **Elev./Depth:** 5.5-5.7m

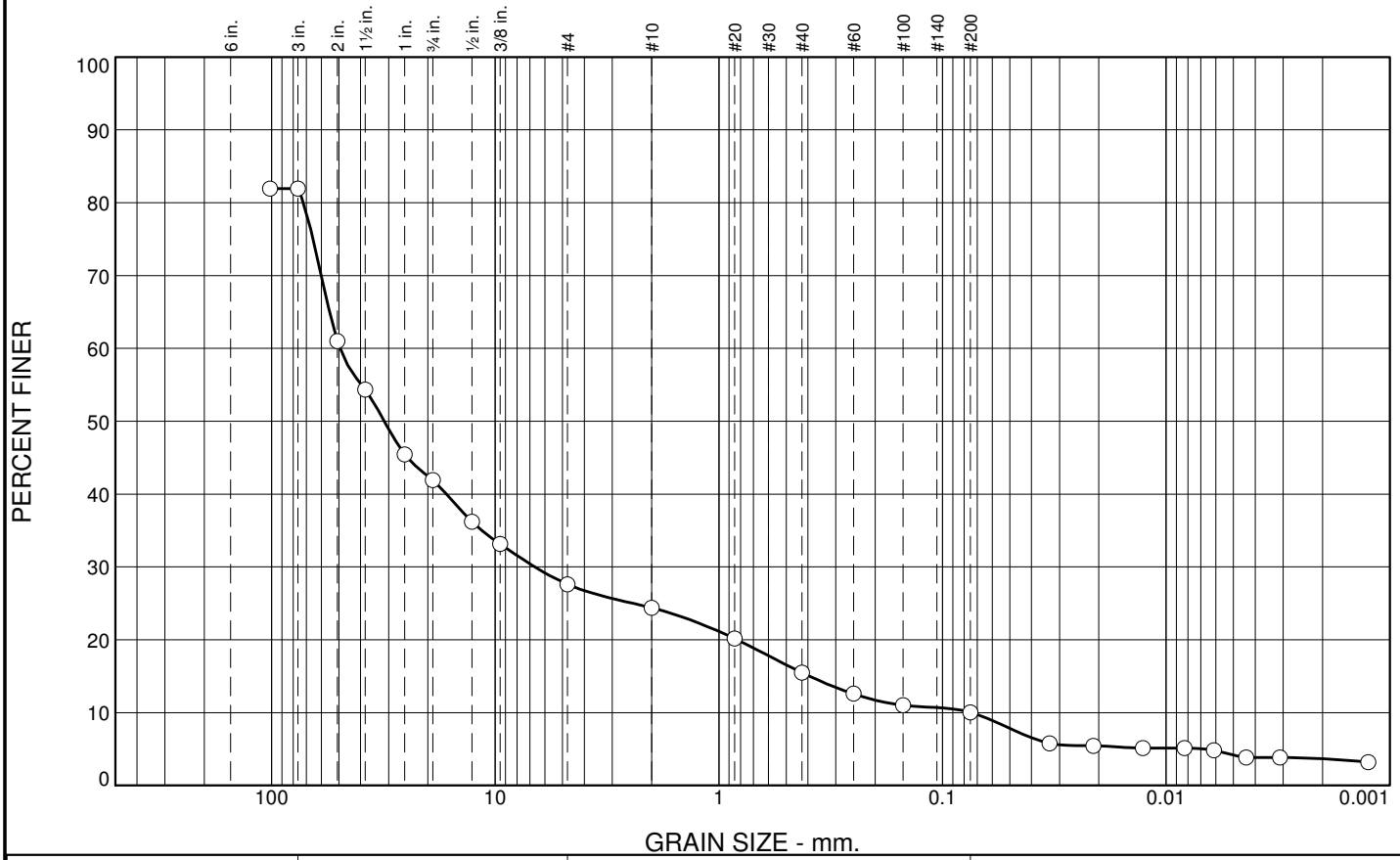
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV/EAP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
	40.0	14.3	3.2	8.9	5.5	6.3	3.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
4	81.9		
3	81.9		
2	61.0		
1.5	54.3		
1	45.4		
.75	41.9		
.5	36.2		
.375	33.2		
#4	27.6		
#10	24.4		
#20	20.2		
#40	15.5		
#60	12.6		
#100	11.0		
#200	10.0		
0.0332 mm.	5.8		
0.0211 mm.	5.5		
0.0127 mm.	5.1		
0.0083 mm.	5.1		
0.0061 mm.	4.8		
0.0044 mm.	3.8		
0.0031 mm.	3.9		
0.0012 mm.	3.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= D_{85}= D_{60}= 49.4867
D_{50}= 31.3357 D_{30}= 6.6488 D_{15}= 0.3932
D_{10}= 0.0743 C_u= 666.34 C_c= 12.03

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-122 **Elev./Depth:** 5.0-5.2m

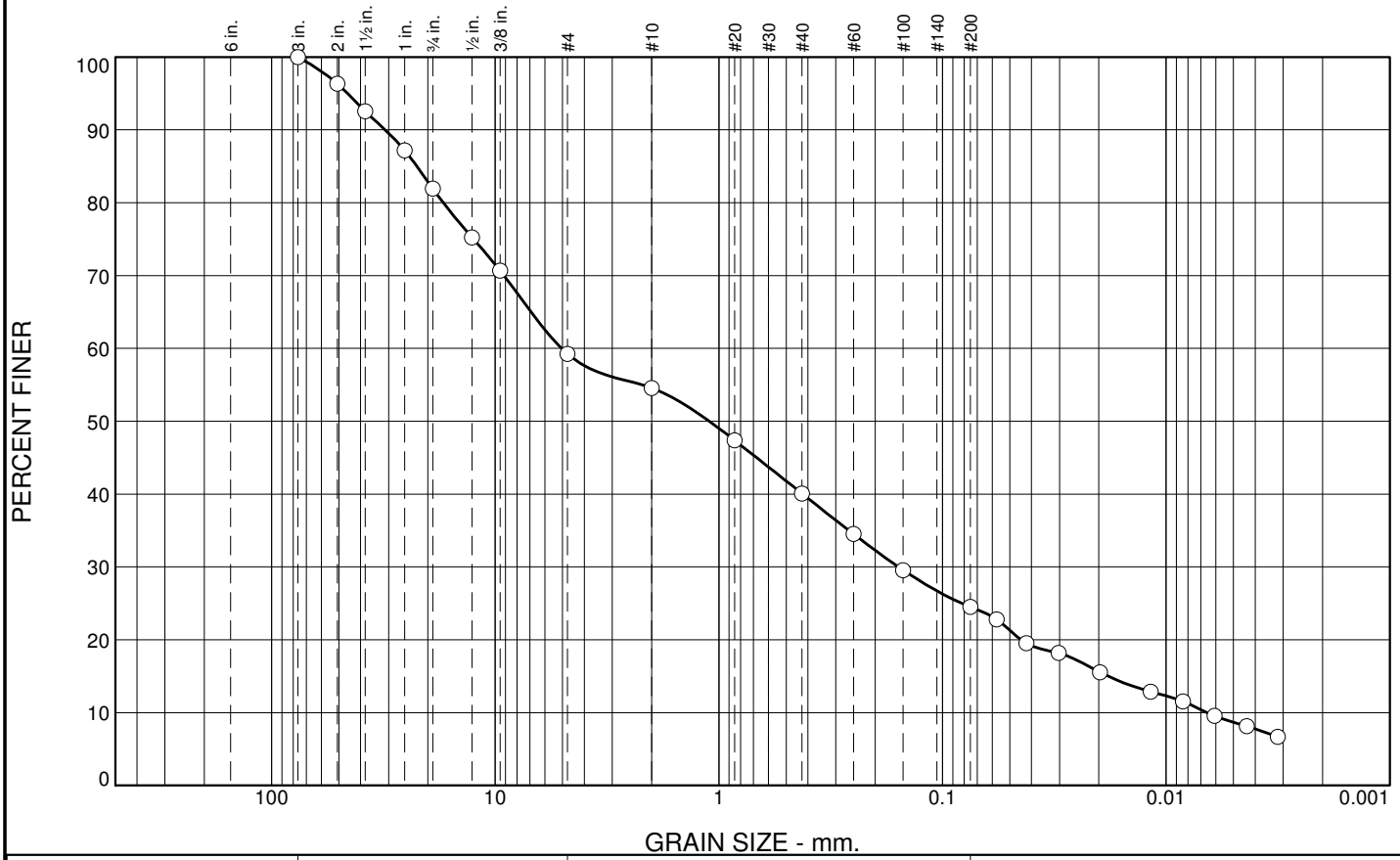
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	18.1	22.6	4.7	14.5	15.6	24.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	96.3		
1.5	92.5		
1	87.2		
.75	81.9		
.5	75.2		
.375	70.7		
#4	59.3		
#10	54.6		
#20	47.4		
#40	40.1		
#60	34.5		
#100	29.6		
#200	24.5		
0.0573 mm.	22.8		
0.0422 mm.	19.5		
0.0303 mm.	18.2		
0.0197 mm.	15.5		
0.0117 mm.	12.9		
0.0084 mm.	11.6		
0.0061 mm.	9.5		
0.0044 mm.	8.1		
0.0032 mm.	6.7		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 15 LL= 23 PI= 8

Coefficients

D_{90}= 31.0851 D_{85}= 22.4312 D_{60}= 5.0470
D_{50}= 1.1037 D_{30}= 0.1574 D_{15}= 0.0181
D_{10}= 0.0066 C_u= 769.98 C_c= 0.75

Classification

USCS= GC AASHTO= A-2-4(0)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-123 **Elev./Depth:** 4.0-4.2m

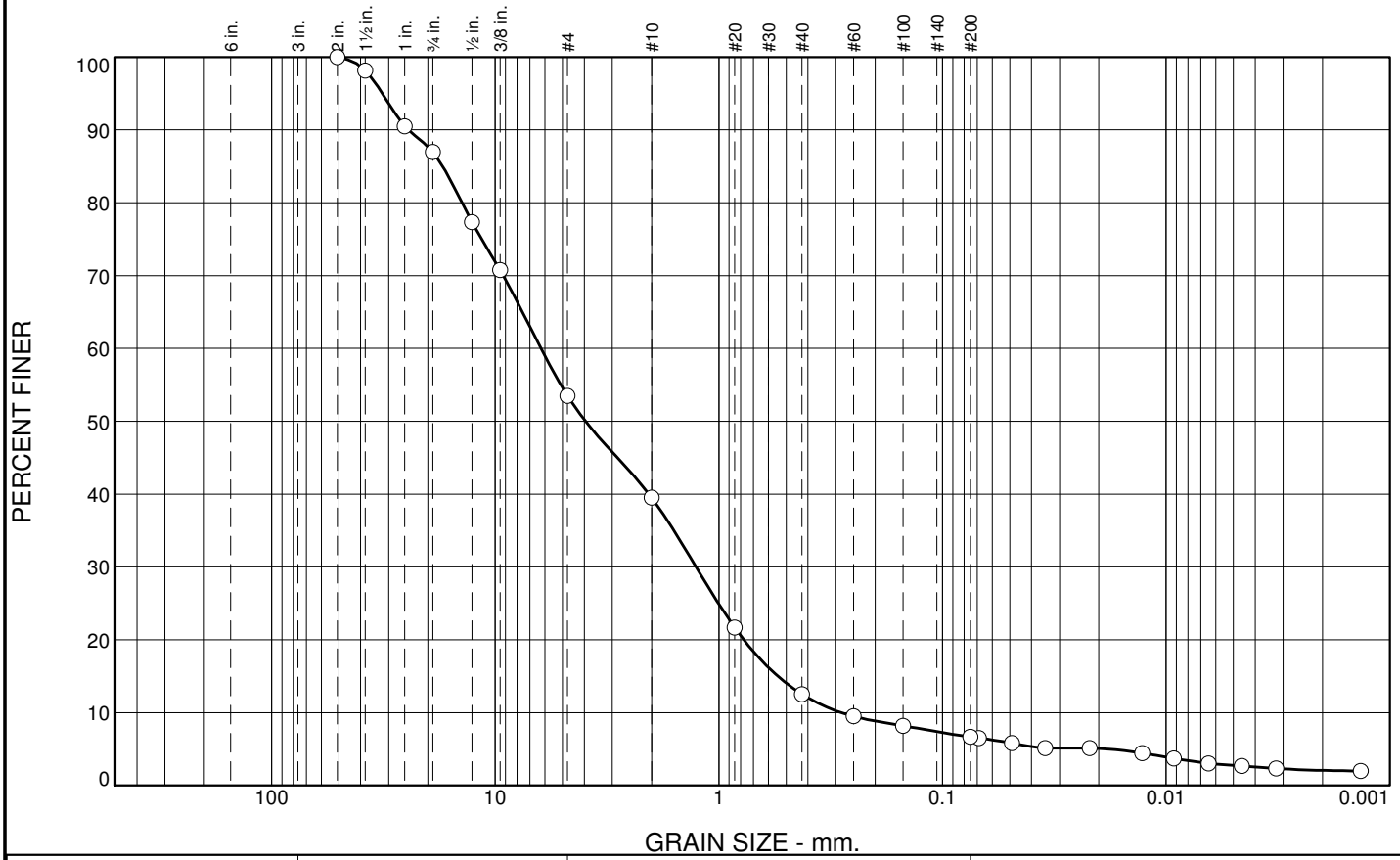
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.0	33.5	14.0	27.0	5.8	4.6	2.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	98.1		
1	90.5		
.75	87.0		
.5	77.3		
.375	70.8		
#4	53.5		
#10	39.5		
#20	21.7		
#40	12.5		
#60	9.5		
#100	8.2		
#200	6.7		
0.0688 mm.	6.5		
0.0489 mm.	5.8		
0.0348 mm.	5.1		
0.0220 mm.	5.1		
0.0128 mm.	4.4		
0.0092 mm.	3.7		
0.0065 mm.	3.0		
0.0046 mm.	2.7		
0.0032 mm.	2.3		
0.0013 mm.	2.0		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 24.5140 D_{85}= 17.2002 D_{60}= 6.2444
D_{50}= 3.9480 D_{30}= 1.2642 D_{15}= 0.5446
D_{10}= 0.2832 C_u= 22.05 C_c= 0.90

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-126 **Elev./Depth:** 4.5-4.7m

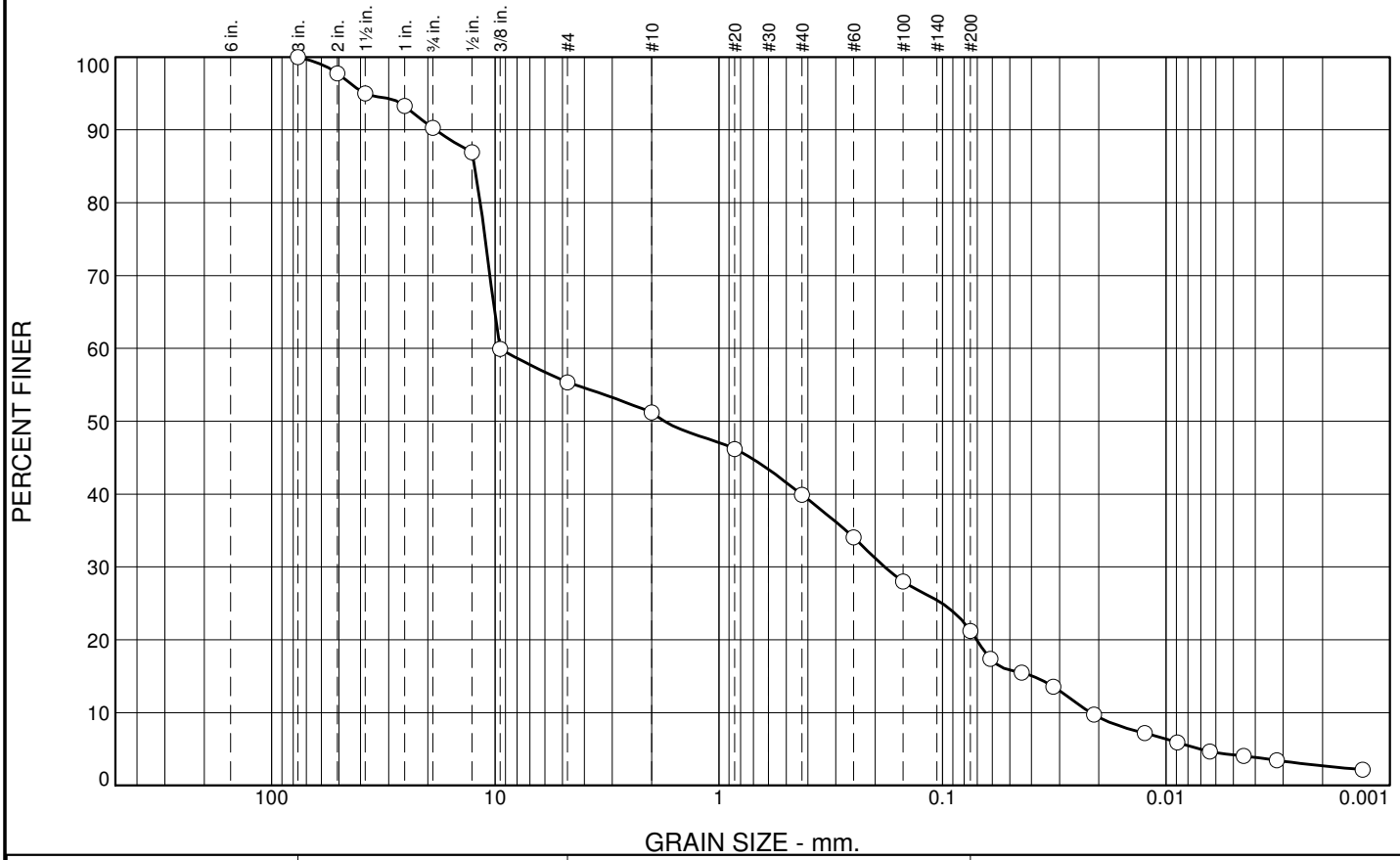
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.7	35.0	4.1	11.3	18.7	18.5	2.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	97.8		
1.5	95.0		
1	93.3		
.75	90.3		
.5	86.9		
.375	59.9		
#4	55.3		
#10	51.2		
#20	46.2		
#40	39.9		
#60	34.1		
#100	28.0		
#200	21.2		
0.0612 mm.	17.4		
0.0442 mm.	15.5		
0.0320 mm.	13.6		
0.0210 mm.	9.7		
0.0125 mm.	7.2		
0.0089 mm.	5.9		
0.0064 mm.	4.7		
0.0045 mm.	4.1		
0.0032 mm.	3.5		
0.0013 mm.	2.2		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 18.5175 D_{85}= 12.3587 D_{60}= 9.5333
D_{50}= 1.7503 D_{30}= 0.1811 D_{15}= 0.0394
D_{10}= 0.0217 C_u= 438.55 C_c= 0.16

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-127 **Elev./Depth:** 4.0-4.2m

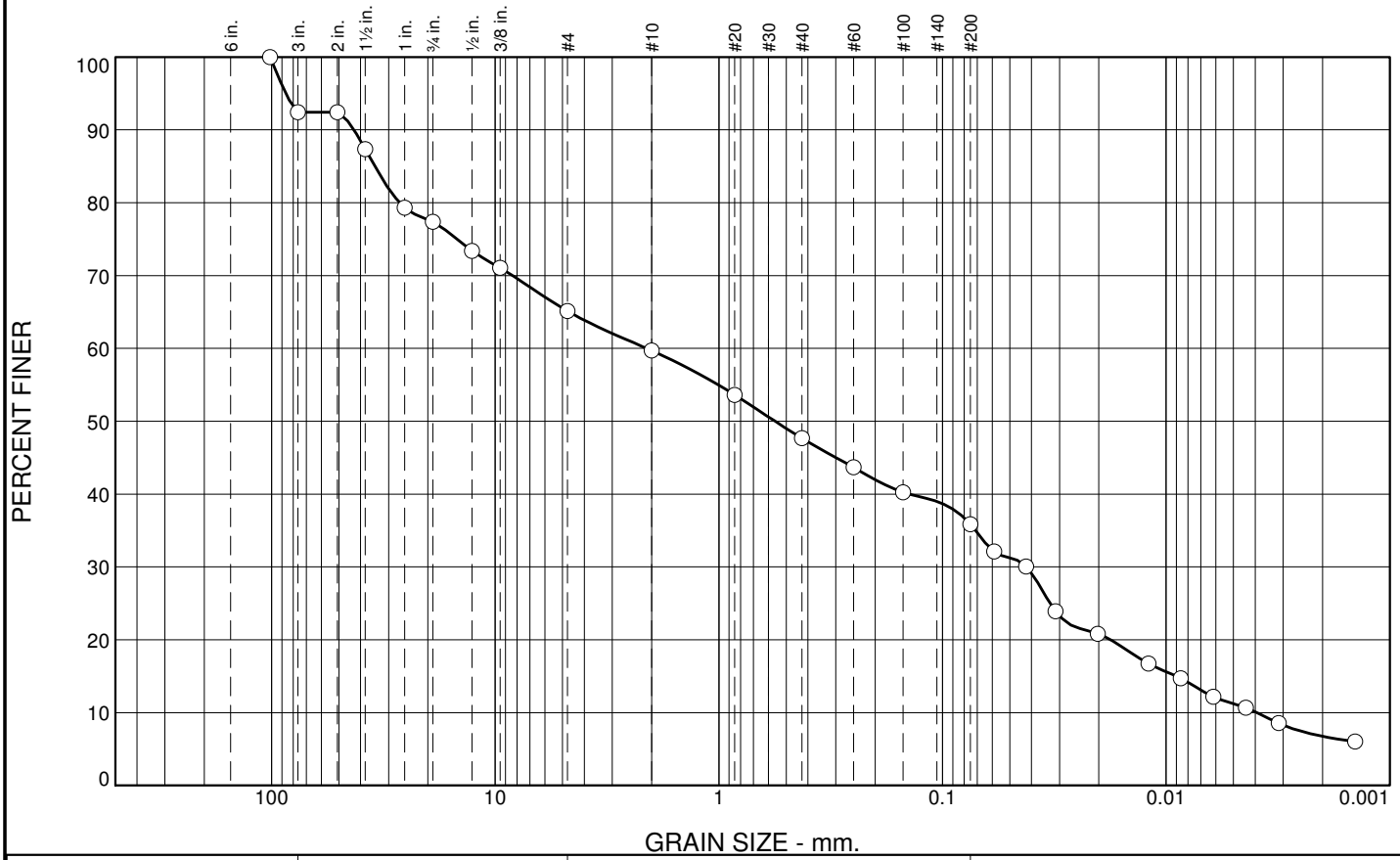
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
7.6	15.0	12.3	5.4	12.0	11.9	29.0	6.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
4	100.0		
3	92.4		
2	92.4		
1.5	87.3		
1	79.3		
.75	77.4		
.5	73.4		
.375	71.1		
#4	65.1		
#10	59.7		
#20	53.6		
#40	47.7		
#60	43.7		
#100	40.2		
#200	35.8		
0.0588 mm.	32.1		
0.0423 mm.	30.1		
0.0313 mm.	23.9		
0.0202 mm.	20.8		
0.0120 mm.	16.7		
0.0086 mm.	14.7		
0.0062 mm.	12.2		
0.0044 mm.	10.7		
0.0031 mm.	8.6		
0.0014 mm.	6.0		

* (no specification provided)

Soil Description

silty, clayey SAND with gravel

Atterberg Limits

PL= 16 LL= 22 PI= 6

Coefficients

D_{90}= 42.8421 D_{85}= 34.4987 D_{60}= 2.1029
D_{50}= 0.5604 D_{30}= 0.0421 D_{15}= 0.0090
D_{10}= 0.0039 C_u= 536.51 C_c= 0.21

Classification

USCS= SC-SM AASHTO= A-4(0)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-130 **Elev./Depth:** 3.0-3.2m

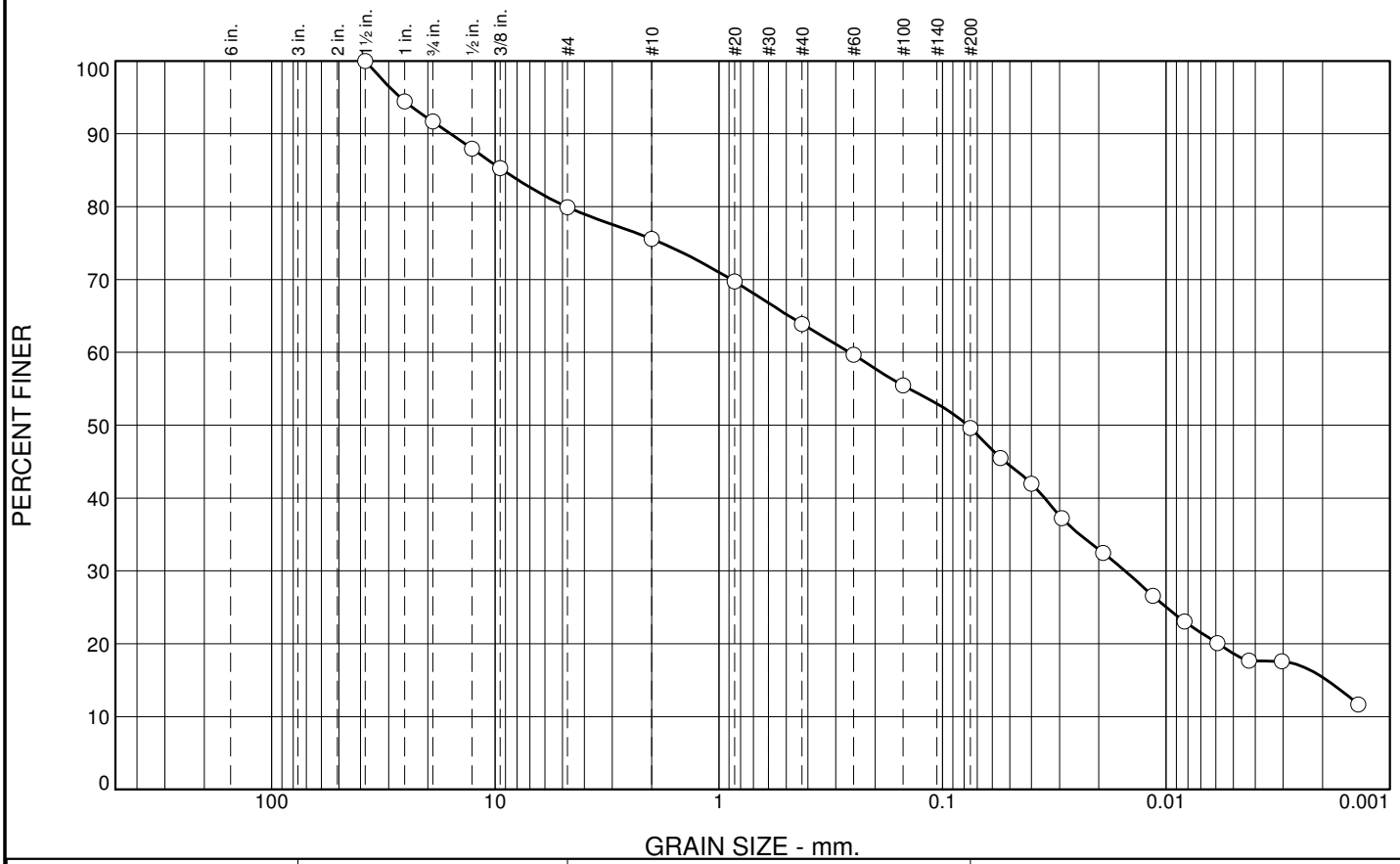
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV/EAP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	8.3	11.8	4.3	11.7	14.3	34.2	15.4

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	94.5		
.75	91.7		
.5	88.0		
.375	85.3		
#4	79.9		
#10	75.6		
#20	69.7		
#40	63.9		
#60	59.7		
#100	55.4		
#200	49.6		
0.0551 mm.	45.5		
0.0400 mm.	42.0		
0.0292 mm.	37.2		
0.0191 mm.	32.5		
0.0114 mm.	26.6		
0.0083 mm.	23.0		
0.0059 mm.	20.1		
0.0043 mm.	17.7		
0.0030 mm.	17.6		
0.0014 mm.	11.7		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 14 LL= 26 PI= 12

Coefficients

D_{90}= 15.8267 D_{85}= 9.2404 D_{60}= 0.2604
D_{50}= 0.0774 D_{30}= 0.0153 D_{15}= 0.0019
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(3)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-133 **Elev./Depth:** 3.5-3.7m

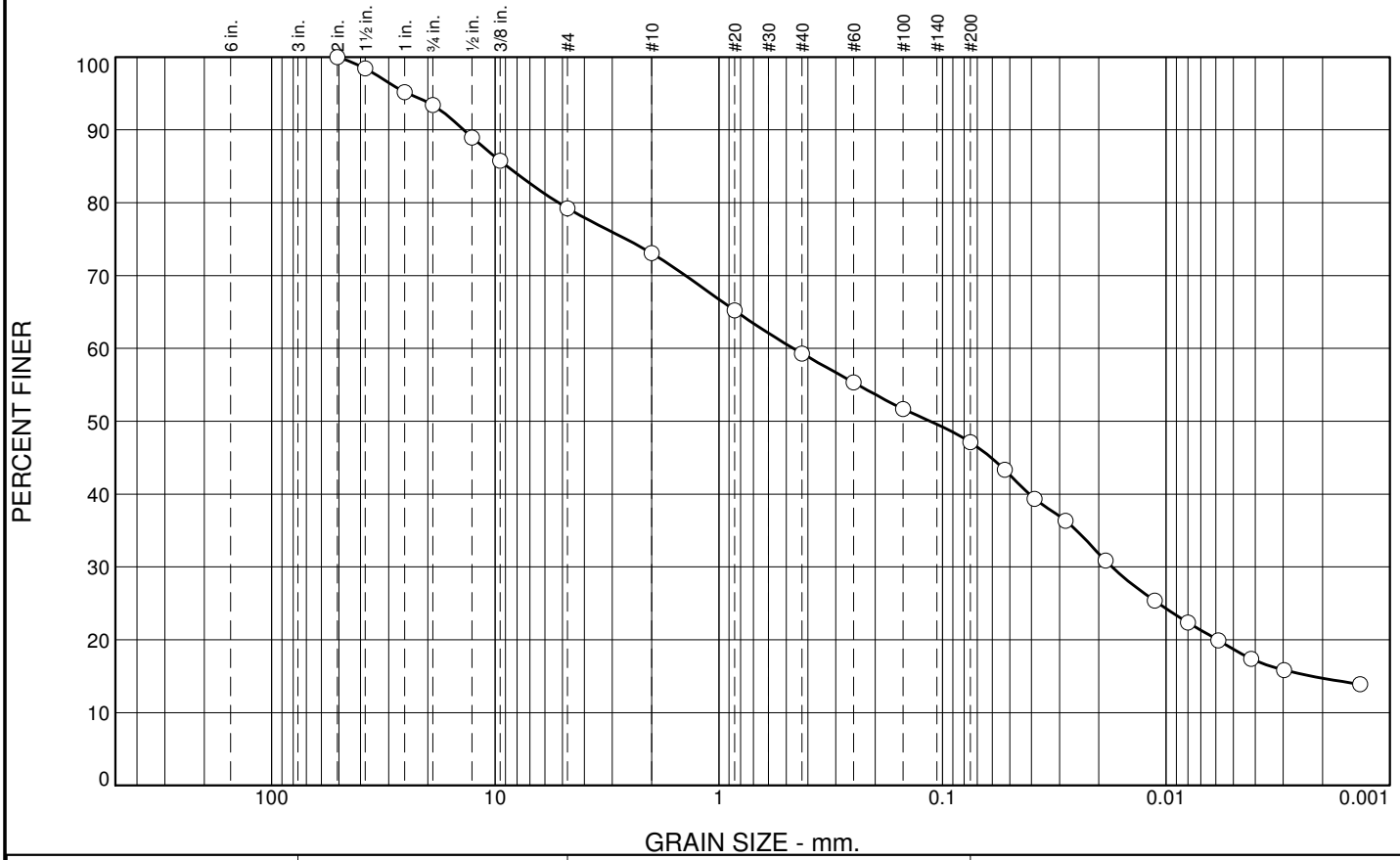
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV/EAP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.6	14.2	6.1	13.8	12.2	32.4	14.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	98.4		
1	95.2		
.75	93.4		
.5	89.0		
.375	85.8		
#4	79.2		
#10	73.1		
#20	65.2		
#40	59.3		
#60	55.3		
#100	51.7		
#200	47.1		
0.0527 mm.	43.3		
0.0388 mm.	39.3		
0.0282 mm.	36.4		
0.0187 mm.	30.9		
0.0113 mm.	25.4		
0.0080 mm.	22.4		
0.0058 mm.	19.9		
0.0042 mm.	17.4		
0.0030 mm.	15.9		
0.0014 mm.	13.9		

* (no specification provided)

Soil Description

clayey SAND with gravel

Atterberg Limits

PL= 13 LL= 25 PI= 12

Coefficients

D_{90}= 13.8531 D_{85}= 8.8455 D_{60}= 0.4645
D_{50}= 0.1136 D_{30}= 0.0175 D_{15}= 0.0022
D_{10}= C_u= C_c=

Classification

USCS= SC AASHTO= A-6(2)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-135 **Elev./Depth:** 4.5-4.7m

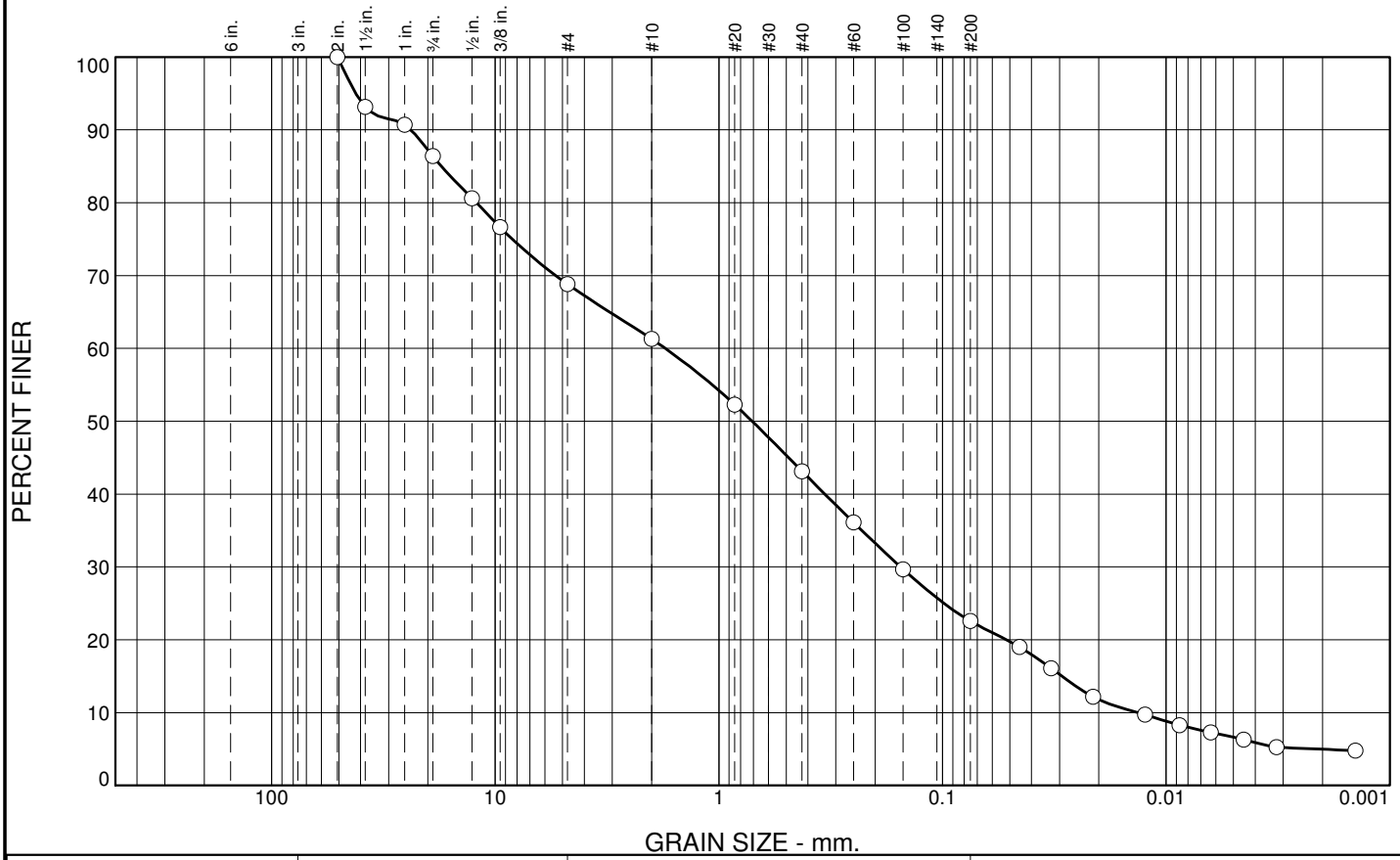
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV/EAP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.6	17.6	7.5	18.2	20.5	17.6	5.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	93.1		
1	90.7		
.75	86.4		
.5	80.6		
.375	76.6		
#4	68.8		
#10	61.3		
#20	52.3		
#40	43.1		
#60	36.1		
#100	29.7		
#200	22.6		
0.0453 mm.	19.0		
0.0327 mm.	16.1		
0.0212 mm.	12.2		
0.0124 mm.	9.7		
0.0087 mm.	8.3		
0.0063 mm.	7.3		
0.0045 mm.	6.3		
0.0032 mm.	5.2		
0.0014 mm.	4.8		

* (no specification provided)

Soil Description

silty SAND with gravel

Atterberg Limits

PL= 15 LL= 17 PI= 2

Coefficients

D_{90}= 23.8810 D_{85}= 17.4232 D_{60}= 1.7388
D_{50}= 0.7092 D_{30}= 0.1541 D_{15}= 0.0292
D_{10}= 0.0134 C_u= 130.19 C_c= 1.02

Classification

USCS= SM AASHTO= A-1-b

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-136 **Elev./Depth:** 5.0-5.2m

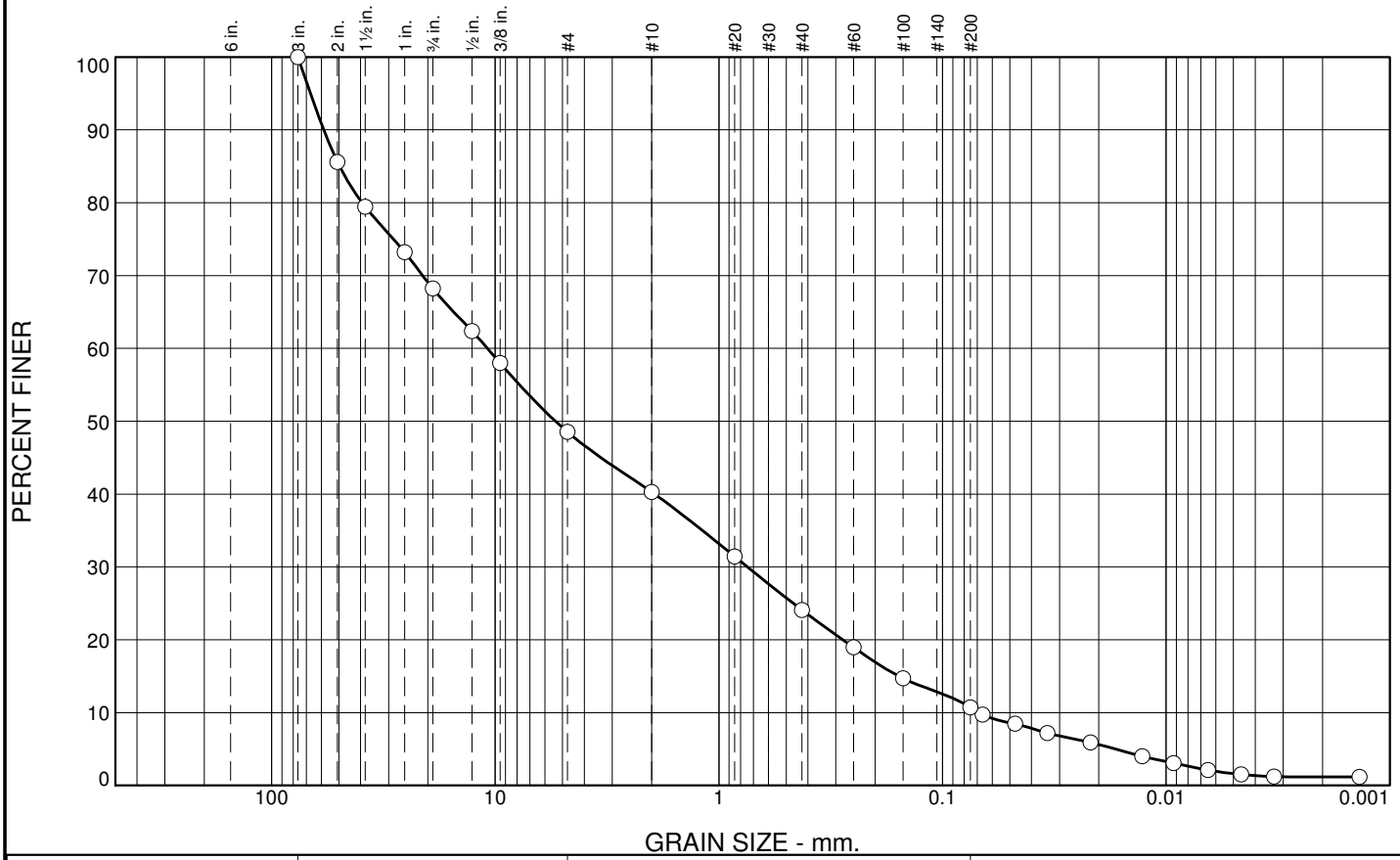
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV/EAP

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	31.8	19.7	8.2	16.2	13.4	9.5	1.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	85.6		
1.5	79.4		
1	73.2		
.75	68.2		
.5	62.4		
.375	58.0		
#4	48.5		
#10	40.3		
#20	31.4		
#40	24.1		
#60	19.0		
#100	14.7		
#200	10.7		
0.0662 mm.	9.7		
0.0474 mm.	8.5		
0.0339 mm.	7.2		
0.0218 mm.	5.9		
0.0128 mm.	4.0		
0.0093 mm.	3.1		
0.0065 mm.	2.1		
0.0046 mm.	1.5		
0.0033 mm.	1.2		
0.0014 mm.	1.2		

* (no specification provided)

Soil Description

poorly graded GRAVEL with silt and sand

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 58.4860 D_{85}= 49.7274 D_{60}= 10.8476
D_{50}= 5.3822 D_{30}= 0.7452 D_{15}= 0.1567
D_{10}= 0.0686 C_u= 158.20 C_c= 0.75

Classification

USCS= GP-GM AASHTO= A-1-a

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-138 **Elev./Depth:** 5.0-5.2m

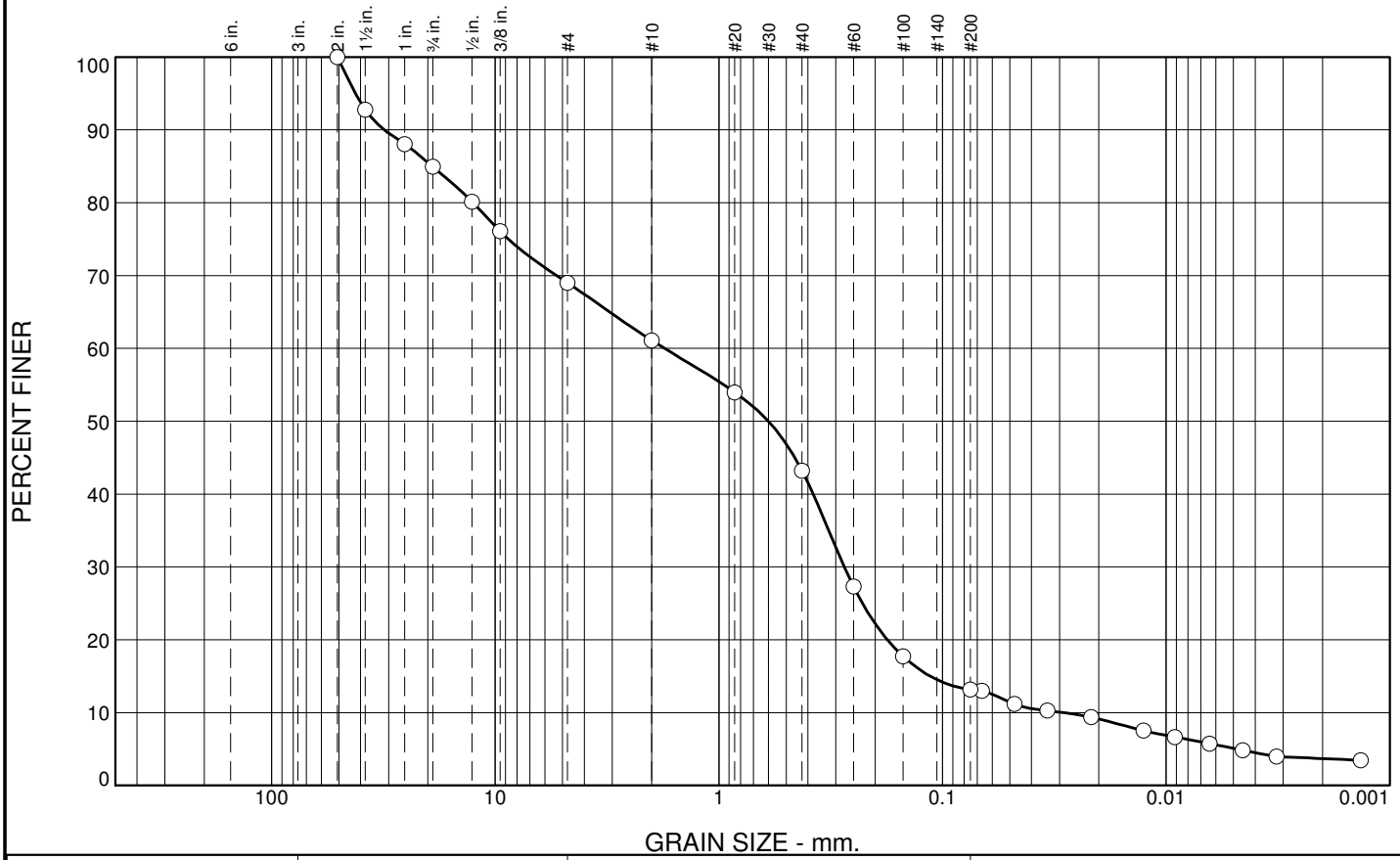
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.0	16.0	7.9	17.9	30.0	9.5	3.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	92.8		
1	88.0		
.75	85.0		
.5	80.1		
.375	76.1		
#4	69.0		
#10	61.1		
#20	54.0		
#40	43.2		
#60	27.3		
#100	17.7		
#200	13.2		
0.0667 mm.	13.0		
0.0477 mm.	11.2		
0.0340 mm.	10.3		
0.0216 mm.	9.4		
0.0126 mm.	7.5		
0.0091 mm.	6.7		
0.0064 mm.	5.8		
0.0045 mm.	4.8		
0.0032 mm.	4.0		
0.0013 mm.	3.5		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 31.3669 D_{85}= 19.1280 D_{60}= 1.7504
D_{50}= 0.6006 D_{30}= 0.2747 D_{15}= 0.1136
D_{10}= 0.0287 C_u= 61.03 C_c= 1.50

Classification

USCS= AASHTO=

Remarks

Sample No.: (1) **Source of Sample:** **Date:** 11/8/12
Location: TP12-139 **Elev./Depth:** 2.0-2.2m

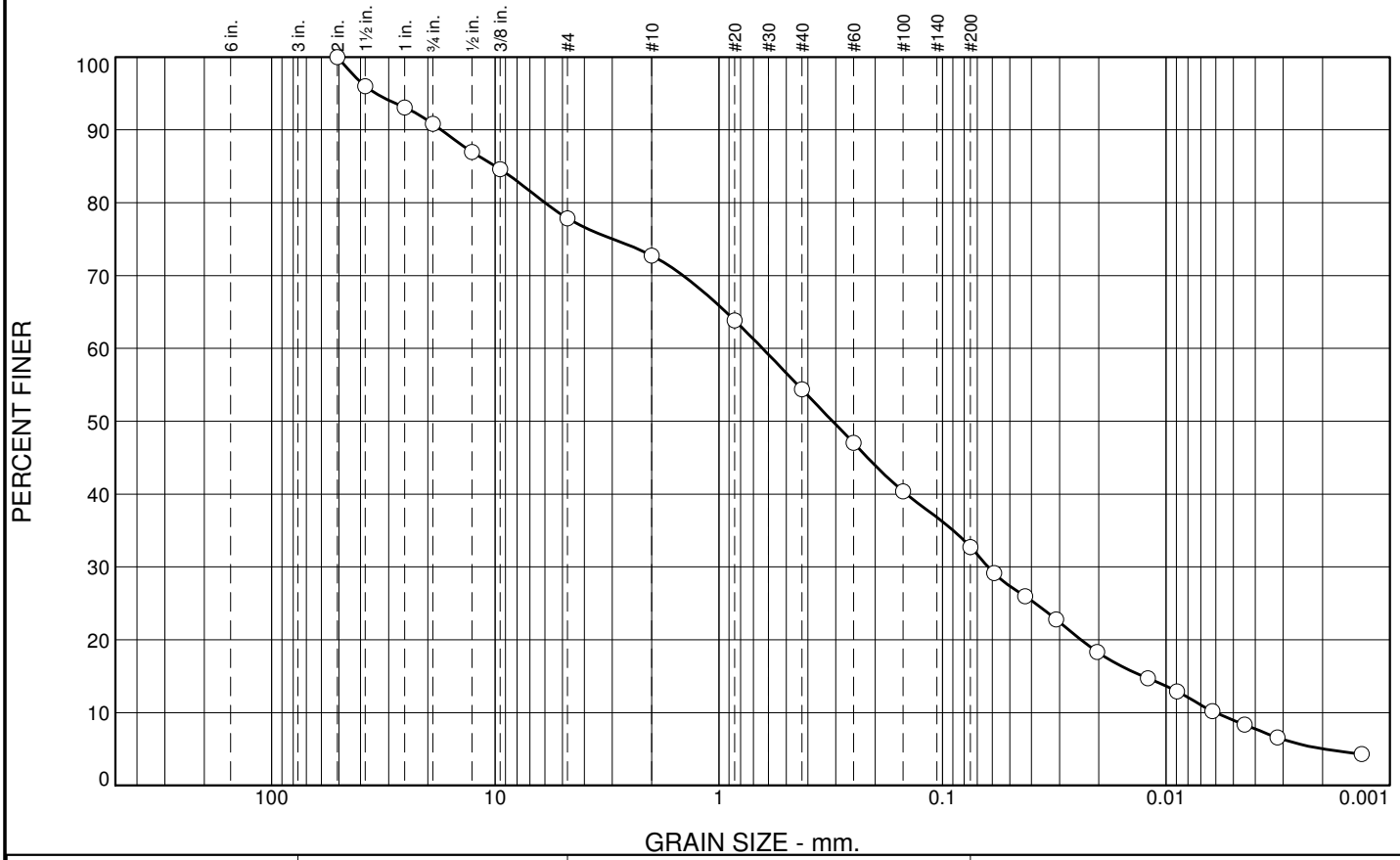
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	9.2	13.0	5.1	18.3	21.7	27.7	5.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	96.0		
1	93.1		
.75	90.8		
.5	86.9		
.375	84.6		
#4	77.8		
#10	72.7		
#20	63.8		
#40	54.4		
#60	47.0		
#100	40.4		
#200	32.7		
0.0588 mm.	29.1		
0.0428 mm.	26.0		
0.0311 mm.	22.8		
0.0203 mm.	18.3		
0.0121 mm.	14.7		
0.0089 mm.	12.9		
0.0062 mm.	10.2		
0.0045 mm.	8.4		
0.0032 mm.	6.6		
0.0013 mm.	4.3		

* (no specification provided)

Soil Description

silty SAND with gravel

Atterberg Limits

PL= 14 LL= 17 PI= 3

Coefficients

D_{90}= 17.4449 D_{85}= 9.9785 D_{60}= 0.6374
D_{50}= 0.3099 D_{30}= 0.0626 D_{15}= 0.0127
D_{10}= 0.0060 C_u= 106.07 C_c= 1.02

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

Sample No.: (2) **Source of Sample:** **Date:** 11/8/12
Location: TP12-139 **Elev./Depth:** 4.0-4.2m

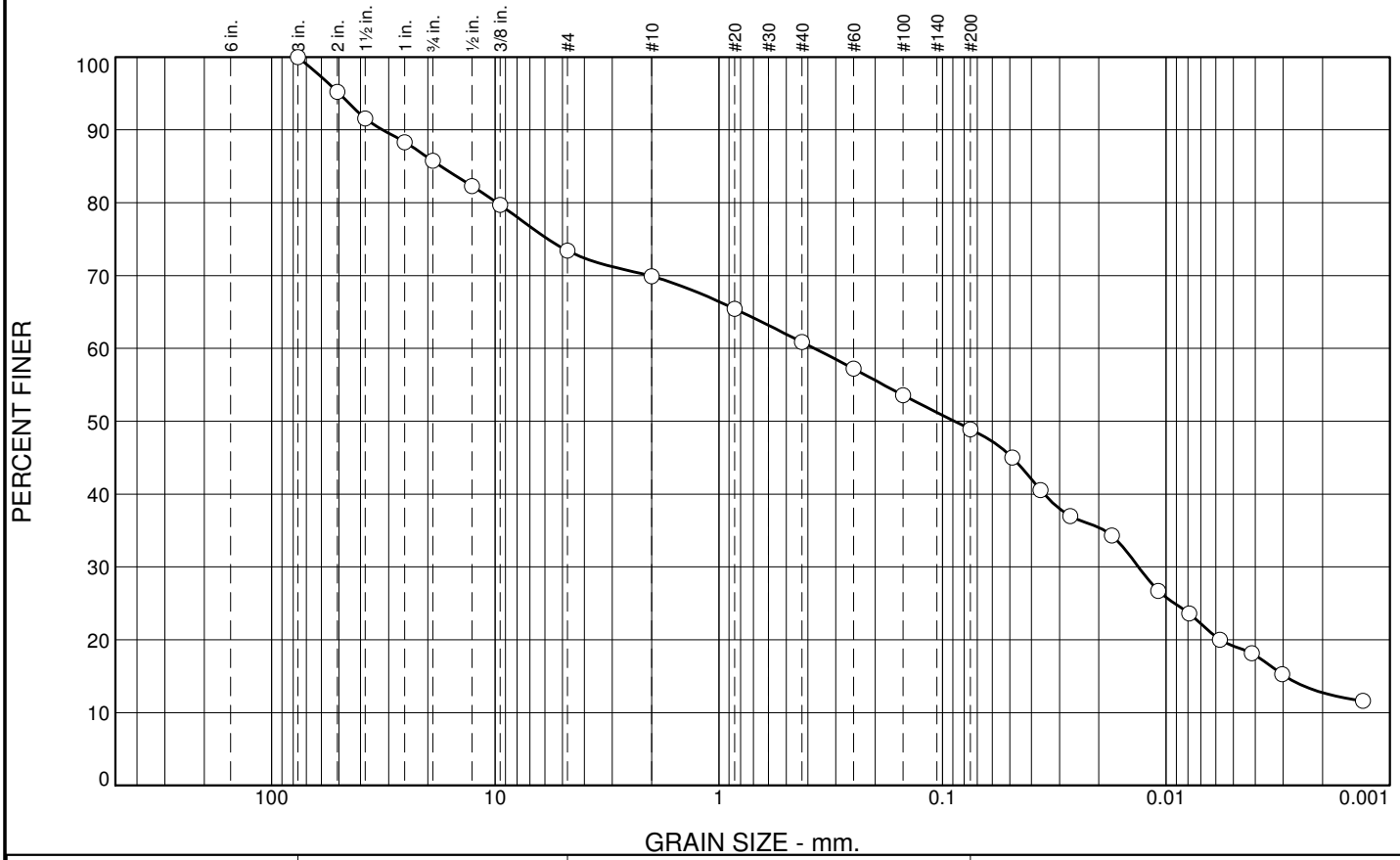
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	14.3	12.3	3.5	9.0	12.0	36.2	12.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	95.2		
1.5	91.6		
1	88.3		
.75	85.7		
.5	82.3		
.375	79.7		
#4	73.4		
#10	69.9		
#20	65.4		
#40	60.9		
#60	57.2		
#100	53.6		
#200	48.9		
0.0488 mm.	45.0		
0.0365 mm.	40.6		
0.0269 mm.	37.0		
0.0175 mm.	34.3		
0.0108 mm.	26.7		
0.0079 mm.	23.6		
0.0057 mm.	20.0		
0.0041 mm.	18.1		
0.0030 mm.	15.3		
0.0013 mm.	11.6		

* (no specification provided)

Soil Description

clayey GRAVEL with sand

Atterberg Limits

PL= 13 LL= 28 PI= 15

Coefficients

D_{90}= 31.9090 D_{85}= 17.5320 D_{60}= 0.3740
D_{50}= 0.0884 D_{30}= 0.0133 D_{15}= 0.0029
D_{10}= C_u= C_c=

Classification

USCS= GC AASHTO= A-6(4)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-142 **Elev./Depth:** 4.0-4.2m

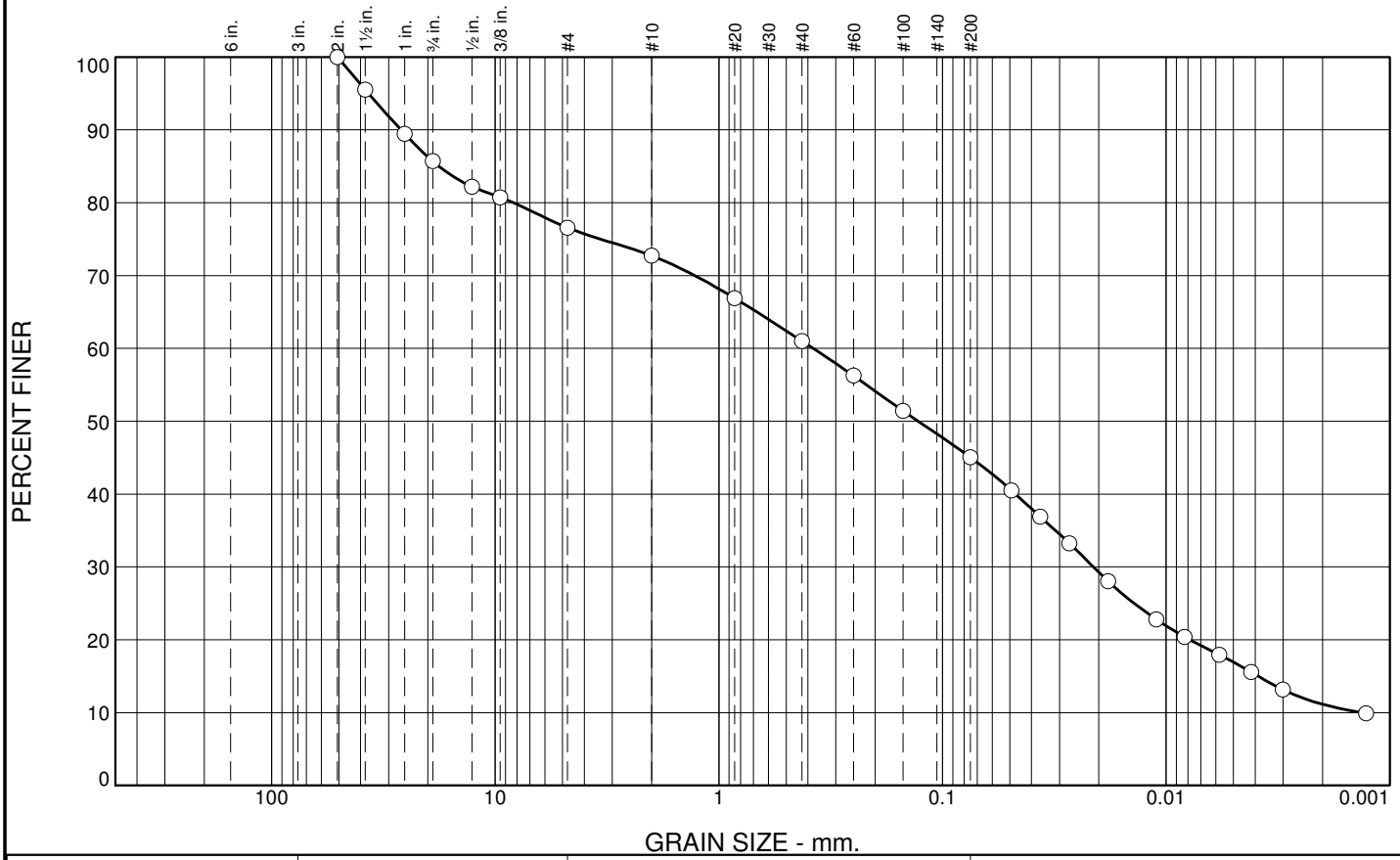
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	14.3	9.1	3.9	11.7	16.0	33.8	11.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	95.5		
1	89.5		
.75	85.7		
.5	82.2		
.375	80.7		
#4	76.6		
#10	72.7		
#20	66.9		
#40	61.0		
#60	56.3		
#100	51.4		
#200	45.0		
0.0492 mm.	40.5		
0.0366 mm.	36.9		
0.0271 mm.	33.3		
0.0182 mm.	28.0		
0.0111 mm.	22.8		
0.0083 mm.	20.4		
0.0058 mm.	18.0		
0.0042 mm.	15.6		
0.0030 mm.	13.2		
0.0013 mm.	9.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 26.3740 D_{85}= 17.8886 D_{60}= 0.3793
D_{50}= 0.1287 D_{30}= 0.0212 D_{15}= 0.0039
D_{10}= 0.0013 C_u= 283.42 C_c= 0.88

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-144 **Elev./Depth:** 4.0-4.2m

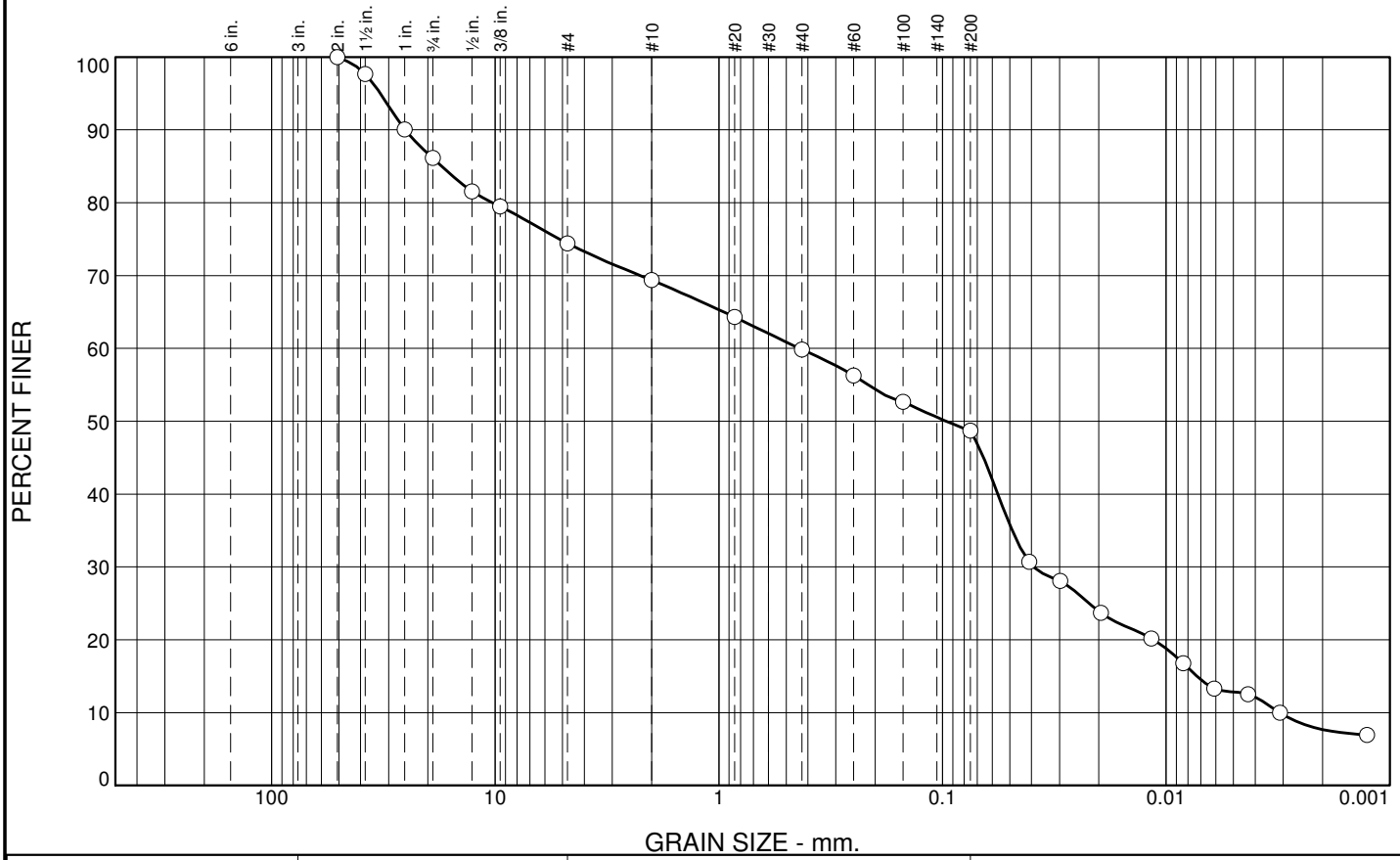
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.8	11.8	5.0	9.6	11.1	41.0	7.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	97.6		
1	90.1		
.75	86.2		
.5	81.6		
.375	79.5		
#4	74.4		
#10	69.4		
#20	64.3		
#40	59.8		
#60	56.3		
#100	52.7		
#200	48.7		
0.0410 mm.	30.7		
0.0297 mm.	28.1		
0.0196 mm.	23.7		
0.0116 mm.	20.2		
0.0084 mm.	16.8		
0.0061 mm.	13.3		
0.0043 mm.	12.5		
0.0031 mm.	10.0		
0.0013 mm.	6.9		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 25.3104 D_{85}= 17.3323 D_{60}= 0.4361
D_{50}= 0.0962 D_{30}= 0.0392 D_{15}= 0.0073
D_{10}= 0.0031 C_u= 140.72 C_c= 1.13

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-146 **Elev./Depth:** 4.5-4.7m

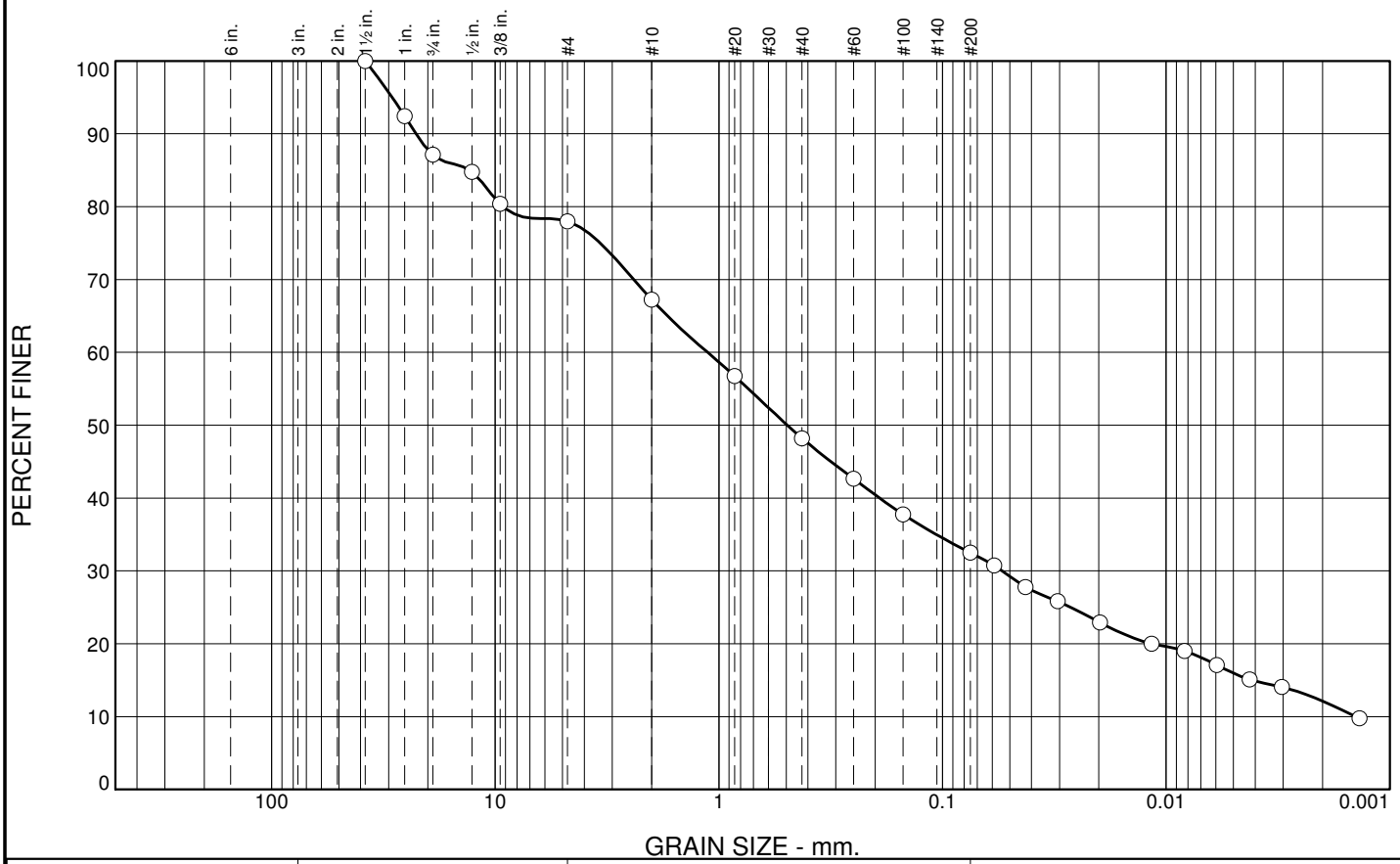
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.9	9.1	10.8	19.0	15.7	20.4	12.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	92.4		
.75	87.1		
.5	84.8		
.375	80.4		
#4	78.0		
#10	67.2		
#20	56.7		
#40	48.2		
#60	42.7		
#100	37.8		
#200	32.5		
0.0588 mm.	30.7		
0.0426 mm.	27.8		
0.0306 mm.	25.8		
0.0198 mm.	22.9		
0.0116 mm.	20.0		
0.0083 mm.	19.0		
0.0059 mm.	17.1		
0.0042 mm.	15.1		
0.0030 mm.	14.1		
0.0014 mm.	9.8		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 22.6269 D_{85}= 13.0277 D_{60}= 1.1235
D_{50}= 0.4943 D_{30}= 0.0542 D_{15}= 0.0041
D_{10}= 0.0014 C_u= 792.35 C_c= 1.84

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-147 **Elev./Depth:** 5.5-5.7m

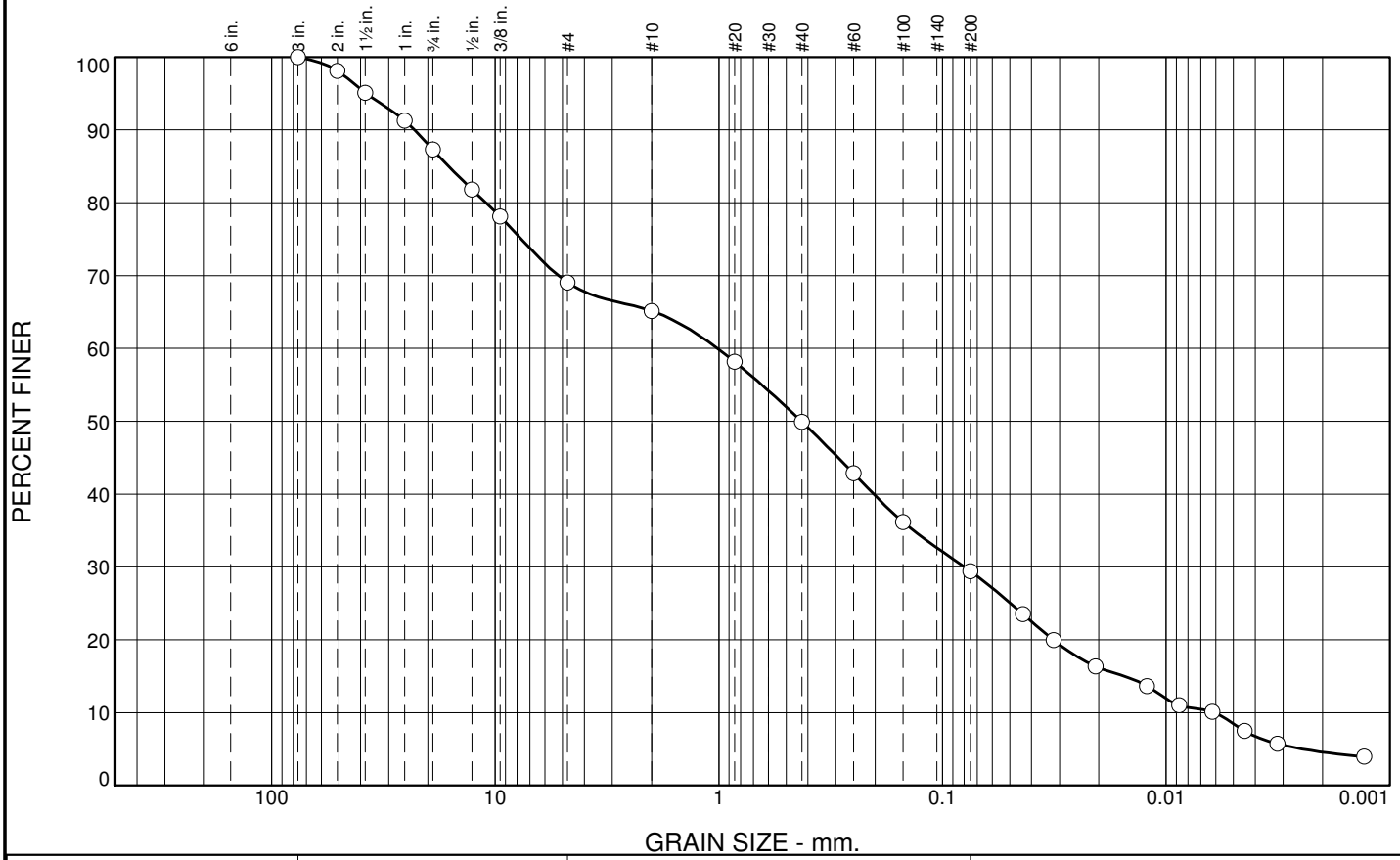
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.7	18.2	4.0	15.2	20.5	24.8	4.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	98.1		
1.5	95.1		
1	91.3		
.75	87.3		
.5	81.8		
.375	78.1		
#4	69.1		
#10	65.1		
#20	58.2		
#40	49.9		
#60	42.9		
#100	36.2		
#200	29.4		
0.0437 mm.	23.5		
0.0318 mm.	19.9		
0.0207 mm.	16.4		
0.0122 mm.	13.7		
0.0088 mm.	11.0		
0.0062 mm.	10.1		
0.0045 mm.	7.5		
0.0032 mm.	5.8		
0.0013 mm.	4.0		

* (no specification provided)

Soil Description

silty SAND with gravel

Atterberg Limits

PL= 12 LL= 15 PI= 3

Coefficients

D_{90}= 23.0003 D_{85}= 16.1716 D_{60}= 1.0147
D_{50}= 0.4281 D_{30}= 0.0797 D_{15}= 0.0154
D_{10}= 0.0061 C_u= 167.24 C_c= 1.03

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-150 **Elev./Depth:** 3.0-3.2m

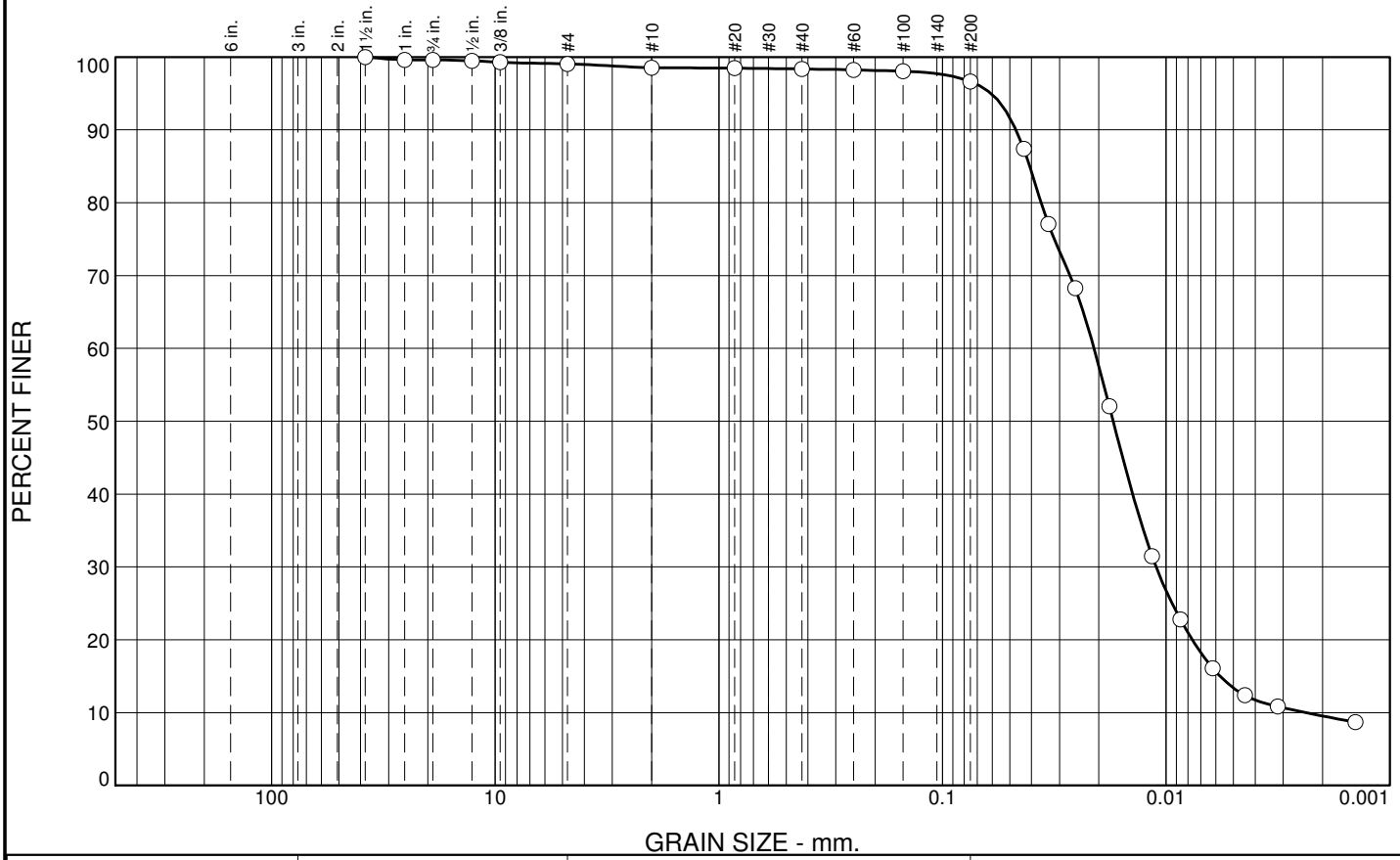
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.4	0.5	0.6	0.1	1.8	87.0	9.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	99.6		
.75	99.6		
.5	99.5		
.375	99.3		
#4	99.1		
#10	98.5		
#20	98.5		
#40	98.4		
#60	98.2		
#100	98.0		
#200	96.6		
0.0433 mm.	87.4		
0.0337 mm.	77.1		
0.0255 mm.	68.3		
0.0180 mm.	52.1		
0.0116 mm.	31.5		
0.0086 mm.	22.8		
0.0062 mm.	16.1		
0.0044 mm.	12.4		
0.0032 mm.	10.9		
0.0014 mm.	8.7		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.0469 D_{85}= 0.0407 D_{60}= 0.0210
D_{50}= 0.0173 D_{30}= 0.0111 D_{15}= 0.0057
D_{10}= 0.0024 C_u= 8.88 C_c= 2.47

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-151 **Elev./Depth:** 5.0-5.2m

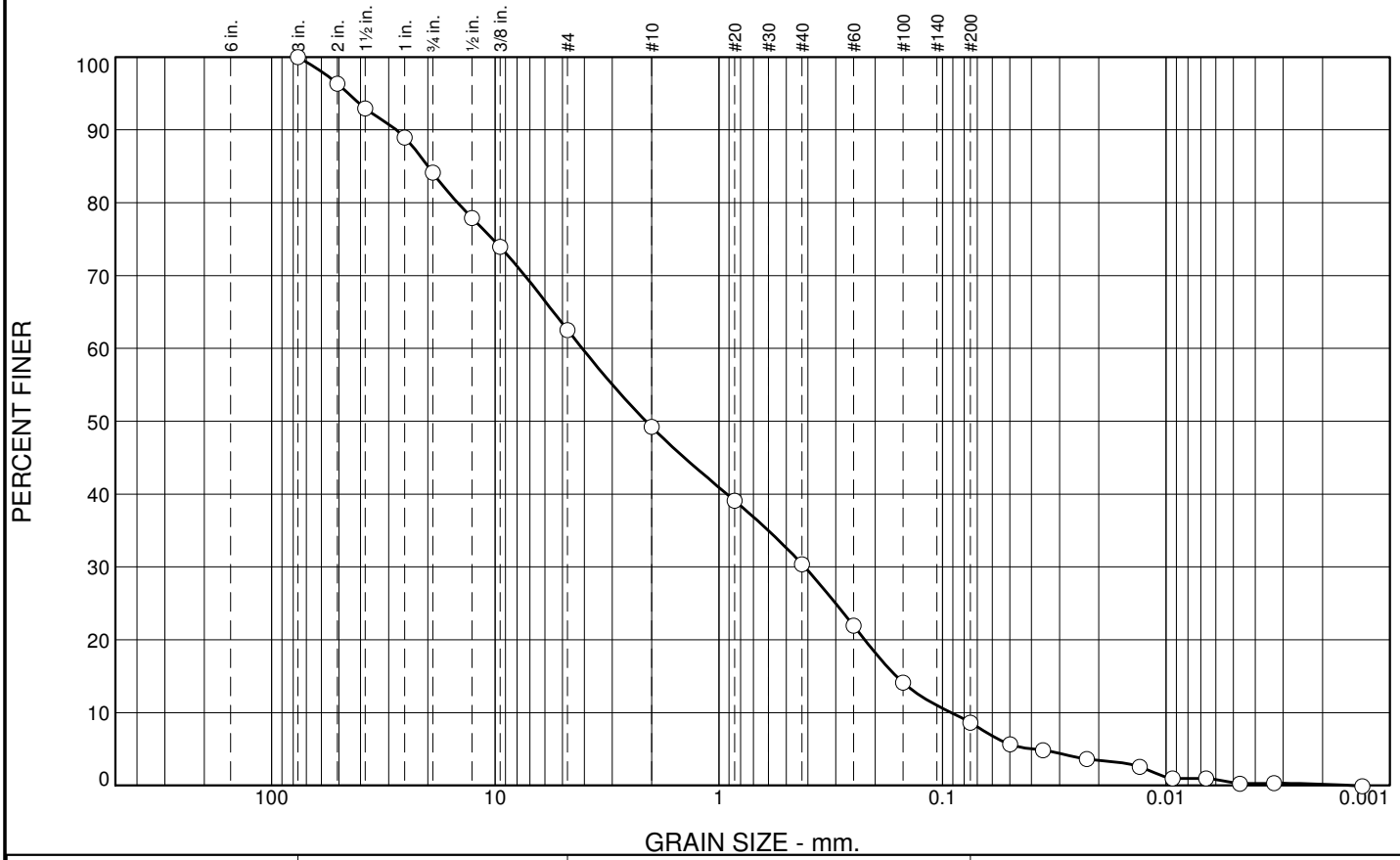
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.9	21.6	13.3	18.8	21.8	8.4	0.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3	100.0		
2	96.3		
1.5	92.9		
1	88.9		
.75	84.1		
.5	77.9		
.375	73.9		
#4	62.5		
#10	49.2		
#20	39.1		
#40	30.4		
#60	21.9		
#100	14.1		
#200	8.6		
0.0499 mm.	5.6		
0.0355 mm.	4.8		
0.0227 mm.	3.6		
0.0131 mm.	2.5		
0.0094 mm.	1.0		
0.0066 mm.	1.0		
0.0047 mm.	0.2		
0.0033 mm.	0.3		
0.0013 mm.			

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 27.7172 D_{85}= 20.0227 D_{60}= 4.0874
D_{50}= 2.1205 D_{30}= 0.4140 D_{15}= 0.1610
D_{10}= 0.0914 C_u= 44.74 C_c= 0.46

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/6/12
Location: TP12-152 **Elev./Depth:** 5.5-5.7m

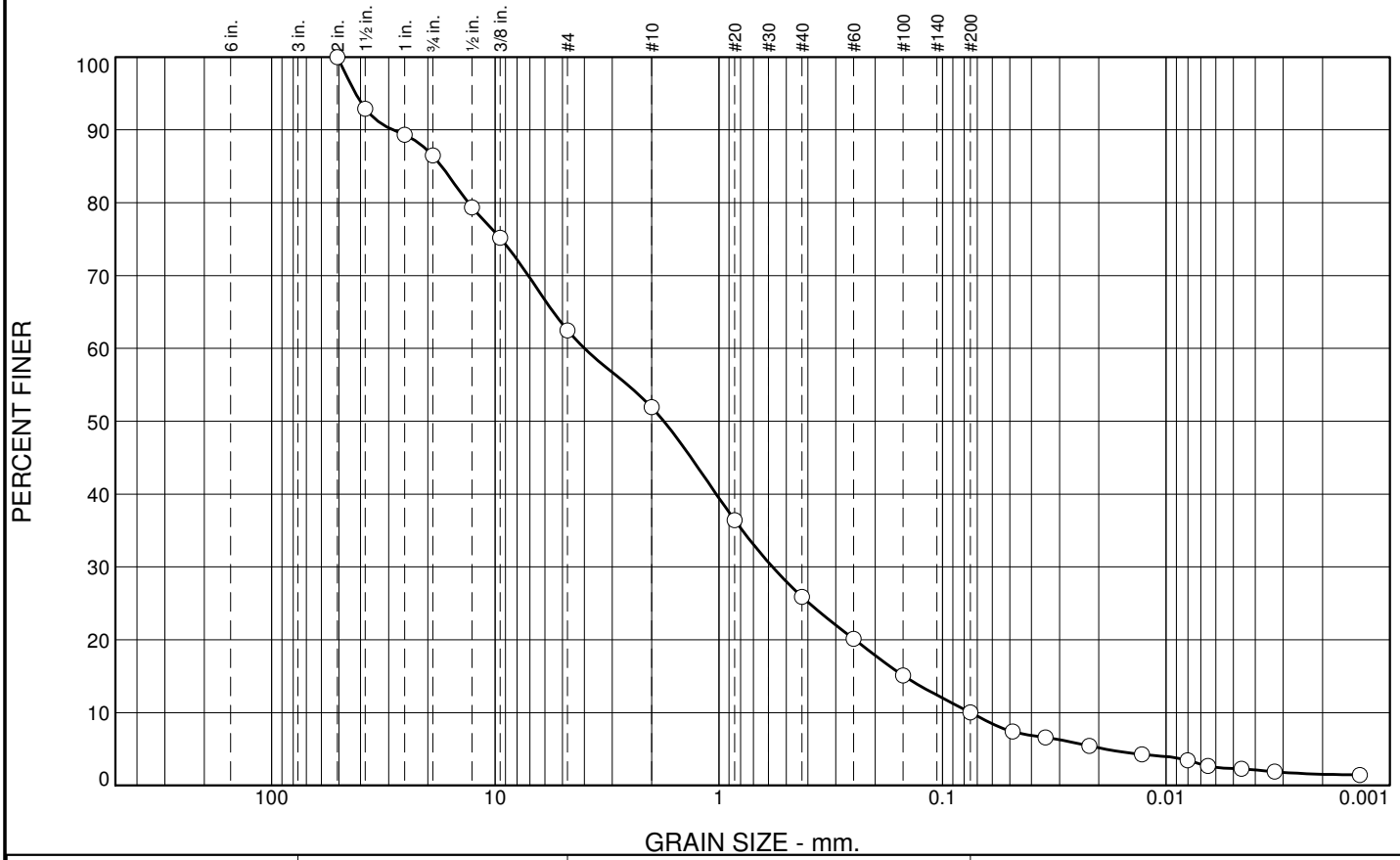
Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	13.5	24.0	10.6	26.0	15.9	8.4	1.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2	100.0		
1.5	92.9		
1	89.3		
.75	86.5		
.5	79.4		
.375	75.2		
#4	62.5		
#10	51.9		
#20	36.4		
#40	25.9		
#60	20.1		
#100	15.1		
#200	10.0		
0.0486 mm.	7.4		
0.0346 mm.	6.6		
0.0220 mm.	5.4		
0.0128 mm.	4.3		
0.0080 mm.	3.5		
0.0065 mm.	2.7		
0.0046 mm.	2.3		
0.0033 mm.	1.9		
0.0014 mm.	1.4		

* (no specification provided)

Soil Description

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 28.5706 D_{85}= 17.3706 D_{60}= 3.9933
D_{50}= 1.7637 D_{30}= 0.5755 D_{15}= 0.1481
D_{10}= 0.0748 C_u= 53.37 C_c= 1.11

Classification

USCS= AASHTO=

Remarks

Sample No.: **Source of Sample:** **Date:** 11/8/12
Location: TP12-155 **Elev./Depth:** 5.0-5.2m

Knight Piésold CONSULTING

Client: New Gold Inc.
Project: Blackwater Gold Project

Project No: VA101-457/04 **Figure**

Tested By: RV

ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 9
Project Number:	KX05349	Date Sampled:	12-Jul-12
Technician:	T. Renton	Depth:	37.20m - 37.40m
Date:	12-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	32	25	15	
Tare ID	F	E	48	
Mass Wet + Tare	40.48	25.68	31.70	
Mass Dry + Tare	35.95	23.31	28.25	
Mass Tare	19.35	14.78	16.72	
Mass of Water	4.53	2.37	3.45	
Dry Soil Mass	16.60	8.53	11.53	
Moisture Content	27.3	27.8	29.9	
Liquid Limit	28.2	27.8	28.1	

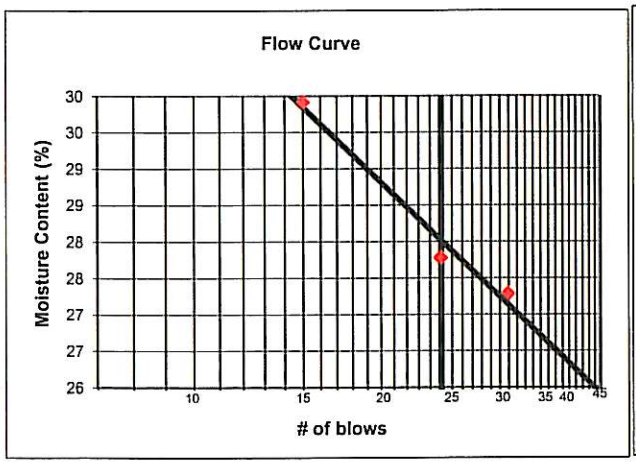
Average Liquid Limit: 28

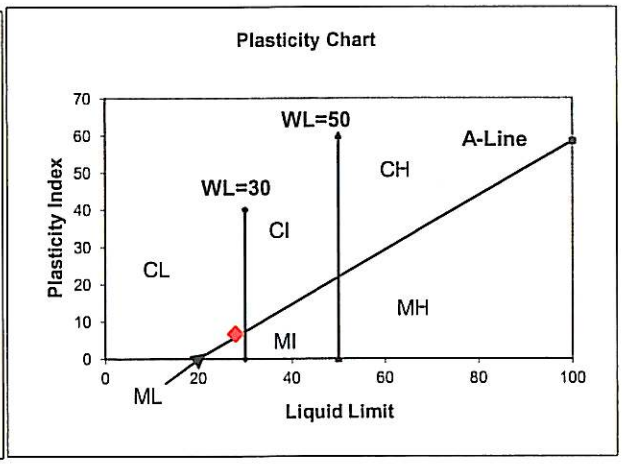
Plastic Limit

Trial No.	1	2		
Tare ID	D	C12		
Mass Wet + Tare	26.01	33.19		
Mass Dry + Tare	24.46	30.58		
Mass Tare	17.15	18.22		
Mass of Water	1.55	2.61		
Dry Soil Mass	7.31	12.36		
Moisture Content	21.2	21.1		

Average Plastic Limit	21
Plasticity Index	7
Received Moisture	22

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 10
Project Number:	KX05349	Date Sampled:	13-Jul-12
Technician:	T. Renton	Depth:	52.50m - 53.35m
Date:	12-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	32	27	17	
Tare ID	D1	BZ	B3	
Mass Wet + Tare	25.89	34.57	24.63	
Mass Dry + Tare	23.55	31.26	22.08	
Mass Tare	15.20	19.86	13.82	
Mass of Water	2.34	3.31	2.55	
Dry Soil Mass	8.35	11.40	8.26	
Moisture Content	28.0	29.0	30.9	
Liquid Limit	29.0	29.3	29.4	

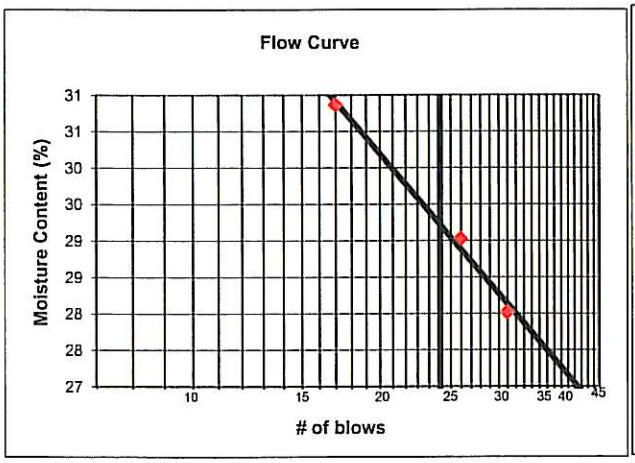
Average Liquid Limit: 29

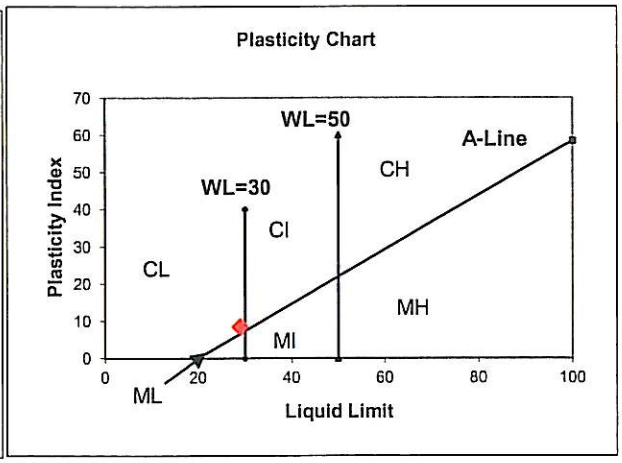
Plastic Limit

Trial No.	1	2		
Tare ID	4	C3		
Mass Wet + Tare	27.59	22.85		
Mass Dry + Tare	25.54	21.76		
Mass Tare	15.58	16.36		
Mass of Water	2.05	1.09		
Dry Soil Mass	9.96	5.40		
Moisture Content	20.6	20.2		

Average Plastic Limit	20
Plasticity Index	9
Received Moisture	20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 11
Project Number:	KX05349	Date Sampled:	13-Jul-12
Technician:	T. Renton	Depth:	53.10m - 53.30m
Date:	15-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	32	22	18	
Tare ID	C11	CC	A5	
Mass Wet + Tare	28.35	27.84	31.18	
Mass Dry + Tare	25.14	24.65	27.65	
Mass Tare	13.52	13.53	15.69	
Mass of Water	3.21	3.19	3.53	
Dry Soil Mass	11.62	11.12	11.96	
Moisture Content	27.6	28.7	29.5	
Liquid Limit	28.6	28.2	28.3	

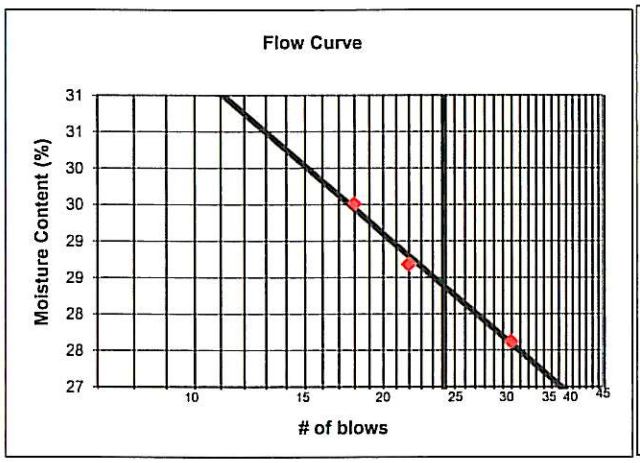
Average Liquid Limit: 28

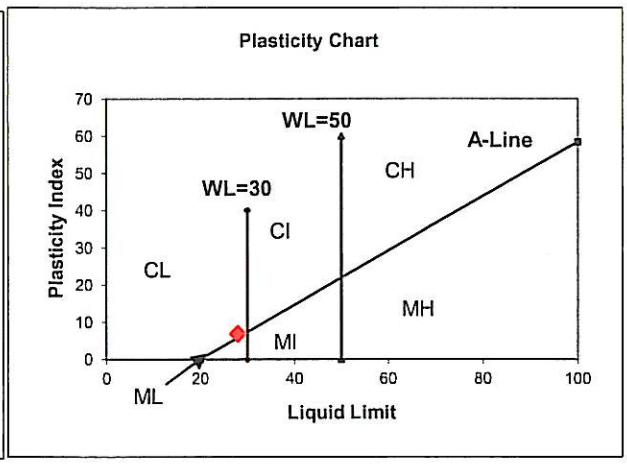
Plastic Limit

Trial No.	1	2		
Tare ID	B4	BH		
Mass Wet + Tare	28.45	20.76		
Mass Dry + Tare	26.38	19.48		
Mass Tare	16.54	13.34		
Mass of Water	2.07	1.28		
Dry Soil Mass	9.84	6.14		
Moisture Content	21.0	20.8		

Average Plastic Limit	21
Plasticity Index	7
Received Moisture	14

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 14
Project Number:	KX05349	Date Sampled:	13-Jul-12
Technician:	T. Renton	Depth:	63.00m - 63.20m
Date:	13-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	27	15	
Tare ID	A5	C11	CC	
Mass Wet + Tare	29.11	27.67	25.78	
Mass Dry + Tare	26.11	24.42	22.81	
Mass Tare	15.70	13.53	13.54	
Mass of Water	3.00	3.25	2.97	
Dry Soil Mass	10.41	10.89	9.27	
Moisture Content	28.8	29.8	32.0	
Liquid Limit	29.9	30.2	30.1	

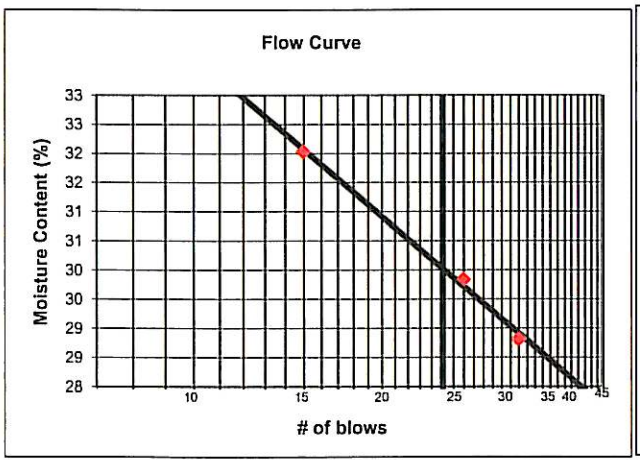
Average Liquid Limit: 30

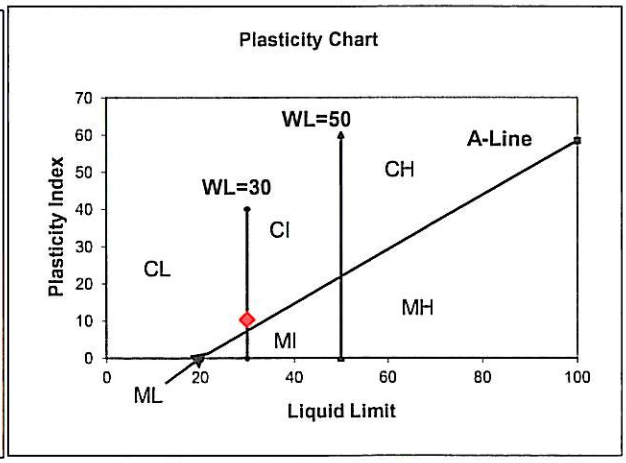
Plastic Limit

Trial No.	1	2		
Tare ID	BH	B4		
Mass Wet + Tare	23.17	30.33		
Mass Dry + Tare	21.56	28.08		
Mass Tare	13.34	16.54		
Mass of Water	1.61	2.25		
Dry Soil Mass	8.22	11.54		
Moisture Content	19.6	19.5		

Average Plastic Limit	20
Plasticity Index	10
Received Moisture	26

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 17
Project Number:	KX05349	Date Sampled:	13-Jul-12
Technician:	T. Renton	Depth:	68.60m - 68.80m
Date:	13-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	34	22	17	
Tare ID	16	Z1	33	
Mass Wet + Tare	33.62	26.44	29.89	
Mass Dry + Tare	29.41	24.03	27.01	
Mass Tare	16.46	17.08	19.00	
Mass of Water	4.21	2.41	2.88	
Dry Soil Mass	12.95	6.95	8.01	
Moisture Content	32.5	34.7	36.0	
Liquid Limit	33.9	34.1	34.2	

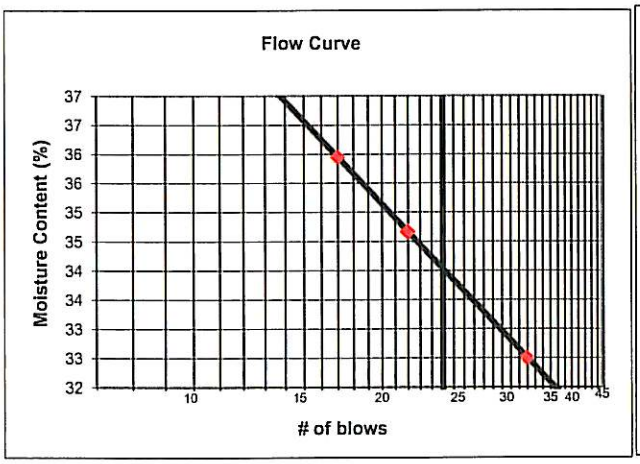
Average Liquid Limit: 34

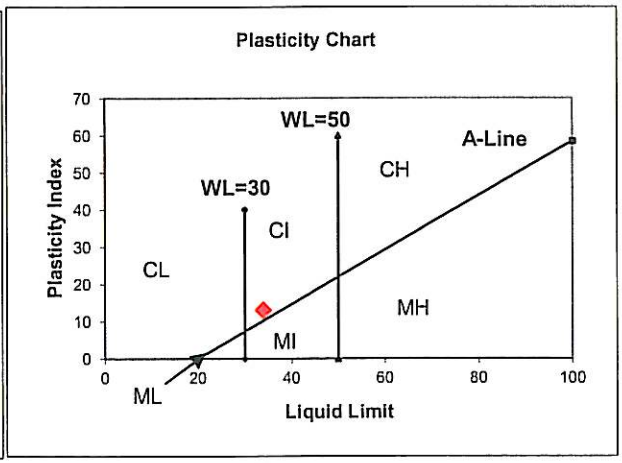
Plastic Limit

Trial No.	1	2		
Tare ID	C5	2		
Mass Wet + Tare	30.91	36.22		
Mass Dry + Tare	28.72	33.16		
Mass Tare	18.22	18.39		
Mass of Water	2.19	3.06		
Dry Soil Mass	10.50	14.77		
Moisture Content	20.9	20.7		

Average Plastic Limit	21
Plasticity Index	13
Received Moisture	14

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-15, sample 19
Project Number:	KX05349	Date Sampled:	13-Jul-12
Technician:	T. Renton	Depth:	76.48m - 76.68m
Date:	15-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	24	20	
Tare ID	BZ	62	P2	
Mass Wet + Tare	30.35	26.76	27.29	
Mass Dry + Tare	27.06	23.96	23.90	
Mass Tare	19.85	18.08	16.83	
Mass of Water	3.29	2.80	3.39	
Dry Soil Mass	7.21	5.88	7.07	
Moisture Content	45.6	47.6	47.9	
Liquid Limit	47.4	47.4	46.6	

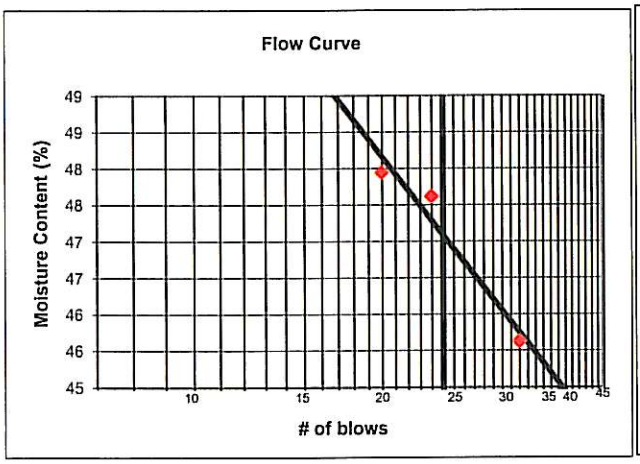
Average Liquid Limit: 47

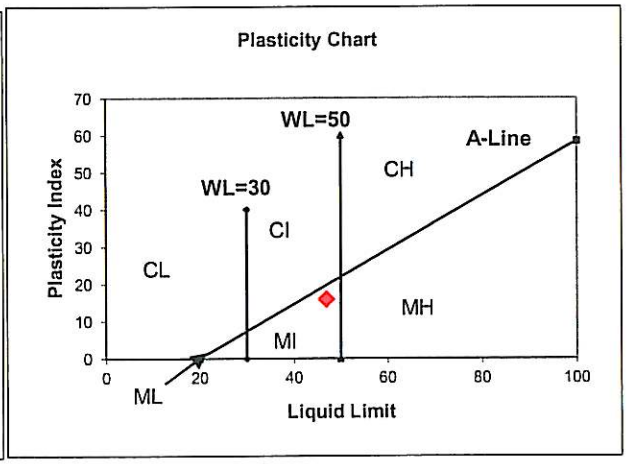
Plastic Limit

Trial No.	1	2		
Tare ID	F	5		
Mass Wet + Tare	34.33	25.68		
Mass Dry + Tare	30.79	22.94		
Mass Tare	19.34	14.07		
Mass of Water	3.54	2.74		
Dry Soil Mass	11.45	8.87		
Moisture Content	30.9	30.9		

Average Plastic Limit	31
Plasticity Index	16
Received Moisture	27

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 2
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	1.90m - 2.10m
Date:	19-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	31	26	14	
Tare ID	16	41	33	
Mass Wet + Tare	30.73	29.69	30.59	
Mass Dry + Tare	28.83	27.92	28.90	
Mass Tare	16.47	16.70	19.01	
Mass of Water	1.90	1.77	1.69	
Dry Soil Mass	12.36	11.22	9.89	
Moisture Content	15.4	15.8	17.1	
Liquid Limit	15.8	15.9	15.9	

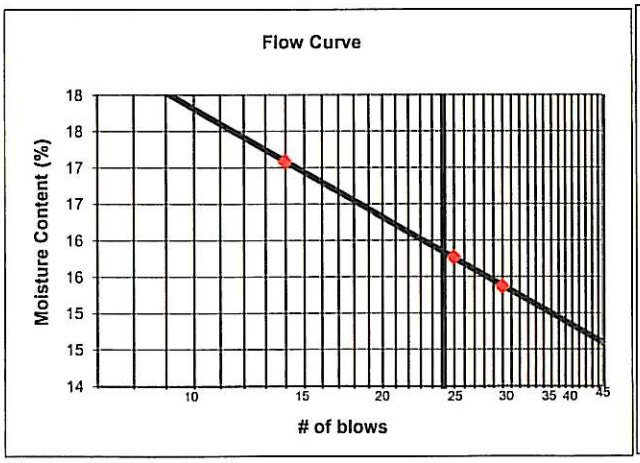
Average Liquid Limit: 16

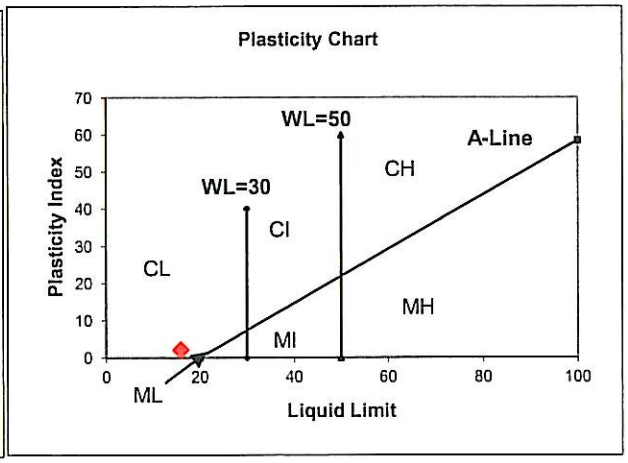
Plastic Limit

Trial No.	1	2		
Tare ID	1	21		
Mass Wet + Tare	25.68	36.08		
Mass Dry + Tare	24.23	33.77		
Mass Tare	13.65	17.09		
Mass of Water	1.45	2.31		
Dry Soil Mass	10.58	16.68		
Moisture Content	13.7	13.8		

Average Plastic Limit	14
Plasticity Index	2
Received Moisture	6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 4
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	6.75m - 6.95m
Date:	19-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	23	15	
Tare ID	C5	2	27	
Mass Wet + Tare	27.90	29.28	27.42	
Mass Dry + Tare	26.20	27.32	25.60	
Mass Tare	18.20	18.37	17.90	
Mass of Water	1.70	1.96	1.82	
Dry Soil Mass	8.00	8.95	7.70	
Moisture Content	21.3	21.9	23.6	
Liquid Limit	22.1	21.7	22.2	

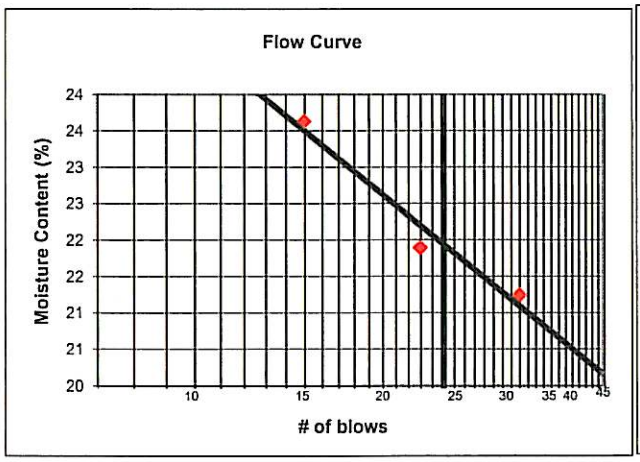
Average Liquid Limit: 22

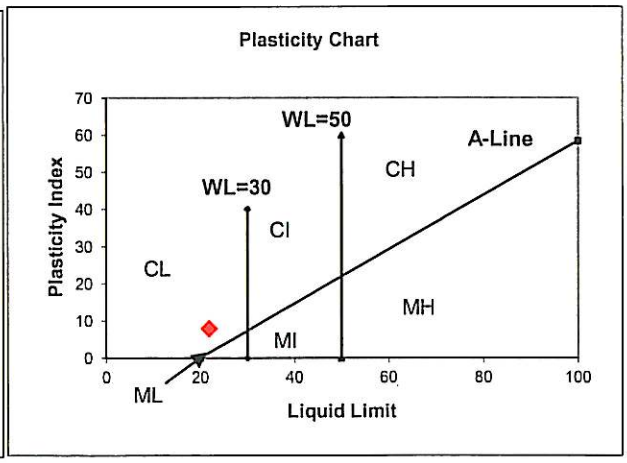
Plastic Limit

Trial No.	1	2		
Tare ID	21	BZ		
Mass Wet + Tare	30.18	32.31		
Mass Dry + Tare	28.67	30.77		
Mass Tare	17.69	19.86		
Mass of Water	1.51	1.54		
Dry Soil Mass	10.98	10.91		
Moisture Content	13.8	14.1		

Average Plastic Limit	14
Plasticity Index	8
Received Moisture	5

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 6
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	10.00m - 10.20m
Date:	19-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	21	18	
Tare ID	10	P2	62	
Mass Wet + Tare	27.27	28.86	30.01	
Mass Dry + Tare	25.18	26.52	27.65	
Mass Tare	15.99	16.84	18.10	
Mass of Water	2.09	2.34	2.36	
Dry Soil Mass	9.19	9.68	9.55	
Moisture Content	22.7	24.2	24.7	
Liquid Limit	23.8	23.6	23.7	

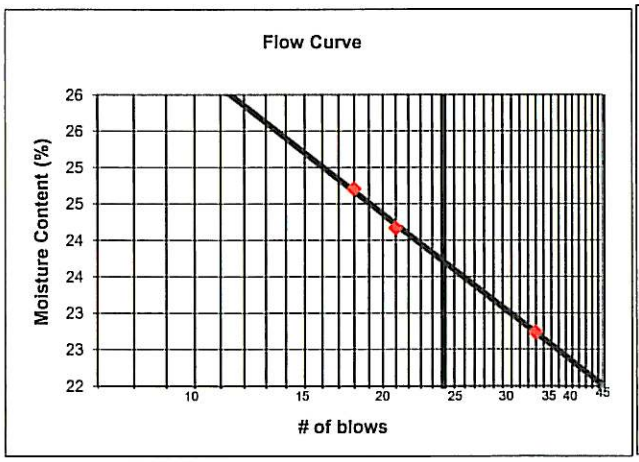
Average Liquid Limit: 24

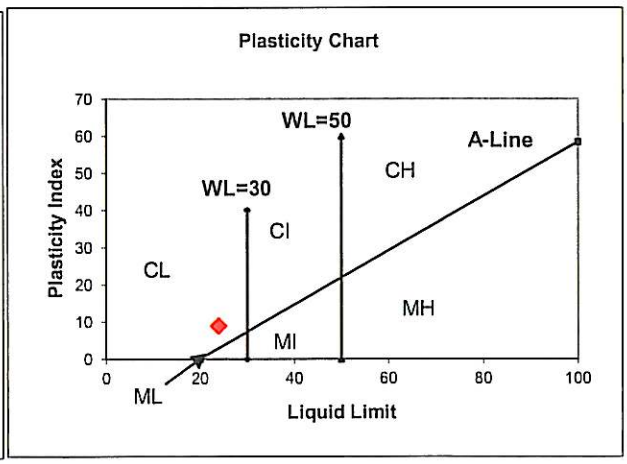
Plastic Limit

Trial No.	1	2		
Tare ID	BH	5		
Mass Wet + Tare	22.00	24.74		
Mass Dry + Tare	20.87	23.37		
Mass Tare	13.34	14.09		
Mass of Water	1.13	1.37		
Dry Soil Mass	7.53	9.28		
Moisture Content	15.0	14.8		

Average Plastic Limit	15
Plasticity Index	9
Received Moisture	6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 9
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	17.80m - 18.00m
Date:	21-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	22	16	
Tare ID	16	2	Z7	
Mass Wet + Tare	30.70	34.99	28.36	
Mass Dry + Tare	28.38	32.14	26.50	
Mass Tare	16.46	18.39	17.89	
Mass of Water	2.32	2.85	1.86	
Dry Soil Mass	11.92	13.75	8.61	
Moisture Content	19.5	20.7	21.6	
Liquid Limit	20.2	20.4	20.4	

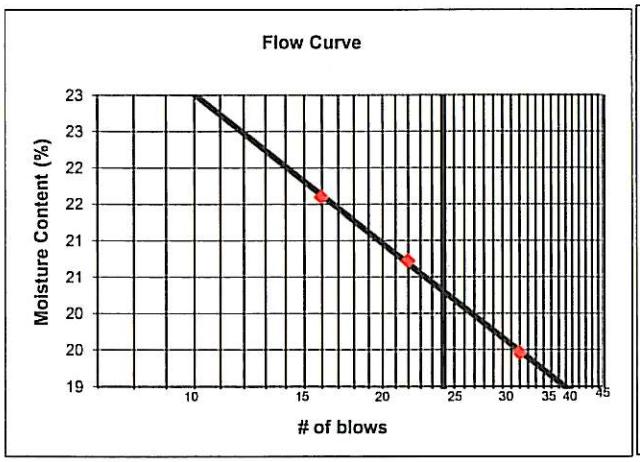
Average Liquid Limit: 20

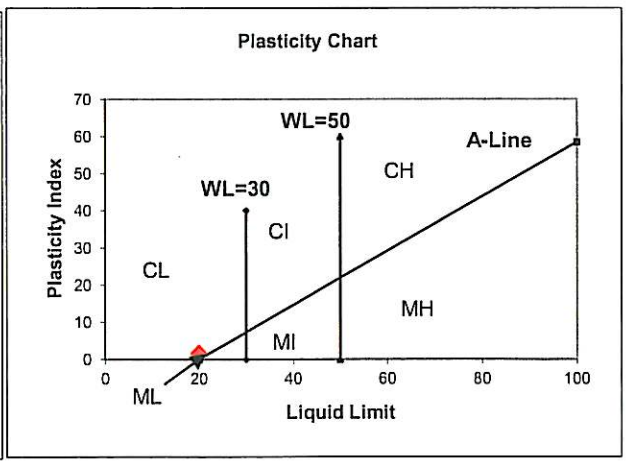
Plastic Limit

Trial No.	1	2		
Tare ID	21	BZ		
Mass Wet + Tare	25.55	33.35		
Mass Dry + Tare	24.34	31.27		
Mass Tare	17.70	19.87		
Mass of Water	1.21	2.08		
Dry Soil Mass	6.64	11.40		
Moisture Content	18.2	18.2		

Average Plastic Limit	18
Plasticity Index	2
Received Moisture	13

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 16
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	35.83m - 36.03m
Date:	20-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	30	22	19	
Tare ID	16	Z7	21	
Mass Wet + Tare	27.56	27.80	30.06	
Mass Dry + Tare	24.68	25.15	26.73	
Mass Tare	16.45	17.89	17.70	
Mass of Water	2.88	2.65	3.33	
Dry Soil Mass	8.23	7.26	9.03	
Moisture Content	35.0	36.5	36.9	
Liquid Limit	35.9	35.9	35.6	

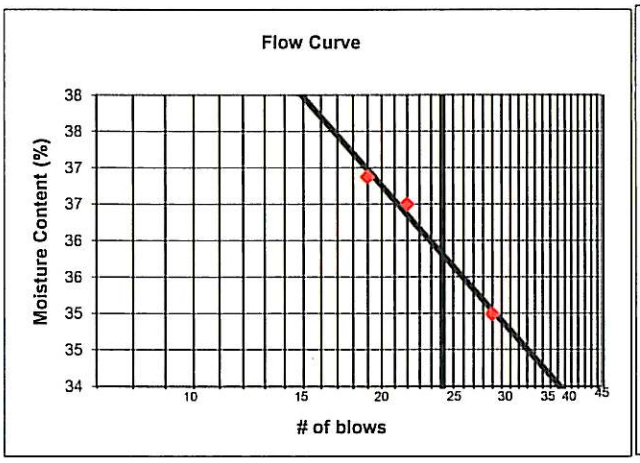
Average Liquid Limit: 36

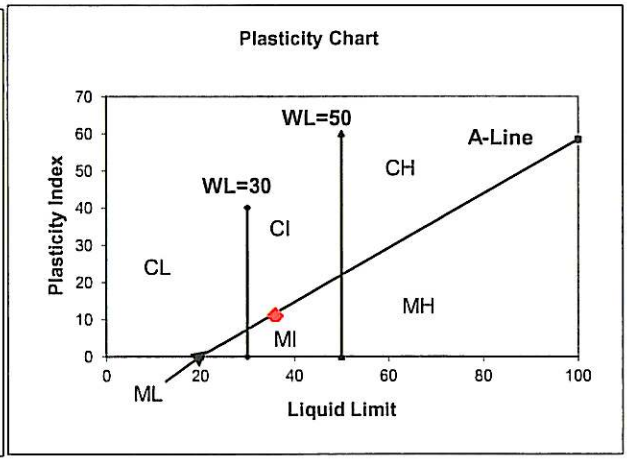
Plastic Limit

Trial No.	1	2		
Tare ID	1	2		
Mass Wet + Tare	23.77	29.31		
Mass Dry + Tare	21.75	27.14		
Mass Tare	13.65	18.39		
Mass of Water	2.02	2.17		
Dry Soil Mass	8.10	8.75		
Moisture Content	24.9	24.8		

Average Plastic Limit	25
Plasticity Index	11
Received Moisture	20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 22
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	1.9m - 2.1m
Date:	19-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	32	28	15	
Tare ID	P	14	48	
Mass Wet + Tare	24.41	22.47	25.73	
Mass Dry + Tare	22.87	20.98	23.67	
Mass Tare	17.15	15.56	16.72	
Mass of Water	1.54	1.49	2.06	
Dry Soil Mass	5.72	5.42	6.95	
Moisture Content	26.9	27.5	29.6	
Liquid Limit	27.8	27.9	27.8	

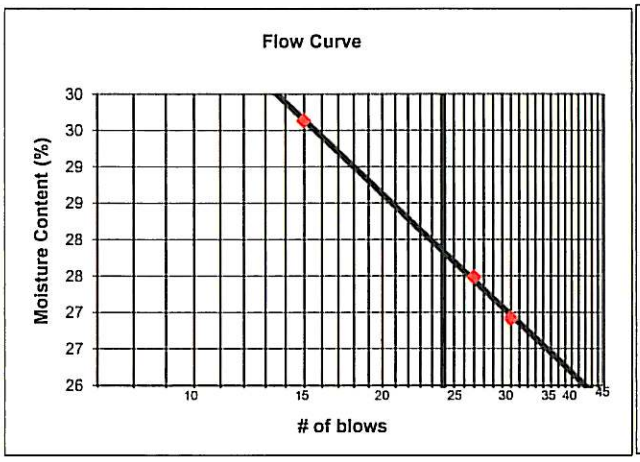
Average Liquid Limit: 28

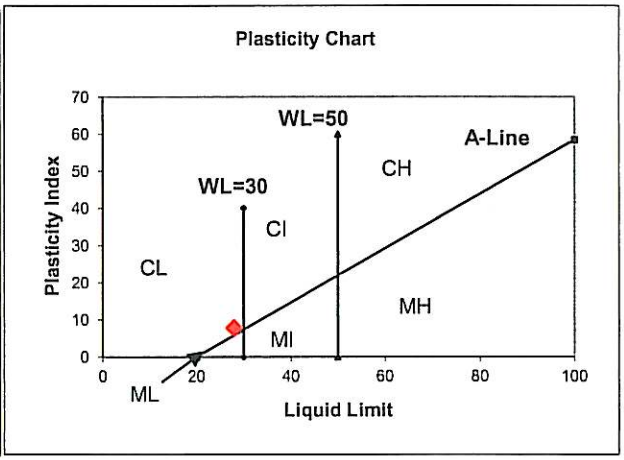
Plastic Limit

Trial No.	1	2		
Tare ID	B3	C12		
Mass Wet + Tare	27.99	31.02		
Mass Dry + Tare	25.61	28.89		
Mass Tare	13.82	18.21		
Mass of Water	2.38	2.13		
Dry Soil Mass	11.79	10.68		
Moisture Content	20.2	19.9		

Average Plastic Limit	20
Plasticity Index	8
Received Moisture	17

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 26
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	59.32m - 59.52m
Date:	21-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	34	28	19	
Tare ID	I	41	F	
Mass Wet + Tare	23.24	25.24	29.63	
Mass Dry + Tare	21.09	23.39	27.19	
Mass Tare	13.65	17.16	19.35	
Mass of Water	2.15	1.85	2.44	
Dry Soil Mass	7.44	6.23	7.84	
Moisture Content	28.9	29.7	31.1	
Liquid Limit	30.1	30.2	30.1	

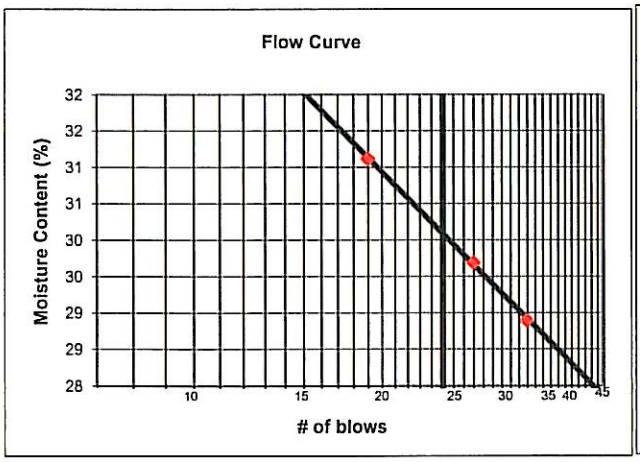
Average Liquid Limit: 30

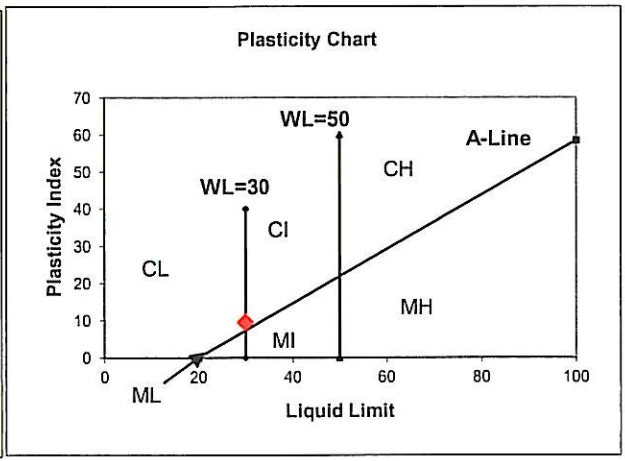
Plastic Limit

Trial No.	1	2		
Tare ID	10	C12		
Mass Wet + Tare	27.88	31.46		
Mass Dry + Tare	25.87	29.22		
Mass Tare	15.99	18.22		
Mass of Water	2.01	2.24		
Dry Soil Mass	9.88	11.00		
Moisture Content	20.3	20.4		

Average Plastic Limit	20
Plasticity Index	10
Received Moisture	12

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 31
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	67.46m - 67.66m
Date:	21-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	25	19	
Tare ID	48	14	B3	
Mass Wet + Tare	26.40	23.54	20.70	
Mass Dry + Tare	24.08	21.56	18.94	
Mass Tare	16.72	15.58	13.82	
Mass of Water	2.32	1.98	1.76	
Dry Soil Mass	7.36	5.98	5.12	
Moisture Content	31.5	33.1	34.4	
Liquid Limit	33.0	33.1	33.2	

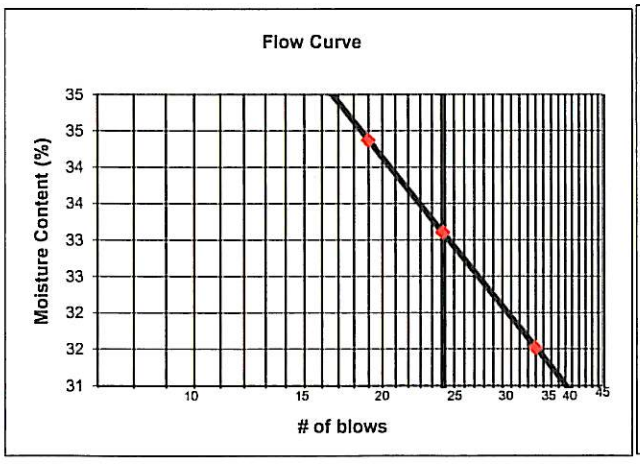
Average Liquid Limit: 33

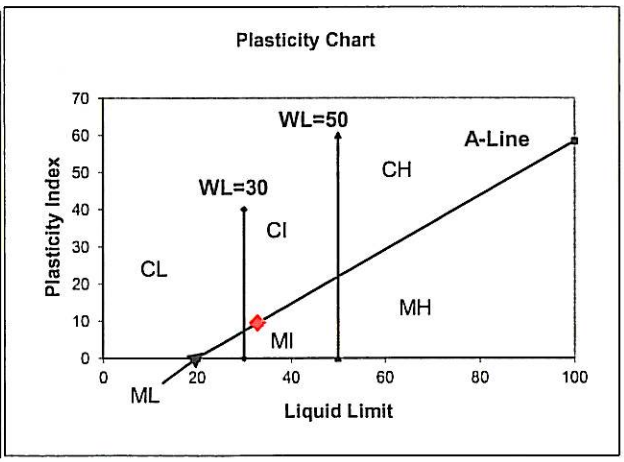
Plastic Limit

Trial No.	1	2		
Tare ID	BH	21		
Mass Wet + Tare	24.58	28.35		
Mass Dry + Tare	22.44	26.22		
Mass Tare	13.33	17.07		
Mass of Water	2.14	2.13		
Dry Soil Mass	9.11	9.15		
Moisture Content	23.5	23.3		

Average Plastic Limit	23
Plasticity Index	10
Received Moisture	12

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 32
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	T. Renton	Depth:	69.5m - 69.7m
Date:	26-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	29	21	40	
Tare ID	16	41	BZ	
Mass Wet + Tare	29.47	29.04	30.14	
Mass Dry + Tare	26.70	26.33	27.96	
Mass Tare	16.45	16.69	19.86	
Mass of Water	2.77	2.71	2.18	
Dry Soil Mass	10.25	9.64	8.10	
Moisture Content	27.0	28.1	26.9	
Liquid Limit	27.6	27.5	28.7	

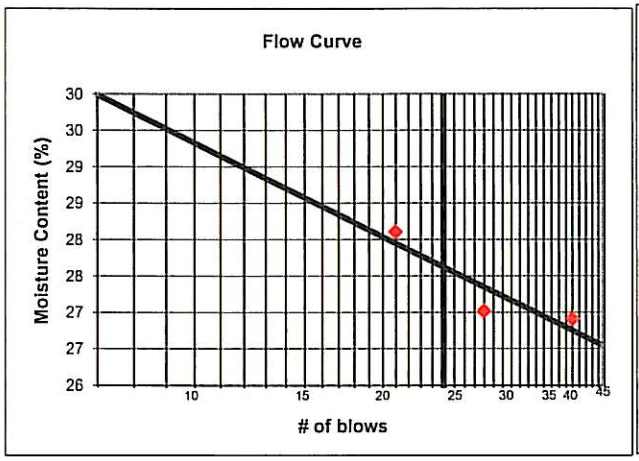
Average Liquid Limit: 28

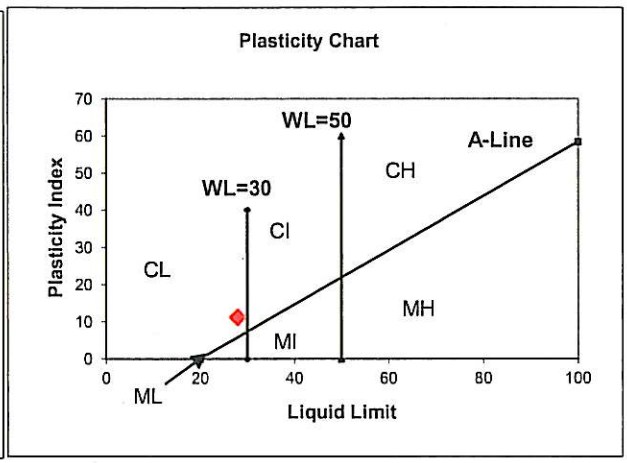
Plastic Limit

Trial No.	1	2		
Tare ID	Z7	5		
Mass Wet + Tare	30.88	29.91		
Mass Dry + Tare	29.03	27.64		
Mass Tare	17.89	14.09		
Mass of Water	1.85	2.27		
Dry Soil Mass	11.14	13.55		
Moisture Content	16.6	16.8		

Average Plastic Limit	17
Plasticity Index	11
Received Moisture	12

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-16, sample 35
Project Number:	KX05349	Date Sampled:	16-Jul-12
Technician:	S. Herman	Depth:	77.5m - 77.7m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	20	24	
Tare ID	C3	E	A5	
Mass Wet + Tare	23.07	24.83	25.46	
Mass Dry + Tare	20.90	21.41	22.19	
Mass Tare	16.37	14.78	15.69	
Mass of Water	2.17	3.42	3.27	
Dry Soil Mass	4.53	6.63	6.50	
Moisture Content	47.9	51.6	50.3	
Liquid Limit	50.1	50.1	50.1	

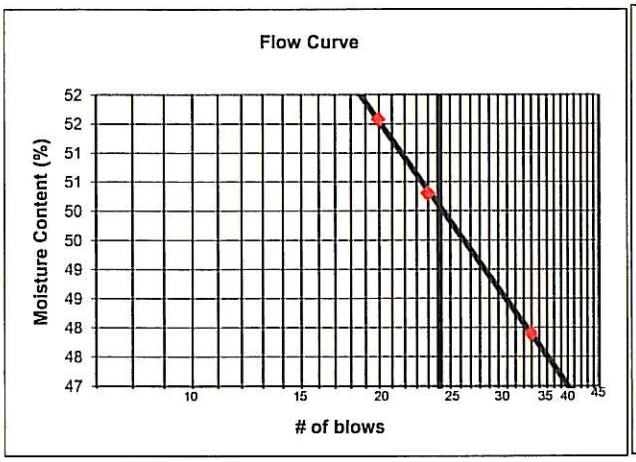
Average Liquid Limit: 50

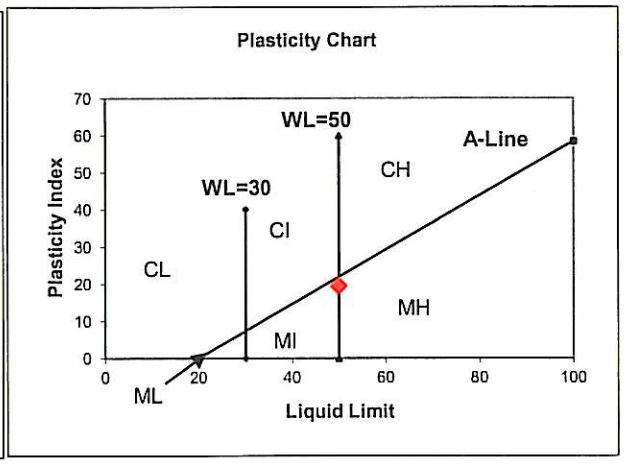
Plastic Limit

Trial No.	1	2		
Tare ID	C5	C11		
Mass Wet + Tare	23.15	19.01		
Mass Dry + Tare	22.01	17.72		
Mass Tare	18.21	13.52		
Mass of Water	1.14	1.29		
Dry Soil Mass	3.80	4.20		
Moisture Content	30.0	30.7		

Average Plastic Limit	30
Plasticity Index	20
Received Moisture	24

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 03
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	B. Garlick	Depth:	5.33m - 5.53m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	26	19	
Tare ID	7	8	S5	
Mass Wet + Tare	44.96	45.02	41.74	
Mass Dry + Tare	39.25	39.22	36.46	
Mass Tare	18.58	18.92	18.49	
Mass of Water	5.71	5.80	5.28	
Dry Soil Mass	20.67	20.30	17.97	
Moisture Content	27.6	28.6	29.4	
Liquid Limit	28.9	28.7	28.4	

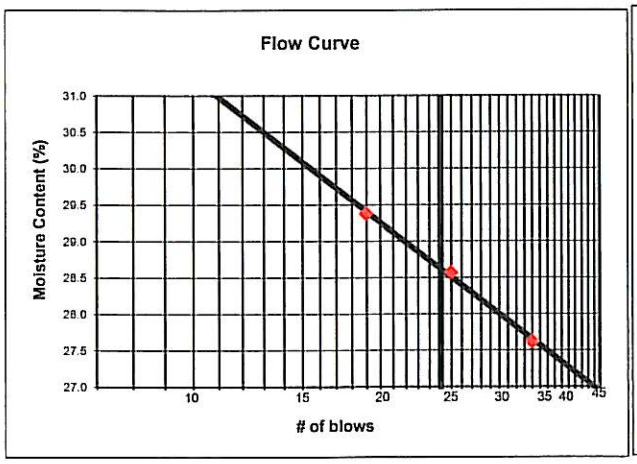
Average Liquid Limit: 29

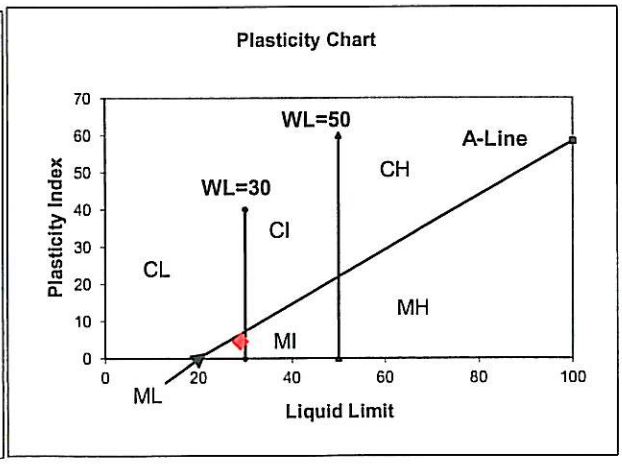
Plastic Limit

Trial No.	1	2		
Tare ID	S2	3A		
Mass Wet + Tare	36.06	34.86		
Mass Dry + Tare	32.71	31.71		
Mass Tare	18.78	18.90		
Mass of Water	3.35	3.15		
Dry Soil Mass	13.93	12.81		
Moisture Content	24.0	24.6		

Average Plastic Limit	24
Plasticity Index	5
Received Moisture	23.1

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 10
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	B. Garlick	Depth:	25.46m - 25.66m
Date:	21-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	23	17	
Tare ID	1	S5	S3	
Mass Wet + Tare	41.58	43.86	45.48	
Mass Dry + Tare	37.31	39.01	40.20	
Mass Tare	18.72	18.51	18.65	
Mass of Water	4.27	4.85	5.28	
Dry Soil Mass	18.59	20.50	21.55	
Moisture Content	23.0	23.7	24.5	
Liquid Limit	24.0	23.4	23.3	

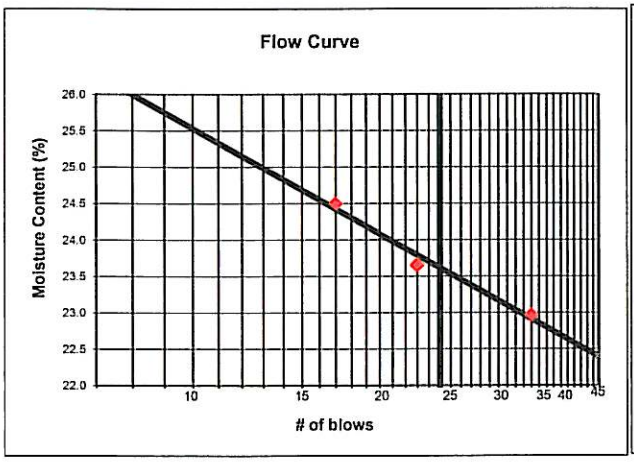
Average Liquid Limit: 24

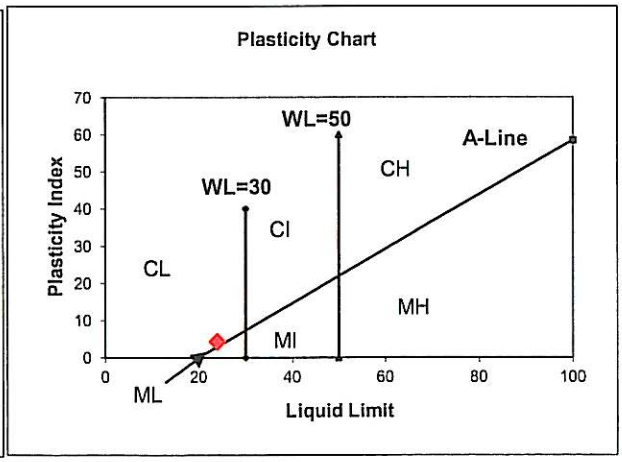
Plastic Limit

Trial No.	1	2		
Tare ID	S8	5		
Mass Wet + Tare	35.01	36.09		
Mass Dry + Tare	32.30	33.32		
Mass Tare	18.69	18.84		
Mass of Water	2.71	2.77		
Dry Soil Mass	13.61	14.48		
Moisture Content	19.9	19.1		

Average Plastic Limit	20
Plasticity Index	4
Received Moisture	12.6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 14
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	G. Michaud	Depth:	36.94m - 37.14m
Date:	20-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	21	11	
Tare ID	Q	AB	K	
Mass Wet + Tare	33.05	34.83	40.18	
Mass Dry + Tare	31.14	32.48	36.68	
Mass Tare	21.67	21.61	21.60	
Mass of Water	1.91	2.35	3.50	
Dry Soil Mass	9.47	10.87	15.08	
Moisture Content	20.2	21.6	23.2	
Liquid Limit	21.1	21.1	21.0	

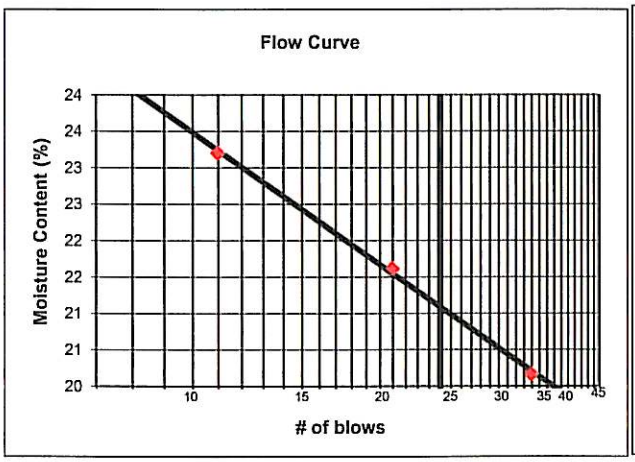
Average Liquid Limit: 21

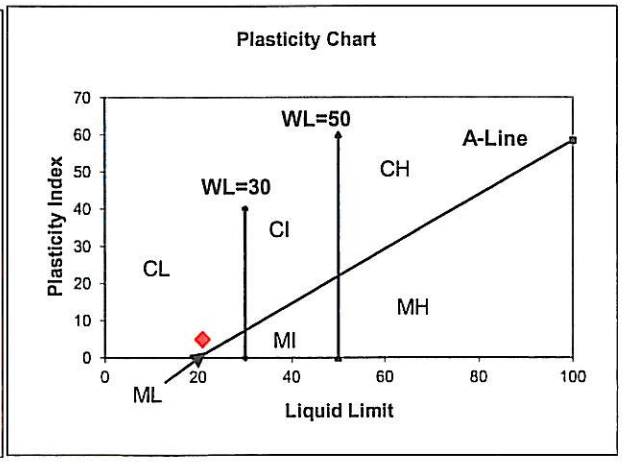
Plastic Limit

Trial No.	1	2	3	
Tare ID	8	37	16	
Mass Wet + Tare	21.80	29.40	27.24	
Mass Dry + Tare	20.83	28.32	26.44	
Mass Tare	14.72	21.52	21.39	
Mass of Water	0.97	1.08	0.80	
Dry Soil Mass	6.11	6.80	5.05	
Moisture Content	15.9	15.9	15.8	

Average Plastic Limit	16
Plasticity Index	5
Received Moisture	8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 22
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	B. Garlick	Depth:	63.18m - 63.38m
Date:	21-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	30	23	16	
Tare ID	7	13	6	
Mass Wet + Tare	42.94	43.76	43.51	
Mass Dry + Tare	37.62	38.15	37.86	
Mass Tare	18.58	18.75	18.79	
Mass of Water	5.32	5.61	5.65	
Dry Soil Mass	19.04	19.40	19.07	
Moisture Content	27.9	28.9	29.6	
Liquid Limit	28.6	28.6	28.0	

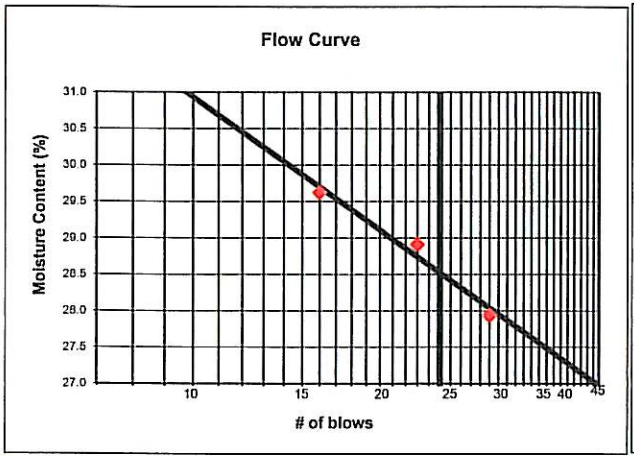
Average Liquid Limit: 29

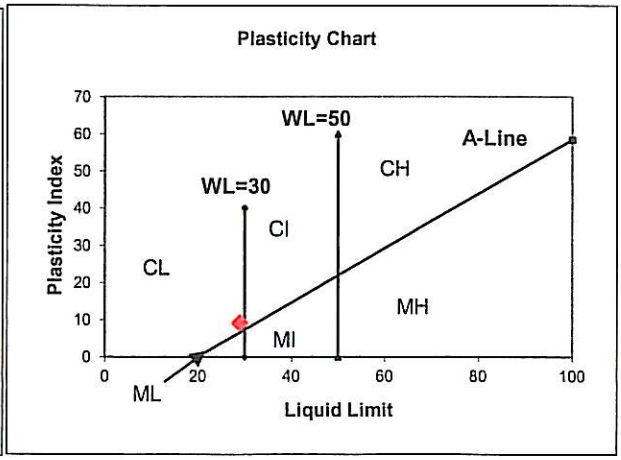
Plastic Limit

Trial No.	1	2		
Tare ID	S11	8		
Mass Wet + Tare	33.09	33.67		
Mass Dry + Tare	30.68	31.19		
Mass Tare	18.72	18.42		
Mass of Water	2.41	2.48		
Dry Soil Mass	11.96	12.77		
Moisture Content	20.2	19.4		

Average Plastic Limit	20
Plasticity Index	9
Received Moisture	13.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 29
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	G. Michaud	Depth:	80.7m - 80.9m
Date:	20-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	28	31	20	
Tare ID	BH	CB	B	
Mass Wet + Tare	28.41	27.99	35.93	
Mass Dry + Tare	24.04	23.01	30.86	
Mass Tare	15.89	13.60	21.83	
Mass of Water	4.37	4.98	5.07	
Dry Soil Mass	8.15	9.41	9.03	
Moisture Content	53.6	52.9	56.1	
Liquid Limit	54.4	54.5	54.6	

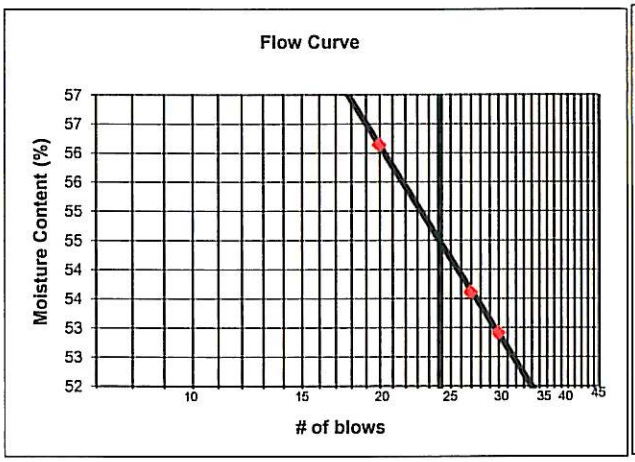
Average Liquid Limit: 54

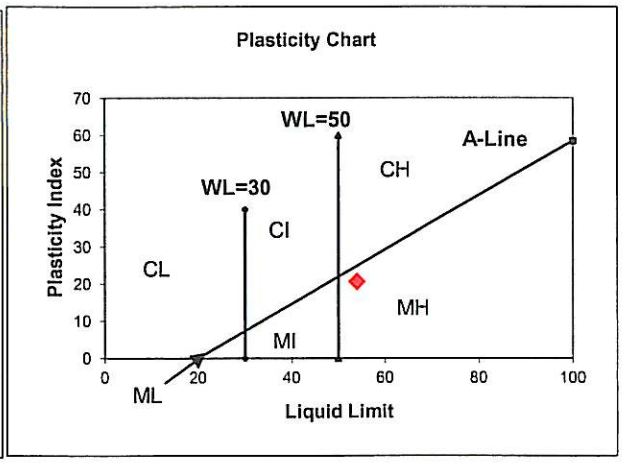
Plastic Limit

Trial No.	1	2	3	
Tare ID	7	11	9	
Mass Wet + Tare	28.45	28.55	28.34	
Mass Dry + Tare	26.73	26.74	26.64	
Mass Tare	21.54	21.30	21.52	
Mass of Water	1.72	1.81	1.70	
Dry Soil Mass	5.19	5.44	5.12	
Moisture Content	33.1	33.3	33.2	

Average Plastic Limit	33
Plasticity Index	21
Received Moisture	28

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 33
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	B. Garlick	Depth:	93.85m - 94.05m
Date:	23-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	32	21	15	
Tare ID	S7	15	2	
Mass Wet + Tare	41.63	41.67	43.22	
Mass Dry + Tare	34.05	34.06	34.96	
Mass Tare	18.52	18.82	18.85	
Mass of Water	7.58	7.61	8.26	
Dry Soil Mass	15.53	15.24	16.11	
Moisture Content	48.8	49.9	51.3	
Liquid Limit	50.5	48.8	48.1	

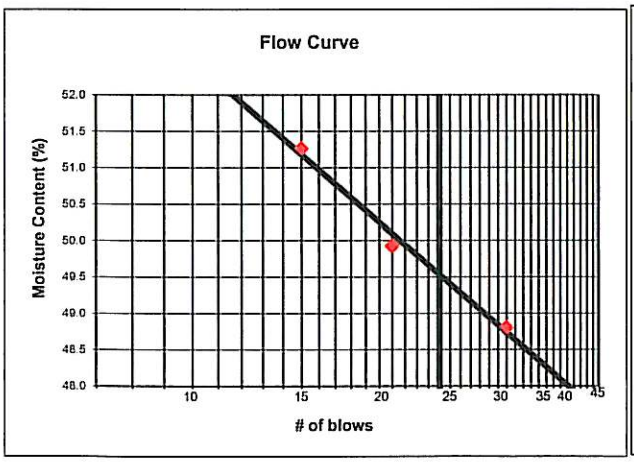
Average Liquid Limit: 50

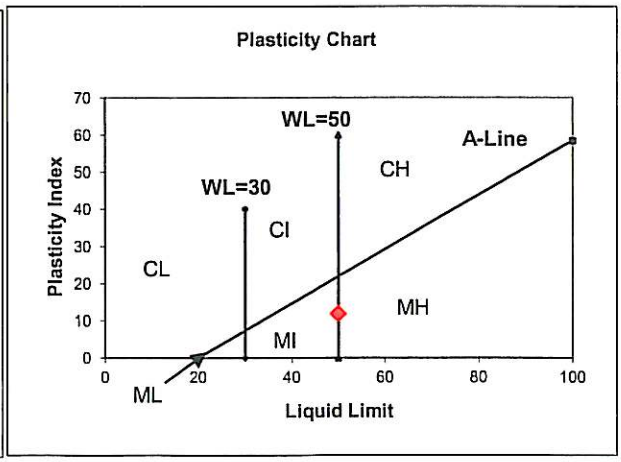
Plastic Limit

Trial No.	1	2		
Tare ID	S6	S4		
Mass Wet + Tare	36.22	38.07		
Mass Dry + Tare	31.37	32.65		
Mass Tare	18.62	18.36		
Mass of Water	4.85	5.42		
Dry Soil Mass	12.75	14.29		
Moisture Content	38.0	37.9		

Average Plastic Limit	38
Plasticity Index	12
Received Moisture	31.9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-17, sample 37
Project Number:	KX05349	Date Sampled:	20-Jul-12
Technician:	B. Garlick	Depth:	104.77m - 104.97m
Date:	20-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	34	22	15	
Tare ID	8	6	13	
Mass Wet + Tare	39.58	41.83	42.70	
Mass Dry + Tare	32.56	33.85	34.11	
Mass Tare	18.93	18.80	18.75	
Mass of Water	7.02	7.98	8.59	
Dry Soil Mass	13.63	15.05	15.36	
Moisture Content	51.5	53.0	55.9	
Liquid Limit	53.7	52.2	52.5	

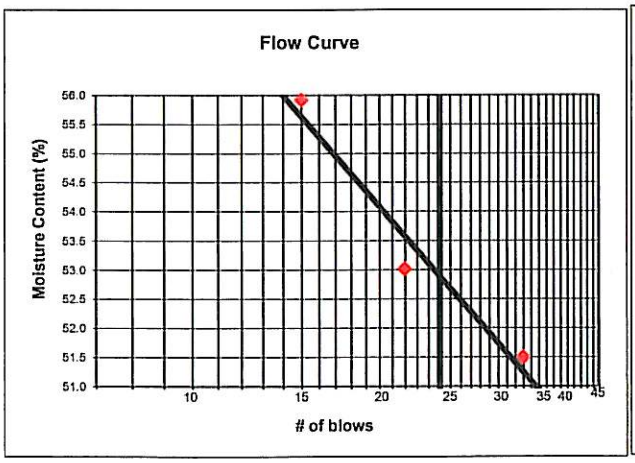
Average Liquid Limit: 53

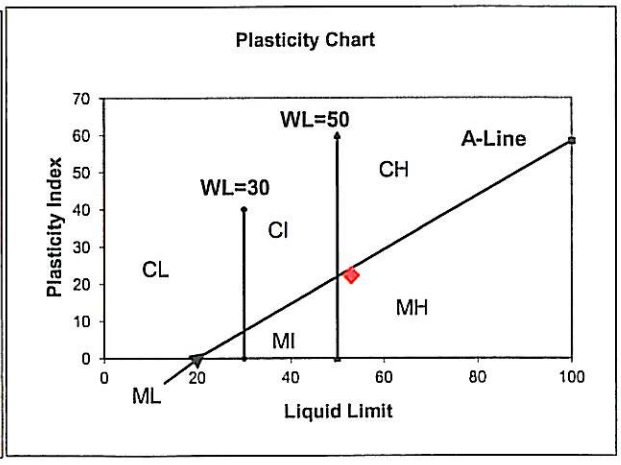
Plastic Limit

Trial No.	1	2		
Tare ID	S11	7		
Mass Wet + Tare	33.09	34.02		
Mass Dry + Tare	29.75	30.37		
Mass Tare	18.71	18.57		
Mass of Water	3.34	3.65		
Dry Soil Mass	11.04	11.80		
Moisture Content	30.3	30.9		

Average Plastic Limit	31
Plasticity Index	22
Received Moisture	15.4

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 3
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	G. Michaud	Depth:	10.19m - 10.39m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	16	27	35	
Tare ID	G	O	AU	
Mass Wet + Tare	35.98	34.84	32.84	
Mass Dry + Tare	33.40	32.67	30.97	
Mass Tare	21.51	22.04	21.49	
Mass of Water	2.58	2.17	1.87	
Dry Soil Mass	11.89	10.63	9.48	
Moisture Content	21.7	20.4	19.7	
Liquid Limit	20.5	20.6	20.6	

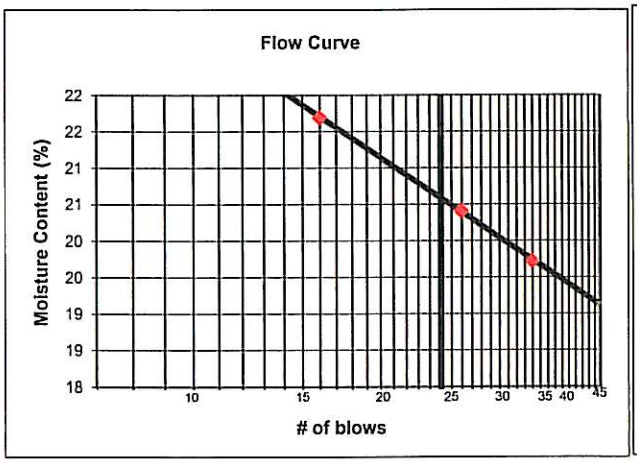
Average Liquid Limit: 21

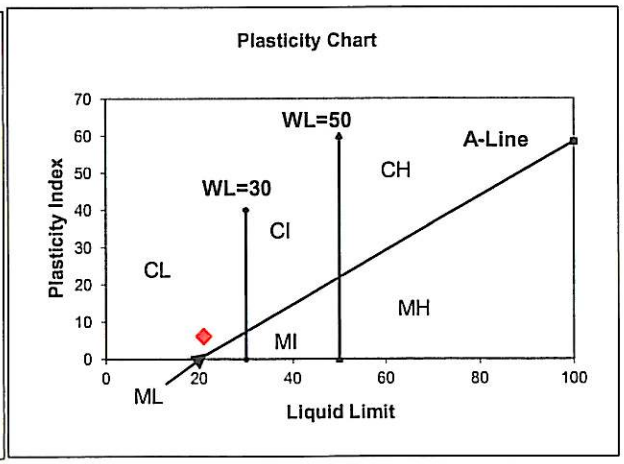
Plastic Limit

Trial No.	1	2	3	
Tare ID	2	38	24	
Mass Wet + Tare	33.44	31.21	27.60	
Mass Dry + Tare	31.93	29.95	26.82	
Mass Tare	21.64	21.35	21.55	
Mass of Water	1.51	1.26	0.78	
Dry Soil Mass	10.29	8.60	5.27	
Moisture Content	14.7	14.7	14.8	

Average Plastic Limit	15
Plasticity Index	6
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 4
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	G. Michaud	Depth:	12.98m - 13.18m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	11	22	32	
Tare ID	AQ	E	C	
Mass Wet + Tare	36.35	32.68	30.95	
Mass Dry + Tare	33.54	30.71	29.39	
Mass Tare	21.57	21.46	21.67	
Mass of Water	2.81	1.97	1.56	
Dry Soil Mass	11.97	9.25	7.72	
Moisture Content	23.5	21.3	20.2	
Liquid Limit	21.2	21.0	20.9	

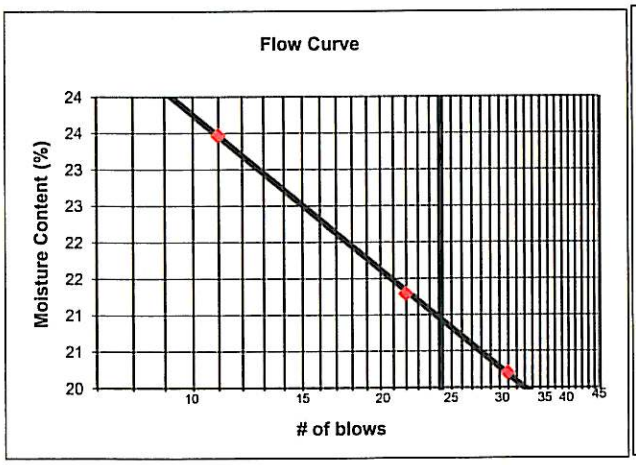
Average Liquid Limit: 21

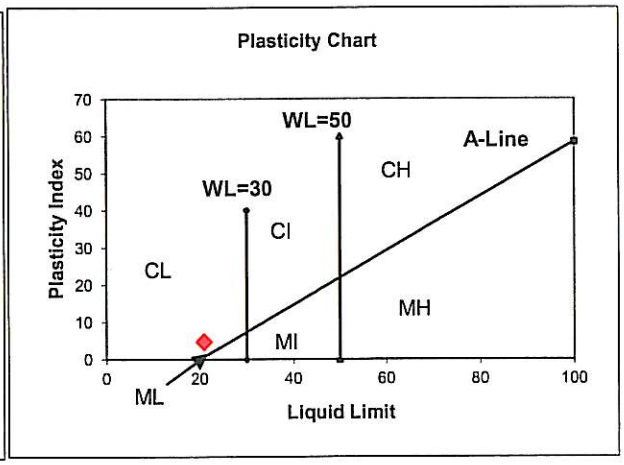
Plastic Limit

Trial No.	1	2	3	
Tare ID	22	BA	MA	
Mass Wet + Tare	32.41	25.17	25.10	
Mass Dry + Tare	30.89	23.86	23.70	
Mass Tare	21.50	15.67	14.99	
Mass of Water	1.52	1.31	1.40	
Dry Soil Mass	9.39	8.19	8.71	
Moisture Content	16.2	16.0	16.1	

Average Plastic Limit	16
Plasticity Index	5
Received Moisture	11

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 07
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	B. Garlick	Depth:	22.74m - 22.94m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	26	18	
Tare ID	9	11	S11	
Mass Wet + Tare	46.36	39.59	44.80	
Mass Dry + Tare	41.40	35.72	39.79	
Mass Tare	18.54	18.68	18.71	
Mass of Water	4.96	3.87	5.01	
Dry Soil Mass	22.86	17.04	21.08	
Moisture Content	21.7	22.7	23.8	
Liquid Limit	22.7	22.8	22.8	

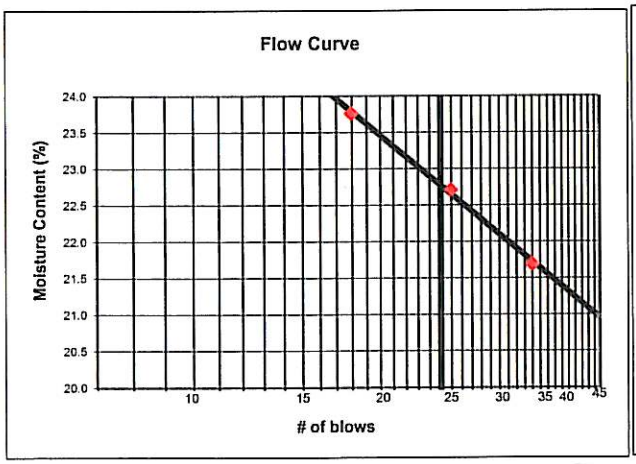
Average Liquid Limit: 23

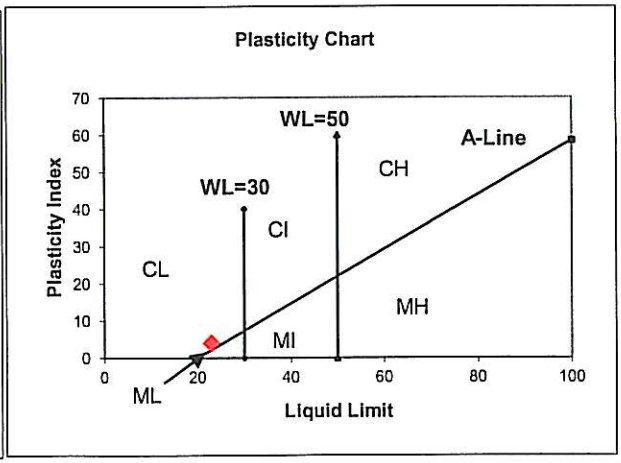
Plastic Limit

Trial No.	1	2		
Tare ID	6	13		
Mass Wet + Tare	35.59	36.98		
Mass Dry + Tare	32.98	34.04		
Mass Tare	18.80	18.75		
Mass of Water	2.61	2.94		
Dry Soil Mass	14.18	15.29		
Moisture Content	18.4	19.2		

Average Plastic Limit	19
Plasticity Index	4
Received Moisture	14.6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 12
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	B. Garlick	Depth:	38.67m - 38.87m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	25	15	
Tare ID	4	3	S9	
Mass Wet + Tare	42.28	43.38	40.02	
Mass Dry + Tare	35.76	36.48	33.85	
Mass Tare	18.80	18.87	18.82	
Mass of Water	6.52	6.90	6.17	
Dry Soil Mass	16.96	17.61	15.03	
Moisture Content	38.4	39.2	41.1	
Liquid Limit	40.2	39.2	38.5	

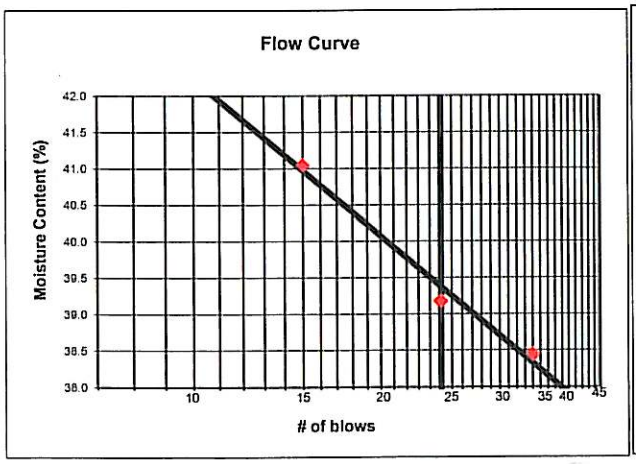
Average Liquid Limit: 39

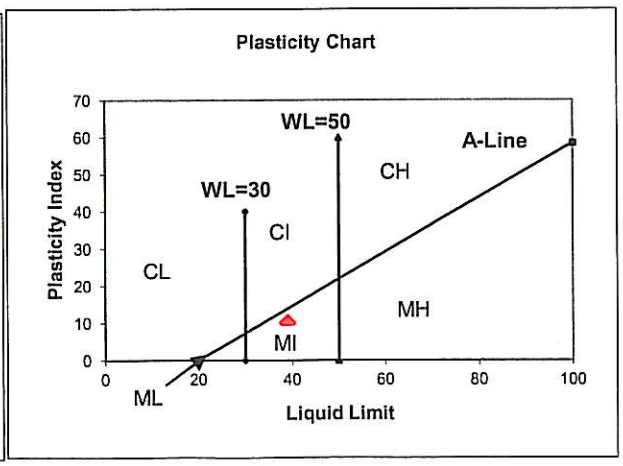
Plastic Limit

Trial No.	1	2		
Tare ID	S1	14		
Mass Wet + Tare	35.38	35.20		
Mass Dry + Tare	31.75	31.48		
Mass Tare	18.94	18.72		
Mass of Water	3.63	3.72		
Dry Soil Mass	12.81	12.76		
Moisture Content	28.3	29.2		

Average Plastic Limit	29
Plasticity Index	10
Received Moisture	23.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 16
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	G. Michaud	Depth:	51.49m - 51.69m
Date:	22-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	24	33	12	
Tare ID	S	DD	H	
Mass Wet + Tare	37.93	35.11	38.72	
Mass Dry + Tare	34.15	32.08	34.53	
Mass Tare	21.56	21.59	21.68	
Mass of Water	3.78	3.03	4.19	
Dry Soil Mass	12.59	10.49	12.85	
Moisture Content	30.0	28.9	32.6	
Liquid Limit	29.9	30.0	29.8	

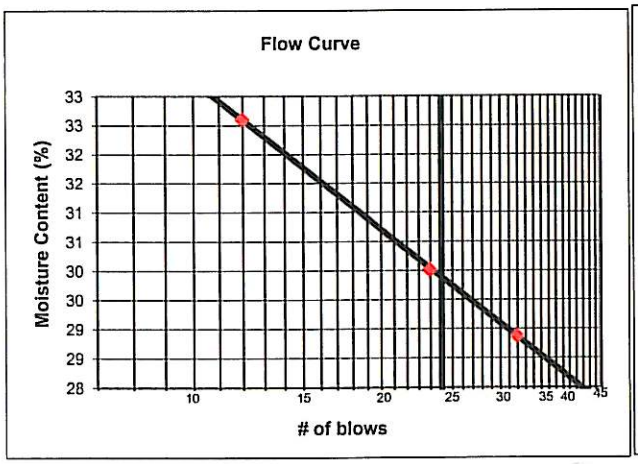
Average Liquid Limit: 30

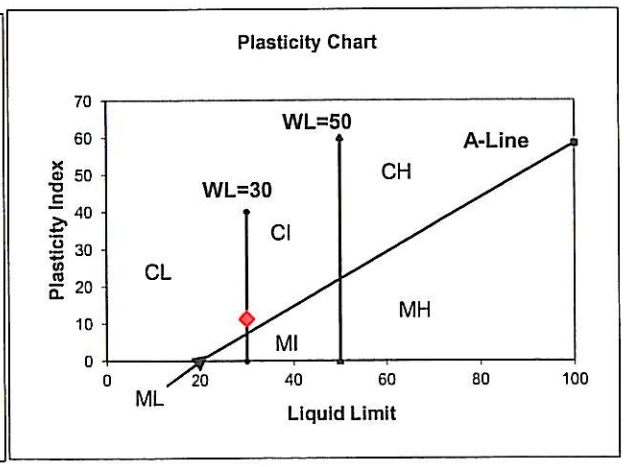
Plastic Limit

Trial No.	1	2	3	
Tare ID	47	15	27	
Mass Wet + Tare	28.55	29.11	29.08	
Mass Dry + Tare	27.44	28.02	27.89	
Mass Tare	21.45	22.14	21.47	
Mass of Water	1.11	1.09	1.19	
Dry Soil Mass	5.99	5.88	6.42	
Moisture Content	18.5	18.5	18.5	

Average Plastic Limit	19
Plasticity Index	11
Received Moisture	14

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-18, sample 20
Project Number:	KX05349	Date Sampled:	24-Jul-12
Technician:	B. Garlick	Depth:	69.0m - 69.2m
Date:	21-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	25	15	
Tare ID	12	10	S10	
Mass Wet + Tare	41.97	40.35	42.17	
Mass Dry + Tare	33.88	32.60	33.35	
Mass Tare	18.86	18.83	18.46	
Mass of Water	8.09	7.75	8.82	
Dry Soil Mass	15.02	13.77	14.89	
Moisture Content	53.9	56.3	59.2	
Liquid Limit	56.4	56.3	55.6	

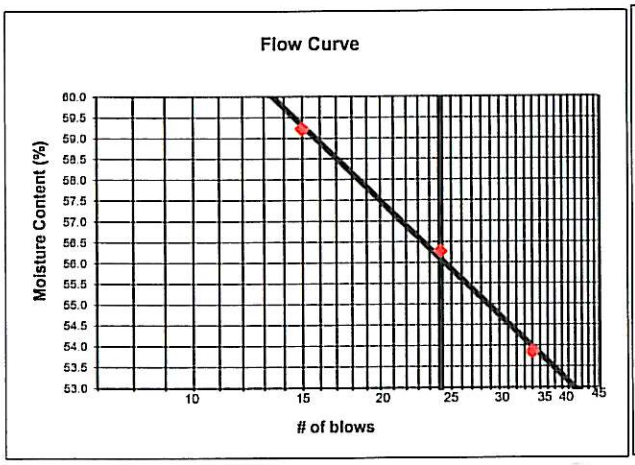
Average Liquid Limit: 56

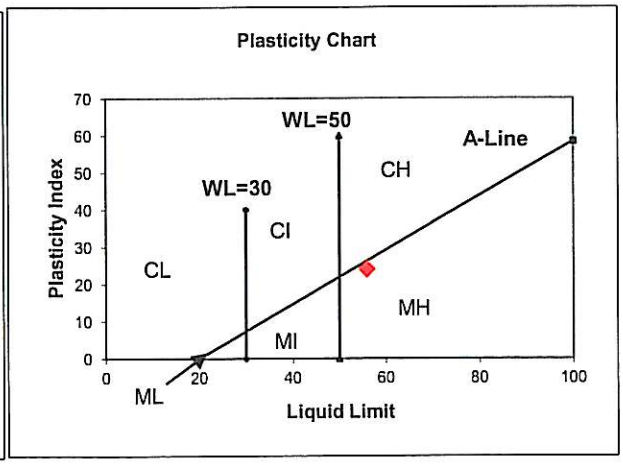
Plastic Limit

Trial No.	1	2		
Tare ID	S2	3A		
Mass Wet + Tare	33.30	34.09		
Mass Dry + Tare	29.72	30.50		
Mass Tare	18.78	18.91		
Mass of Water	3.58	3.59		
Dry Soil Mass	10.94	11.59		
Moisture Content	32.7	31.0		

Average Plastic Limit	32
Plasticity Index	24
Received Moisture	17.4

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-19, sample 02
Project Number:	KX05349	Date Sampled:	7-Aug-12
Technician:	B. Garlick	Depth:	5.45m - 5.65m
Date:	20-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	31	25	19	
Tare ID	11	2	S7	
Mass Wet + Tare	48.53	46.22	44.81	
Mass Dry + Tare	42.91	40.96	39.69	
Mass Tare	18.68	18.84	18.52	
Mass of Water	5.62	5.26	5.12	
Dry Soil Mass	24.23	22.12	21.17	
Moisture Content	23.2	23.8	24.2	
Liquid Limit	23.9	23.8	23.4	

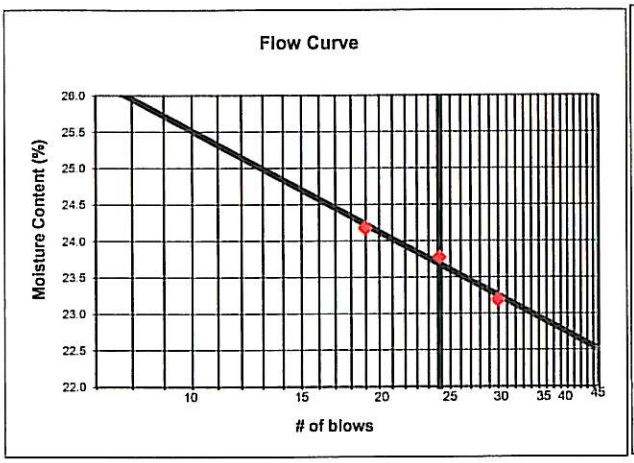
Average Liquid Limit: 24

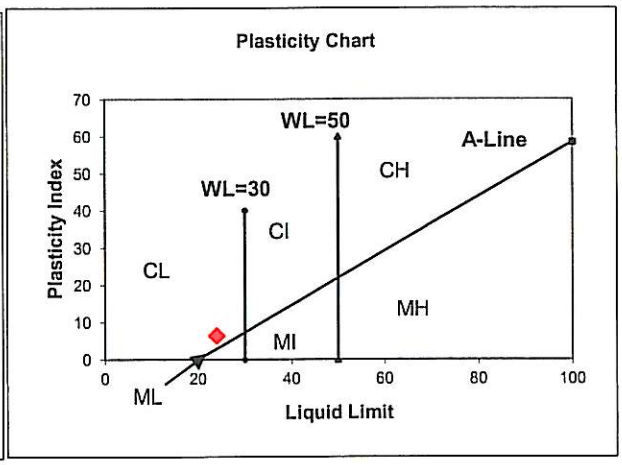
Plastic Limit

Trial No.	1	2		
Tare ID	15	9		
Mass Wet + Tare	35.04	33.61		
Mass Dry + Tare	32.62	31.38		
Mass Tare	18.82	18.55		
Mass of Water	2.42	2.23		
Dry Soil Mass	13.80	12.83		
Moisture Content	17.5	17.4		

Average Plastic Limit	17
Plasticity Index	7
Received Moisture	5.6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-19, sample 06
Project Number:	KX05349	Date Sampled:	7-Aug-12
Technician:	B. Garlick	Depth:	22.04m - 22.24m
Date:	20-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	27	19	
Tare ID	4	S1	14	
Mass Wet + Tare	42.48	44.28	46.45	
Mass Dry + Tare	36.90	38.23	39.72	
Mass Tare	18.80	18.95	18.72	
Mass of Water	5.58	6.05	6.73	
Dry Soil Mass	18.10	19.28	21.00	
Moisture Content	30.8	31.4	32.0	
Liquid Limit	32.3	31.7	31.0	

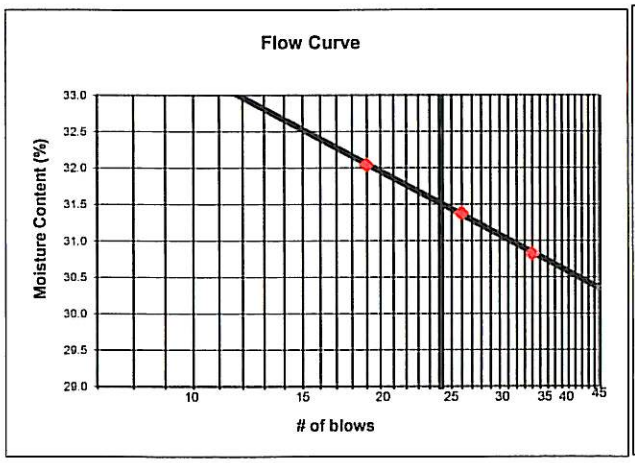
Average Liquid Limit: 32

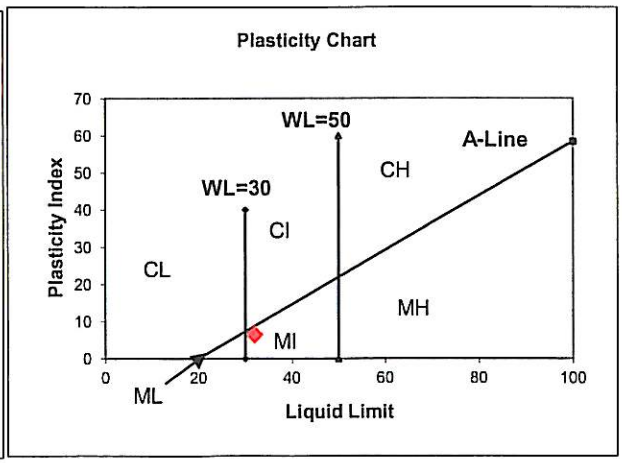
Plastic Limit

Trial No.	1	2		
Tare ID	3	S4		
Mass Wet + Tare	33.81	36.12		
Mass Dry + Tare	30.77	32.55		
Mass Tare	18.87	18.36		
Mass of Water	3.04	3.57		
Dry Soil Mass	11.90	14.19		
Moisture Content	25.5	25.2		

Average Plastic Limit	25
Plasticity Index	7
Received Moisture	25.9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-19, sample 7
Project Number:	KX05349	Date Sampled:	7-Aug-12
Technician:	G. Michaud	Depth:	31.03m - 31.23m
Date:	20-Nov-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2	3	
No. of Blows	14	15	19	
Tare ID	CD	AD	A	
Mass Wet + Tare	28.73	34.79	32.97	
Mass Dry + Tare	26.25	32.66	31.20	
Mass Tare	13.53	21.54	21.74	
Mass of Water	2.48	2.13	1.77	
Dry Soil Mass	12.72	11.12	9.46	
Moisture Content	19.5	19.2	18.7	
Liquid Limit	18.1	18.0	18.1	

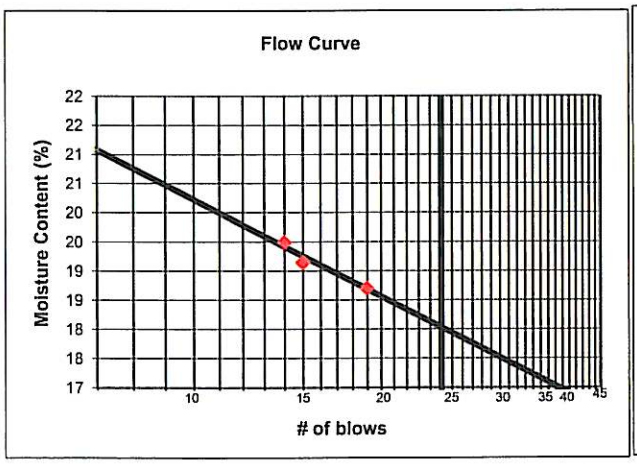
Average Liquid Limit: 18

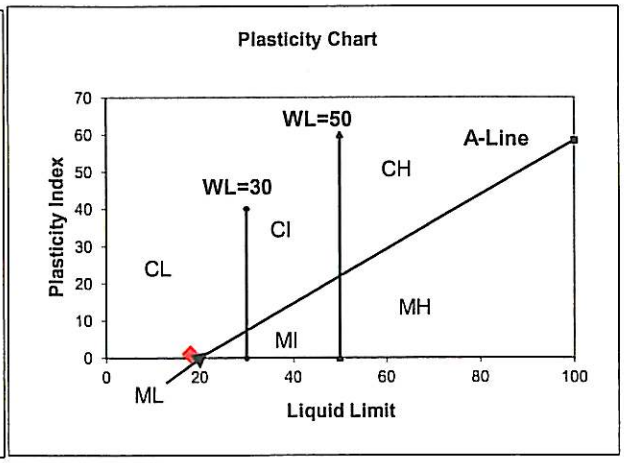
Plastic Limit

Trial No.	1	2	3	
Tare ID	25	31	5	
Mass Wet + Tare	27.10	32.69	31.01	
Mass Dry + Tare	26.29	31.09	29.66	
Mass Tare	21.46	21.57	21.64	
Mass of Water	0.81	1.60	1.35	
Dry Soil Mass	4.83	9.52	8.02	
Moisture Content	16.8	16.8	16.8	

Average Plastic Limit	17
Plasticity Index	1
Received Moisture	14

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-20, sample 4
Project Number:	KX05349	Date Sampled:	9-Aug-12
Technician:	G. Michaud	Depth:	20.2m - 20.4m
Date:	19-Nov-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	36	17	14	
Tare ID	AA	N	AK	
Mass Wet + Tare	37.86	39.57	37.84	
Mass Dry + Tare	35.43	36.60	35.17	
Mass Tare	21.76	21.43	21.82	
Mass of Water	2.43	2.97	2.67	
Dry Soil Mass	13.67	15.17	13.35	
Moisture Content	17.8	19.6	20.0	
Liquid Limit	18.7	18.6	18.6	

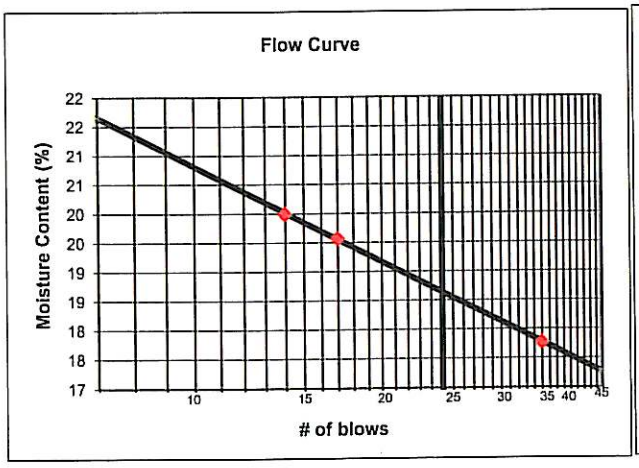
Average Liquid Limit: 19

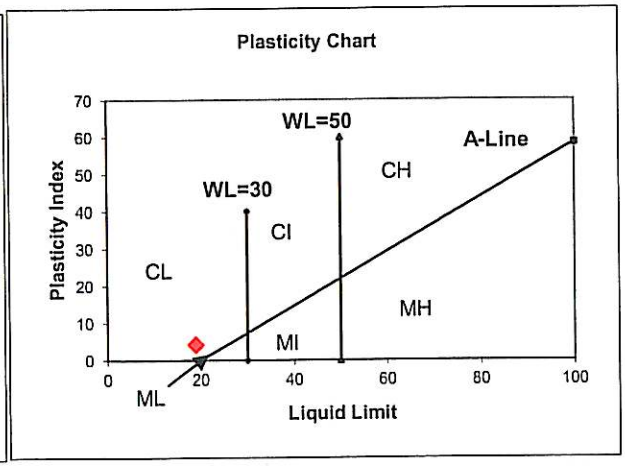
Plastic Limit

Trial No.	1	2	3	
Tare ID	14	46	30	
Mass Wet + Tare	32.37	35.87	32.70	
Mass Dry + Tare	30.98	34.02	31.25	
Mass Tare	21.43	21.40	21.36	
Mass of Water	1.39	1.85	1.45	
Dry Soil Mass	9.55	12.62	9.89	
Moisture Content	14.6	14.7	14.7	

Average Plastic Limit	15
Plasticity Index	4
Received Moisture	8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 2
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	5.4m - 5.6m
Date:	27-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	22	14		
Tare ID	1	2		
Mass Wet + Tare	92.13	91.04		
Mass Dry + Tare	85.84	84.75		
Mass Tare	53.89	54.12		
Mass of Water	6.29	6.29		
Dry Soil Mass	31.95	30.63		
Moisture Content	19.7	20.5		
Liquid Limit	19.4	19.1		

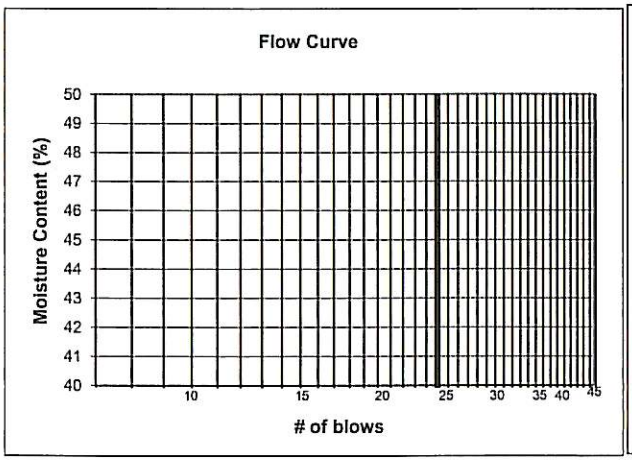
Average Liquid Limit: 19

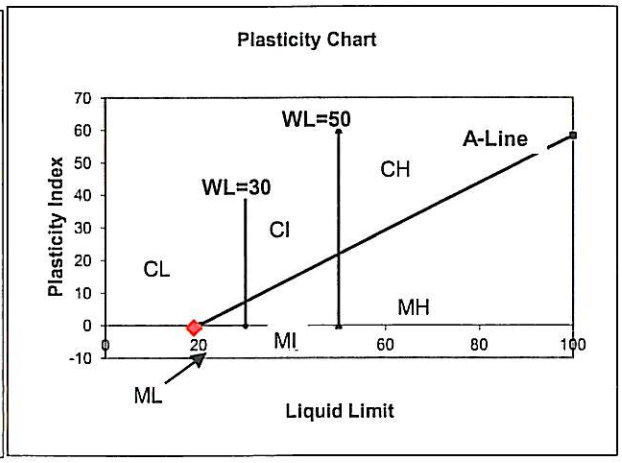
Plastic Limit

Trial No.	1			
Tare ID	13			
Mass Wet + Tare	67.64			
Mass Dry + Tare	65.37			
Mass Tare	53.72			
Mass of Water	2.27			
Dry Soil Mass	11.65			
Moisture Content	19.5			

Average Plastic Limit	19
Plasticity Index	0
Received Moisture	16

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 3
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	7.82m - 8.02m
Date:	27-Sep-12	Comments:	NON-PLASTIC

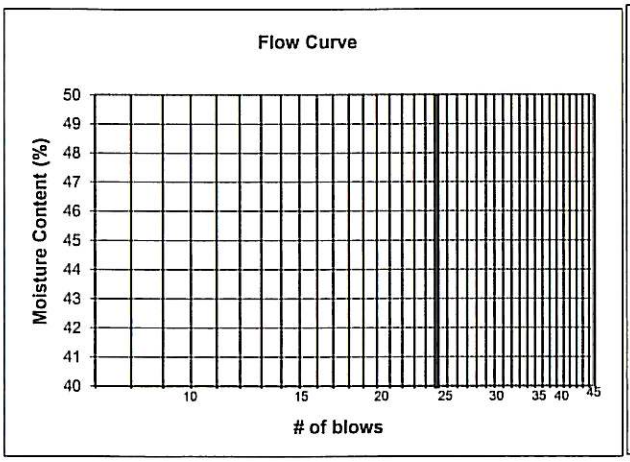
Liquid Limit

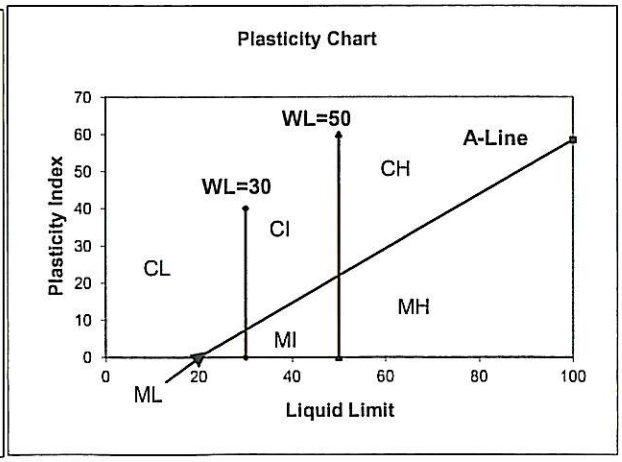
Trial No.	1				
No. of Blows	7				
Tare ID	2A				
Mass Wet + Tare	80.73				
Mass Dry + Tare	75.64				
Mass Tare	53.69				
Mass of Water	5.09				
Dry Soil Mass	21.95				
Moisture Content	23.2				
Liquid Limit	19.9				Average Liquid Limit:

Plastic Limit

Trial No.	1				
Tare ID	13				
Mass Wet + Tare	49.59				
Mass Dry + Tare	47.22				
Mass Tare	36.80				
Mass of Water	2.37				
Dry Soil Mass	10.42				
Moisture Content	22.7				Average Plastic Limit
					Plasticity Index
					Received Moisture 21

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 7
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	26.83m - 27.03m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	23	19	
Tare ID	10A	11A	12A	
Mass Wet + Tare	78.12	81.44	84.83	
Mass Dry + Tare	72.10	74.23	77.00	
Mass Tare	52.45	53.05	54.22	
Mass of Water	6.02	7.21	7.83	
Dry Soil Mass	19.65	21.18	22.78	
Moisture Content	30.6	34.0	34.4	
Liquid Limit	31.8	33.7	33.2	

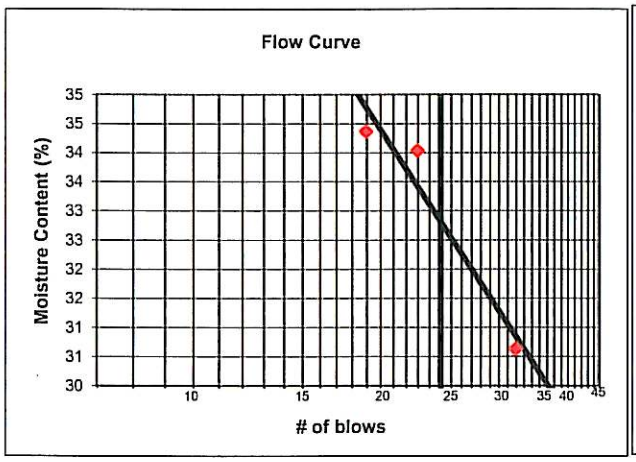
Average Liquid Limit: 33

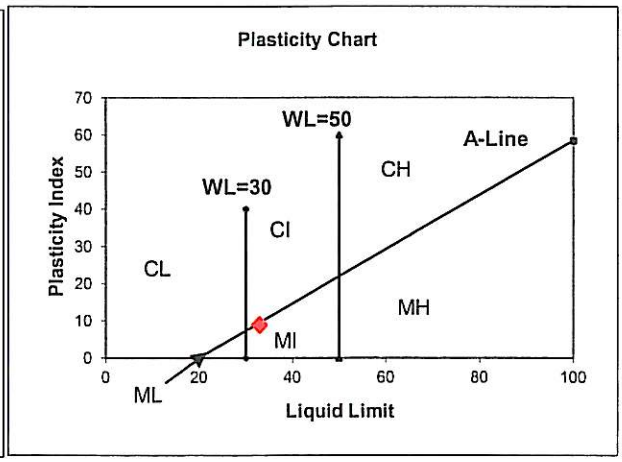
Plastic Limit

Trial No.	1	2	3	
Tare ID	7A	8	9A	
Mass Wet + Tare	64.36	64.31	63.05	
Mass Dry + Tare	62.31	62.31	61.24	
Mass Tare	53.81	53.99	53.61	
Mass of Water	2.05	2.00	1.81	
Dry Soil Mass	8.50	8.32	7.63	
Moisture Content	24.1	24.0	23.7	

Average Plastic Limit	24
Plasticity Index	9
Received Moisture	24

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 8
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	32.76m - 32.96m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	30	27	19	
Tare ID	16A	17A	18A	
Mass Wet + Tare	82.18	79.45	81.54	
Mass Dry + Tare	76.59	74.34	75.87	
Mass Tare	53.61	54.21	54.06	
Mass of Water	5.59	5.11	5.67	
Dry Soil Mass	22.98	20.13	21.81	
Moisture Content	24.3	25.4	26.0	
Liquid Limit	24.9	25.7	25.1	

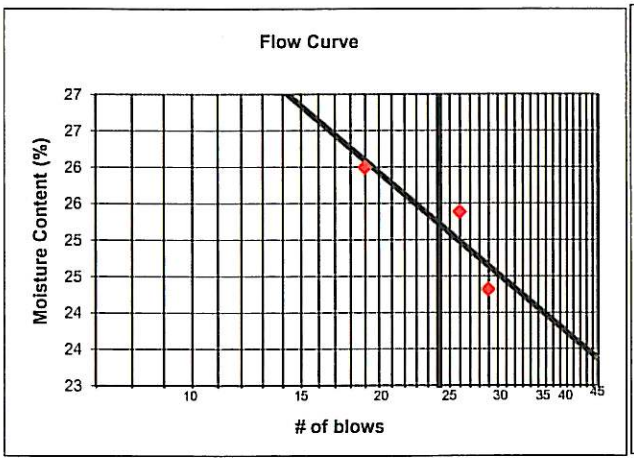
Average Liquid Limit: 25

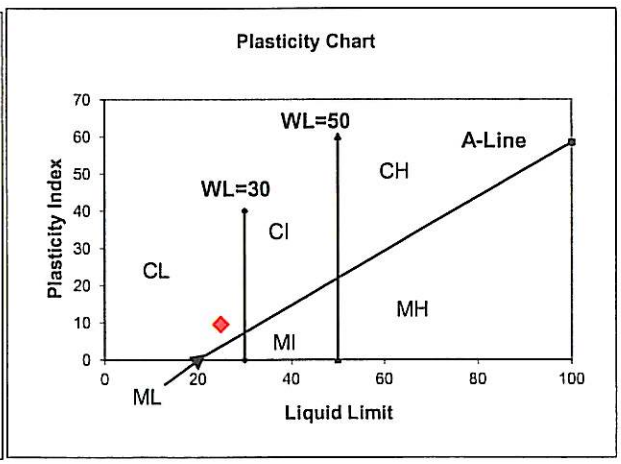
Plastic Limit

Trial No.	1	2	3	
Tare ID	13A	14A	15A	
Mass Wet + Tare	63.94	62.83	65.67	
Mass Dry + Tare	62.39	61.61	64.08	
Mass Tare	52.23	53.59	53.83	
Mass of Water	1.55	1.22	1.59	
Dry Soil Mass	10.16	8.02	10.25	
Moisture Content	15.3	15.2	15.5	

Average Plastic Limit	15
Plasticity Index	10
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 12
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	50.74m - 50.94m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	29	25	17	
Tare ID	1	2	3	
Mass Wet + Tare	91.86	85.55	86.45	
Mass Dry + Tare	84.79	79.33	79.99	
Mass Tare	53.86	53.50	53.89	
Mass of Water	7.07	6.22	6.46	
Dry Soil Mass	30.93	25.83	26.10	
Moisture Content	22.9	24.1	24.8	
Liquid Limit	23.3	24.1	23.6	

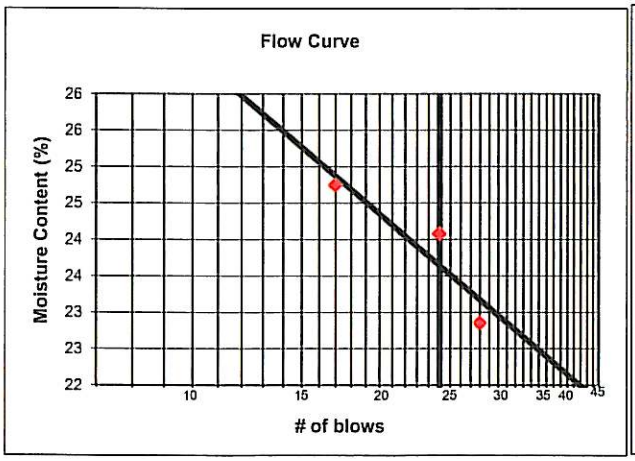
Average Liquid Limit: 24

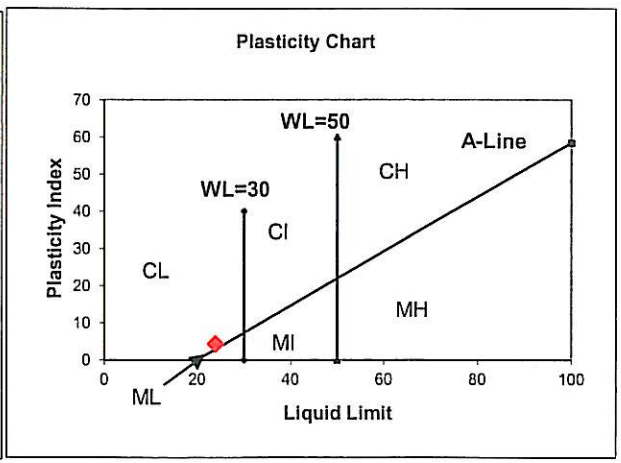
Plastic Limit

Trial No.	1	2	3	
Tare ID	19A	20A	21A	
Mass Wet + Tare	64.10	62.72	63.56	
Mass Dry + Tare	62.50	61.03	61.85	
Mass Tare	54.21	52.43	53.15	
Mass of Water	1.60	1.69	1.71	
Dry Soil Mass	8.29	8.60	8.70	
Moisture Content	19.3	19.7	19.7	

Average Plastic Limit	20
Plasticity Index	4
Received Moisture	20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 13
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	56.41m - 56.61m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	31	25	20	
Tare ID	1	2	3	
Mass Wet + Tare	85.18	85.30	83.60	
Mass Dry + Tare	78.54	78.51	77.35	
Mass Tare	52.43	53.03	54.16	
Mass of Water	6.64	6.79	6.25	
Dry Soil Mass	26.11	25.48	23.19	
Moisture Content	25.4	26.6	27.0	
Liquid Limit	26.2	26.7	26.2	

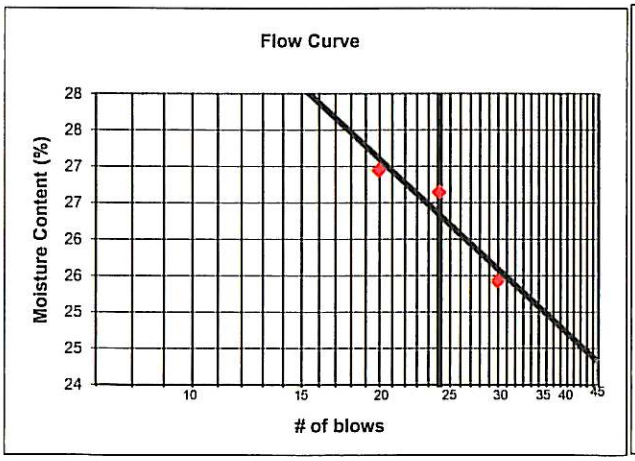
Average Liquid Limit: 26

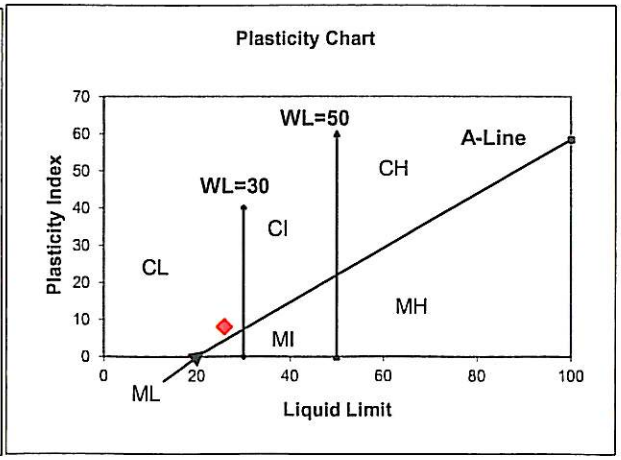
Plastic Limit

Trial No.	1	2	3	
Tare ID	7	8	9	
Mass Wet + Tare	63.61	62.96	62.00	
Mass Dry + Tare	62.12	61.61	60.73	
Mass Tare	53.80	53.97	53.60	
Mass of Water	1.49	1.35	1.27	
Dry Soil Mass	8.32	7.64	7.13	
Moisture Content	17.9	17.7	17.8	

Average Plastic Limit	18
Plasticity Index	8
Received Moisture	16

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-21, sample 14
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Shearer	Depth:	59.52m - 59.72m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	27	23	20	
Tare ID	1	2	3	
Mass Wet + Tare	82.44	83.81	83.85	
Mass Dry + Tare	76.27	77.20	77.15	
Mass Tare	53.64	54.25	54.15	
Mass of Water	6.17	6.61	6.70	
Dry Soil Mass	22.63	22.95	23.00	
Moisture Content	27.3	28.8	29.1	
Liquid Limit	27.6	28.5	28.3	

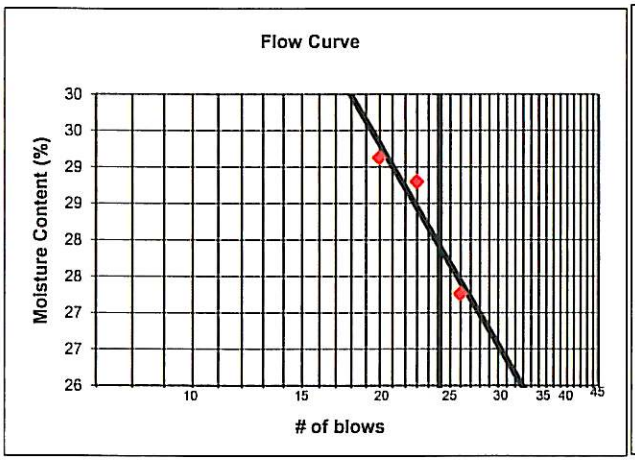
Average Liquid Limit: 28

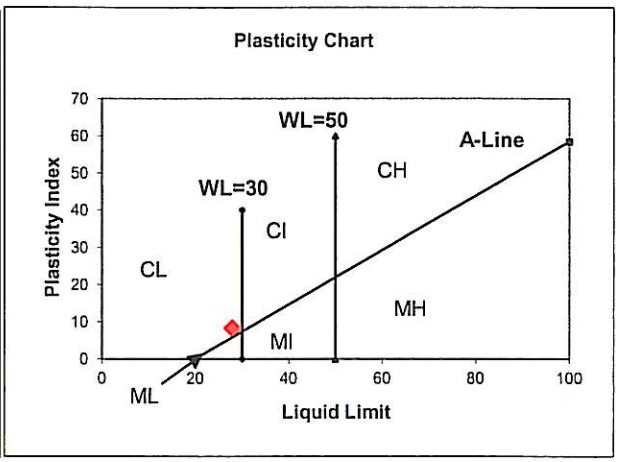
Plastic Limit

Trial No.	1	2	3	
Tare ID	7	8	9	
Mass Wet + Tare	62.72	63.66	65.71	
Mass Dry + Tare	61.00	62.00	63.79	
Mass Tare	52.23	53.58	53.84	
Mass of Water	1.72	1.66	1.92	
Dry Soil Mass	8.77	8.42	9.95	
Moisture Content	19.6	19.7	19.3	

Average Plastic Limit	20
Plasticity Index	8
Received Moisture	20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample S1
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	J. McDonald	Depth:	1.58m - 1.78m
Date:	28-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	34	18	25	
Tare ID	BH	BE	D	
Mass Wet + Tare	30.07	31.22	36.70	
Mass Dry + Tare	27.60	28.36	33.98	
Mass Tare	15.84	15.75	21.59	
Mass of Water	2.47	2.86	2.72	
Dry Soil Mass	11.76	12.61	12.39	
Moisture Content	21.0	22.7	22.0	
Liquid Limit	21.9	21.8	22.0	

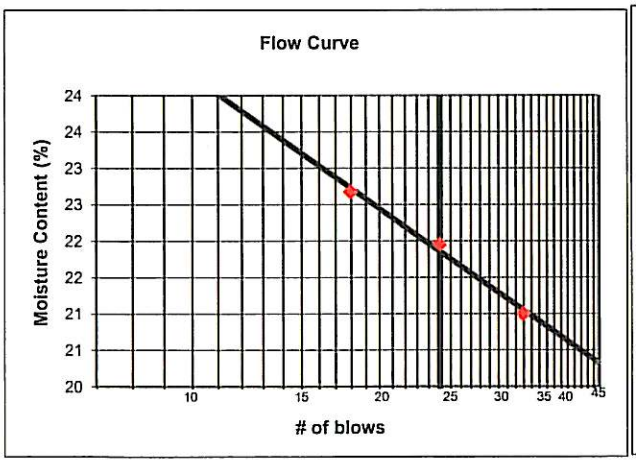
Average Liquid Limit: 22

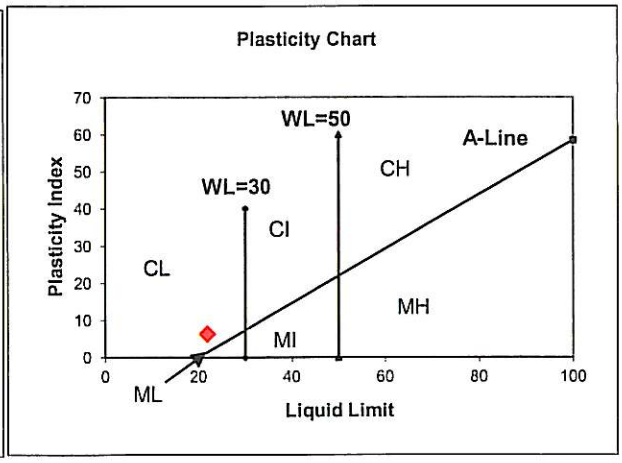
Plastic Limit

Trial No.	1	2	3	
Tare ID	29	1	9	
Mass Wet + Tare	32.45	34.77	34.77	
Mass Dry + Tare	30.99	32.99	32.98	
Mass Tare	21.52	21.55	21.47	
Mass of Water	1.46	1.78	1.79	
Dry Soil Mass	9.47	11.44	11.51	
Moisture Content	15.4	15.6	15.6	

Average Plastic Limit	16
Plasticity Index	6
Received Moisture	5

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample 2
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	B. Shearer	Depth:	8.28m - 8.41m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	30	24	16	
Tare ID	22A	23A	24A	
Mass Wet + Tare	88.67	87.06	89.81	
Mass Dry + Tare	82.97	81.42	83.63	
Mass Tare	53.84	53.54	53.87	
Mass of Water	5.70	5.64	6.18	
Dry Soil Mass	29.13	27.88	29.76	
Moisture Content	19.6	20.2	20.8	
Liquid Limit	20.1	20.1	19.6	

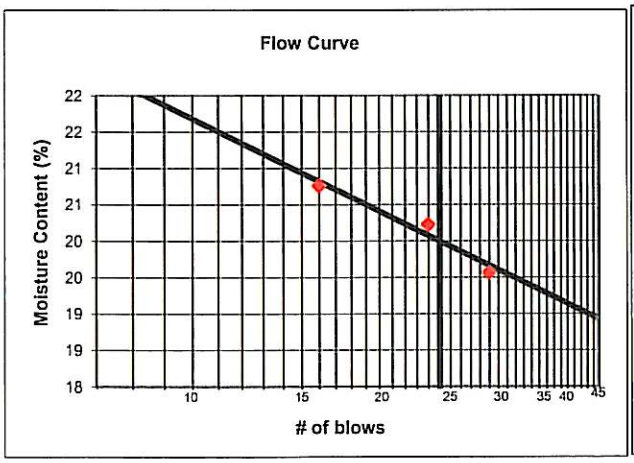
Average Liquid Limit: 20

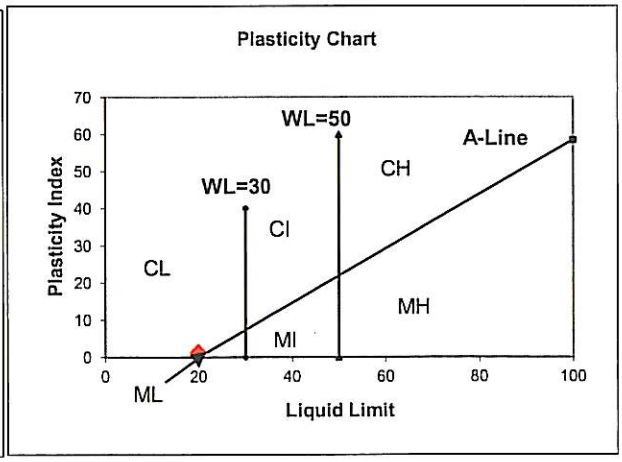
Plastic Limit

Trial No.	1	2	3	
Tare ID	19A	20A	21A	
Mass Wet + Tare	65.44	59.88	59.19	
Mass Dry + Tare	63.70	58.71	58.24	
Mass Tare	54.21	52.44	53.16	
Mass of Water	1.74	1.17	0.95	
Dry Soil Mass	9.49	6.27	5.08	
Moisture Content	18.3	18.7	18.7	

Average Plastic Limit	19
Plasticity Index	1
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample 3
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	B. Shearer	Depth:	14.26m - 14.46m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	28	25	15	
Tare ID	1	2	3	
Mass Wet + Tare	85.53	88.97	80.02	
Mass Dry + Tare	79.51	82.15	74.63	
Mass Tare	53.58	54.07	54.31	
Mass of Water	6.02	6.82	5.39	
Dry Soil Mass	25.93	28.08	20.32	
Moisture Content	23.2	24.3	26.5	
Liquid Limit	23.6	24.3	24.9	

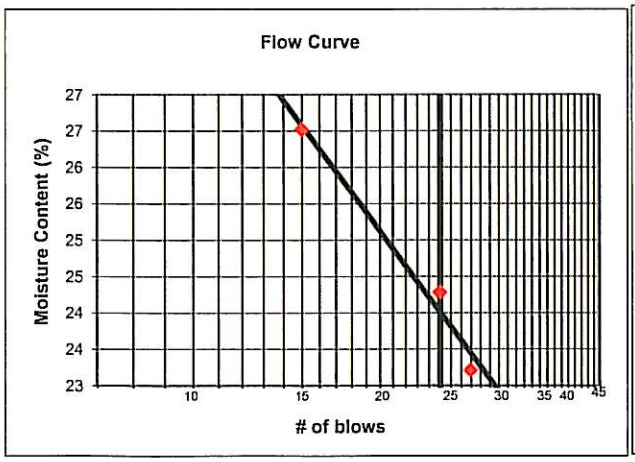
Average Liquid Limit: 24

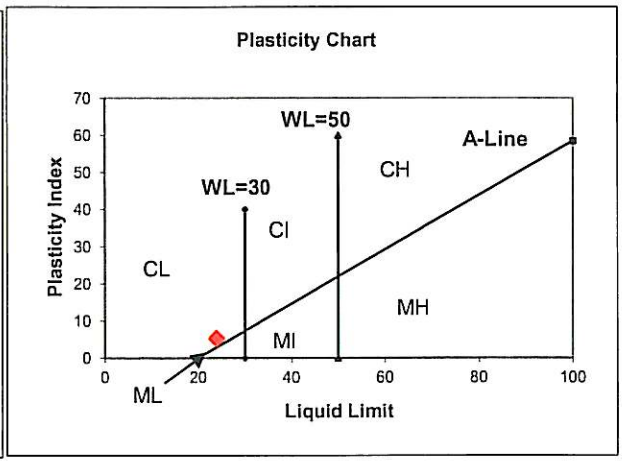
Plastic Limit

Trial No.	1	2	3	
Tare ID	7	8	9	
Mass Wet + Tare	62.72	64.26	63.89	
Mass Dry + Tare	61.32	62.64	62.31	
Mass Tare	53.72	53.94	53.87	
Mass of Water	1.40	1.62	1.58	
Dry Soil Mass	7.60	8.70	8.44	
Moisture Content	18.4	18.6	18.7	

Average Plastic Limit	19
Plasticity Index	5
Received Moisture	16

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample S7
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	J. McDonald	Depth:	33.78m - 33.98m
Date:	28-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	37	27	17	
Tare ID	C	BF	AG	
Mass Wet + Tare	36.71	30.40	40.38	
Mass Dry + Tare	33.91	27.59	36.60	
Mass Tare	21.68	15.83	21.63	
Mass of Water	2.80	2.81	3.78	
Dry Soil Mass	12.23	11.76	14.97	
Moisture Content	22.9	23.9	25.3	
Liquid Limit	24.1	24.1	24.1	

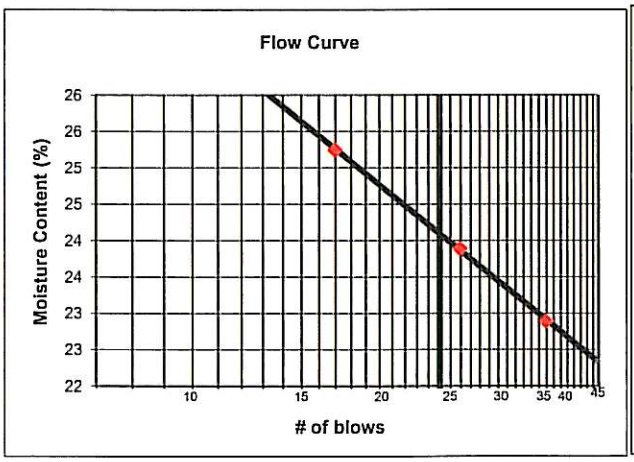
Average Liquid Limit: 24

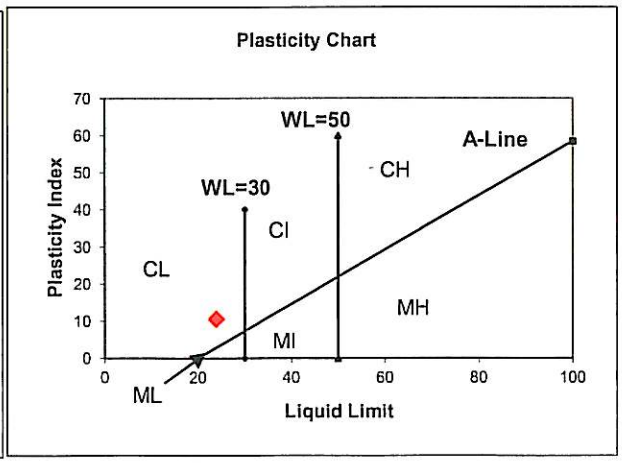
Plastic Limit

Trial No.	1	2	3	
Tare ID	35	44	26	
Mass Wet + Tare	32.08	28.81	23.22	
Mass Dry + Tare	30.82	27.96	22.17	
Mass Tare	21.34	21.52	14.30	
Mass of Water	1.26	0.85	1.05	
Dry Soil Mass	9.48	6.44	7.87	
Moisture Content	13.3	13.2	13.3	

Average Plastic Limit	13
Plasticity Index	11
Received Moisture	4

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample 8
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	B. Shearer	Depth:	38.51m - 38.71m
Date:	27-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1			
No. of Blows	12			
Tare ID	36A			
Mass Wet + Tare	90.60			
Mass Dry + Tare	85.48			
Mass Tare	52.60			
Mass of Water	5.12			
Dry Soil Mass	32.88			
Moisture Content	15.6			
Liquid Limit	14.2			

Average Liquid Limit: _____

Plastic Limit

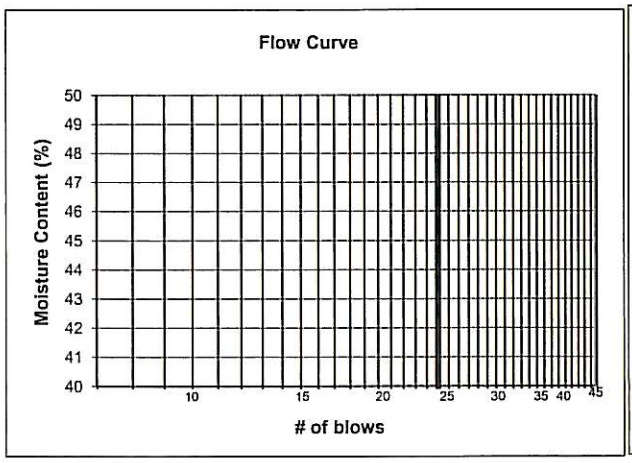
Trial No.	1			
Tare ID	31A			
Mass Wet + Tare	65.00			
Mass Dry + Tare	63.20			
Mass Tare	53.74			
Mass of Water	1.80			
Dry Soil Mass	9.46			
Moisture Content	19.0			

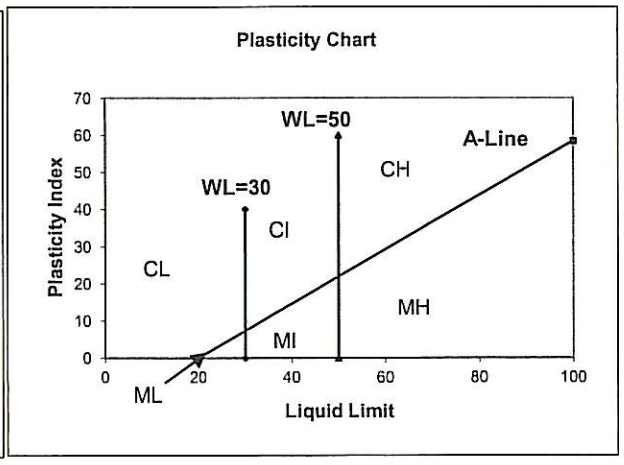
Average Plastic Limit _____

Plasticity Index _____

Received Moisture 13

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample 10
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	B. Shearer	Depth:	51.19m - 51.39m
Date:	27-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	14	6		
Tare ID	29A	30A		
Mass Wet + Tare	88.08	86.27		
Mass Dry + Tare	82.55	80.51		
Mass Tare	54.06	54.29		
Mass of Water	5.53	5.76		
Dry Soil Mass	28.49	26.22		
Moisture Content	19.4	22.0		
Liquid Limit	18.1	18.5		

Average Liquid Limit: 18

Plastic Limit

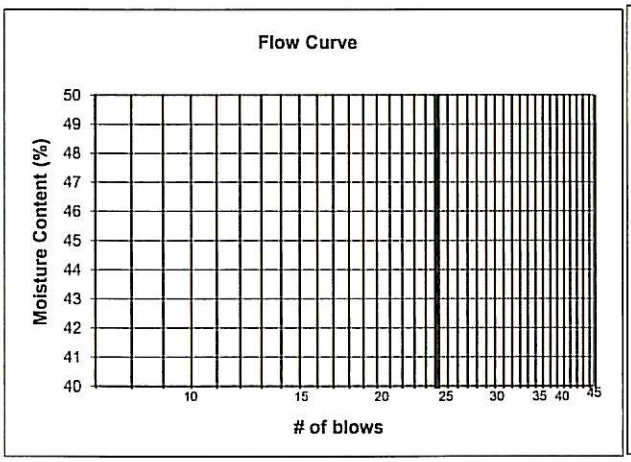
Trial No.	1			
Tare ID	19A			
Mass Wet + Tare	70.35			
Mass Dry + Tare	67.33			
Mass Tare	53.73			
Mass of Water	3.02			
Dry Soil Mass	13.60			
Moisture Content	22.2			

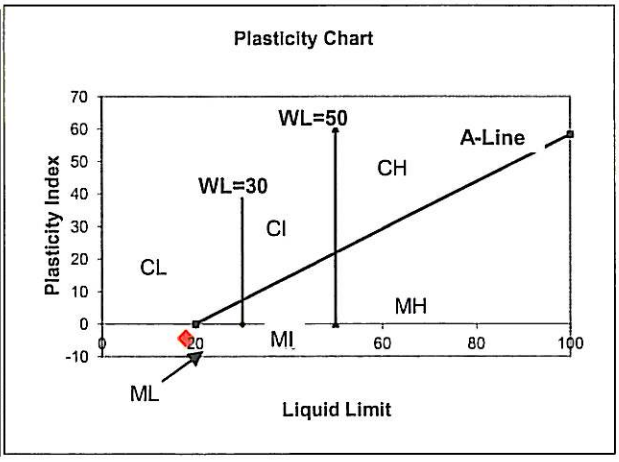
Average Plastic Limit 22

Plasticity Index -4

Received Moisture 19

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-22, sample 11
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	B. Shearer	Depth:	57.58m - 57.78m
Date:	27-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	30	26	20	
Tare ID	4A	5A	6A	
Mass Wet + Tare	82.32	81.82	78.79	
Mass Dry + Tare	75.15	74.67	72.31	
Mass Tare	54.27	53.90	54.15	
Mass of Water	7.17	7.15	6.48	
Dry Soil Mass	20.88	20.77	18.16	
Moisture Content	34.3	34.4	35.7	
Liquid Limit	35.2	34.6	34.7	

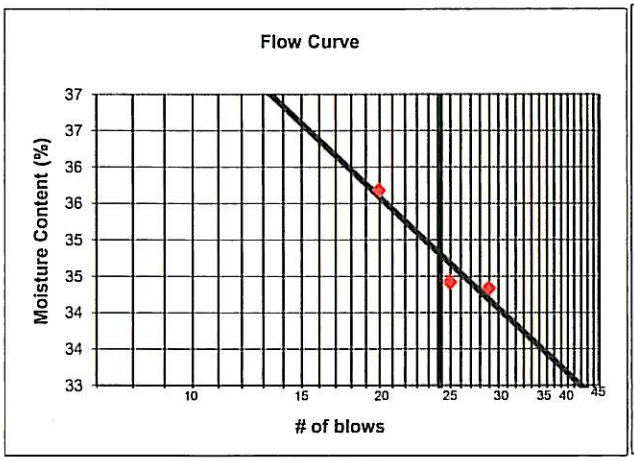
Average Liquid Limit: 35

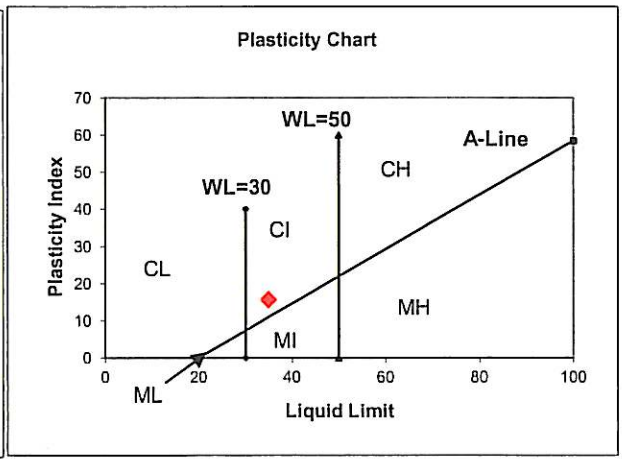
Plastic Limit

Trial No.	1	2	3	
Tare ID	1A	2A	3A	
Mass Wet + Tare	65.00	63.62	63.89	
Mass Dry + Tare	63.20	62.05	62.29	
Mass Tare	53.74	53.93	53.98	
Mass of Water	1.80	1.57	1.60	
Dry Soil Mass	9.46	8.12	8.31	
Moisture Content	19.0	19.3	19.3	

Average Plastic Limit	19
Plasticity Index	16
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-23, sample 3
Project Number:	KX05349	Date Sampled:	14-Aug-12
Technician:	J. McDonald	Depth:	6.31m - 6.51m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	28	36	18	
Tare ID	BC	CD	BF	
Mass Wet + Tare	37.22	35.54	41.29	
Mass Dry + Tare	33.60	31.88	36.73	
Mass Tare	15.90	13.47	15.83	
Mass of Water	3.62	3.66	4.56	
Dry Soil Mass	17.70	18.41	20.90	
Moisture Content	20.5	19.9	21.8	
Liquid Limit	20.8	20.9	20.9	

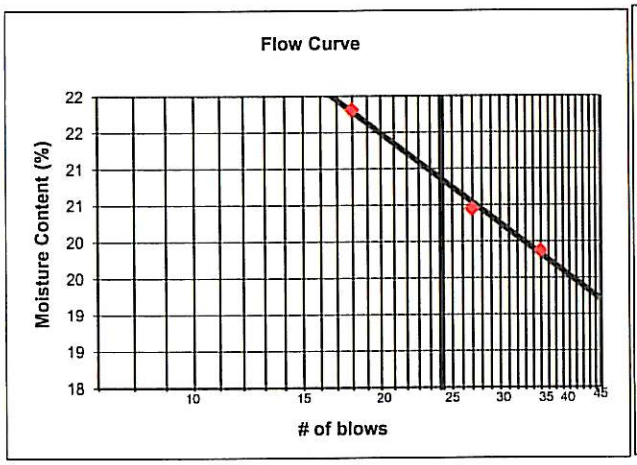
Average Liquid Limit: 21

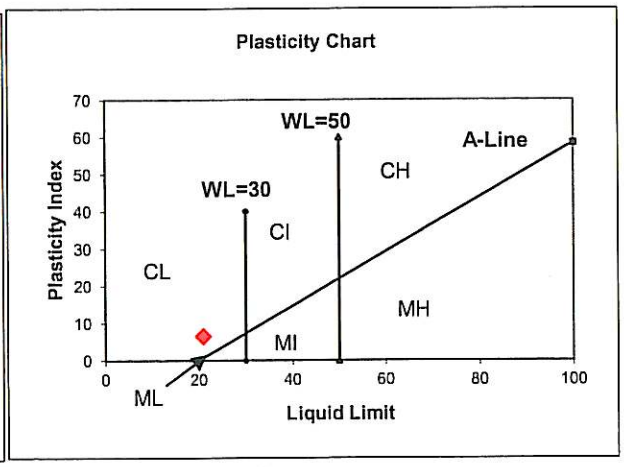
Plastic Limit

Trial No.	1	2	3	
Tare ID	28	16	25	
Mass Wet + Tare	29.21	32.08	32.29	
Mass Dry + Tare	28.21	30.73	30.95	
Mass Tare	21.32	21.39	21.42	
Mass of Water	1.00	1.35	1.34	
Dry Soil Mass	6.89	9.34	9.53	
Moisture Content	14.5	14.5	14.1	

Average Plastic Limit	14
Plasticity Index	7
Received Moisture	11

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-23, sample 5
Project Number:	KX05349	Date Sampled:	14-Aug-12
Technician:	J. McDonald	Depth:	14.25m - 14.45m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	40	21	29	
Tare ID	AR	H	N	
Mass Wet + Tare	45.28	38.08	37.46	
Mass Dry + Tare	41.38	35.23	34.66	
Mass Tare	22.01	21.68	21.46	
Mass of Water	3.90	2.85	2.80	
Dry Soil Mass	19.37	13.55	13.20	
Moisture Content	20.1	21.0	21.2	
Liquid Limit	21.5	20.6	21.6	

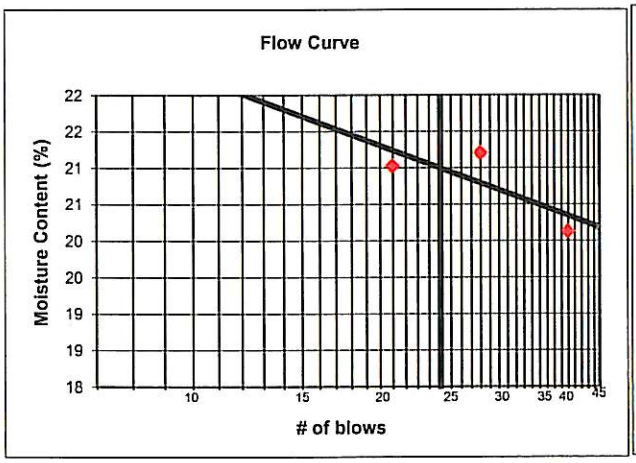
Average Liquid Limit: 21

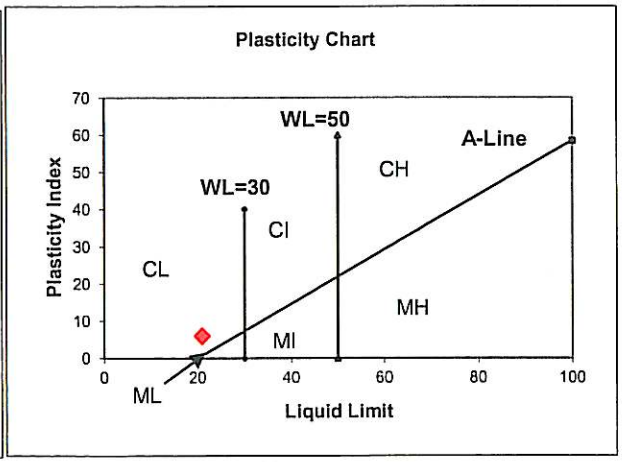
Plastic Limit

Trial No.	1	2	3	
Tare ID	5	14	19	
Mass Wet + Tare	32.95	33.76	32.40	
Mass Dry + Tare	31.49	32.17	31.07	
Mass Tare	21.64	21.40	22.11	
Mass of Water	1.46	1.59	1.33	
Dry Soil Mass	9.85	10.77	8.96	
Moisture Content	14.8	14.8	14.8	

Average Plastic Limit	15
Plasticity Index	6
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-23, sample 9
Project Number:	KX05349	Date Sampled:	14-Aug-12
Technician:	J. McDonald	Depth:	34.89m - 35.09m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	15	22	30	
Tare ID	Q	E	AH	
Mass Wet + Tare	43.10	42.95	45.05	
Mass Dry + Tare	39.72	39.72	41.59	
Mass Tare	21.60	21.48	21.42	
Mass of Water	3.38	3.23	3.46	
Dry Soil Mass	18.12	18.24	20.17	
Moisture Content	18.7	17.7	17.2	
Liquid Limit	17.5	17.4	17.6	

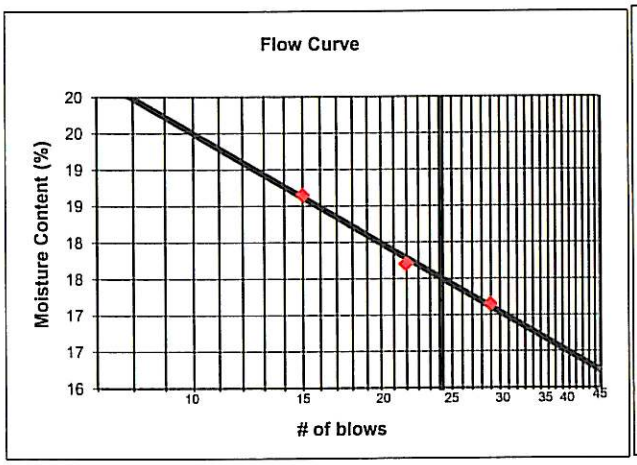
Average Liquid Limit: 18

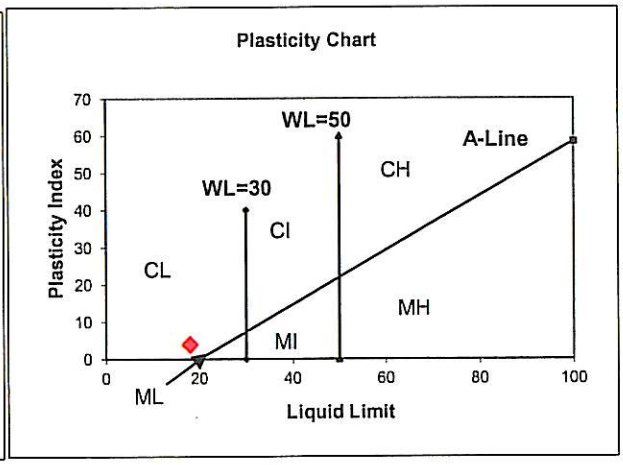
Plastic Limit

Trial No.	1	2	3	
Tare ID	41	27	9	
Mass Wet + Tare	34.70	34.95	34.05	
Mass Dry + Tare	33.09	33.31	32.52	
Mass Tare	21.50	21.50	21.47	
Mass of Water	1.61	1.64	1.53	
Dry Soil Mass	11.59	11.81	11.05	
Moisture Content	13.9	13.9	13.8	

Average Plastic Limit	14
Plasticity Index	4
Received Moisture	12

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-24, sample BS1
Project Number:	KX05349	Date Sampled:	20-Aug-12
Technician:	M. Tennant	Depth:	16.17m - 16.42m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	12	23	39	
Tare ID	AD	K	A	
Mass Wet + Tare	38.49	45.26	45.57	
Mass Dry + Tare	35.01	40.65	41.23	
Mass Tare	21.59	21.59	21.81	
Mass of Water	3.48	4.61	4.34	
Dry Soil Mass	13.42	19.06	19.42	
Moisture Content	25.9	24.2	22.3	
Liquid Limit	23.7	23.9	23.7	

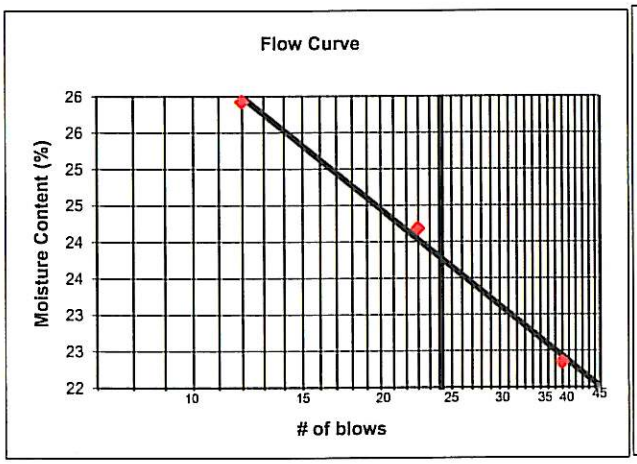
Average Liquid Limit: 24

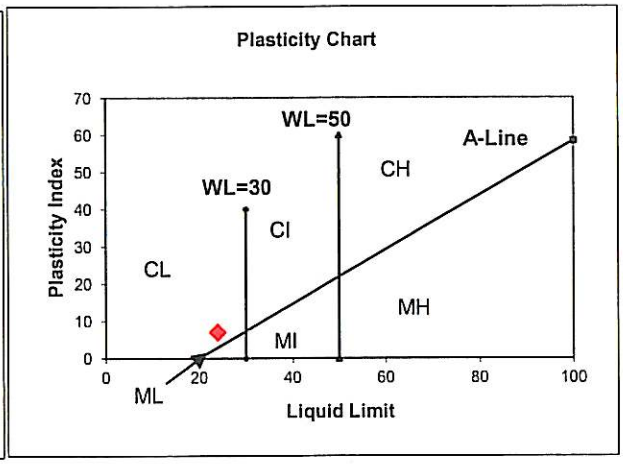
Plastic Limit

Trial No.	1	2	3	
Tare ID	23	47	5	
Mass Wet + Tare	33.69	33.08	32.98	
Mass Dry + Tare	31.91	31.43	31.36	
Mass Tare	21.47	21.45	21.64	
Mass of Water	1.78	1.65	1.62	
Dry Soil Mass	10.44	9.98	9.72	
Moisture Content	17.0	16.5	16.7	

Average Plastic Limit	17
Plasticity Index	7
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-24, sample BS2
Project Number:	KX05349	Date Sampled:	20-Aug-12
Technician:	J. McDonald	Depth:	22.59m - 22.86m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	18	20	30	
Tare ID	AS	T	E	
Mass Wet + Tare	38.96	40.34	36.94	
Mass Dry + Tare	35.91	37.04	34.33	
Mass Tare	21.62	21.37	21.48	
Mass of Water	3.05	3.30	2.61	
Dry Soil Mass	14.29	15.67	12.85	
Moisture Content	21.3	21.1	20.3	
Liquid Limit	20.5	20.5	20.8	

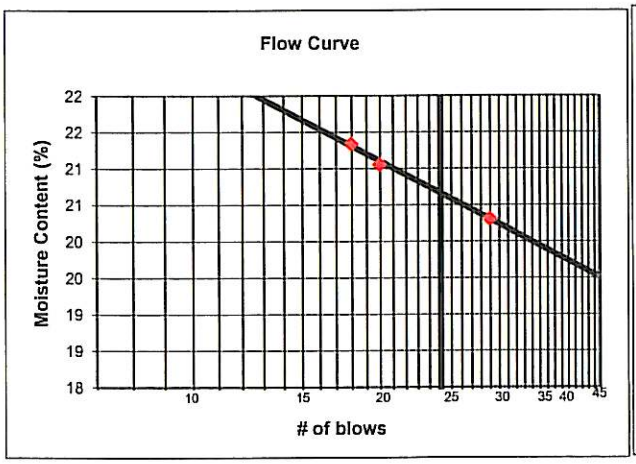
Average Liquid Limit: 21

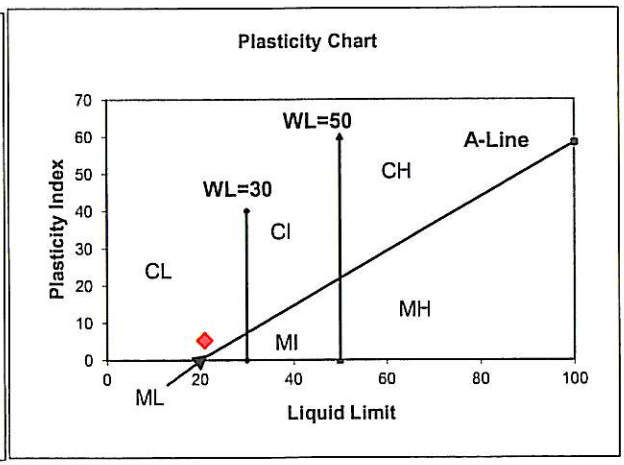
Plastic Limit

Trial No.	1	2	3	
Tare ID	23	32	11	
Mass Wet + Tare	30.68	31.04	32.07	
Mass Dry + Tare	29.44	29.76	30.63	
Mass Tare	21.46	21.53	21.26	
Mass of Water	1.24	1.28	1.44	
Dry Soil Mass	7.98	8.23	9.37	
Moisture Content	15.5	15.6	15.4	

Average Plastic Limit	15
Plasticity Index	6
Received Moisture	22

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-24, sample BS3
Project Number:	KX05349	Date Sampled:	20-Aug-12
Technician:	B.Garlick	Depth:	32.33m - 32.53 m
Date:	18-Oct-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	29	24	18	
Tare ID	10	1	7	
Mass Wet + Tare	42.09	44.53	46.15	
Mass Dry + Tare	37.74	39.63	40.86	
Mass Tare	18.80	18.70	18.57	
Mass of Water	4.35	4.90	5.29	
Dry Soil Mass	18.94	20.93	22.29	
Moisture Content	23.0	23.4	23.7	
Liquid Limit	23.4	23.3	22.8	

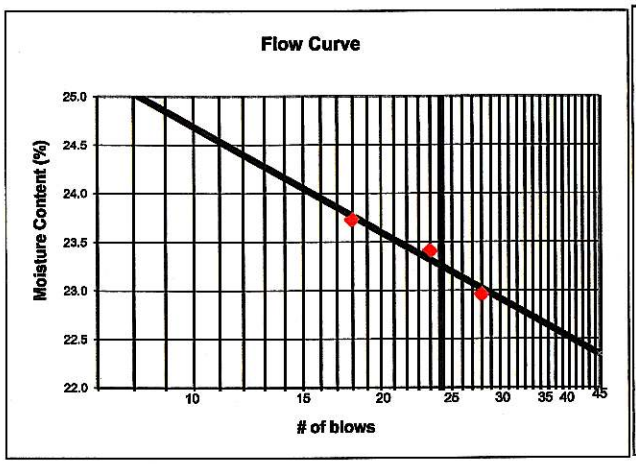
Average Liquid Limit: 23

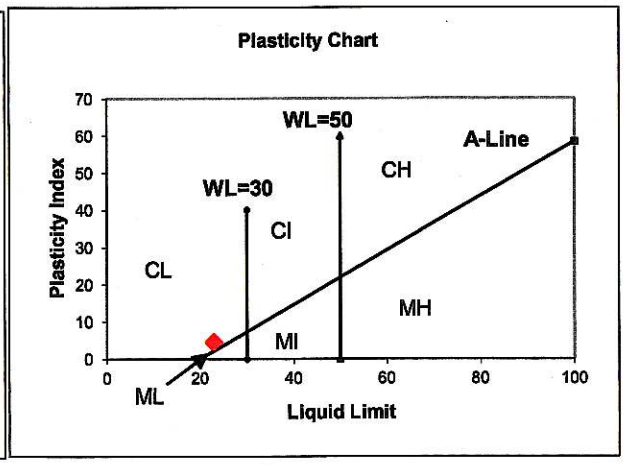
Plastic Limit

Trial No.	1	2		
Tare ID	2	3		
Mass Wet + Tare	33.30	33.33		
Mass Dry + Tare	31.06	31.09		
Mass Tare	18.84	18.89		
Mass of Water	2.24	2.24		
Dry Soil Mass	12.22	12.20		
Moisture Content	18.3	18.4		

Average Plastic Limit	18
Plasticity Index	5
Received Moisture	10.9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-24, sample BS4
Project Number:	KX05349	Date Sampled:	20-Aug-12
Technician:	J. McDonald	Depth:	37.04m - 37.24m
Date:	4-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	19	14	23	
Tare ID	8	2	38	
Mass Wet + Tare	33.68	37.80	44.94	
Mass Dry + Tare	30.56	35.07	41.11	
Mass Tare	14.74	21.61	21.33	
Mass of Water	3.12	2.73	3.83	
Dry Soil Mass	15.82	13.46	19.78	
Moisture Content	19.7	20.3	19.4	
Liquid Limit	19.0	18.9	19.2	

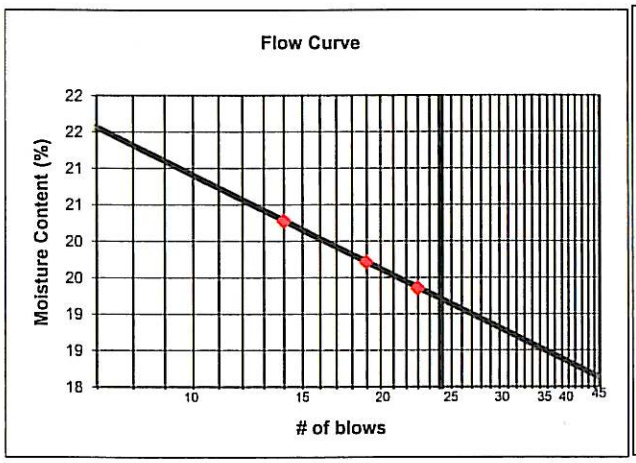
Average Liquid Limit: 19

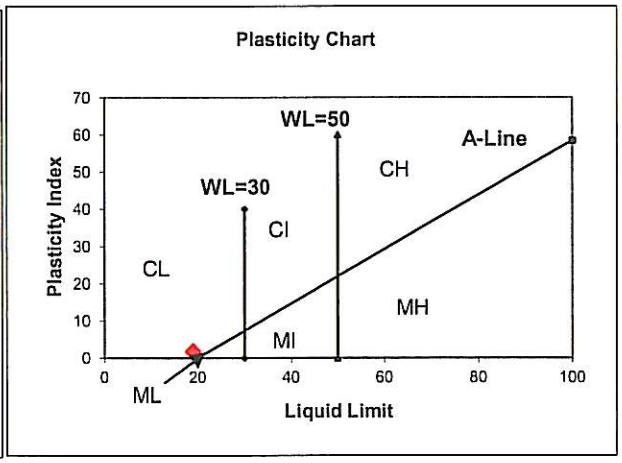
Plastic Limit

Trial No.	1	2	3	
Tare ID	W	U	A	
Mass Wet + Tare	30.83	33.38	36.62	
Mass Dry + Tare	29.52	31.67	34.43	
Mass Tare	21.79	21.59	21.75	
Mass of Water	1.31	1.71	2.19	
Dry Soil Mass	7.73	10.08	12.68	
Moisture Content	16.9	17.0	17.3	

Average Plastic Limit	17
Plasticity Index	2
Received Moisture	17

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-24, sample BS5
Project Number:	KX05349	Date Sampled:	20-Aug-12
Technician:	B.Garlick	Depth:	43.75m - 44.00 m
Date:	18-Oct-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	33	25	18	
Tare ID	S1	6	S7	
Mass Wet + Tare	44.46	44.67	46.34	
Mass Dry + Tare	39.14	39.21	40.35	
Mass Tare	18.93	18.79	18.51	
Mass of Water	5.32	5.46	5.99	
Dry Soil Mass	20.21	20.42	21.84	
Moisture Content	26.3	26.7	27.4	
Liquid Limit	27.3	26.7	26.3	

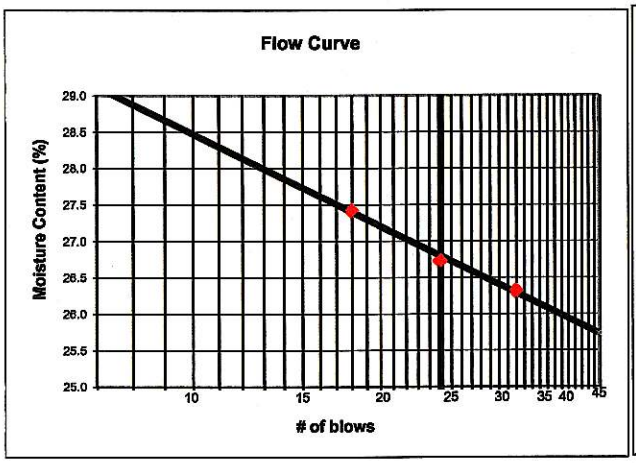
Average Liquid Limit: 27

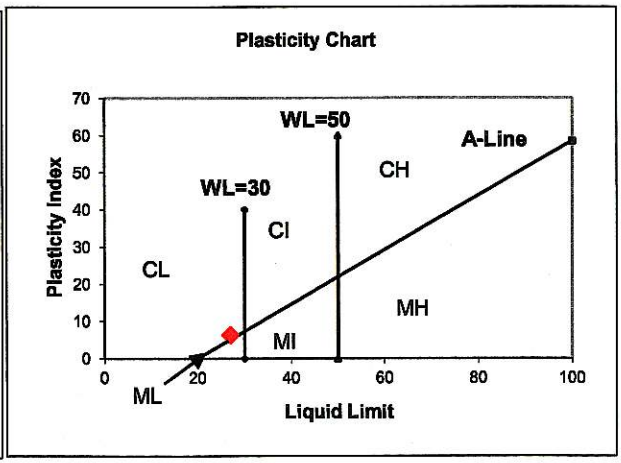
Plastic Limit

Trial No.	1	2		
Tare ID	S4	S10		
Mass Wet + Tare	34.94	33.16		
Mass Dry + Tare	32.14	30.64		
Mass Tare	18.35	18.45		
Mass of Water	2.80	2.52		
Dry Soil Mass	13.79	12.19		
Moisture Content	20.3	20.7		

Average Plastic Limit	20
Plasticity Index	7
Received Moisture	13.8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-25, sample BS2
Project Number:	KX05349	Date Sampled:	21-Aug-12
Technician:	J. McDonald	Depth:	8.30m - 8.49m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	20	25	30	
Tare ID	T	AN	Y	
Mass Wet + Tare	43.55	38.38	46.83	
Mass Dry + Tare	39.70	35.50	42.58	
Mass Tare	21.35	21.41	21.46	
Mass of Water	3.85	2.88	4.25	
Dry Soil Mass	18.35	14.09	21.12	
Moisture Content	21.0	20.4	20.1	
Liquid Limit	20.4	20.4	20.6	

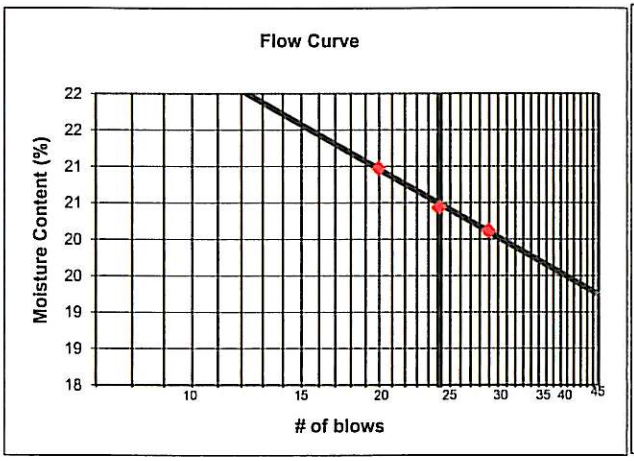
Average Liquid Limit: 20

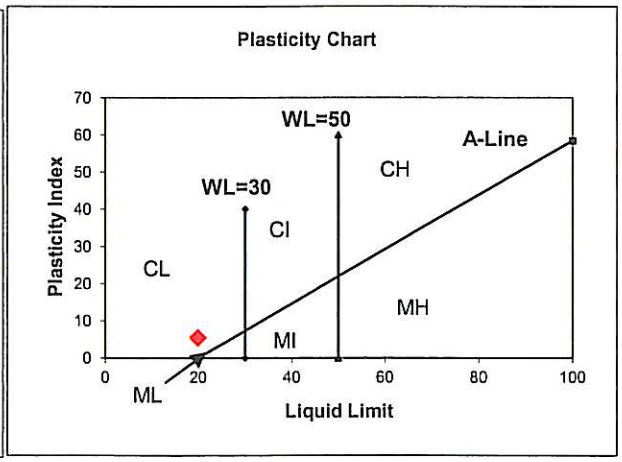
Plastic Limit

Trial No.	1	2	3	
Tare ID	38	11	49	
Mass Wet + Tare	30.89	32.44	33.93	
Mass Dry + Tare	29.69	31.04	32.36	
Mass Tare	21.32	21.24	21.47	
Mass of Water	1.20	1.40	1.57	
Dry Soil Mass	8.37	9.80	10.89	
Moisture Content	14.3	14.3	14.4	

Average Plastic Limit	14
Plasticity Index	6
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-25, sample BS3
Project Number:	KX05349	Date Sampled:	21-Aug-12
Technician:	J. McDonald	Depth:	22.26m - 22.57m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	34	21	18	
Tare ID	B	G	W	
Mass Wet + Tare	38.22	35.73	41.02	
Mass Dry + Tare	35.49	33.22	37.58	
Mass Tare	21.82	21.48	21.77	
Mass of Water	2.73	2.51	3.44	
Dry Soil Mass	13.67	11.74	15.81	
Moisture Content	20.0	21.4	21.8	
Liquid Limit	20.8	20.9	20.9	

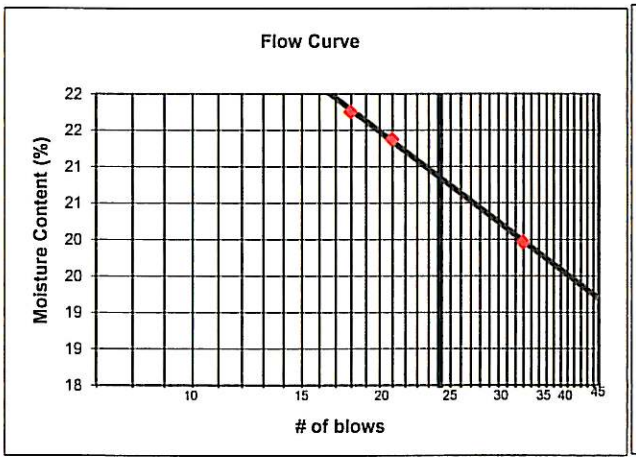
Average Liquid Limit: 21

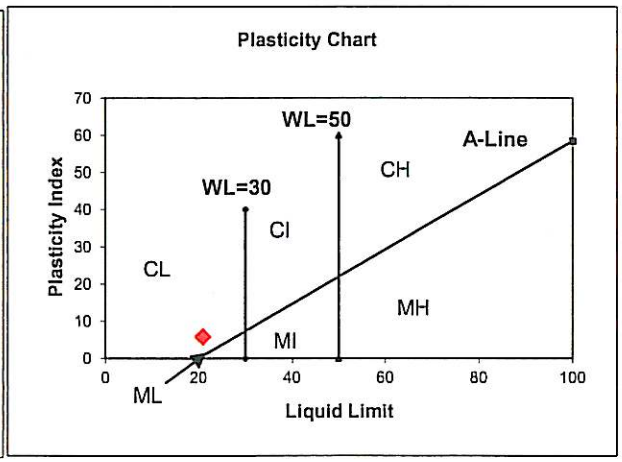
Plastic Limit

Trial No.	1	2	3	
Tare ID	2	23	22	
Mass Wet + Tare	32.09	30.79	31.50	
Mass Dry + Tare	30.72	29.58	30.19	
Mass Tare	21.61	21.47	21.47	
Mass of Water	1.37	1.21	1.31	
Dry Soil Mass	9.11	8.11	8.72	
Moisture Content	15.0	14.9	15.0	

Average Plastic Limit	15
Plasticity Index	6
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-25, sample BS5
Project Number:	KX05349	Date Sampled:	21-Aug-12
Technician:	J. McDonald	Depth:	43.25m - 43.40m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	15	20	30	
Tare ID	AT	R	AS	
Mass Wet + Tare	44.64	37.66	44.08	
Mass Dry + Tare	40.53	34.85	40.32	
Mass Tare	21.75	21.50	21.65	
Mass of Water	4.11	2.81	3.76	
Dry Soil Mass	18.78	13.35	18.67	
Moisture Content	21.9	21.0	20.1	
Liquid Limit	20.5	20.5	20.6	

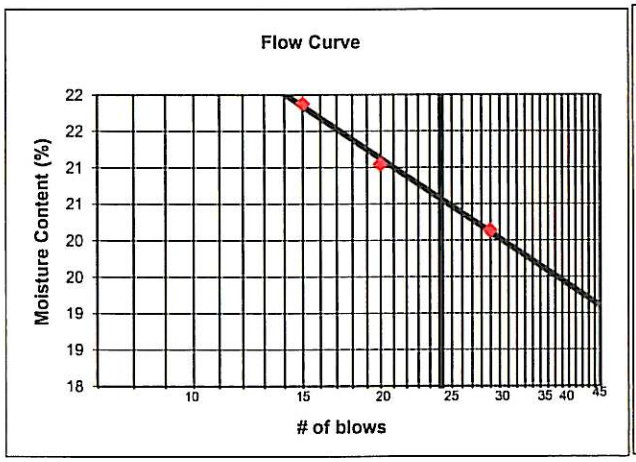
Average Liquid Limit: 21

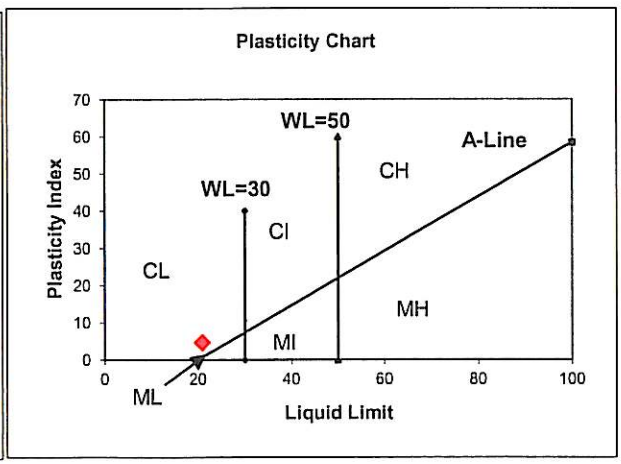
Plastic Limit

Trial No.	1	2	3	
Tare ID	32	2	44	
Mass Wet + Tare	34.21	31.41	29.82	
Mass Dry + Tare	32.45	30.05	28.61	
Mass Tare	21.51	21.61	21.14	
Mass of Water	1.76	1.36	1.21	
Dry Soil Mass	10.94	8.44	7.47	
Moisture Content	16.1	16.1	16.2	

Average Plastic Limit	16
Plasticity Index	5
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-26, sample BS1
Project Number:	KX05349	Date Sampled:	23-Aug-12
Technician:	J. McDonald	Depth:	8.31m - 8.51m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	16	24	31	
Tare ID	G	AN	Y	
Mass Wet + Tare	39.26	42.36	45.25	
Mass Dry + Tare	36.21	38.95	41.44	
Mass Tare	21.48	21.43	21.48	
Mass of Water	3.05	3.41	3.81	
Dry Soil Mass	14.73	17.52	19.96	
Moisture Content	20.7	19.5	19.1	
Liquid Limit	19.6	19.4	19.6	

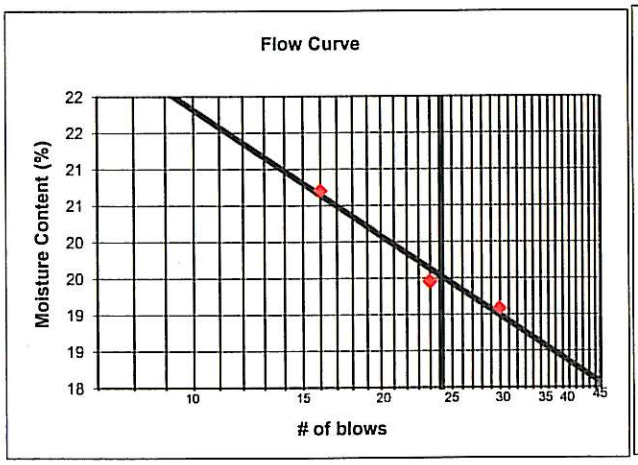
Average Liquid Limit: 20

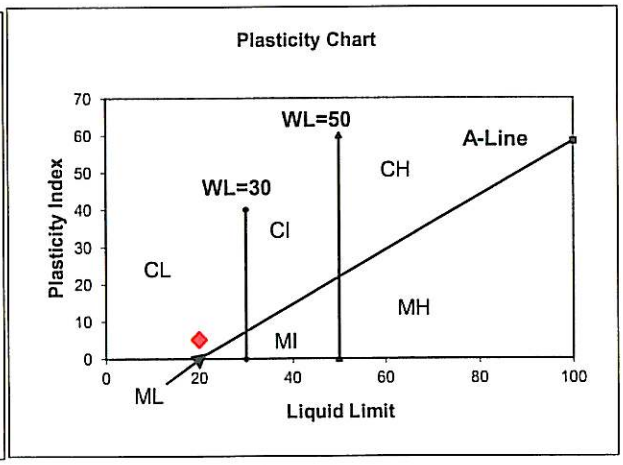
Plastic Limit

Trial No.	1	2	3	
Tare ID	11	47	38	
Mass Wet + Tare	30.38	31.53	31.60	
Mass Dry + Tare	29.21	30.24	30.28	
Mass Tare	21.24	21.42	21.31	
Mass of Water	1.17	1.29	1.32	
Dry Soil Mass	7.97	8.82	8.97	
Moisture Content	14.7	14.6	14.7	

Average Plastic Limit	15
Plasticity Index	5
Received Moisture	10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-27, sample BS1
Project Number:	KX05349	Date Sampled:	24-Aug-12
Technician:	J. McDonald	Depth:	4.90m - 5.06m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	15	27	33	
Tare ID	A	W	T	
Mass Wet + Tare	38.86	38.42	40.88	
Mass Dry + Tare	36.05	35.87	37.94	
Mass Tare	21.80	21.79	21.36	
Mass of Water	2.81	2.55	2.94	
Dry Soil Mass	14.25	14.08	16.58	
Moisture Content	19.7	18.1	17.7	
Liquid Limit	18.5	18.3	18.4	

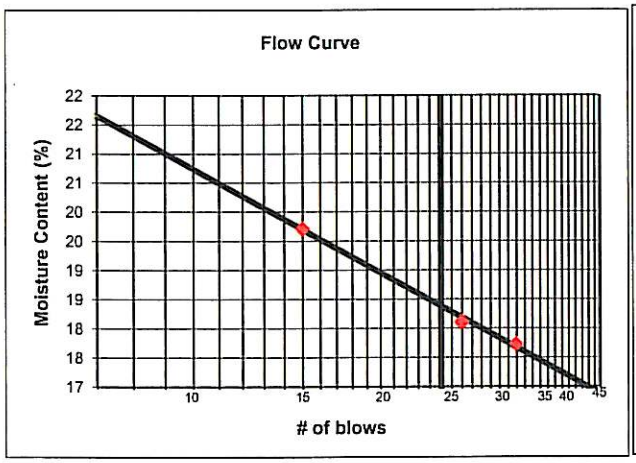
Average Liquid Limit: 18

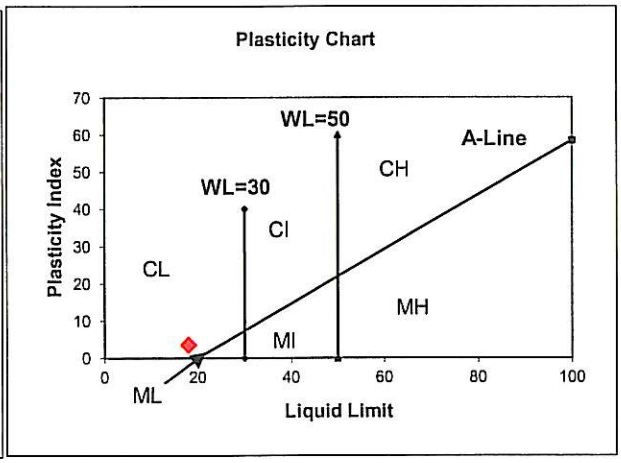
Plastic Limit

Trial No.	1	2	3	
Tare ID	23	13	17	
Mass Wet + Tare	33.64	33.56	35.23	
Mass Dry + Tare	32.13	32.04	33.49	
Mass Tare	21.46	21.45	21.32	
Mass of Water	1.51	1.52	1.74	
Dry Soil Mass	10.67	10.59	12.17	
Moisture Content	14.2	14.4	14.3	

Average Plastic Limit	14
Plasticity Index	4
Received Moisture	8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-27, sample BS2
Project Number:	KX05349	Date Sampled:	24-Aug-12
Technician:	J. McDonald	Depth:	14.33m - 14.48m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	17	24	36	
Tare ID	AH	H	AR	
Mass Wet + Tare	34.40	37.84	38.09	
Mass Dry + Tare	32.09	35.06	35.49	
Mass Tare	21.38	21.65	22.04	
Mass of Water	2.31	2.78	2.60	
Dry Soil Mass	10.71	13.41	13.45	
Moisture Content	21.6	20.7	19.3	
Liquid Limit	20.5	20.6	20.3	

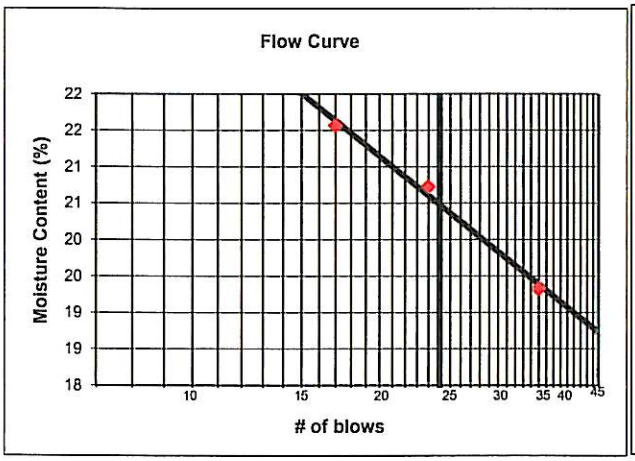
Average Liquid Limit: 20

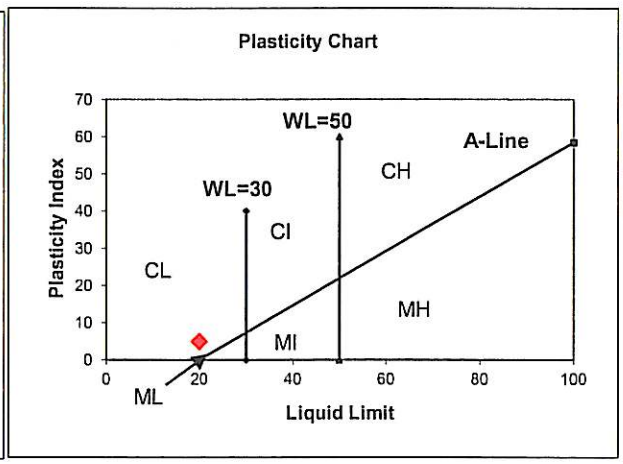
Plastic Limit

Trial No.	1	2	3	
Tare ID	10	42	40	
Mass Wet + Tare	32.63	33.33	31.74	
Mass Dry + Tare	31.21	31.78	30.41	
Mass Tare	21.60	21.44	21.48	
Mass of Water	1.42	1.55	1.33	
Dry Soil Mass	9.61	10.34	8.93	
Moisture Content	14.8	15.0	14.9	

Average Plastic Limit	15
Plasticity Index	5
Received Moisture	7

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-27, sample BS3
Project Number:	KX05349	Date Sampled:	24-Aug-12
Technician:	J. McDonald	Depth:	26.83m - 27.00m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1			
No. of Blows	5			
Tare ID	r			
Mass Wet + Tare	44.44			
Mass Dry + Tare	40.73			
Mass Tare	21.52			
Mass of Water	3.71			
Dry Soil Mass	19.21			
Moisture Content	19.3			
Liquid Limit	16.0			

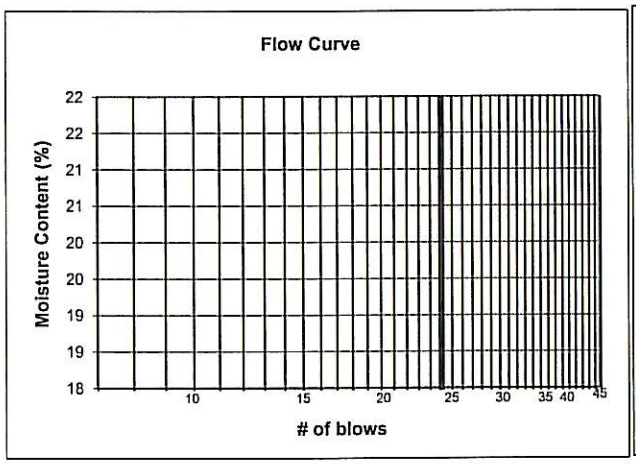
Average Liquid Limit: 16

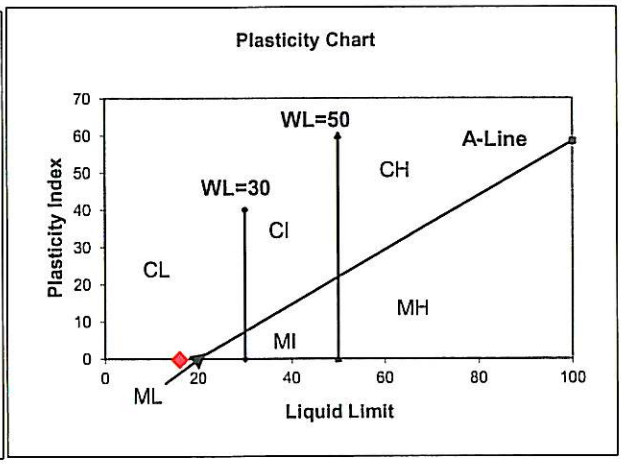
Plastic Limit

Trial No.				
Tare ID				
Mass Wet + Tare				
Mass Dry + Tare				
Mass Tare				
Mass of Water				
Dry Soil Mass				
Moisture Content				

Average Plastic Limit
Plasticity Index
Received Moisture 10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-27, sample BS5
Project Number:	KX05349	Date Sampled:	24-Aug-12
Technician:	J. McDonald	Depth:	45.06m - 45.32m
Date:	5-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	28	35	19	
Tare ID	AT	AS	A	
Mass Wet + Tare	45.32	42.62	38.38	
Mass Dry + Tare	40.29	38.22	34.69	
Mass Tare	21.76	21.62	21.75	
Mass of Water	5.03	4.40	3.69	
Dry Soil Mass	18.53	16.60	12.94	
Moisture Content	27.1	26.5	28.5	
Liquid Limit	27.6	27.7	27.5	

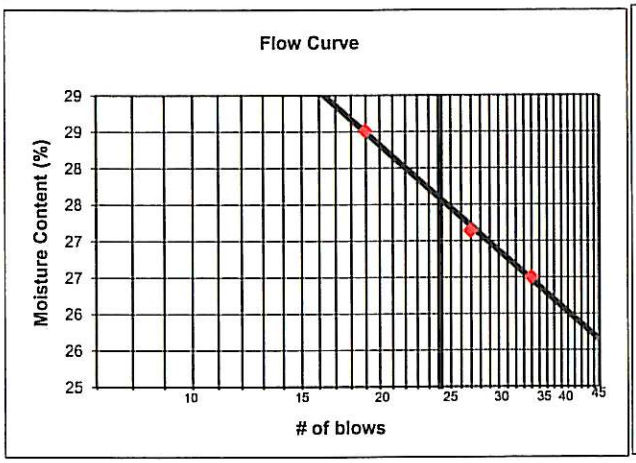
Average Liquid Limit: 28

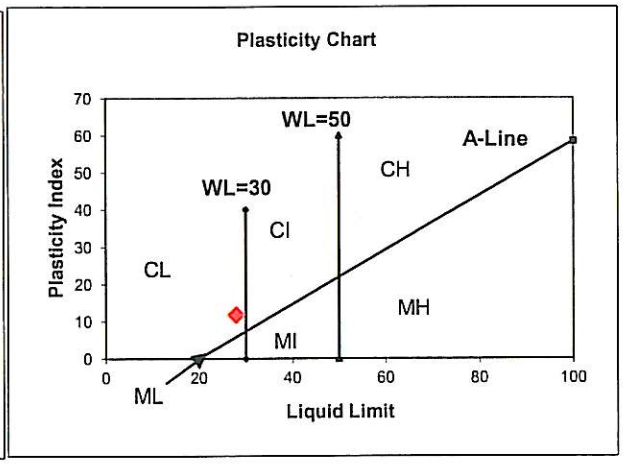
Plastic Limit

Trial No.	1	2	3	
Tare ID	44	47	43	
Mass Wet + Tare	31.49	30.01	32.30	
Mass Dry + Tare	30.10	28.84	30.79	
Mass Tare	21.47	21.45	21.46	
Mass of Water	1.39	1.17	1.51	
Dry Soil Mass	8.63	7.39	9.33	
Moisture Content	16.1	15.8	16.2	

Average Plastic Limit	16
Plasticity Index	12
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-29, sample BS2
Project Number:	KX05349	Date Sampled:	25-Aug-12
Technician:	M. Tennant	Depth:	14.74m - 14.94m
Date:	8-Sep-12	Comments:	NON-PLASTIC

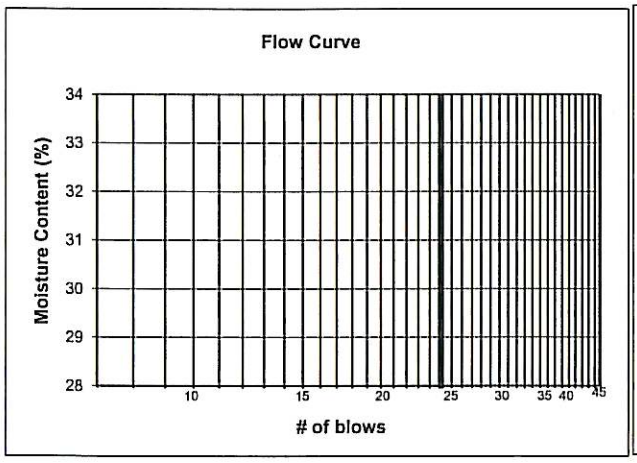
Liquid Limit

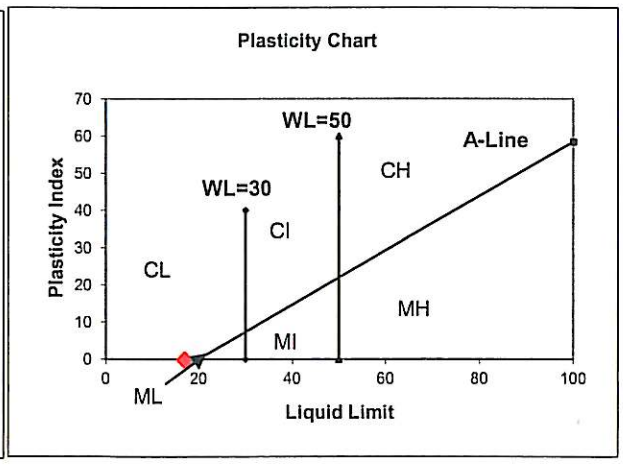
Trial No.	1				
No. of Blows	6				
Tare ID	W				
Mass Wet + Tare	45.32				
Mass Dry + Tare	41.40				
Mass Tare	21.79				
Mass of Water	3.92				
Dry Soil Mass	19.61				
Moisture Content	20.0				
Liquid Limit	16.9				Average Liquid Limit: 17

Plastic Limit

Trial No.					
Tare ID					
Mass Wet + Tare					
Mass Dry + Tare					
Mass Tare					
Mass of Water					
Dry Soil Mass					
Moisture Content					Average Plastic Limit
					Plasticity Index
					Received Moisture 18

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-29, sample BS4
Project Number:	KX05349	Date Sampled:	25-Aug-12
Technician:	B. Garlick	Depth:	32.73m - 32.93m
Date:	22-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.				
No. of Blows				
Tare ID				
Mass Wet + Tare				
Mass Dry + Tare				
Mass Tare				
Mass of Water				
Dry Soil Mass				
Moisture Content				
Liquid Limit				

Average Liquid Limit: _____

Plastic Limit

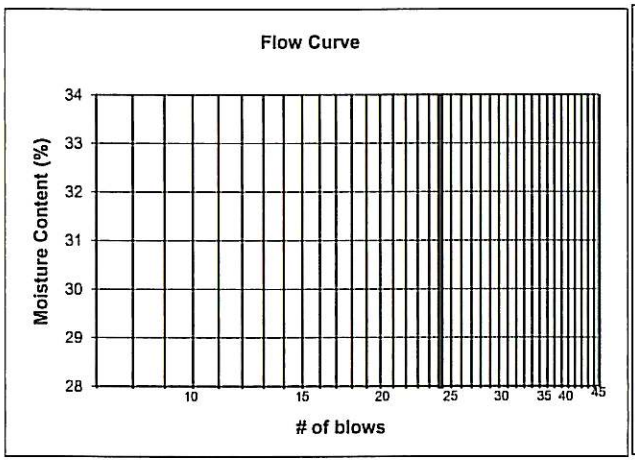
Trial No.				
Tare ID				
Mass Wet + Tare				
Mass Dry + Tare				
Mass Tare				
Mass of Water				
Dry Soil Mass				
Moisture Content				

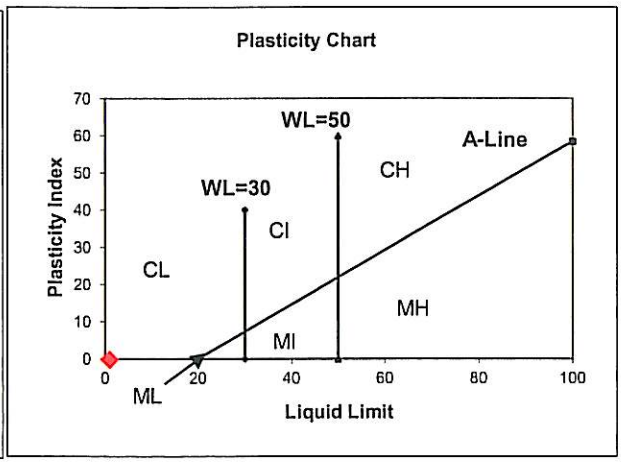
Average Plastic Limit _____

Plasticity Index _____

Received Moisture 17

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	GT12-29, sample BS5
Project Number:	KX05349	Date Sampled:	25-Aug-12
Technician:	B. Garlick	Depth:	40.64m - 40.85m
Date:	22-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	36	25	15	
Tare ID	35	41	11	
Mass Wet + Tare	43.16	38.03	40.08	
Mass Dry + Tare	38.17	34.09	35.37	
Mass Tare	21.37	21.50	21.26	
Mass of Water	4.99	3.94	4.71	
Dry Soil Mass	16.80	12.59	14.11	
Moisture Content	29.7	31.3	33.4	
Liquid Limit	31.2	31.3	31.3	

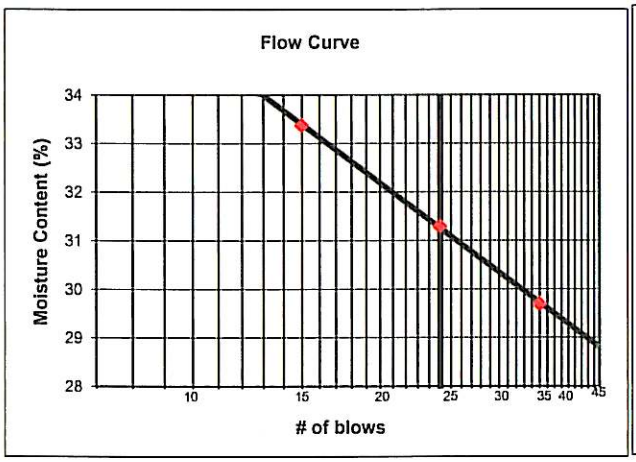
Average Liquid Limit: 31

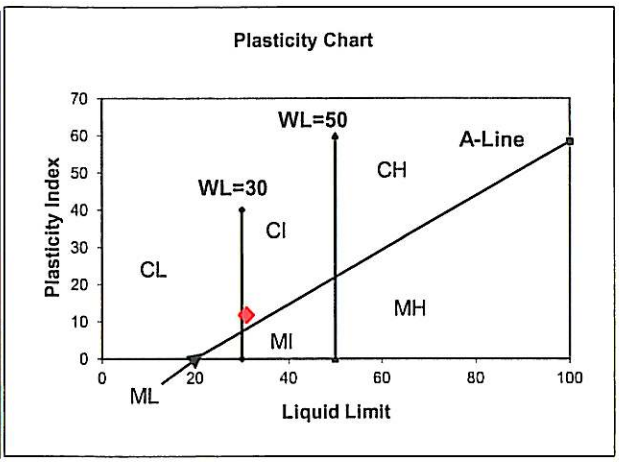
Plastic Limit

Trial No.	1	2	3	
Tare ID	31	14	17	
Mass Wet + Tare	33.12	34.84	33.37	
Mass Dry + Tare	31.27	32.65	31.49	
Mass Tare	21.56	21.42	21.33	
Mass of Water	1.85	2.19	1.88	
Dry Soil Mass	9.71	11.23	10.16	
Moisture Content	19.1	19.5	18.5	

Average Plastic Limit	19
Plasticity Index	12
Received Moisture	16

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS TEST REPORT

(Test Reference: ASTM D 4318)

MDH ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

Client:	Knight Piesold
Project	Blackwater
MDH Job No:	611748
Technician:	JA
Date:	14-Dec-2012

Sample: GT 12 - 45

Sample Preparation: (air-dried)

Percentage of sample retained on 425-um (No. 40) sieve: NA

Plastic Limit

Tare #	A35	A17	
Tare Wt, g	13.24	13.04	
Wet + Tare, g	19.63	19.89	
Dry + Tare, g	18.74	18.94	average
M%	16.2%	16.1%	16.1%

Liquid Limit (method A)

# of Blows	37	23	14
Tare #	17A	A19	21A
Tare Wt, g	14.66	13.39	14.60
Wet + tare, g	21.35	20.43	23.09
Dry + tare, g	19.99	18.94	21.20
Water content	25.5%	26.8%	28.6%

SUMMARY

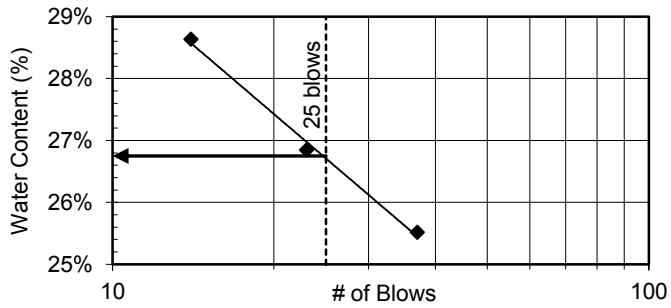
Plastic Limit: 16.1%

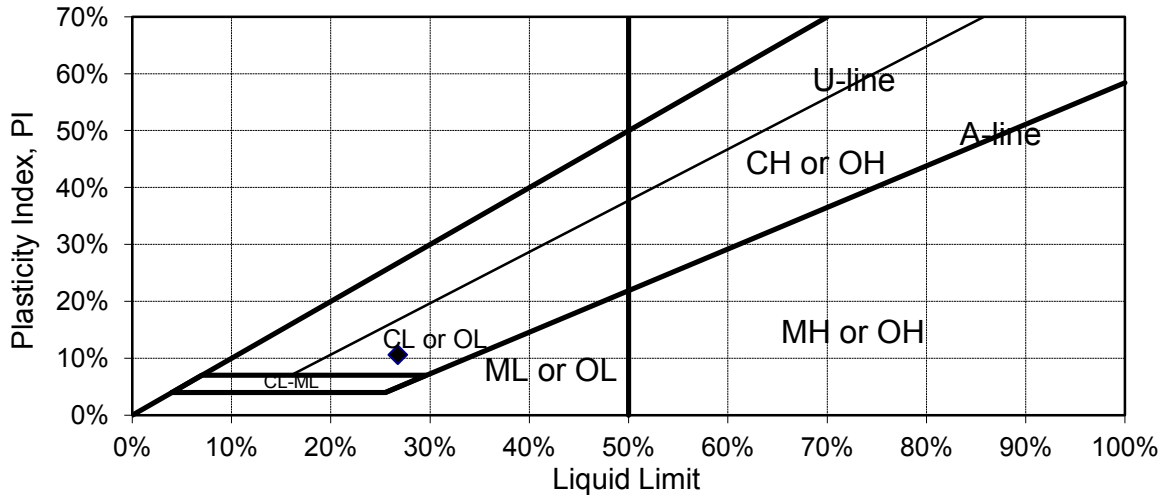
Liquid Limit: 26.7%

Plasticity Index: 10.6%

Classification: CL

Natural Water Content: n/a





Comments: -

The testing services reported here have been performed in accordance with accepted local industry standards.

The results presented are for the sole use of the designated client only.

This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

ATTERBERG LIMITS TEST REPORT

(Test Reference: ASTM D 4318)

MDH ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

Client:	Knight Piesold
Project	Blackwater
MDH Job No:	611748
Technician:	JA
Date:	14-Dec-2012

Sample: GT 12 - 46

Sample Preparation: (air-dried)

Percentage of sample retained on 425-um (No. 40) sieve: NA

Plastic Limit

Tare #	13A	4J	
Tare Wt, g	14.11	14.45	
Wet + Tare, g	19.85	20.96	
Dry + Tare, g	19.04	20.02	average
M%	16.4%	16.9%	16.7%

Liquid Limit (method A)

# of Blows	38	26	12
Tare #	B3	42A	B7
Tare Wt, g	14.14	14.52	14.45
Wet + tare, g	22.48	22.21	23.04
Dry + tare, g	20.60	20.37	20.82
Water content	29.1%	31.5%	34.9%

SUMMARY

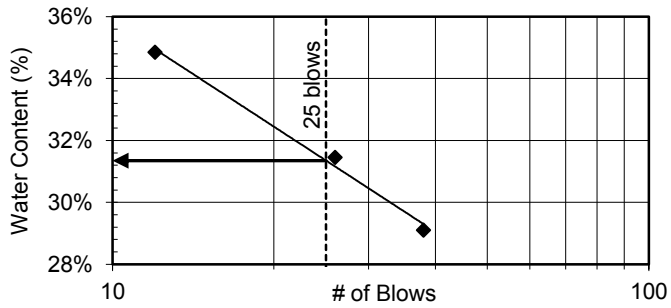
Plastic Limit: 16.7%

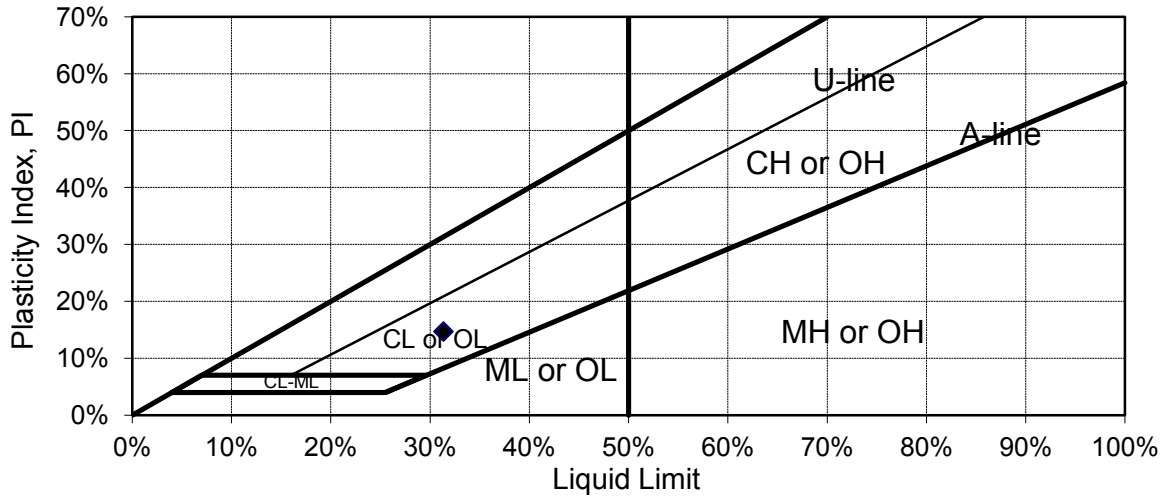
Liquid Limit: 31.3%

Plasticity Index: 14.7%

Classification: CL

Natural Water Content: n/a





Comments: -

The testing services reported here have been performed in accordance with accepted local industry standards.

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This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-48, sample S15
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	M. Tennant	Depth:	4.8m - 5.0m
Date:	8-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2	3	
No. of Blows	20	28	25	
Tare ID	AQ	U	E	
Mass Wet + Tare	35.43	38.21	44.01	
Mass Dry + Tare	32.98	35.35	40.09	
Mass Tare	21.62	21.59	21.47	
Mass of Water	2.45	2.86	3.92	
Dry Soil Mass	11.36	13.76	18.62	
Moisture Content	21.6	20.8	21.1	
Liquid Limit	21.0	21.1	21.1	

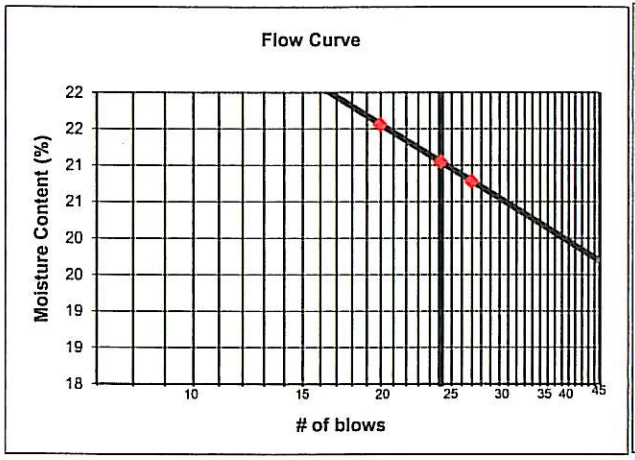
Average Liquid Limit: 21

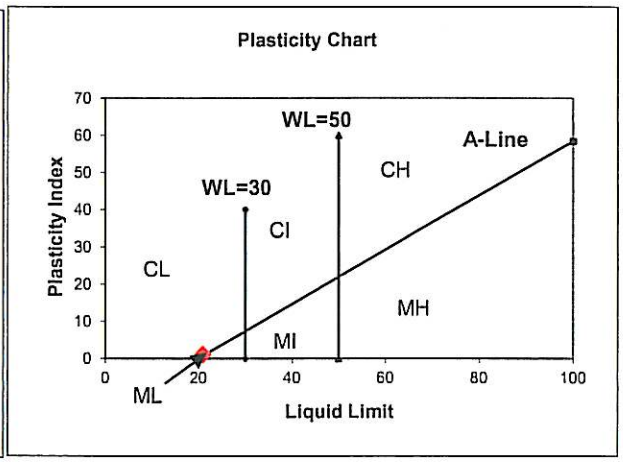
Plastic Limit

Trial No.	1	2	3	
Tare ID	9	32	43	
Mass Wet + Tare	35.67	34.80	34.56	
Mass Dry + Tare	33.35	32.58	32.42	
Mass Tare	21.47	21.54	21.55	
Mass of Water	2.32	2.22	2.14	
Dry Soil Mass	11.88	11.04	10.87	
Moisture Content	19.5	20.1	19.7	

Average Plastic Limit	20
Plasticity Index	1
Received Moisture	19

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-49, sample S16
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	M. Tennant	Depth:	4.0m - 4.2m
Date:	8-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2	3	
No. of Blows	7	11	18	
Tare ID	B	AR	C	
Mass Wet + Tare	43.77	46.97	40.35	
Mass Dry + Tare	39.36	42.16	36.94	
Mass Tare	21.81	22.04	21.69	
Mass of Water	4.41	4.81	3.41	
Dry Soil Mass	17.55	20.12	15.25	
Moisture Content	25.1	23.9	22.4	
Liquid Limit	21.6	21.6	21.5	

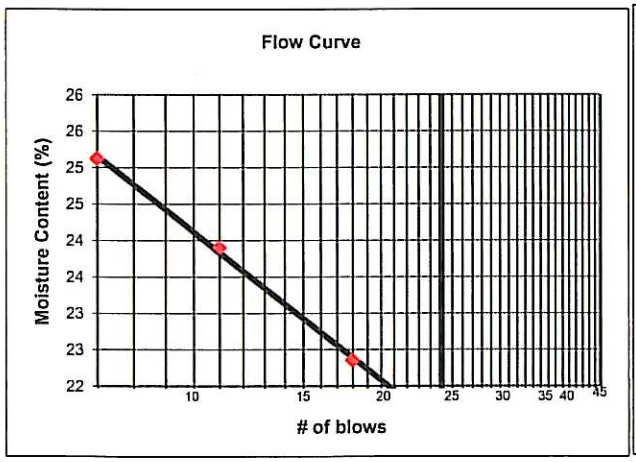
Average Liquid Limit: 21

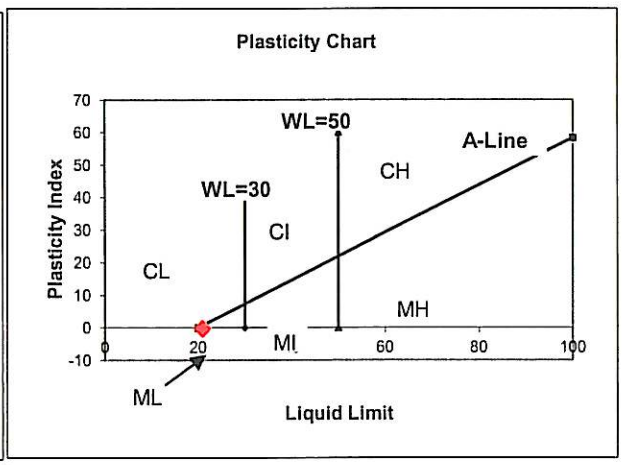
Plastic Limit

Trial No.	1	2	3	
Tare ID	18	10	46	
Mass Wet + Tare	37.84	36.88	33.60	
Mass Dry + Tare	34.97	34.23	31.48	
Mass Tare	21.38	21.63	21.40	
Mass of Water	2.87	2.65	2.12	
Dry Soil Mass	13.59	12.60	10.08	
Moisture Content	21.1	21.0	21.0	

Average Plastic Limit	21
Plasticity Index	0
Received Moisture	20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-57, sample S18
Project Number:	KX05349	Date Sampled:	12-Aug-12
Technician:	B. Garlick	Depth:	3.8m - 4.0m
Date:	22-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	25	15	
Tare ID	25	30	28	
Mass Wet + Tare	41.82	43.89	48.14	
Mass Dry + Tare	38.65	40.27	43.59	
Mass Tare	21.43	21.36	21.32	
Mass of Water	3.17	3.62	4.55	
Dry Soil Mass	17.22	18.91	22.27	
Moisture Content	18.4	19.1	20.4	
Liquid Limit	19.3	19.2	19.2	

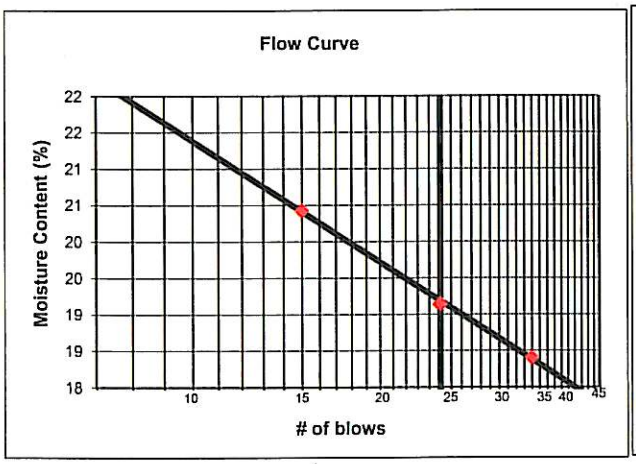
Average Liquid Limit: 19

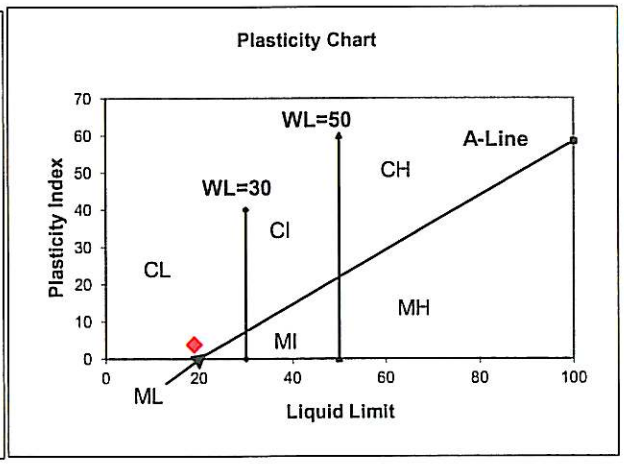
Plastic Limit

Trial No.	1	2	3	
Tare ID	13	37	38	
Mass Wet + Tare	34.73	35.19	35.15	
Mass Dry + Tare	33.01	33.45	33.29	
Mass Tare	21.43	21.52	21.33	
Mass of Water	1.72	1.74	1.86	
Dry Soil Mass	11.58	11.93	11.96	
Moisture Content	14.9	14.6	15.6	

Average Plastic Limit	15
Plasticity Index	4
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-61, sample 19
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	M. Tennant	Depth:	2.5m - 2.7m
Date:	25-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	8	9		
Tare ID	E	K		
Mass Wet + Tare	45.85	46.61		
Mass Dry + Tare	40.79	41.44		
Mass Tare	21.45	21.56		
Mass of Water	5.06	5.17		
Dry Soil Mass	19.34	19.88		
Moisture Content	26.2	26.0		
Liquid Limit	22.8	23.0		

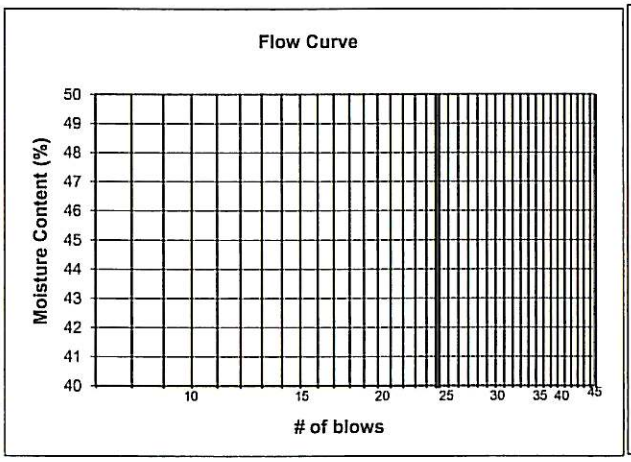
Average Liquid Limit: 25

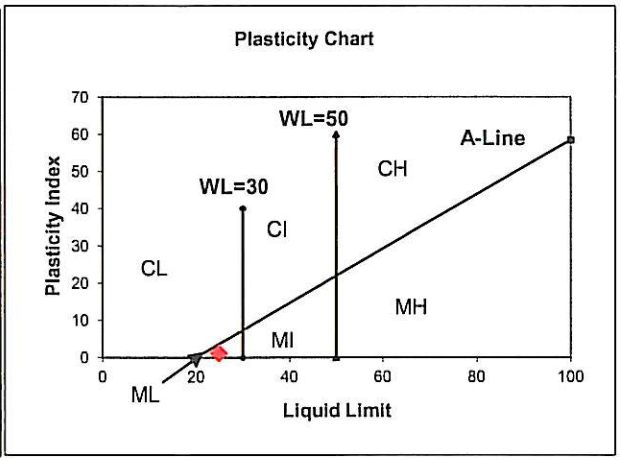
Plastic Limit

Trial No.	1	2	3	
Tare ID	14	15	19	
Mass Wet + Tare	29.19	32.70	29.65	
Mass Dry + Tare	27.69	30.67	28.21	
Mass Tare	21.40	22.05	22.09	
Mass of Water	1.50	2.03	1.44	
Dry Soil Mass	6.29	8.62	6.12	
Moisture Content	23.8	23.5	23.5	

Average Plastic Limit	24
Plasticity Index	1
Received Moisture	31.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-62, sample S20
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	J. McDonald	Depth:	3.0m - 3.2m
Date:	28-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1			
No. of Blows	5			
Tare ID	AK			
Mass Wet + Tare	49.98			
Mass Dry + Tare	45.99			
Mass Tare	21.80			
Mass of Water	3.99			
Dry Soil Mass	24.19			
Moisture Content	16.5			
Liquid Limit	13.6			

Average Liquid Limit: _____

Plastic Limit

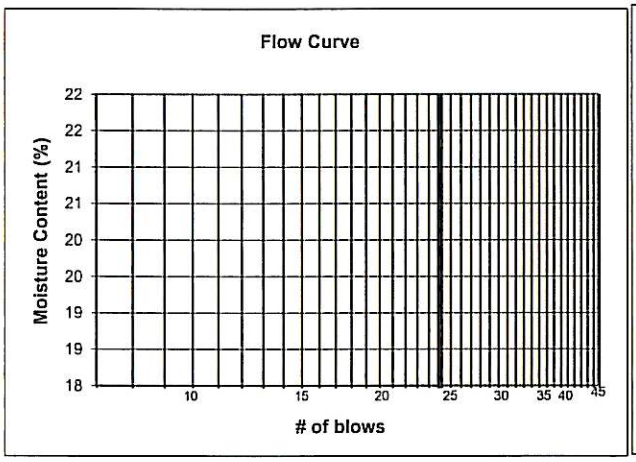
Trial No.				
Tare ID				
Mass Wet + Tare				
Mass Dry + Tare				
Mass Tare				
Mass of Water				
Dry Soil Mass				
Moisture Content				

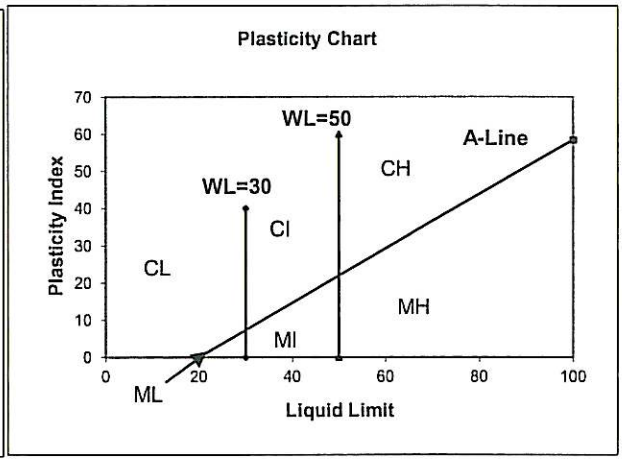
Average Plastic Limit _____

Plasticity Index _____

Received Moisture 10

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-65, sample S21
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	J. McDonald	Depth:	4.0m - 4.2m
Date:	28-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	40	29	15	
Tare ID	CF	BL	B	
Mass Wet + Tare	27.16	29.60	30.95	
Mass Dry + Tare	25.01	27.40	28.24	
Mass Tare	13.56	16.04	15.66	
Mass of Water	2.15	2.20	2.71	
Dry Soil Mass	11.45	11.36	12.58	
Moisture Content	18.8	19.4	21.5	
Liquid Limit	20.0	19.8	20.2	

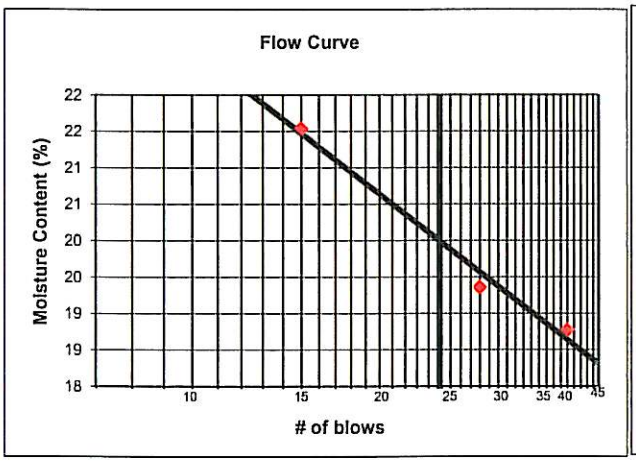
Average Liquid Limit: 20

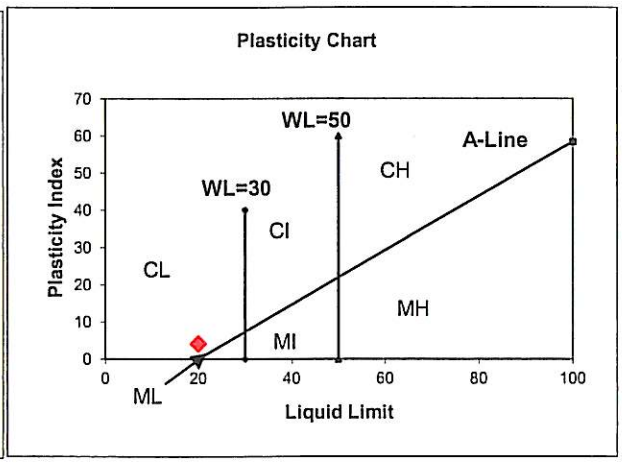
Plastic Limit

Trial No.	1	2	3	
Tare ID	24	25	47	
Mass Wet + Tare	34.70	33.35	32.63	
Mass Dry + Tare	32.91	31.73	31.11	
Mass Tare	21.56	21.43	21.46	
Mass of Water	1.79	1.62	1.52	
Dry Soil Mass	11.35	10.30	9.65	
Moisture Content	15.8	15.7	15.8	

Average Plastic Limit	16
Plasticity Index	4
Received Moisture	8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-67, sample S22
Project Number:	KX05349	Date Sampled:	13-Aug-12
Technician:	G. Michaud	Depth:	3.5m - 3.7m
Date:	15-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	18	41	28	
Tare ID	AQ	B	T	
Mass Wet + Tare	36.45	36.13	31.83	
Mass Dry + Tare	33.94	33.90	30.14	
Mass Tare	21.64	21.81	21.38	
Mass of Water	2.51	2.23	1.69	
Dry Soil Mass	12.30	12.09	8.76	
Moisture Content	20.4	18.4	19.3	
Liquid Limit	19.6	19.7	19.6	

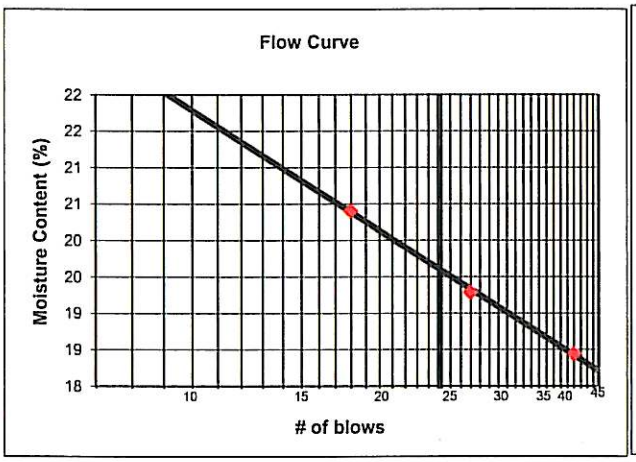
Average Liquid Limit: 20

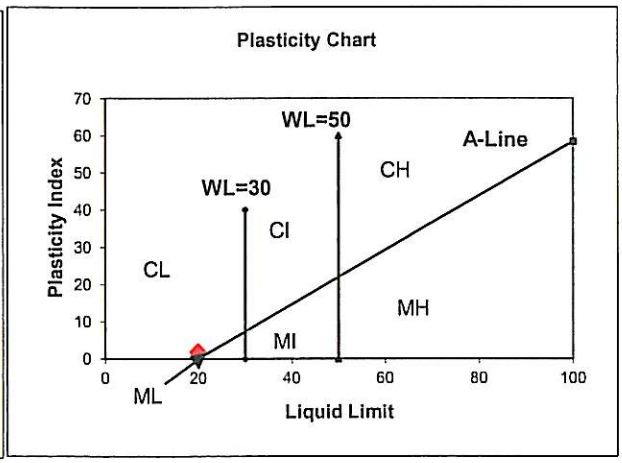
Plastic Limit

Trial No.	1	2	3	
Tare ID	9	38	35	
Mass Wet + Tare	33.49	30.63	34.64	
Mass Dry + Tare	31.65	29.22	32.62	
Mass Tare	21.47	21.34	21.39	
Mass of Water	1.84	1.41	2.02	
Dry Soil Mass	10.18	7.88	11.23	
Moisture Content	18.1	17.9	18.0	

Average Plastic Limit	18
Plasticity Index	2
Received Moisture	17

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-72, sample S23
Project Number:	KX05349	Date Sampled:	14-Aug-12
Technician:	J. McDonald	Depth:	4.0m - 4.2m
Date:	28-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	40	27	18	
Tare ID	S	AL	AV	
Mass Wet + Tare	36.15	35.82	36.69	
Mass Dry + Tare	33.77	33.43	34.00	
Mass Tare	21.55	21.80	21.59	
Mass of Water	2.38	2.39	2.69	
Dry Soil Mass	12.22	11.63	12.41	
Moisture Content	19.5	20.6	21.7	
Liquid Limit	20.8	20.8	20.8	

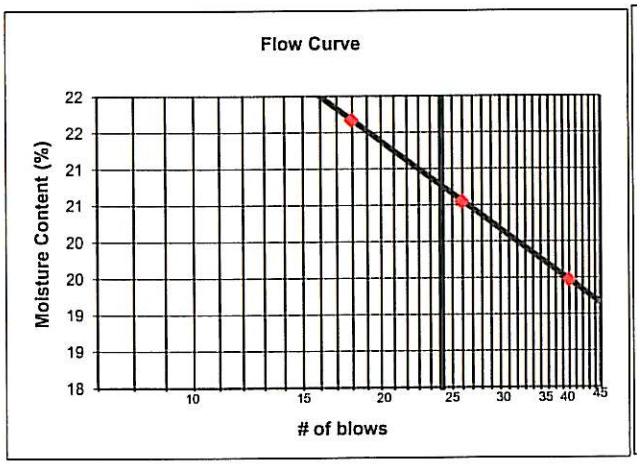
Average Liquid Limit: 21

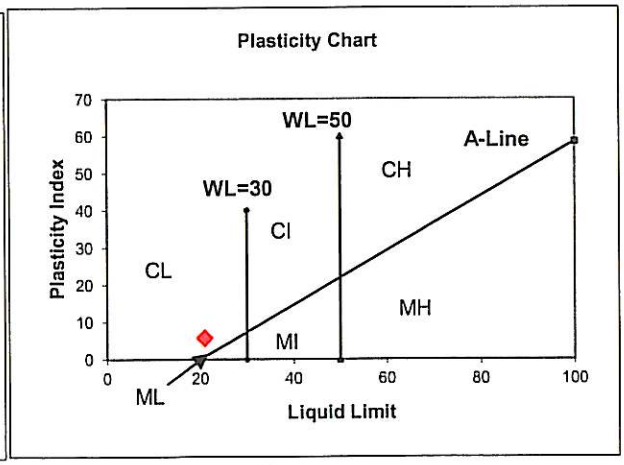
Plastic Limit

Trial No.	1	2	3	
Tare ID	16	33	43	
Mass Wet + Tare	36.26	32.34	34.57	
Mass Dry + Tare	34.32	30.96	32.87	
Mass Tare	21.39	21.88	21.54	
Mass of Water	1.94	1.38	1.70	
Dry Soil Mass	12.93	9.08	11.33	
Moisture Content	15.0	15.2	15.0	

Average Plastic Limit	15
Plasticity Index	6
Received Moisture	8

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-77, sample S25
Project Number:	KX05349	Date Sampled:	15-Aug-12
Technician:	M. Tennant	Depth:	4.5m - 4.7m
Date:	25-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	5	7		
Tare ID	T	V		
Mass Wet + Tare	44.85	50.98		
Mass Dry + Tare	40.99	46.44		
Mass Tare	21.38	22.18		
Mass of Water	3.86	4.54		
Dry Soil Mass	19.61	24.26		
Moisture Content	19.7	18.7		
Liquid Limit	16.3	16.1		

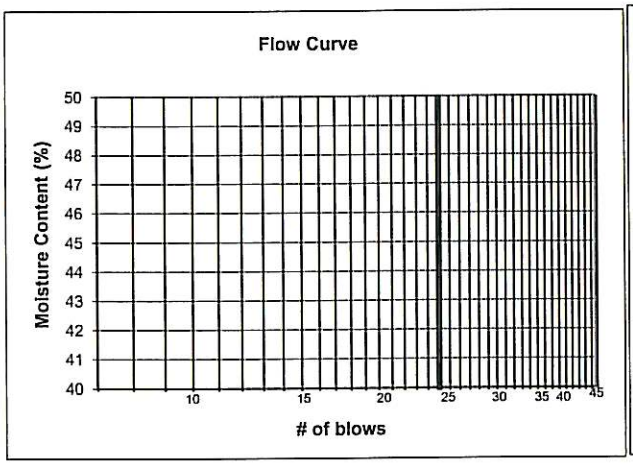
Average Liquid Limit: 15

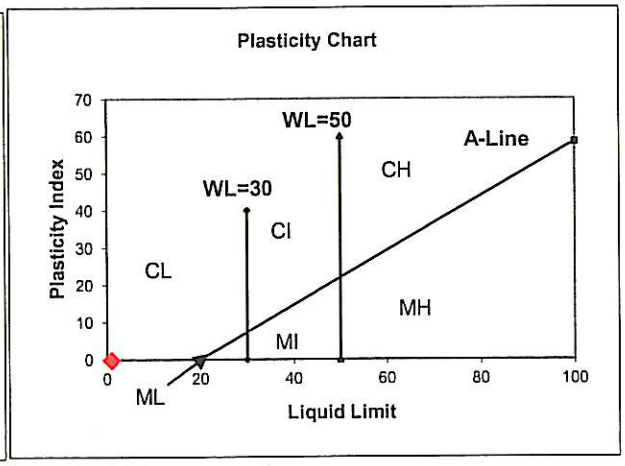
Plastic Limit

Trial No.	1	2	3	
Tare ID	5	10	46	
Mass Wet + Tare	37.03	35.86	33.39	
Mass Dry + Tare	34.60	33.64	31.52	
Mass Tare	21.65	21.48	21.63	
Mass of Water	2.43	2.22	1.87	
Dry Soil Mass	12.95	12.16	9.89	
Moisture Content	18.8	18.3	18.9	

Average Plastic Limit	19
Plasticity Index	-4
Received Moisture	17.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-85, sample S27
Project Number:	KX05349	Date Sampled:	15-Aug-12
Technician:	B.Garlick	Depth:	5.5m - 5.7m
Date:	18-Oct-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	35	24	15	
Tare ID	12	4	S2	
Mass Wet + Tare	41.75	42.61	44.35	
Mass Dry + Tare	38.47	39.10	40.23	
Mass Tare	18.85	18.80	18.76	
Mass of Water	3.28	3.51	4.12	
Dry Soil Mass	19.62	20.30	21.47	
Moisture Content	16.7	17.3	19.2	
Liquid Limit	17.5	17.2	18.0	

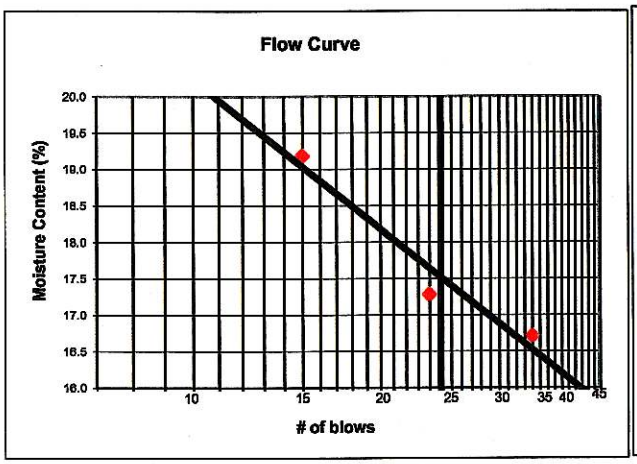
Average Liquid Limit: 18

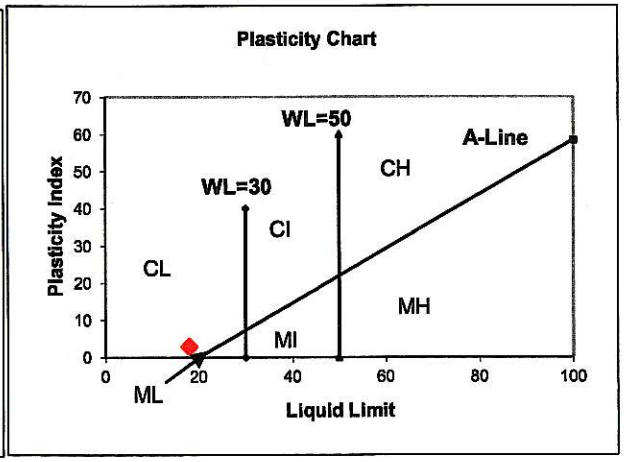
Plastic Limit

Trial No.	1	2		
Tare ID	10	S7		
Mass Wet + Tare	36.19	33.01		
Mass Dry + Tare	33.94	31.13		
Mass Tare	18.82	18.53		
Mass of Water	2.25	1.88		
Dry Soil Mass	15.12	12.60		
Moisture Content	14.9	14.9		

Average Plastic Limit	15
Plasticity Index	3
Received Moisture	7.6

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-87, sample S28
Project Number:	KX05349	Date Sampled:	15-Aug-12
Technician:	J. McDonald	Depth:	5.7m - 5.9m
Date:	28-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1			
No. of Blows	6			
Tare ID	AF			
Mass Wet + Tare	46.27			
Mass Dry + Tare	40.93			
Mass Tare	21.73			
Mass of Water	5.34			
Dry Soil Mass	19.20			
Moisture Content	27.8			
Liquid Limit	23.5			

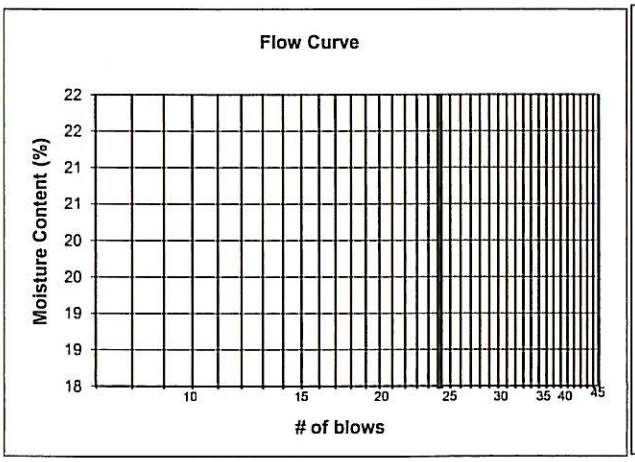
Average Liquid Limit: _____

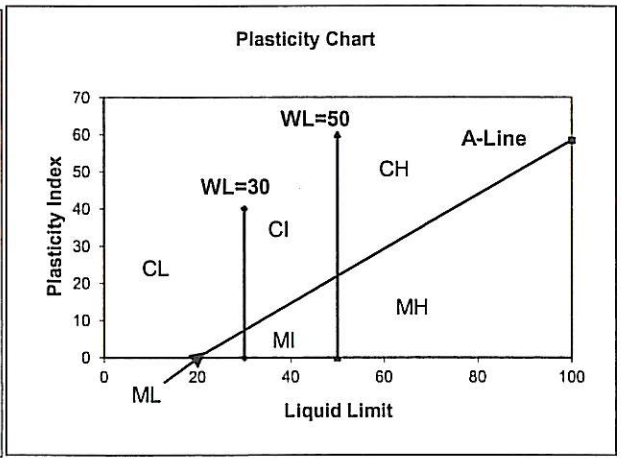
Plastic Limit

Trial No.	1	2	3	
Tare ID	18	40	13	
Mass Wet + Tare	30.93	28.84	29.91	
Mass Dry + Tare	29.02	27.35	28.18	
Mass Tare	21.39	21.48	21.42	
Mass of Water	1.91	1.49	1.73	
Dry Soil Mass	7.63	5.87	6.76	
Moisture Content	25.0	25.4	25.6	

Average Plastic Limit _____
Plasticity Index _____
Received Moisture 20

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-88, sample S29
Project Number:	KX05349	Date Sampled:	16-Aug-12
Technician:	M. Tennant	Depth:	6.0m - 6.2m
Date:	25-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	10	17		
Tare ID	Q	AO		
Mass Wet + Tare	45.99	45.96		
Mass Dry + Tare	41.63	41.73		
Mass Tare	21.60	21.60		
Mass of Water	4.36	4.23		
Dry Soil Mass	20.03	20.13		
Moisture Content	21.8	21.0		
Liquid Limit	19.5	20.0		

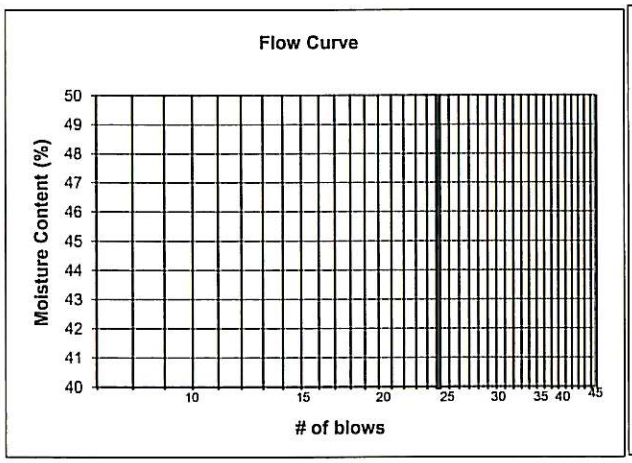
Average Liquid Limit: 20

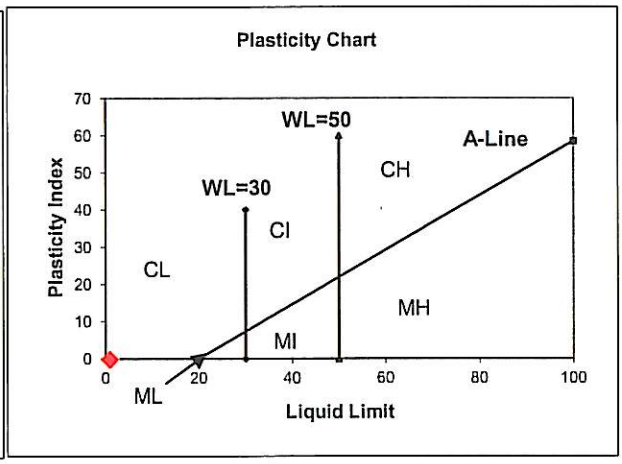
Plastic Limit

Trial No.	1	2	3	
Tare ID	22	23	42	
Mass Wet + Tare	32.26	32.78	34.07	
Mass Dry + Tare	30.26	30.74	31.79	
Mass Tare	21.47	21.46	21.43	
Mass of Water	2.00	2.04	2.28	
Dry Soil Mass	8.79	9.28	10.36	
Moisture Content	22.8	22.0	22.0	

Average Plastic Limit	22
Plasticity Index	-2
Received Moisture	17.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





GRAIN SIZE DISTRIBUTION

Knight Piesold
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 15-Nov-12

TEST No:

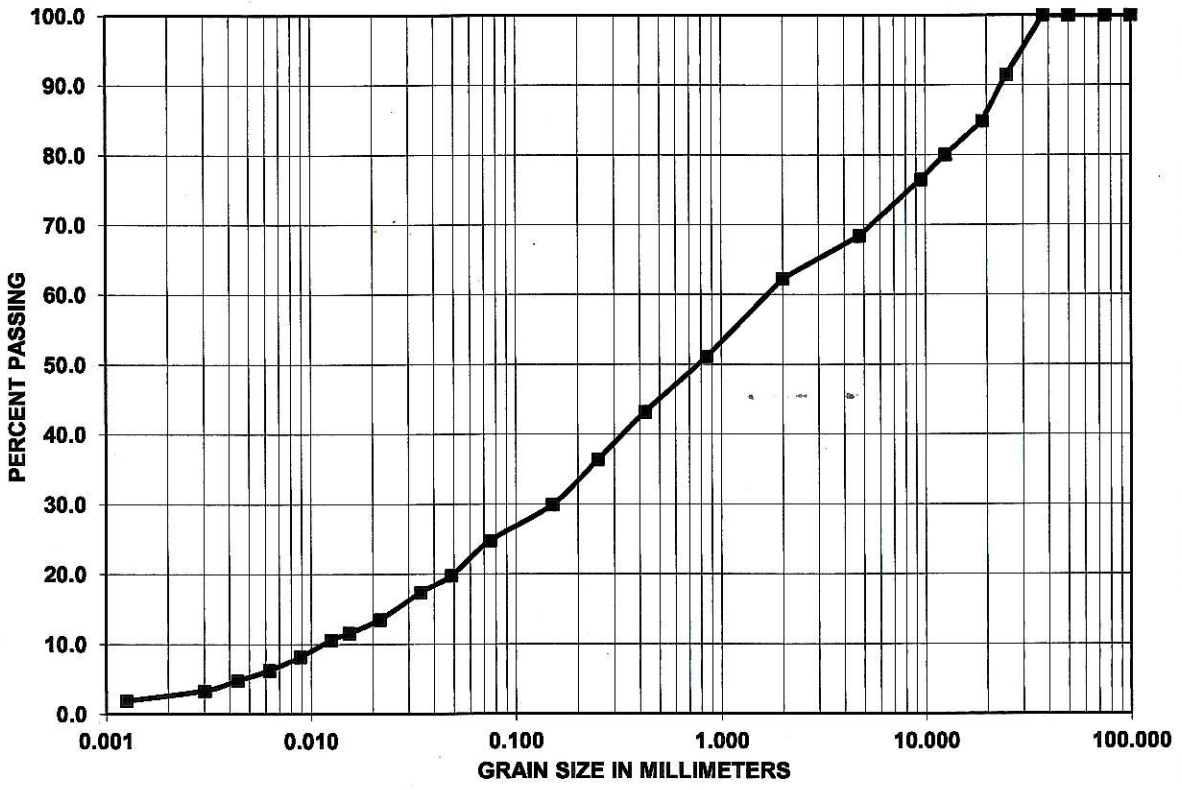
DATE SAMPLED: 16-Aug-12

DATE TESTED: 28-Oct-12

SAMPLED BY: Client

SOURCE: TP12-89, sample S30

DEPTH: 3.0m - 3.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	91.5
19.0	84.8
12.5	80.0
9.5	76.5
4.75	68.4
2.00	62.2
0.850	51.1
0.425	43.1
0.250	36.3
0.150	29.9
0.075	24.7
0.0485	19.8
0.0343	17.4
0.0217	13.5
0.0153	11.6
0.0125	10.6
0.0089	8.2
0.0063	6.3
0.0044	4.8
0.0030	3.4
0.0013	1.9

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_u =	N/A
C_c =	N/A

GRAVEL	31.62%
SAND	43.63%
SILT	22.20%
CLAY	2.54%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering Interpretation or evaluation of the test results is provided only on written request.

ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-90, sample 31
Project Number:	KX05349	Date Sampled:	16-Aug-12
Technician:	M. Tennant	Depth:	5.5m - 5.7m
Date:	25-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	9	14		
Tare ID	Z	G		
Mass Wet + Tare	48.99	47.59		
Mass Dry + Tare	44.83	43.71		
Mass Tare	21.72	21.50		
Mass of Water	4.16	3.88		
Dry Soil Mass	23.11	22.21		
Moisture Content	18.0	17.5		
Liquid Limit	15.9	16.2		

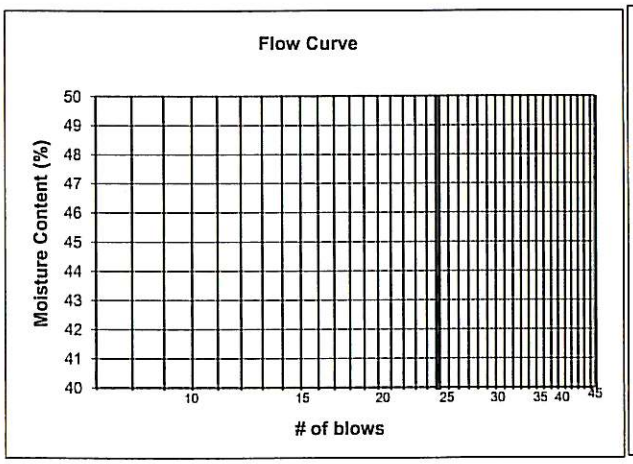
Average Liquid Limit: 17

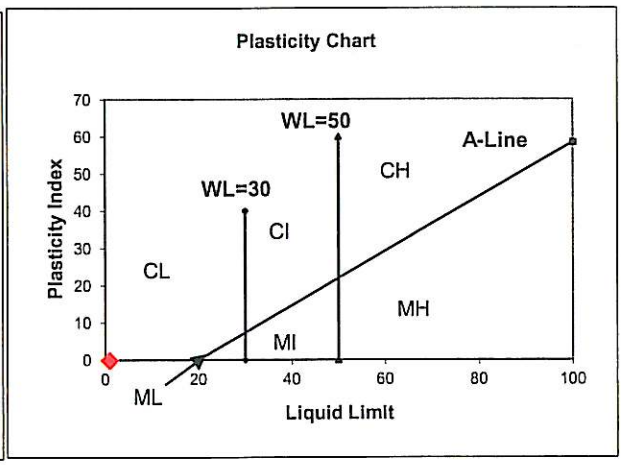
Plastic Limit

Trial No.	1	2	3	
Tare ID	17	4	28	
Mass Wet + Tare	36.95	36.48	35.69	
Mass Dry + Tare	34.71	34.34	33.65	
Mass Tare	21.32	21.51	21.32	
Mass of Water	2.24	2.14	2.04	
Dry Soil Mass	13.39	12.83	12.33	
Moisture Content	16.7	16.7	16.5	

Average Plastic Limit	17
Plasticity Index	0
Received Moisture	9.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-95, sample S33
Project Number:	KX05349	Date Sampled:	16-Aug-12
Technician:	M. Tennant	Depth:	6.0m - 6.2m
Date:	25-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	12	15	26	
Tare ID	W	AN	AS	
Mass Wet + Tare	43.79	44.14	47.87	
Mass Dry + Tare	39.31	39.58	42.90	
Mass Tare	21.77	21.43	21.62	
Mass of Water	4.48	4.56	4.97	
Dry Soil Mass	17.54	18.15	21.28	
Moisture Content	25.5	25.1	23.4	
Liquid Limit	23.3	23.6	23.5	

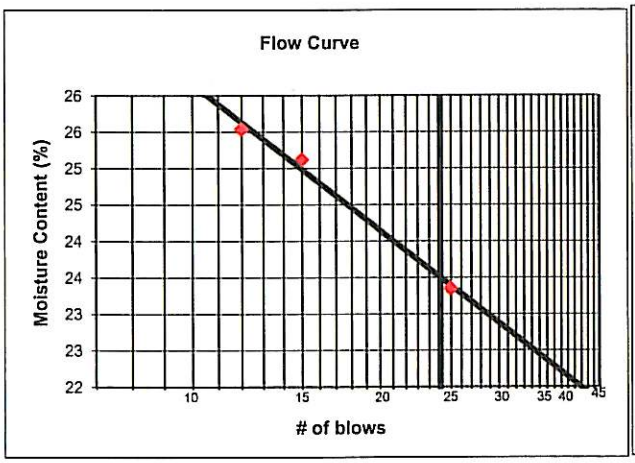
Average Liquid Limit: 24

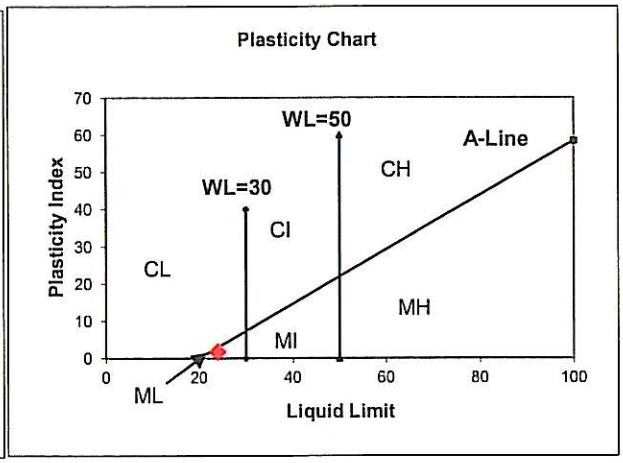
Plastic Limit

Trial No.	1	2	3	
Tare ID	27	2	37	
Mass Wet + Tare	31.97	31.63	32.34	
Mass Dry + Tare	30.07	29.81	30.39	
Mass Tare	21.46	21.61	21.51	
Mass of Water	1.90	1.82	1.95	
Dry Soil Mass	8.61	8.20	8.88	
Moisture Content	22.1	22.2	22.0	

Average Plastic Limit	22
Plasticity Index	2
Received Moisture	13

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





GRAIN SIZE DISTRIBUTION

Knight Pieshold Ltd.
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Smithers BC
PROJECT: KX05349
DATE: 18-Oct-12

TEST No:

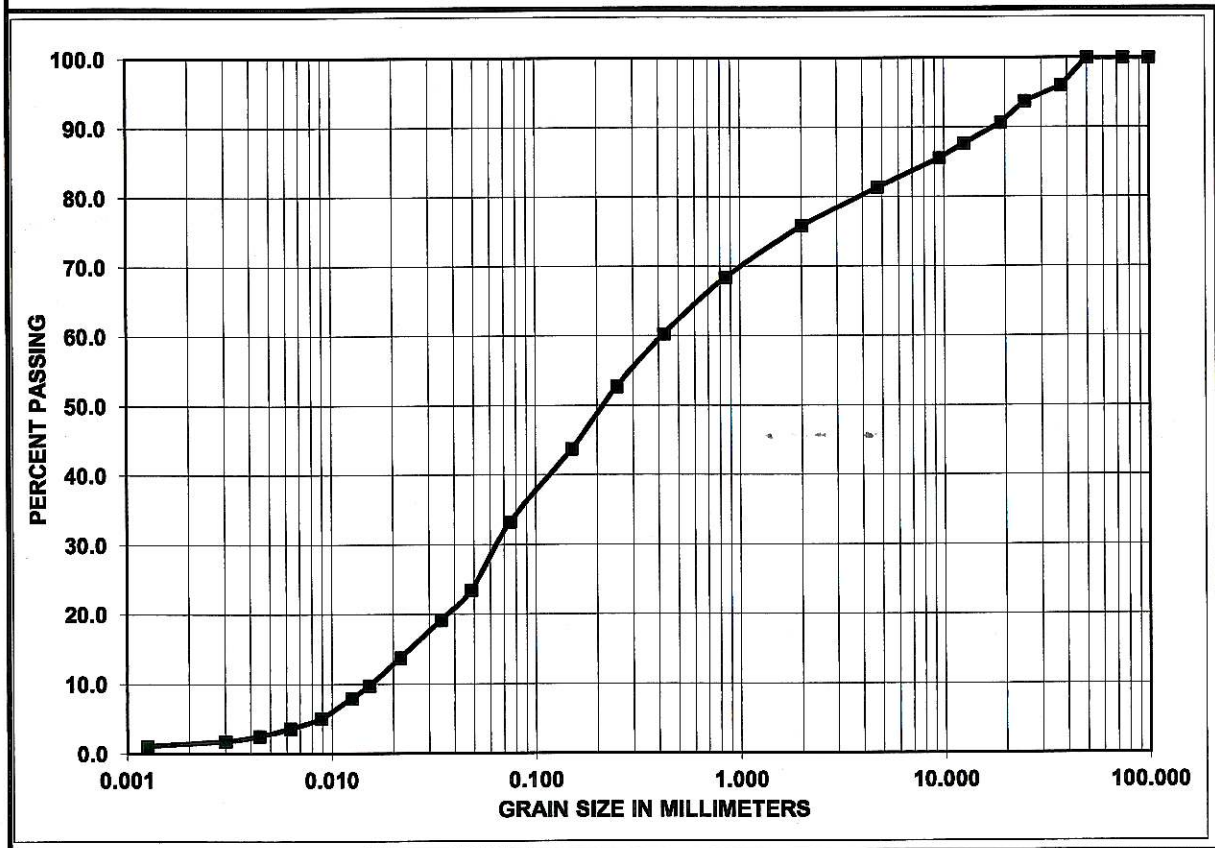
DATE SAMPLED: 16-Aug-12

DATE TESTED: 17-Oct-12

SAMPLED BY: Client

SOURCE: TP12-96, sample S34

DEPTH: 7.0m - 7.2m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	96.0
25.0	93.7
19.0	90.6
12.5	87.6
9.5	85.5
4.75	81.4
2.00	75.9
0.850	68.4
0.425	60.3
0.250	52.7
0.150	43.7
0.075	33.2
0.0485	23.5
0.0343	19.1
0.0217	13.7
0.0153	9.8
0.0125	7.9
0.0089	5.1
0.0063	3.6
0.0044	2.5
0.0030	1.8
0.0013	1.1

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	18.63%
SAND	48.13%
SILT	31.85%
CLAY	1.39%

TECHNICIAN: Bruce Garlick

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-99, sample S35
Project Number:	KX05349	Date Sampled:	17-Aug-12
Technician:	J. McDonald	Depth:	6.0m - 6.2m
Date:	28-Sep-12	Comments:	NON-PLASTIC

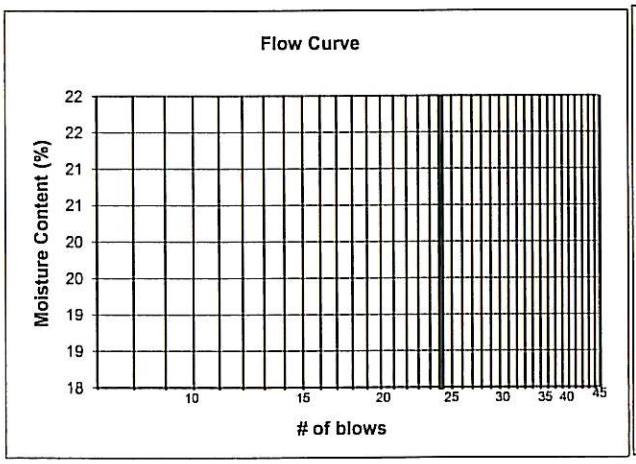
Liquid Limit

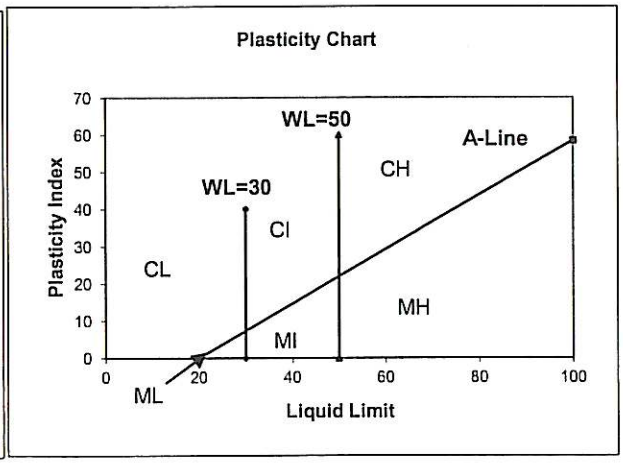
Trial No.	1				
No. of Blows	8				
Tare ID	CC				
Mass Wet + Tare	28.99				
Mass Dry + Tare	26.12				
Mass Tare	13.41				
Mass of Water	2.87				
Dry Soil Mass	12.71				
Moisture Content	22.6				
Liquid Limit	19.7				Average Liquid Limit:

Plastic Limit

Trial No.					
Tare ID					
Mass Wet + Tare					
Mass Dry + Tare					
Mass Tare					
Mass of Water					
Dry Soil Mass					
Moisture Content					Average Plastic Limit
					Plasticity Index
					Received Moisture 15

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





GRAIN SIZE DISTRIBUTION

amec

Knight Piesold
1400 750 West Pender Street
Vancouver, BC
V6C 2T8

Attention: Josie Speed

PROJECT NAME: Blackwater

OFFICE: Prince George, BC
PROJECT: KX05349
DATE: 15-Nov-12

TEST No:

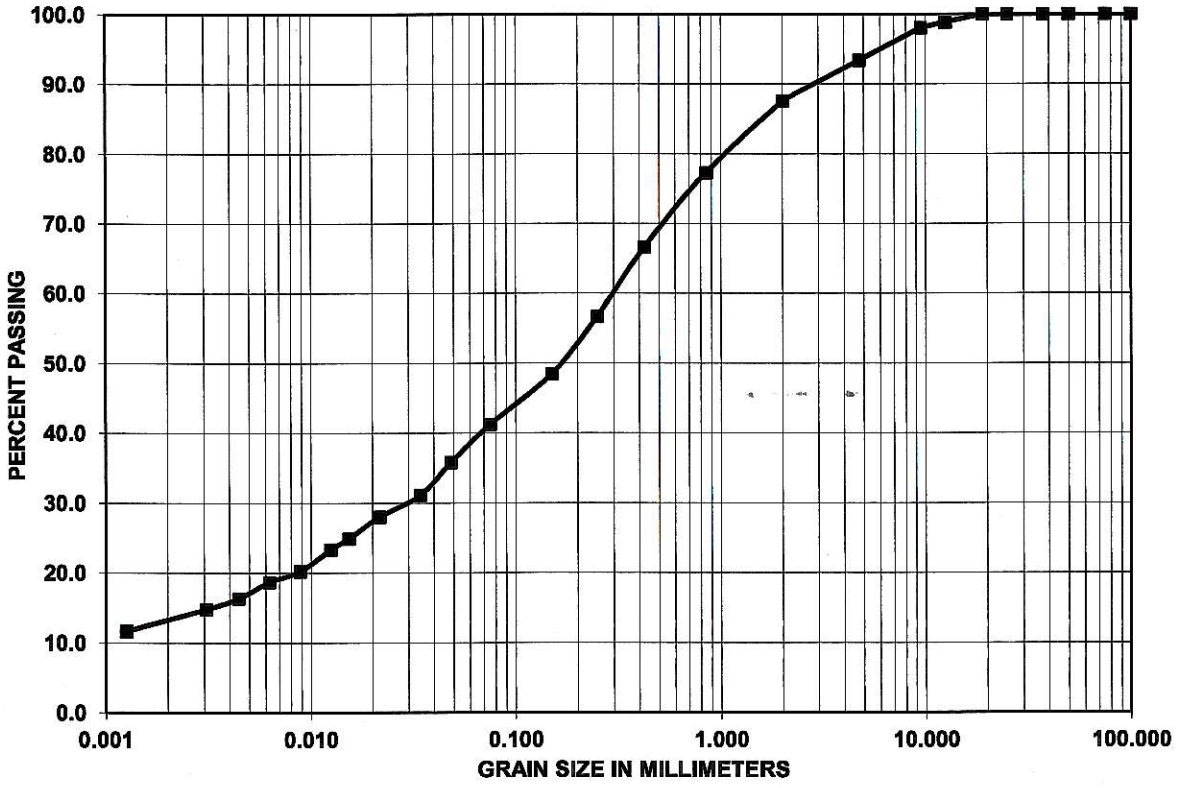
DATE SAMPLED: 17-Aug-12

DATE TESTED: 28-Oct-12

SAMPLED BY: Client

SOURCE: TP12-102, sample S36

DEPTH: 5.5m - 5.7m



SUMMARY

Grain size (mm)	Passing (%)
75.0	100.0
50.0	100.0
37.5	100.0
25.0	100.0
19.0	100.0
12.5	98.9
9.5	98.0
4.75	93.4
2.00	87.5
0.850	77.3
0.425	66.6
0.250	56.7
0.150	48.4
0.075	41.2
0.0485	35.8
0.0343	31.1
0.0217	28.0
0.0153	24.9
0.0125	23.3
0.0089	20.2
0.0063	18.7
0.0044	16.3
0.0031	14.8
0.0013	11.7

REMARKS:

D_{10} =	N/A
D_{30} =	N/A
D_{60} =	N/A
C_U =	N/A
C_c =	N/A

GRAVEL	6.63%
SAND	52.20%
SILT	28.22%
CLAY	12.95%

TECHNICIAN: JMichaud

Reporting of these test results constitutes a testing service only.
Engineering interpretation or evaluation of the test results is provided only on written request.

ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-102, sample S36
Project Number:	KX05349	Date Sampled:	17-Aug-12
Technician:	J. McDonald	Depth:	5.5m - 5.7m
Date:	25-Oct-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	40	26	16	
Tare ID	N	AO	R	
Mass Wet + Tare	38.28	34.61	38.05	
Mass Dry + Tare	35.67	32.48	35.20	
Mass Tare	21.45	21.60	21.53	
Mass of Water	2.61	2.13	2.85	
Dry Soil Mass	14.22	10.88	13.67	
Moisture Content	18.4	19.6	20.8	
Liquid Limit	19.6	19.7	19.7	

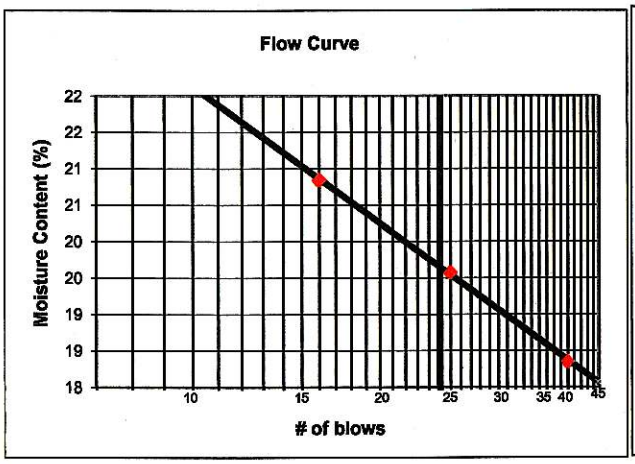
Average Liquid Limit: 20

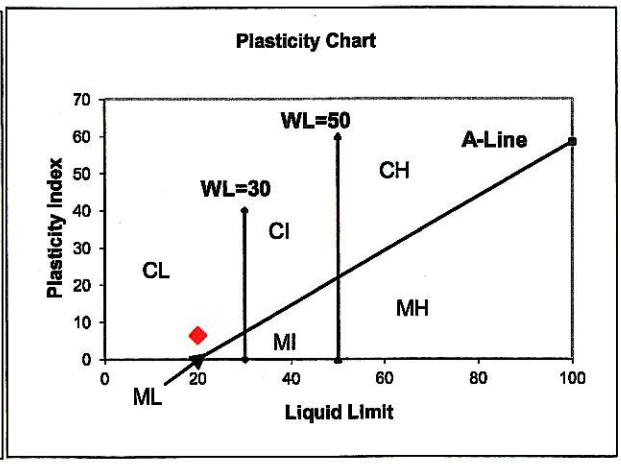
Plastic Limit

Trial No.	1	2	3	
Tare ID	16	14	13	
Mass Wet + Tare	37.78	34.06	35.08	
Mass Dry + Tare	35.84	32.56	33.48	
Mass Tare	21.39	21.43	21.44	
Mass of Water	1.94	1.50	1.60	
Dry Soil Mass	14.45	11.13	12.04	
Moisture Content	13.4	13.5	13.3	

Average Plastic Limit	13
Plasticity Index	7
Received Moisture	12

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-114, sample S41
Project Number:	KX05349	Date Sampled:	18-Aug-12
Technician:	M. Tennant	Depth:	5.5m - 5.7m
Date:	25-Sep-12	Comments:	

Liquid Limit

Trial No.	1	2	3	
No. of Blows	18	30	35	
Tare ID	AQ	AR	U	
Mass Wet + Tare	43.05	45.73	46.97	
Mass Dry + Tare	39.46	42.02	43.03	
Mass Tare	21.59	22.03	21.58	
Mass of Water	3.59	3.71	3.94	
Dry Soil Mass	17.87	19.99	21.45	
Moisture Content	20.1	18.6	18.4	
Liquid Limit	19.3	19.0	19.2	

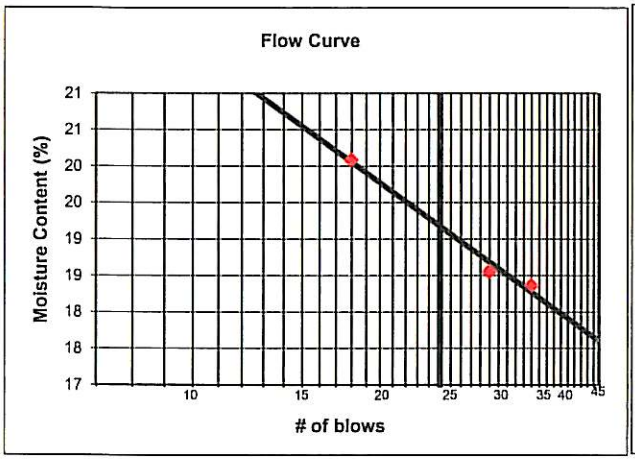
Average Liquid Limit: 19

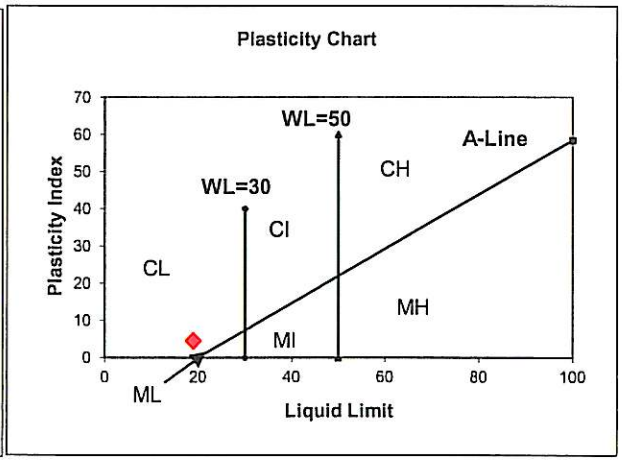
Plastic Limit

Trial No.	1	2	3	
Tare ID	38	41	11	
Mass Wet + Tare	29.95	32.55	33.79	
Mass Dry + Tare	28.86	31.18	32.24	
Mass Tare	21.33	21.50	21.29	
Mass of Water	1.09	1.37	1.55	
Dry Soil Mass	7.53	9.68	10.95	
Moisture Content	14.5	14.2	14.2	

Average Plastic Limit	14
Plasticity Index	5
Received Moisture	9

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





ATTERBERG LIMITS
ASTM D4318

PROJECT:	Blackwater	Sample ID:	TP12-117, sample S42
Project Number:	KX05349	Date Sampled:	19-Aug-12
Technician:	M. Tennant	Depth:	6.0m - 6.2m
Date:	25-Sep-12	Comments:	NON-PLASTIC

Liquid Limit

Trial No.	1	2		
No. of Blows	10	12		
Tare ID	AD	B		
Mass Wet + Tare	46.37	49.48		
Mass Dry + Tare	42.36	45.05		
Mass Tare	21.55	21.81		
Mass of Water	4.01	4.43		
Dry Soil Mass	20.81	23.24		
Moisture Content	19.3	19.1		
Liquid Limit	17.2	17.4		

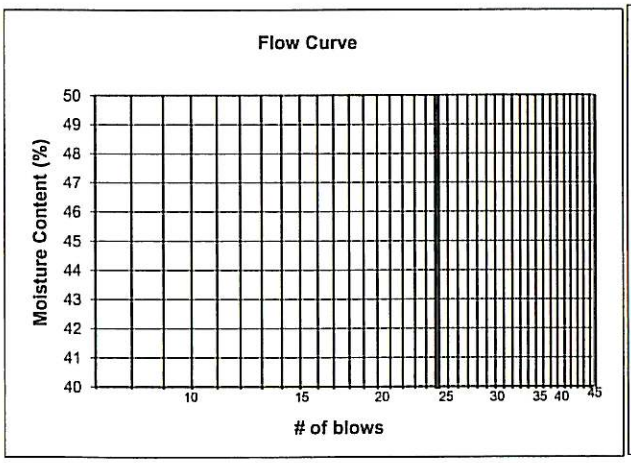
Average Liquid Limit: 18

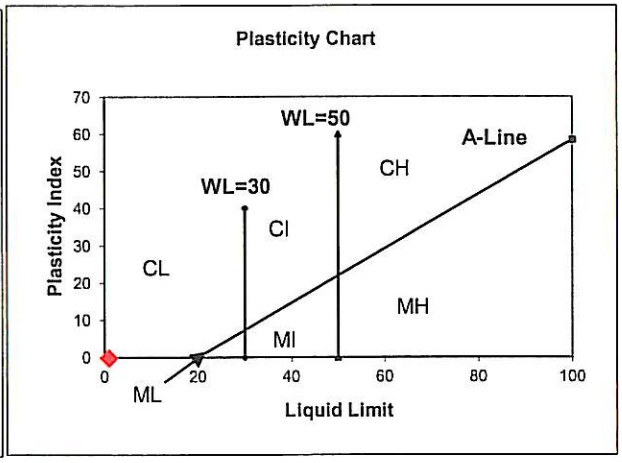
Plastic Limit

Trial No.	1	2	3	
Tare ID	32	31	30	
Mass Wet + Tare	31.76	29.87	31.89	
Mass Dry + Tare	30.24	28.64	30.35	
Mass Tare	21.54	21.56	21.37	
Mass of Water	1.52	1.23	1.54	
Dry Soil Mass	8.70	7.08	8.98	
Moisture Content	17.5	17.4	17.1	

Average Plastic Limit	17
Plasticity Index	1
Received Moisture	8.0

Plasticity Index	PI = LL - PL
Liquidity Index	LI = (MC - PL) / PI





APPENDIX D2

ENGINEERING PROPERTIES TESTING

(Pages D2-1 to D2-36)

Knight Piésold CONSULTING

Pinhole Dispersion Test
ASTM D 4647

Project	Black Water	*Project No.*	VA101-247/04
Date of Test	9/12/2012	*Activity Code*	
Sample Location	GT12-18 Sample 5	*Lab No.*	L2012-120PPQ
Sample Description	Clayey Sand with Gravel	*Sample ID*	2012-120PPQ-02
Sample Type	Undisturbed	Dry Density, pcf	120.7
Curing Time, hrs.	NA	Moisture Content, %	13.4

Specimen Parameters
Length, in. 1.5"
Diameter, in. 1.25"

		Flow			Turbidity from Side							
Clock Time	Head	ml	sec.	Rate, ml/s	Very Dark	Dark	Mod.Dark	Slight	Barely Vis.	Comp. Clear	Comp.Clear from Top	Comments
	2	10	24.3	0.412					x			Sand Sediment Barely Vis.
	2	10	24.7	0.404					x			Sand Sediment Barely Vis.
	2	10	24.4	0.409						x		
	2	10	24.9	0.402						x		
	2	10	24	0.416							x	
	7	10	10.8	0.923					x			Cloudiness Barely Vis.
	7	10	10.5	0.954							x	
	7	10	10.8	0.924							x	
	7	10	10.7	0.936							x	
	7	10	11.1	0.903							x	
	15	10	6.74	1.484						x		
	15	10	6.81	1.468							x	
	15	10	6.79	1.473							x	
	15	10	6.64	1.506							x	
	15	10	6.83	1.464							x	
	40	10	3.87	2.584							x	
	40	10	3.44	2.907							x	
	40	10	3.6	2.778							x	
	40	10	3.71	2.695							x	
	40	10	3.57	2.801							x	
	40	10	3.87	2.584							x	ND1
												Nondispersive

Target Flow Conditions: 2in. = 0.4-0.8ml/s; 7 in. = 0.8-1.4ml/s; 15 in. = 1.0-1.8ml/s; 40 in. = <3.0ml/s

Knight Piésold CONSULTING

Pinhole Dispersion Test
ASTM D 4647

Project	Blackwater Gold Project	*Project No.*	VA101-457/04
Date of Test	9/12/2012	*Activity Code*	
Sample Location	GT12-18 Sample 8	*Lab No.*	L2012-120PPQ
Sample Description	Silty Clay	*Sample ID*	2012-120PPQ-03
Sample Type	Undisturbed	Dry Density, pcf	117.5
Curing Time, hrs.	NA	Moisture Content, %	15.8

Specimen Parameters
Length, in. 1.5"
Diameter, in. 1.25"

		Flow			Turbidity from Side							
Clock Time	Head	ml	sec.	Rate, ml/s	Very Dark	Dark	Mod.Dark	Slight	Barely Vis.	Comp. Clear	Comp.Clear from Top	Comments
	2	10	19.4	0.52				x				Slight Cloudiness Vis.
	2	10	23.7	0.42				x				Slight Cloudiness Vis.
	2	10	19.8	0.51					x			
	2	10	20	0.5					x			
	2	10	20.4	0.49						x		
	2	10	21.5	0.46							x	
	7	10	7.49	1.34				x				
	7	10	7.89	1.27					x			
	7	10	7.39	1.35						x		
	7	10	7.48	1.34					x			Slight Cloudiness Vis.
	7	10	7.1	1.41						x		
	7	10	7.05	1.42						x		
	7	10	7.21	1.39						x		
	7	10	7.05	1.42							x	
	7	10	7.18	1.39							x	
	15	10	4.75	2.11				x				Sand Sediment &
	15	10	4.17	2.4				x				Slight Cloudiness Vis.
	15	10	4.62	2.16				x				"
	15	10	4.2	2.38				x				"
	15	10	3.99	2.51				x				"
												ND3
												Slightly to Moderately
												Dispersive

Target Flow Conditions: 2in. = 0.4-0.8ml/s; 7 in. = 0.8-1.4ml/s; 15 in. = 1.0-1.8ml/s; 40 in. = <3.0ml/s

Knight Piésold CONSULTING

Pinhole Dispersion Test
ASTM D 4647

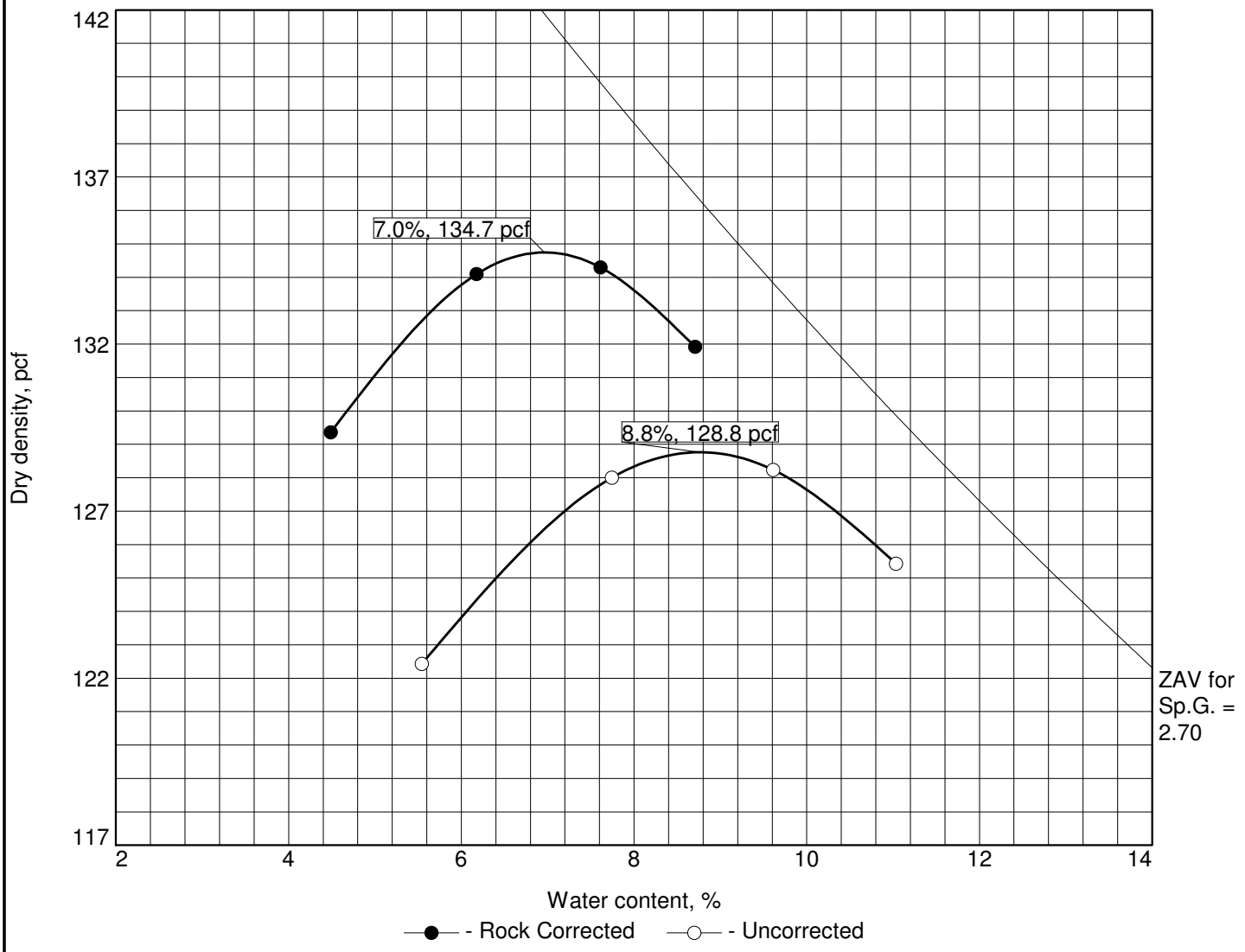
Project	Blackwater Gold Project	*Project No.*	VA101-457/04
Date of Test	9/13/2012	*Activity Code*	
Sample Location	GT12-18 Sample 10	*Lab No.*	L2012-120PPQ
Sample Description	Silty Clay	*Sample ID*	2012-120PPQ-04
Sample Type	Undisturbed	Dry Density, pcf	117.9
Curing Time, hrs.	NA	Moisture Content, %	19.9

Specimen Parameters
Length, in. 1.5"
Diameter, in. 1.25"

		Flow			Turbidity from Side							
Clock Time	Head	ml	sec.	Rate, ml/s	Very Dark	Dark	Mod.Dark	Slight	Barely Vis.	Comp. Clear	Comp.Clear from Top	Comments
	2	87.3	10	0.11			x					Cloudiness Mod. Dark
	2	47.8	5	0.1					x			Cloudiness Barely Vis.
	2	46.3	5	0.11							x	
	2	46.6	5	0.11							x	
	2	47.6	10	0.21							x	
	7	15.3	10	0.65			x					Cloudiness Mod. Dark
	7	13.3	10	0.75				x				Cloudiness Slightly Vis.
	7	13.6	10	0.73					x			Cloudiness Barely Vis.
	7	13.5	10	0.74						x		
	7	13.3	10	0.75							x	
	7	13	10	0.77							x	
	7	13.4	10	0.75							x	
	15	6.2	10	1.61				x				Sand Sediment &
	15	6.18	10	1.62				x				Cloudiness Slightly Vis.
	15	5.9	10	1.69				x				"
	15	5.8	10	1.72				x				"
	15	5.62	10	1.78				x				"
	40	2.31	10	4.33			x					Sand Sediment &
	40	2.32	10	4.31			x					Cloudiness Mod. Dark
	40	2.13	10	4.69				x				"
	40	2.28	10	4.39				x				Cloudiness Slightly Vis.
	40	2.27	10	4.41				x				"
	40	2.39	10	4.18				x				"
												ND3
												Slightly Dispersive

Target Flow Conditions: 2in. = 0.4-0.8ml/s; 7 in. = 0.8-1.4ml/s; 15 in. = 1.0-1.8ml/s; 40 in. = <3.0ml/s

COMPACTION TEST REPORT



Test specification: ASTM D 698-07 Method B Standard
ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
10.67-25.91m	SC	A-4(0)		2.7	23	9	23.2	37.0

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 134.7 pcf	128.8 pcf	clayey SAND with gravel
Optimum moisture = 7.0 %	8.8 %	

Project No. VA101-457/ **Client:** New Gold Inc.
Project: Blackwater Gold Project

○ **Location:** GT12-45 **Sample Number:** 1, 2, 3

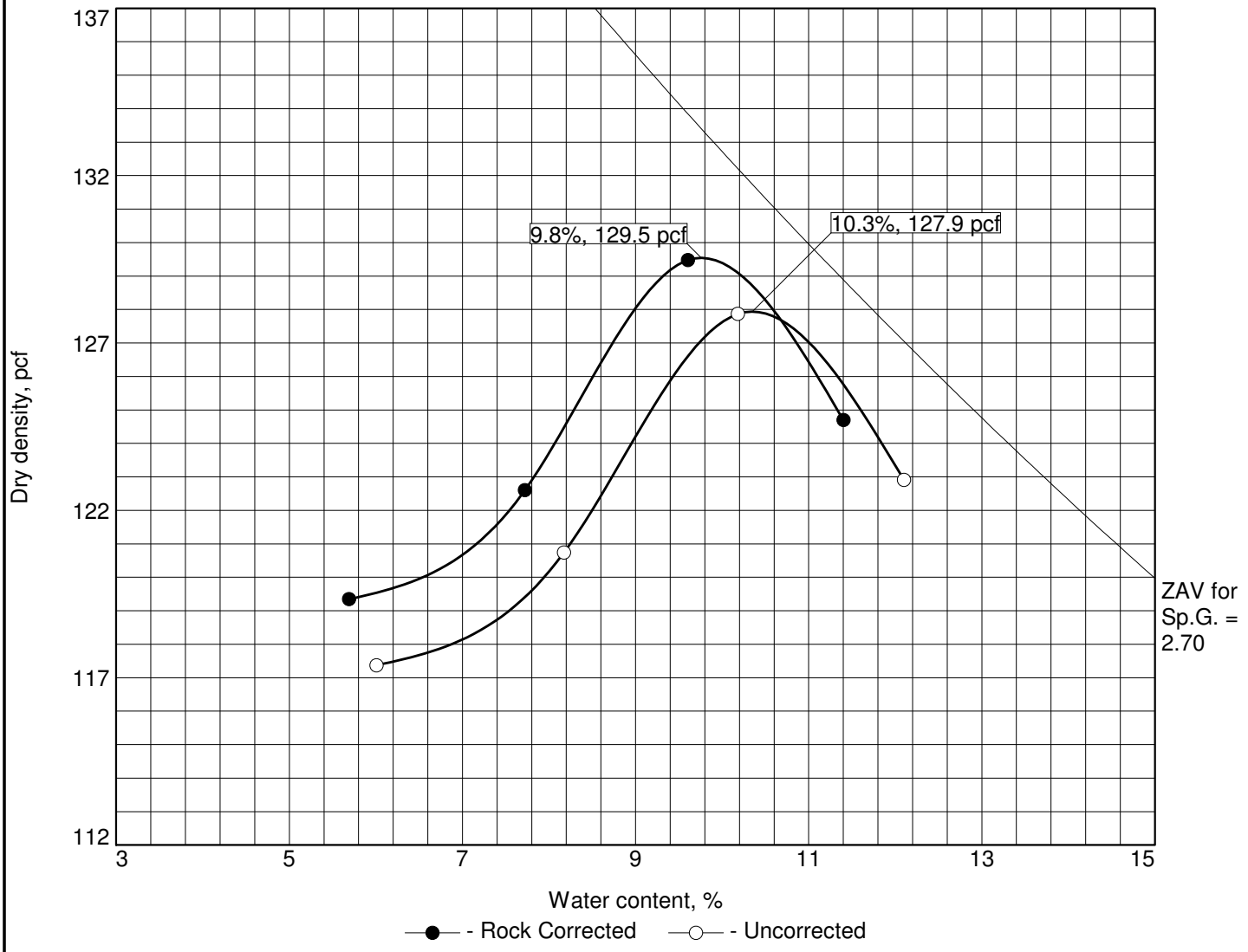
Remarks:

Knight Piésold CONSULTING

Figure

Tested By: MF

COMPACTION TEST REPORT



Test specification: ASTM D 698-07 Method B Standard
ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
10.67-35.05	SC	A-4(1)		2.7	23	10	6.3	42.7

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 129.5 pcf	127.9 pcf	clayey SAND
Optimum moisture = 9.8 %	10.3 %	

Project No. VA101-457/ **Client:** New Gold Inc.
Project: Blackwater Gold Project

○ **Location:** GT12-46 **Sample Number:** 1, 2, 3

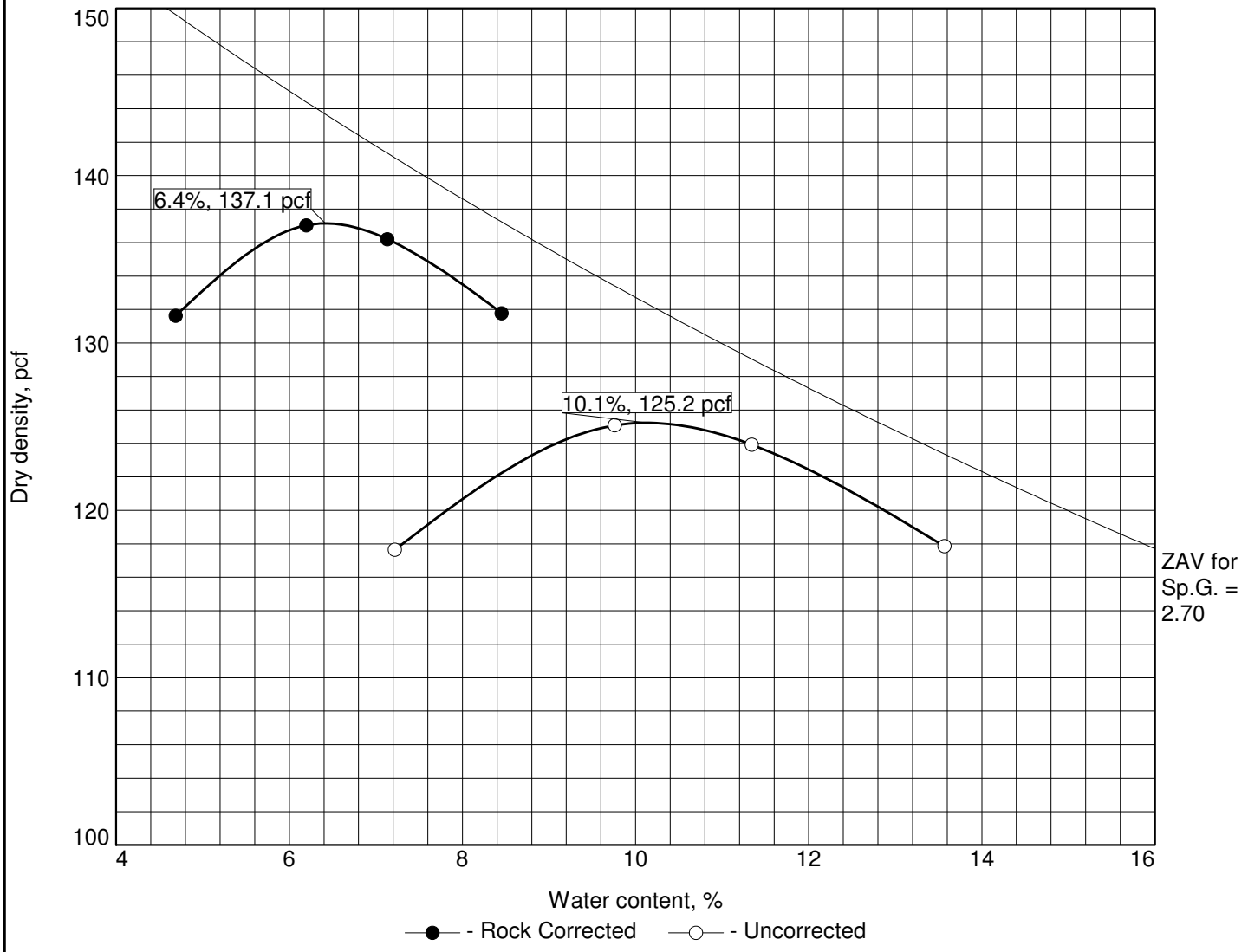
Remarks:

Knight Piésold CONSULTING

Figure

Tested By: MF

COMPACTION TEST REPORT



Test specification: ASTM D 698-07 Method A Standard
ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
4.0-4.2m	GC	A-2-4(0)		2.7	23	8	40.7	24.5

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 137.1 pcf	125.2 pcf	clayey GRAVEL with sand
Optimum moisture = 6.4 %	10.1 %	

Project No. VA101-457/ **Client:** New Gold Inc.
Project: Blackwater Gold Project

○ **Location:** TP12-123

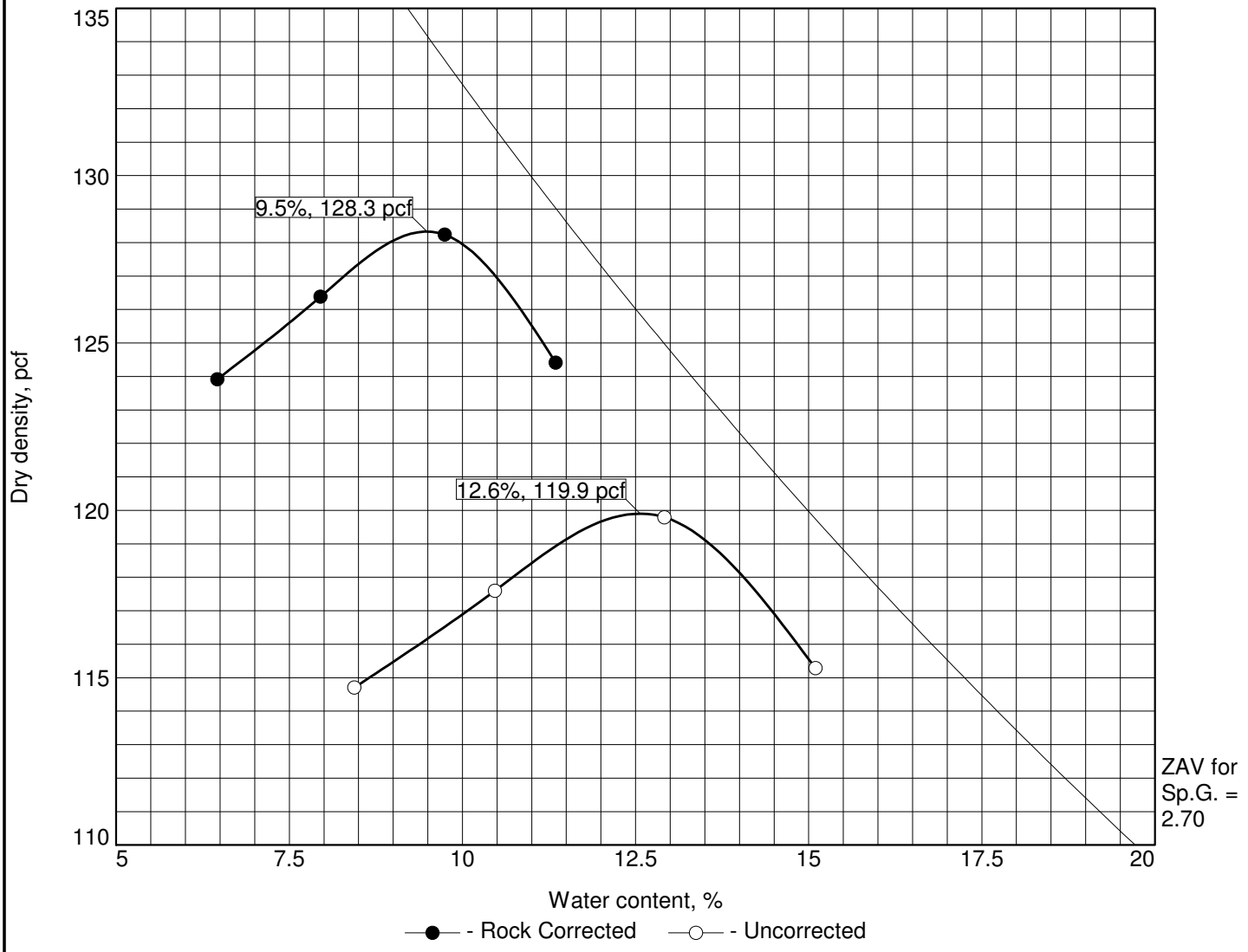
Remarks:

Knight Piésold CONSULTING

Figure

Tested By: RV

COMPACTION TEST REPORT



Test specification: ASTM D 698-07 Method A Standard
ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
4.0-4.2m	GC	A-6(4)		2.7	28	15	26.6	48.9

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 128.3 pcf	119.9 pcf	clayey GRAVEL with sand
Optimum moisture = 9.5 %	12.6 %	

Project No. VA101-457/ **Client:** New Gold Inc.
Project: Blackwater Gold Project

○ **Location:** TP12-142

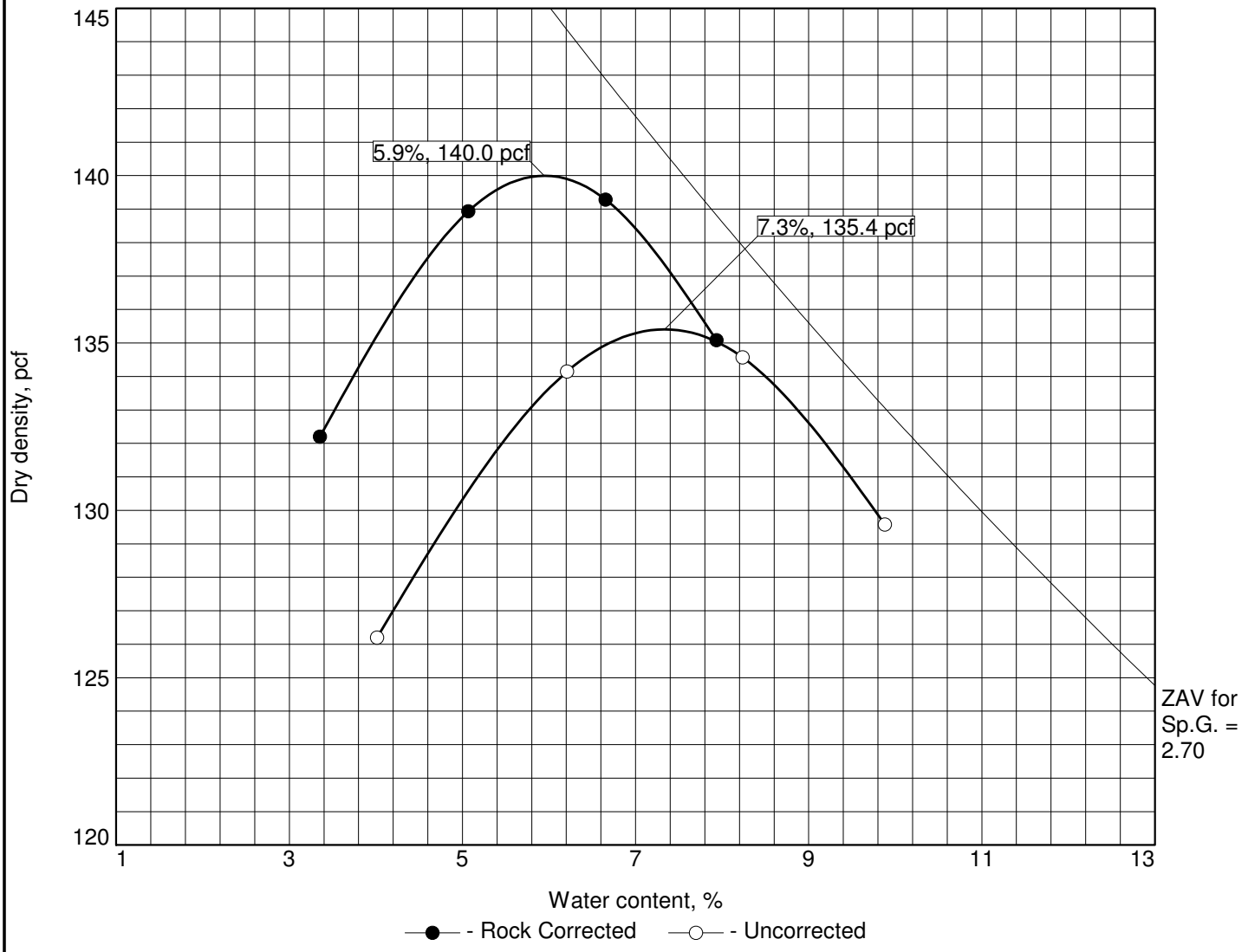
Remarks:

Knight Piésold CONSULTING

Figure

Tested By: RV

COMPACTION TEST REPORT



Test specification: ASTM D 698-07 Method B Standard
ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
3.0-3.2m	SM	A-2-4(0)		2.7	15	3	21.9	29.4

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 140.0 pcf	135.4 pcf	silty SAND with gravel
Optimum moisture = 5.9 %	7.3 %	

Project No. VA101-457/ **Client:** New Gold Inc.
Project: Blackwater Gold Project

○ **Location:** TP12-150

Remarks:

Knight Piésold CONSULTING

Figure

Tested By: RV

MDH
ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

SPECIFIC GRAVITY TEST (FINE MATERIAL)

Client:	Knight Piesold
Project:	Blackwater
MDH#	611748
Tech:	JA
Date:	20-Dec-12

Sample: GT 12 - 45

PYCNOMETER DATA:

Pycnometer #:	C9A
Mass of pycnometer empty & dry (g):	172.51
Mass of pycnometer with water (g):	671.08
Temperature (^{o}C):	20.2

PRE-TEST SAMPLE INFORMATION:

Water Content (wet sample):

Tare #:	Rainbow	Wet weight (g):	50.18
Tare Mass (g):	30.80	Calc. Dry Weight (g):	49.73
Wet sample + tare (g):	61.12		
Dry sample + tare (g):	60.85		
Dry sample (g):	30.05		
Water Content (%):	0.90		

POST-TEST INFORMATION:

Mass of pycnometer, water, & sample (g):	702.22
Temperature (^{o}C):	21
Mass of dry sample (g):	49.73

Specific gravity: 2.69

Comments:

MDH
ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

SPECIFIC GRAVITY TEST (FINE MATERIAL)

Client:	Knight Piesold
Project:	Blackwater
MDH#	611748
Tech:	JA
Date:	20-Dec-12

Sample: GT 12 - 46

PYCNOMETER DATA:

Pycnometer #:	1
Mass of pycnometer empty & dry (g):	166.70
Mass of pycnometer with water (g):	664.89
Temperature (^{o}C):	20.2

PRE-TEST SAMPLE INFORMATION:

Water Content (wet sample):

Tare #:	L	Wet weight (g):	50.87
Tare Mass (g):	31.12	Calc. Dry Weight (g):	50.30
Wet sample + tare (g):	111.06		
Dry sample + tare (g):	110.16		
Dry sample (g):	79.04		
Water Content (%):	1.14		

POST-TEST INFORMATION:

Mass of pycnometer, water, & sample (g):	696.93
Temperature (^{o}C):	21
Mass of dry sample (g):	50.30

Specific gravity: 2.77

Comments:

Knight Piésold CONSULTING

Moisture-Density Worksheet

Identification				*Test Results (Summary)*				*Density Determination*					*Moisture Determination*				
Hole	Depth (m)	Sample No.	Sample Type	% Moisture	Dry Density (pcf)	USCS	Component, Color, Consistency, Structure ...	Sample Length (in)	Sample Diameter (in)	Wet Wt. + Tare, g	Tare, g	Wet Soil Wt., g	Tare I.D.	Wet Wt. + Tare	Dry Wt. + Tare	Tare	Run By
GH12-18	35.75-35.95		11	11.1	120.5		Clayey Silty Sand and Gravel, Lt Brown, Dense,	6.400	3.815			2571.0		3209.0	2930.0	412.3	dab
							Moist										
GH12-28	23-25		4	17.8			Sand, Wet, Brown, Loose							1513.7	1347.1	411.1	dab
GH12-15	86.12-86.32		24	-0.7			Clay Silty Sand and Gravel, Loose, Moist							2671.7	2409.4	40808.0	dab
GH12-18	25.13-25.23		8	15.8	117.5		Sandy Elastic Silt, Brown, Dense, Moist	3.343	3.717			1295.3		850.9	791.4	414.3	dab
GH12-18	15.6-15.8		5	13.4	120.7		Clayey Sand and Gravel, Brown, Dense, Moist	5.533	3.771			2221.3		1276.1	1174.4	416.7	dab
GH12-18	32.95-33.15		10	19.9	117.9		Sandy Elastic Silt, Brown, Dense, Moist	2.588	2.833			605.30		995.30	898.35	412.00	dab

Project	**Blackwater Gold Project**	**Sheet Prep. By**	**db**	**Lab No.**	**L2012-120PPQ**
Project No.	**VA101-457/04**	**Checked By**	**jdb**	**Date**	**9/13/2012**

Knight Piésold CONSULTING

Moisture-Density Worksheet

Identification				Test Results (Summary)				Density Determination					Moisture Determination				
Hole	Depth (m)	Sample No.	Sample Type	% Moisture	Dry Density (pcf)	USCS	Component, Color, Consistency, Structure ...	Sample Length (in)	Sample Diameter (in)	Wet Wt. + Tare, g	Tare, g	Wet Soil Wt., g	Tare I.D.	Wet Wt. + Tare	Dry Wt. + Tare	Tare	Run By
GT12-14-2	45.0-45.2m			19.4	106.7			2.990	3.490			956.8	C75	882.1	757.9	117.1	RV
GT12-32-1	15.84-16.04m			5.6	126.2			2.390	3.770			933.70	C69	917.40	875.60	131.90	RV
GT12-32-2a	24.38-24.58m			6.1	139.9			2.510	3.720			1062.9	C56	870.8	827.5	117.3	RV
GT12-32-2b	39.63-39.83m			8.9	133.1			2.330	3.820			1016.4	C58	865.4	804.0	117.1	RV
GT12-32-4	49.08-49.28m			7.2	135.1			2.730	3.760			1152.3	C54	854.4	804.8	117.0	RV
GT12-32-6	64.75-64.9m			13.7	128.2			4.640	3.550			1757.1	C53	952.6	852.0	118.4	RV
GT12-33-1	4.6-4.8m			9.4	132.4			5.220	3.780			2227.0	C79	854.9	791.8	117.6	RV
GT12-33-4	40.03-40.23m			19.6	109.3			5.910	3.460			1906.5	C55	670.9	580.5	118.1	RV
GT12-35-3	36.65-36.85m			23.3	103.8			4.860	3.480			1553.6	P69	627.3	537.4	151.9	RV
GT12-35-4	41.13-41.33m			25.9	97.0			3.130	3.480			954.3	C64	913.1	752.7	132.2	RV
GT12-37-1	3.75-3.9m			8.9	87.0			3.180	3.340			693.3	Slimer	823.8	767.3	134.6	RV
GT12-37-4	43.4-43.6m			13.7	115.5			3.130	3.770			1204.2	Bat	873.2	784.7	136.6	RV
GT12-38-1	8.6-8.75m			7.8	136.0			3.920	3.760			1675.30	C71	1131.00	1058.70	134.10	RV
GT12-39-6	89.9-90.1m			28.2	93.9			3.500	3.730			1209.40	P59	585.70	489.10	146.90	RV
GT12-41	73.0-73.9m			23.4	93.7			1.730	3.350			462.80	Hog	594.00	506.20	131.62	RV
GT12-44-3	15.6-15.8m			7.3	148.5			1.850	3.510			748.70	C52	864.90	814.10	117.60	RV
GT12-45	10.67-13.72m	1		9.7	138.7			4.270	3.730			1863.90	RG14	1633.90	1505.60	185.50	RV
GT12-45	16.76-19.87m	2		8.9	144.4			3.630	3.760			1664.80	Bat	1449.50	1341.70	136.60	RV

Knight Piésold CONSULTING

Moisture-Density Worksheet

Identification				Test Results (Summary)				Density Determination					Moisture Determination				
Hole	Depth (m)	Sample No.	Sample Type	% Moisture	Dry Density (pcf)	USCS	Component, Color, Consistency, Structure ...	Sample Length (in)	Sample Diameter (in)	Wet Wt. + Tare, g	Tare, g	Wet Soil Wt., g	Tare I.D.	Wet Wt. + Tare	Dry Wt. + Tare	Tare	Run By
GT12-45	19.87-25.91m	3		10.6	131.7			1.750	3.450			625.50	C56	741.40	681.50	117.40	RV
GT12-45-2	12.37-12.55m			10.0	132.2			3.400	3.830			1496.30	CG3	731.06	676.40	132.10	RV
GT12-45-21	14.55-14.75m			8.7	138.0			3.010	3.710			1280.30	C72	1106.40	1027.50	116.20	RV
GT12-45-3	17.6-17.8m			8.4	139.8			5.280	3.770			2344.00	C70	791.70	740.60	132.80	RV
GT12-45-22	22.2-22.4m			10.9	125.6			3.140	3.730			1254.90	C51	1368.10	1244.70	117.66	RV
GT12-45-6	36.0-36.2m			17.1	118.9			6.440	3.600			2394.60	P111	1409.00	1225.40	148.80	RV
GT12-45-7	40.15-40.39m			11.0	127.7			3.290	3.750			1351.90	C55	1041.30	950.10	118.10	RV
GT12-45-26	52.3-52.5m			11.6	125.2			4.680	3.750			1895.90	P61	1218.40	1106.60	145.40	RV
GT12-45-10	55.45-55.6m			8.4	134.2			3.590	3.770			1530.00	C61	1385.50	1288.40	133.00	RV
GT12-45-11	61.75-62.0m			8.2	133.2			2.740	3.660			1090.00	Hog	1220.40	1138.20	131.70	RV
GT12-45-29	70.7-70.95m			15.2	111.7			2.060	3.760			772.60	P52	830.10	728.20	57.90	RV
GT12-45-13	73.55-73.7m			13.8	132.0			2.270	3.660			942.00	P68	1090.70	976.30	149.00	RV
GT12-45-15	86.0-86.2m			11.2	135.5			1.380	3.770			609.50	P66	755.00	693.80	147.90	RV
GT12-45-16	86.95-87.2m			12.8	124.1			6.070	3.780			2504.80	DB	1334.50	1199.80	151.10	RV
GT12-46	10.67-35.05m	1		6.5	142.2			3.500	3.788			1567.76	Cat	565.78	539.60	135.99	RV
GT12-46	10.67-35.05m	2		7.9	147.6			2.780	3.800			1317.70	Bird	528.53	499.70	133.29	RV
GT12-46	10.67-35.05m	3		7.4	129.1			3.380	3.800			1395.46	Skunk	521.54	494.50	130.53	RV
GT12-46-5	12.8-13.0m			7.8	150.9			2.570	3.740			1206.00	C61	1338.60	1251.10	132.90	RV

Knight Piésold CONSULTING

Moisture-Density Worksheet

Identification				Test Results (Summary)				Density Determination					Moisture Determination				
Hole	Depth (m)	Sample No.	Sample Type	% Moisture	Dry Density (pcf)	USCS	Component, Color, Consistency, Structure ...	Sample Length (in)	Sample Diameter (in)	Wet Wt. + Tare, g	Tare, g	Wet Soil Wt., g	Tare I.D.	Wet Wt. + Tare	Dry Wt. + Tare	Tare	Run By
GT12-46-7	18.9-19.15m			4.2	115.4			2.790	4.380			1326.60	Skunk	1445.20	1392.10	130.50	RV
GT12-46-10	28.2-28.45m			7.5	130.6			1.940	3.800			810.50	C64	941.20	885.00	132.20	RV
GT12-46-11	31.4-31.65m			9.5	134.1			4.360	3.760			1865.10	C638	1412.30	1301.60	132.20	RV
GT12-46-17	49.25-49.52m			9.5	134.7			2.970	3.770			1283.50	RG4	1463.40	1352.10	182.90	RV
GT12-46-18	52.45-52.7m			13.0	116.8			2.510	3.800			985.70	RG14	1171.10	1058.00	185.70	RV
GT12-46-20	58.4-58.69m			8.7	135.0			2.730	3.750			1161.80	RG2	1318.80	1227.70	183.00	RV
GT12-47-3	6.83-7.05m			6.9	141.5			2.020	3.800			909.70	RG11	1096.20	1037.30	187.00	RV

Project	**Blackwater**	**Sheet Prep. By**	**EAP**	**Lab No.**	**L2012-140PPQ**
Project No.	**VA101-00457.04**	**Checked By**		**Date**	**12/4/2012**

ENGINEERED SOLUTIONS
Member of the SNC-LAVALIN Group

Client:	Knight Piesold
Project:	Black Water
MDH Project No:	611748
Date:	27-Nov-12

Water Content

Sample #	GT12-45	GT12-46				
Depth (m)	63-63.25	53.75-54				
Tare #	CC24	BB01				
Tare Mass (g)	37.75	37.95				
Wet sample + tare (g)	226.47	216.91				
Dry sample + tare (g)	201.61	198.89				
Wt. Dry sample (g)	163.86	160.94				
Water Content (%)	15.17	11.20				

Bulk Density

Sample #	GT12-45	GT12-46				
Depth (m)	63-63.25	53.75-54				
Mass of sample in air (g):	133.5	230.2				
Mass of sample + wax in air (g):	140.28	241.7				
Mass of sample + wax in water (g):	73.14	114.12				
Wet density (kg/m^3):	2243	2008				
Dry density (kg/m^3):	1947	1806				

Comments:

The testing services reported here have been performed in accordance with accepted local industry standards.

The results presented are for the sole use of the designated client only.

This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / 105 deg C (105 deg C circled) Method: Oven (O) / Microwave (M) (Oven (O) circled)

Sample No.						
Sample ID		TP12-121	TP12-122	TP12-123	TP12-126	TP12-127
Depth		5.5-5.7m	5.0-5.2m	4.0-4.2m	4.5-4.7m	4.0-4.2m
Soil Description						
(USCS)						
Trial No.		1	2	3	4	5
Tare No.		Bat	Bird	Cadet	C58	C54
Tare + Wet Soil	A	1205.86	1167.76	3825	1205.8	1178.44
Tare + Dry Soil	B	1110.39	1066.5	3556	1122.78	1088.5
Tare	C	136.58	133.27	259	116.91	116.9
Wt. of Water	D , A-B	95.47	101.26	269	83.02	89.94
Dry Soil, Ws	E , B-C	973.81	933.23	3297	1005.87	971.6
Moisture Content, (%)	(D / E) x100	9.80	10.85	8.16	8.25	9.26

Remarks:

Sample No.						
Sample ID		TP12-130	TP12-133	TP12-135	TP12-136	TP12-138
Depth		3.0-3.2m	3.5-3.7m	4.5-4.7m	5.0-5.2m	5.0-5.2m
Soil Description						
(USCS)						
Trial No.		6	7	8	9	10
Tare No.		C62	Skunk	C68	C60	C76
Tare + Wet Soil	A	1382.15	1075.19	1440.35	1133.47	1362.66
Tare + Dry Soil	B	1261.42	982.23	1310.57	1069.87	1288.58
Tare	C	131.14	130.45	131.84	131.33	115.70
Wt. of Water	A-B, D	120.73	92.96	129.78	63.60	74.08
Dry Soil, Ws	B-C, E	1130.28	851.78	1178.73	938.54	1172.88
Moisture Content, (%)	(D / E) x100	10.68	10.91	11.01	6.78	6.32

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	*Blackwater*	*Project No.*	*VA101-00457.04/DV101-00077.13-1700*
Lab No.	*L2012-140*	*Date of Test*	*11/6/2012*
Tested By	*RV*	*Checked By*	*EAP*

Drying Conditions: *60 deg C / 105 deg C* (105 deg C circled) *Method:* *Oven (O) / Microwave (M)* (Oven (O) circled)

Sample No.						
Sample ID		TP12-139(1)	TP12-139(2)	TP12-142	TP12-144	TP12-146
Depth		2.0-2.2m	4.0-4.2m	4.0-4.2m	4.0-4.2m	4.5-4.7m
Soil Description						
(USCS)						
Trial No.		*1*	*2*	*3*	*4*	*5*
Tare No.		P66	C77	3kings	DB	C64
Tare + Wet Soil	*A*	1112.90	1400.49	2773.00	1266.88	1339.23
Tare + Dry Soil	*B*	1044.64	1265.33	2531.50	1159.44	1248.48
Tare	*C*	147.88	117.47	229.00	151.65	132.04
Wt. of Water	*D , A-B*	68.26	135.16	241.50	107.44	90.75
Dry Soil, Ws	*E , B-C*	896.76	1147.86	2302.50	1007.79	1116.44
Moisture Content, (%)	*(D / E) x100*	7.61	11.77	10.49	10.66	8.13

Remarks:

Sample No.						
Sample ID		TP12-147	TP12-150	TP12-151	TP12-152	TP12-155
Depth		5.5-5.7m	3.0-3.2m	5.0-5.2m	5.5-5.7m	5.0-5.2m
Soil Description						
(USCS)						
Trial No.		*6*	*7*	*8*	*9*	*10*
Tare No.		C66	Cudda's	C69	C61	C56
Tare + Wet Soil	*A*	1425.38	3702.00	1535.10	1573.28	877.82
Tare + Dry Soil	*B*	1324.11	3457.00	1257.63	1442.14	822.67
Tare	*C*	132.21	241.50	131.95	132.82	117.17
Wt. of Water	*A-B, D*	101.27	245.00	277.47	131.14	55.15
Dry Soil, Ws	*B-C, E*	1191.90	3215.50	1125.68	1309.32	705.50
Moisture Content, (%)	*(D / E) x100*	8.50	7.62	24.65	10.02	7.82

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-13	GT12-13	GT12-13	GT12-13	GT12-14
Sample ID		1	2	3	4	1
Depth		9.75-9.95m	18.15-18.3m	45.13-45.3m	54.73-54.9m	36.0-36.2m
Soil Description						
(USCS)						
Trial No.		1	2	3	4	5
Tare No.		P59	C74	C72	C55	Cat
Tare + Wet Soil	A	706.63	665.58	786.95	686.33	678.89
Tare + Dry Soil	B	664.96	596.42	731.21	630.73	618.59
Tare	C	146.86	117.40	116.19	117.91	135.93
Wt. of Water	D , A-B	41.67	69.16	55.74	55.60	60.30
Dry Soil, Ws	E , B-C	518.10	479.02	615.02	512.82	482.66
Moisture Content, (%)	(D / E) x100	8.04	14.44	9.06	10.84	12.49

Remarks:

Sample No.		GT12-14	GT12-15	GT12-31	GT12-31	GT12-31
Sample ID		3	1	1	4	7
Depth		51.0-51.2m	5.4-5.6m	4.57-4.87m	19.8-20.0m	37.38-37.54m
Soil Description						
(USCS)						
Trial No.		7	8	5	7	8
Tare No.		J31	J04	B	A	C5
Tare + Wet Soil	A	693.84	854.13	835.67	757.30	765.42
Tare + Dry Soil	B	639.75	769.05	782.39	679.90	692.36
Tare	C	196.15	199.26	145.96	144.90	305.94
Wt. of Water	A-B, D	54.09	85.08	53.28	77.40	73.06
Dry Soil, Ws	B-C, E	443.60	569.79	636.43	535.00	386.42
Moisture Content, (%)	(D / E) x100	12.19	14.93	8.37	14.47	18.91

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	*Blackwater*	*Project No.*	*VA101-00457.04/DV101-00077.13-1700*
Lab No.	*L2012-140*	*Date of Test*	*11/6/2012*
Tested By	*RV*	*Checked By*	*EAP*

Drying Conditions: *60 deg C / (105 deg C)* *Method:* *(Oven (O)) / Microwave (M)*

Sample No.		GT12-31				
Sample ID		3				
Depth		14.16-14.43m				
Soil Description						
(USCS)						
Trial No.		*1*				
Tare No.						
Tare + Wet Soil	*A*	835.67				
Tare + Dry Soil	*B*	782.39				
Tare	*C*	145.96				
Wt. of Water	*D , A-B*	53.28				
Dry Soil, Ws	*E , B-C*	636.43				
Moisture Content, (%)	*(D / E) x100*	8.37				

Remarks:

Sample No.						
Sample ID						
Depth						
Soil Description						
(USCS)						
Trial No.						
Tare No.						
Tare + Wet Soil	*A*					
Tare + Dry Soil	*B*					
Tare	*C*					
Wt. of Water	*A-B, D*					
Dry Soil, Ws	*B-C, E*					
Moisture Content, (%)	*(D / E) x100*					

Remarks:

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Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-33	GT12-34	GT12-34	GT12-34	GT12-34
Sample ID		3	1	3	4	5
Depth		33.4-33.54m	3.45-3.7m	17.45-17.6m	42.07-72.27m	52.22-52.37m
Soil Description						
(USCS)						
Trial No.		6	8	9	10	1
Tare No.		I	Cray	Passy	C69	C67
Tare + Wet Soil	A	799.18	818.04	838.99	843.25	736.11
Tare + Dry Soil	B	746.49	722.74	785.37	788.37	651.70
Tare	C	160.80	120.04	146.55	131.91	133.28
Wt. of Water	D , A-B	52.69	95.30	53.62	54.88	84.41
Dry Soil, Ws	E , B-C	585.69	602.70	638.82	656.46	518.42
Moisture Content, (%)	(D / E) x100	9.00	15.81	8.39	8.36	16.28

Remarks:

Sample No.		GT12-35	GT12-36	GT12-36	GT12-36	GT12-36
Sample ID		1	1	3	4	5
Depth		6.9-7.1m	10.2-10.4m	41.18-41.32m	53.3-53.5m	78.35-78.55m
Soil Description						
(USCS)						
Trial No.		2	5	6	7	8
Tare No.		P111	C52	P66	C56	P69
Tare + Wet Soil	A	730.30	700.17	789.77	805.77	657.98
Tare + Dry Soil	B	686.60	655.90	742.69	678.71	524.13
Tare	C	148.90	117.53	147.93	117.26	151.87
Wt. of Water	A-B, D	43.70	44.27	47.08	127.06	133.85
Dry Soil, Ws	B-C, E	537.70	538.37	594.76	561.45	372.26
Moisture Content, (%)	(D / E) x100	8.13	8.22	7.92	22.63	35.96

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater 1	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-38	GT12-39	GT12-39	GT12-40	GT12-40
Sample ID		2	2	4	1	3
Depth		15.65-15.83m	16.6-16.75m	59.3-59.45m	7.35-7.5m	19.75-19.9m
Soil Description						
(USCS)						
Trial No.		3	4	5	7	8
Tare No.		P19	C638	Slimer	C79	P68
Tare + Wet Soil	A	823.25	469.20	637.70	803.50	496.22
Tare + Dry Soil	B	760.40	425.50	602.30	742.19	448.39
Tare	C	117.83	132.20	134.60	117.56	148.90
Wt. of Water	D , A-B	62.85	43.70	35.40	61.31	47.83
Dry Soil, Ws	E , B-C	642.57	293.30	467.70	624.63	299.49
Moisture Content, (%)	(D / E) x100	9.78	14.90	7.57	9.82	15.97

Remarks:

Sample No.		GT12-40	GT12-40	GT12-41	GT12-41	GT12-41
Sample ID		4	7			
Depth		24.4-24.6m	57.5-57.7m	7.0m	10.0-10.2m	20.0-20.2m
Soil Description						
(USCS)						
Trial No.		9	10	1	2	3
Tare No.		C57	C53	C69	C74	C53
Tare + Wet Soil	A	570.36	681.75	521.15	594.01	826.12
Tare + Dry Soil	B	502.05	592.83	488.00	565.18	773.99
Tare	C	116.67	118.28	131.90	117.41	118.31
Wt. of Water	A-B, D	68.31	88.92	33.15	28.83	52.13
Dry Soil, Ws	B-C, E	385.38	474.55	356.10	447.77	655.68
Moisture Content, (%)	(D / E) x100	17.73	18.74	9.31	6.44	7.95

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater 1	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-41	GT12-41	GT12-41	GT12-41	GT12-41
Sample ID						
Depth		30.0-30.2m	40.0-40.17m	47.0m	50.0-50.2m	57.1-57.3m
Soil Description						
(USCS)						
Trial No.		4	5	6	7	8
Tare No.		C55	P12	J04	J81	P26
Tare + Wet Soil	A	671.51	710	818.07	843.53	558.64
Tare + Dry Soil	B	620.07	642.09	711.85	749.21	454.84
Tare	C	118.01	113.21	199.19	196.17	118.11
Wt. of Water	D , A-B	51.44	67.91	106.22	94.32	103.8
Dry Soil, Ws	E , B-C	502.06	528.88	512.66	553.04	336.73
Moisture Content, (%)	(D / E) x100	10.25	12.84	20.72	17.05	30.83

Remarks:

Sample No.		GT12-41	GT12-42	GT12-43	GT12-43	GT12-43
Sample ID						
Depth		80.0-80.3m	10.0-10.2m	9.8-10.0m	21.5-21.7m	25.0m
Soil Description						
(USCS)						
Trial No.		10	1	2	3	4
Tare No.		P06	J23	C72	10	C59
Tare + Wet Soil	A	603.44	987.45	729.42	1024.44	836.13
Tare + Dry Soil	B	548.17	899.95	682.3	965.19	777.4
Tare	C	113.1	199.82	116.24	371.95	117.01
Wt. of Water	A-B, D	55.27	87.5	47.12	59.25	58.73
Dry Soil, Ws	B-C, E	435.07	700.13	566.06	593.24	660.39
Moisture Content, (%)	(D / E) x100	12.70	12.50	8.32	9.99	8.89

Remarks:

Knight Piésold CONSULTING

Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater 1	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-43	GT12-43	GT12-43	GT12-43	GT12-43
Sample ID						
Depth		30.0m	43.8m	50.0-50.2m	53.0-53.2m	55.0-55.2m
Soil Description						
(USCS)						
Trial No.		5	6	7	8	9
Tare No.		X-2	C64	C71	C60	C67
Tare + Wet Soil	A	780.52	623.81	645.54	412.58	693.29
Tare + Dry Soil	B	708.40	526.30	569.30	359.70	587.60
Tare	C	196.86	132.11	134.10	131.46	133.30
Wt. of Water	D , A-B	72.12	97.51	76.24	52.88	105.69
Dry Soil, Ws	E , B-C	511.54	394.19	435.20	228.24	454.30
Moisture Content, (%)	(D / E) x100	14.10	24.74	17.52	23.17	23.26

Remarks:

Sample No.		GT12-43	GT12-44	GT12-44	GT12-45	GT12-45
Sample ID					19	1
Depth		62.0-62.2m	7.14-7.24m	13.2-13.4m	3.8-4.0m	5.6-5.8m
Soil Description						
(USCS)						
Trial No.		10	1	2	3	4
Tare No.		Slimer	Possy	B	C66	Bird
Tare + Wet Soil	A	723.63	823.51	830.96	1022.40	788.80
Tare + Dry Soil	B	645.20	723.00	730.60	932.00	725.30
Tare	C	134.59	146.57	146.00	132.30	133.30
Wt. of Water	A-B, D	78.43	100.51	100.36	90.40	63.50
Dry Soil, Ws	B-C, E	510.61	576.43	584.60	799.70	592.00
Moisture Content, (%)	(D / E) x100	15.36	17.44	17.17	11.30	10.73

Remarks:

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Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater 1	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-45	GT12-45	GT12-45	GT12-45	GT12-45
Sample ID		20	4	23	5	24
Depth		9.65-9.9m	23.6-23.8m	27.8-28.0m	30.05-30.2m	34.1-34.4m
Soil Description						
(USCS)						
Trial No.		5	6	7	8	9
Tare No.		C68	P69	C58	C56	C75
Tare + Wet Soil	A	977.50	1102.80	1058.60	1275.10	869.40
Tare + Dry Soil	B	879.60	999.90	931.90	1064.40	754.20
Tare	C	131.90	152.00	117.10	117.30	117.20
Wt. of Water	D , A-B	97.90	102.90	126.70	210.70	115.20
Dry Soil, Ws	E , B-C	747.70	847.90	814.80	947.10	637.00
Moisture Content, (%)	(D / E) x100	13.09	12.14	15.55	22.25	18.08

Remarks:

Sample No.		GT12-45	GT12-45	GT12-45	GT12-45	GT12-45
Sample ID		8	25	9	27	28
Depth		43.5-43.7	46.3-46.55m	49.4-49.6	58.3-58.5	64.0-64.3m
Soil Description						
(USCS)						
Trial No.		10	1	2	3	4
Tare No.		C79	C53	C60	Skunk	C73
Tare + Wet Soil	A	881.30	1007.30	1006.00	954.70	1160.30
Tare + Dry Soil	B	837.50	934.60	945.20	860.50	1057.90
Tare	C	117.60	118.40	131.40	130.60	117.20
Wt. of Water	A-B, D	43.80	72.70	60.80	94.20	102.40
Dry Soil, Ws	B-C, E	719.90	816.20	813.80	729.90	940.70
Moisture Content, (%)	(D / E) x100	6.08	8.91	7.47	12.91	10.89

Remarks:

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Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-45	GT12-45	GT12-45	GT12-45	GT12-45
Sample ID		12	14	30	31	17
Depth		67.1-67.3	76.3-76.5m	79.4-79.65m	81.0-81.2m	92.2-92.45
Soil Description						
(USCS)						
Trial No.		5	6	7	8	9
Tare No.		C77	C52	C74	C51	C60
Tare + Wet Soil	A	1079.50	956.90	83.22	1106.90	904.00
Tare + Dry Soil	B	935.40	876.80	738.40	971.10	808.20
Tare	C	117.60	117.60	117.50	117.60	131.40
Wt. of Water	D , A-B	144.10	80.10	-655.18	135.80	95.80
Dry Soil, Ws	E , B-C	817.80	759.20	620.90	853.50	676.80
Moisture Content, (%)	(D / E) x100	17.62	10.55	-105.52	15.91	14.15

Remarks:

Sample No.		GT12-45	GT12-46	GT12-46	GT12-46	GT12-46
Sample ID		18	1	2	3	4
Depth		95.25-95.4	0.0m	4.45-4.53m	6.66-6.87m	9.3-9.6m
Soil Description						
(USCS)						
Trial No.		10	1	2	3	4
Tare No.		C70	C63	C66	Bird	C68
Tare + Wet Soil	A	1380.10	1227.60	1708.50	1377.00	1218.40
Tare + Dry Soil	B	1215.40	1102.20	1584.10	1276.60	1146.20
Tare	C	132.90	132.00	132.30	133.30	131.90
Wt. of Water	A-B, D	164.70	125.40	124.40	100.40	72.20
Dry Soil, Ws	B-C, E	1082.50	970.20	1451.80	1143.30	1014.30
Moisture Content, (%)	(D / E) x100	15.21	12.93	8.57	8.78	7.12

Remarks:

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Moisture Content
ASTM D 2216 / ASTM D 4643

Project	Blackwater	Project No.	VA101-00457.04/DV101-00077.13-1700
Lab No.	L2012-140	Date of Test	11/6/2012
Tested By	RV	Checked By	EAP

Drying Conditions: 60 deg C / (105 deg C) Method: (Oven (O)) / Microwave (M)

Sample No.		GT12-46	GT12-46	GT12-46	GT12-46	GT12-46
Sample ID		6	8	9	12	13
Depth		15.6-15.8m	22.2-22.45m	25.06-25.3m	34.2-34.45m	37.15-37.37m
Soil Description						
(USCS)						
Trial No.		5	6	7	8	9
Tare No.		Hog	Cat	C69	C67	Slimer
Tare + Wet Soil	A	1009.80	912.20	1679.60	1363.40	972.30
Tare + Dry Soil	B	930.90	859.80	1558.70	1265.20	913.00
Tare	C	131.70	136.00	131.90	133.40	134.60
Wt. of Water	D , A-B	78.90	52.40	120.90	98.20	59.30
Dry Soil, Ws	E , B-C	799.20	723.80	1426.80	1131.80	778.40
Moisture Content, (%)	(D / E) x100	9.87	7.24	8.47	8.68	7.62

Remarks:

Sample No.		GT12-46	GT12-46	GT12-46	GT12-46	GT12-46
Sample ID		14	15	16	19	21
Depth		39.86-40.1m	42.8-43.05m	46.3-46.5m	54.55-54.8m	60.7-60.9m
Soil Description						
(USCS)						
Trial No.		10	1	2	3	4
Tare No.		RG8	RG15	RG10	RG5	RG18
Tare + Wet Soil	A	1149.20	1359.70	1111.40	1246.00	1368.80
Tare + Dry Soil	B	1032.30	1252.20	1053.10	1152.60	1339.20
Tare	C	184.60	183.90	184.70	184.70	186.00
Wt. of Water	A-B, D	116.90	107.50	58.30	93.40	29.60
Dry Soil, Ws	B-C, E	847.70	1068.30	868.40	967.90	1153.20
Moisture Content, (%)	(D / E) x100	13.79	10.06	6.71	9.65	2.57

Remarks:

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Moisture Content
ASTM D 2216 / ASTM D 4643

Project	*Blackwater 1*	*Project No.*	*VA101-00457.04/DV101-00077.13-1700*
Lab No.	*L2012-140*	*Date of Test*	*11/6/2012*
Tested By	*RV*	*Checked By*	*EAP*

Drying Conditions: *60 deg C / (105 deg C)* *Method:* *(Oven (O))* / *Microwave (M)*

Sample No.		GT12-46	GT12-47	GT12-47	GT12-47	GT12-47
Sample ID		22	1	5	7	9
Depth		64.6-64.8m	0.0m	12.9-13.1m	18.05-18.26m	23.5-23.75m
Soil Description						
(USCS)						
Trial No.		*5*	*2*	*3*	*4*	*5*
Tare No.		RG16	Manning	Ryan	DB	P111
Tare + Wet Soil	*A*	890.20	1242.90	892.60	621.00	686.13
Tare + Dry Soil	*B*	882.20	1153.70	811.90	570.40	609.50
Tare	*C*	185.80	183.40	184.00	151.65	148.74
Wt. of Water	*D , A-B*	8.00	89.20	80.70	50.60	76.63
Dry Soil, Ws	*E , B-C*	696.40	970.30	627.90	418.75	460.76
Moisture Content, (%)	*(D / E) x100*	1.15	9.19	12.85	12.08	16.63

Remarks:

Sample No.		GT12-47	GT12-47	GT12-47	GT12-47	GT12-47
Sample ID		14	18	22	25	30
Depth		34.33-34.53m	43.3-43.5m	58.42-58.67m	64.8-64.97m	88.62-88.79m
Soil Description						
(USCS)						
Trial No.		*6*	*7*	*8*	*9*	*10*
Tare No.		Luck	Bat	P61	C75	Rodgers
Tare + Wet Soil	*A*	931.30	586.26	436.06	506.34	928.60
Tare + Dry Soil	*B*	850.00	489.60	388.30	414.20	816.60
Tare	*C*	183.00	136.64	145.33	117.14	184.30
Wt. of Water	*A-B, D*	81.30	96.66	47.76	92.14	112.00
Dry Soil, Ws	*B-C, E*	667.00	352.96	242.97	297.06	632.30
Moisture Content, (%)	*(D / E) x100*	12.19	27.39	19.66	31.02	17.71

Remarks:

TRIAXIAL HYDRAULIC CONDUCTIVITY TEST REPORT

Test reference: ASTM D 5084

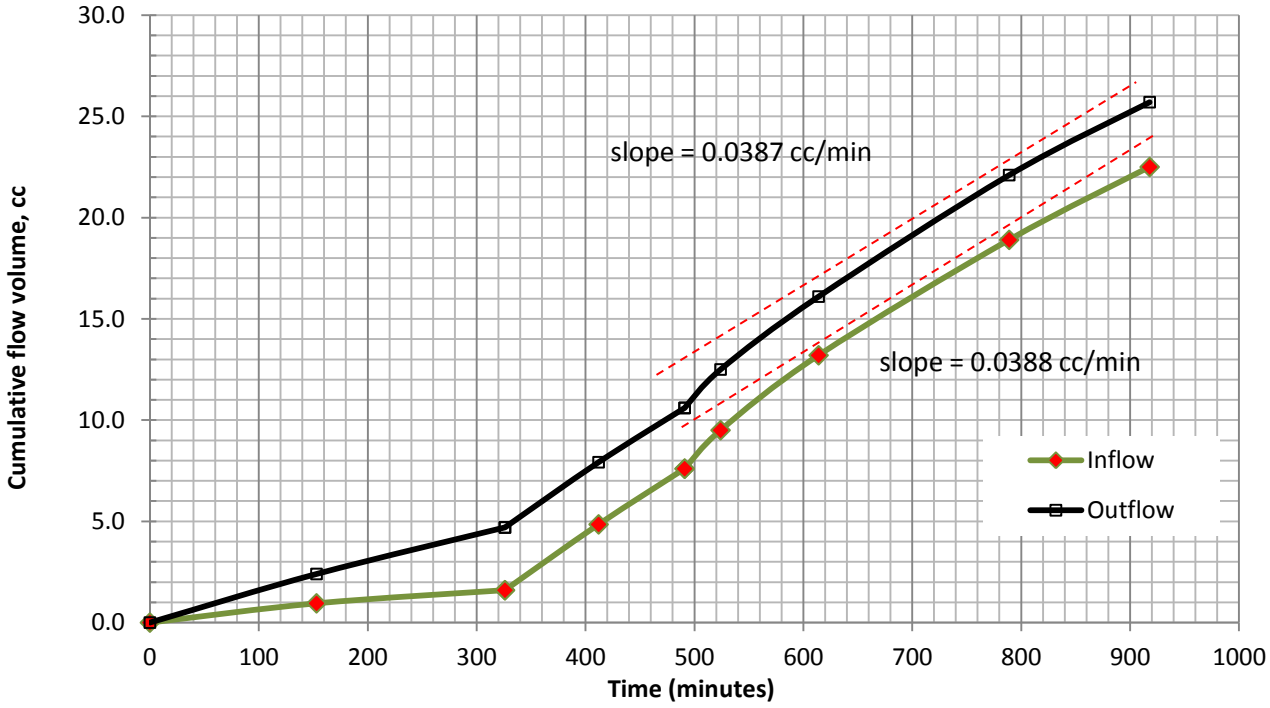
CLIENT:	Knight Piesold Consulting
PROJECT:	Blackwater Project
MDH Job No:	611748
DATE:	13/03/2013

SAMPLE: GT12-45 Remolded, Standard Proctor Effort

Testing Summary:

Cell pressure =	230 kPa	Final Water Content =	13.0%
Average back pressure =	200 kPa	Final Dry Density =	1990 kg/m^3
Head across specimen =	67.5 cm	Final deg of saturation =	100%
Hydraulic gradient =	17.0		
Initial sample diameter =	72.98 mm	Inflow rate =	0.03880 cc/min
Initial sample height =	39.60 mm	Outflow rate =	0.03870 cc/min
Initial Water Content =	15.2%	Average flow rate =	0.03875 cc/min
Initial Dry Density =	1950 kg/m^3		
Initial Deg of saturation =	100%	**Hydraulic Conductivity (based on average flow rate):**	
Permeant:	de-aired tap-water	k = 9.1E-07 cm/s	

Comments:



The testing services reported here have been performed in accordance with accepted local industry standards.

The results presented are for the sole use of the designated client only.

This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

TRIAXIAL HYDRAULIC CONDUCTIVITY TEST REPORT

Test reference: ASTM D 5084

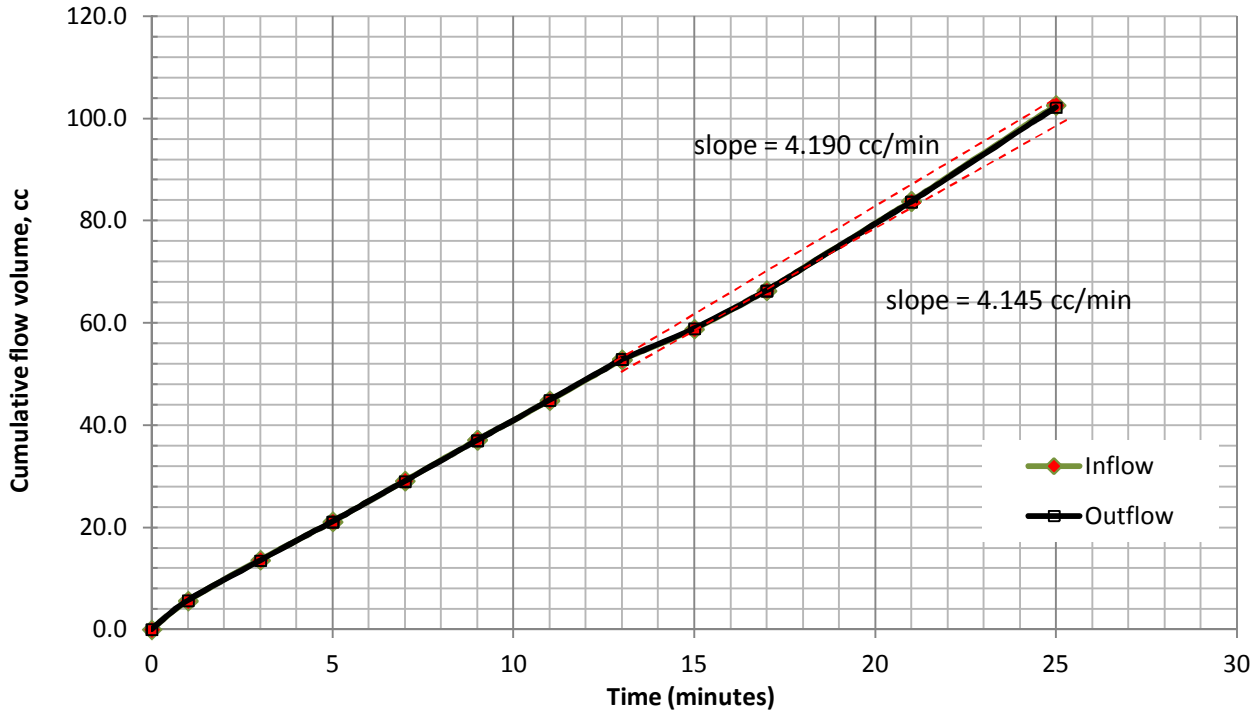
CLIENT:	Knight Piesold Consulting
PROJECT:	Blacwater Project
MDH Job No:	611748
DATE:	10-Jan-13

SAMPLE: GT12-46 Remolded, Standard Proctor Effort

Testing Summary:

Cell pressure =	230 kPa	Final Water Content =	16.0%
Average back pressure =	200 kPa	Final Dry Density =	1627 kg/m^3
Head across specimen =	67.1 cm	Final deg of saturation =	100%
Hydraulic gradient =	17.5		
Initial sample diameter =	73.46 mm	Inflow rate =	4.1900 cc/min
Initial sample height =	38.28 mm	Outflow rate =	4.1450 cc/min
Initial Water Content =	11.5%	Average flow rate =	4.1675 cc/min
Initial Dry Density =	1801 kg/m^3		
Initial Deg of saturation =	59%	**Hydraulic Conductivity (based on average flow rate):**	
Permeant:	de-aired tap-water	k = 9.3E-05 cm/s	

Comments:



The testing services reported here have been performed in accordance with accepted local industry standards.

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This report constitutes a testing service only. It does not represent any interpretation or opinion regarding specification compliance or material suitability.

Engineering interpretation will be provided by MDH Engineered Solutions Corp upon request.

November 29, 2012
Lab no. 212733

Ms. Josie Speed
Knight Piesold Ltd.
750 W. Pender Street, Suite 1400
Vancouver, BC V6C 2T8
CANADA

Dear Ms. Speed:

Enclosed are the x-ray diffraction (XRD) analytical results for your sample, “GT12-42 82.90-83.06m” received after business hours on November 27. Also enclosed are the “raw” data in graph form, as you requested. This sample was analyzed on a “rush” basis (one business day to the next turnaround for DRY samples) so this report will be emailed to you by November 30. The signed acknowledgment of our “New Client Credit Application” will be mailed with this report.

The entire sample was crushed into -1/2" pieces and air-dried before grinding and analysis. A representative portion of the dry, crushed sample was ground to approximately -400 mesh in a steel swing mill, packed into a well-type plastic holder and then scanned with the diffractometer over the range, 3-61° 2θ using Cu-Kα radiation. The results of the scan are summarized as approximate mineral weight percent concentrations on the enclosed table labeled, “Bulk XRD Results.” Estimates of mineral concentrations were made using our XRF-determined elemental composition and the relative peak heights/areas on the XRD scan. The detection limit for an average mineral in this sample is ~1-3% and the analytical reproducibility is approximately equal to the square root of the amount. “Unidentified" accounts for that portion of the XRD scan which could not be resolved and a “?” indicates doubt in both mineral identification and amount.

The dry, crushed sample was subjected to a size separation procedure based on Stokes’ Law to concentrate the clay-size (-2µm) fraction for XRD analysis. A representative portion of the sample was blended with distilled water and 10 ml of 5% Calgon solution to disaggregate the sample without reducing grain size. The mixture was brought up to volume in a 1000 ml graduated cylinder. The suspension was allowed to settle for 19.5 hrs and then 20 ml of the material suspended above the 300 ml mark in the cylinder were drawn into a pre-weighed beaker, dried at ~75°C and the weight of the clay-size material determined. The table labeled, “Clay Size Separation Results” lists the weight percent -2µm particles concentrated by this procedure. This figure should not be interpreted as the total weight percent of clay minerals in the sample but as the weight percent of -2µm material concentrated by this procedure.

The remaining suspension was siphoned off for XRD analysis of the clay-size fraction. A portion of the suspension was drawn onto a cellulose acetate filter and then the deposited material was rolled onto a glass disk forming an "oriented mount." The oriented mount was scanned over the range, 2-62° 2θ using Cu-Kα radiation, treated with glycol and then re-scanned over the range, 2-22°. The table labeled, "XRD Results for -2μm Fraction" summarizes the results of these scans as approximate mineral weight percents. Estimates of mineral concentrations are based on the relative peak areas on the XRD scans and comparison to the XRD results for the bulk sample. The detection limits and reproducibility are similar to those for the bulk sample.

Thank you for the opportunity to be of service to Inter-Mountain Labs.

Sincerely,

Peggy Dalheim

The Mineral Lab ®

Knight Piesold **November 29, 2012**
"Rush" Bulk XRD Results for Sample, "GT12-42 82.90-83.06m" **Lab no. 212733**

Mineral Name	Chemical Formula	Approx. Wt %
Quartz	SiO_2	10
Plagioclase feldspar	$(Na,Ca)Al(Si,Al)_3O_8$	27
K-feldspar	$KAlSi_3O_8$	10
Smectite	$(Ca,Na)_x(Al,Mg,Fe)_4(Si,Al)_8O_{20}(OH,F)_4 \bullet nH_2O$	46
Apatite	$Ca_5(PO_4,CO_3)_3(OH,F,Cl)$	<2?
Hematite	Fe_2O_3	<3?
"Unidentified"	?	<5

Initial _____

Date _____

Analysis performed by The Mineral Lab, Inc

Knight Piesold **November 29, 2012**
"Rush" Clay Size Separation Results for Sample, "GT12-42 82.90-83.06m" **Lab no. 212733**

Weight % -2µm Material Concentrated
6.7

Initial _____

Date _____

Analysis performed by The Mineral Lab, Inc

Knight Piesold **November 29, 2012**
"Rush" XRD Results for -2µm Fraction of Sample, "GT12-42 82.90-83.06m" **Lab no. 212733**

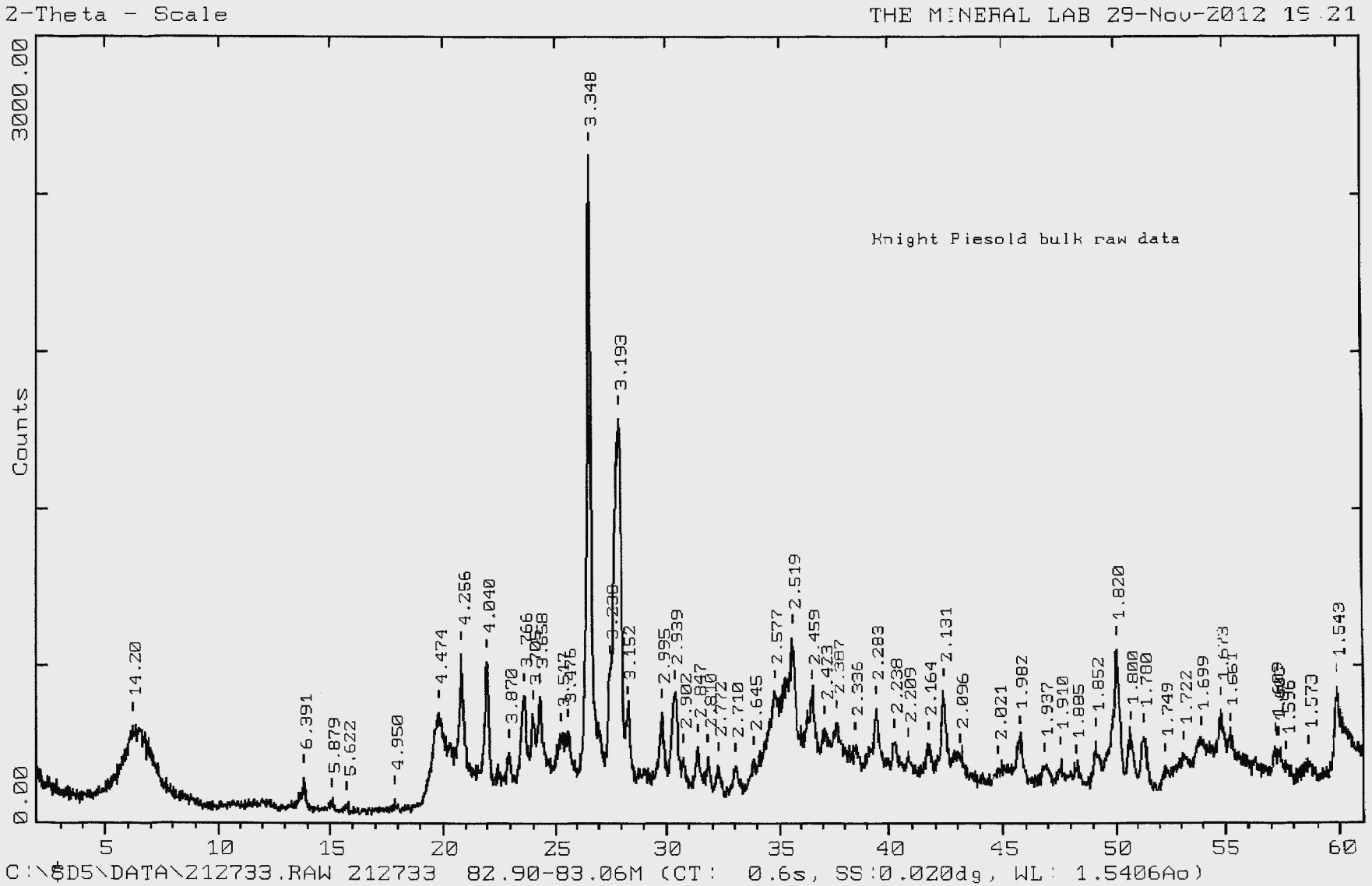
Mineral Name	Chemical Formula	Approx. Wt %
Smectite	$(Ca,Na)_x(Al,Mg,Fe)_4(Si,Al)_8O_{20}(OH,F)_4 \bullet nH_2O$	>90
Kaolinite	$Al_2Si_2O_5(OH)_4$	<5
Quartz	SiO_2	<3
Plagioclase feldspar	$(Na,Ca)Al(Si,Al)_3O_8$	<3
"Unidentified"	?	<5

Initial _____

Date _____

Analysis performed by The Mineral Lab, Inc

The Mineral Lab ®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2.131
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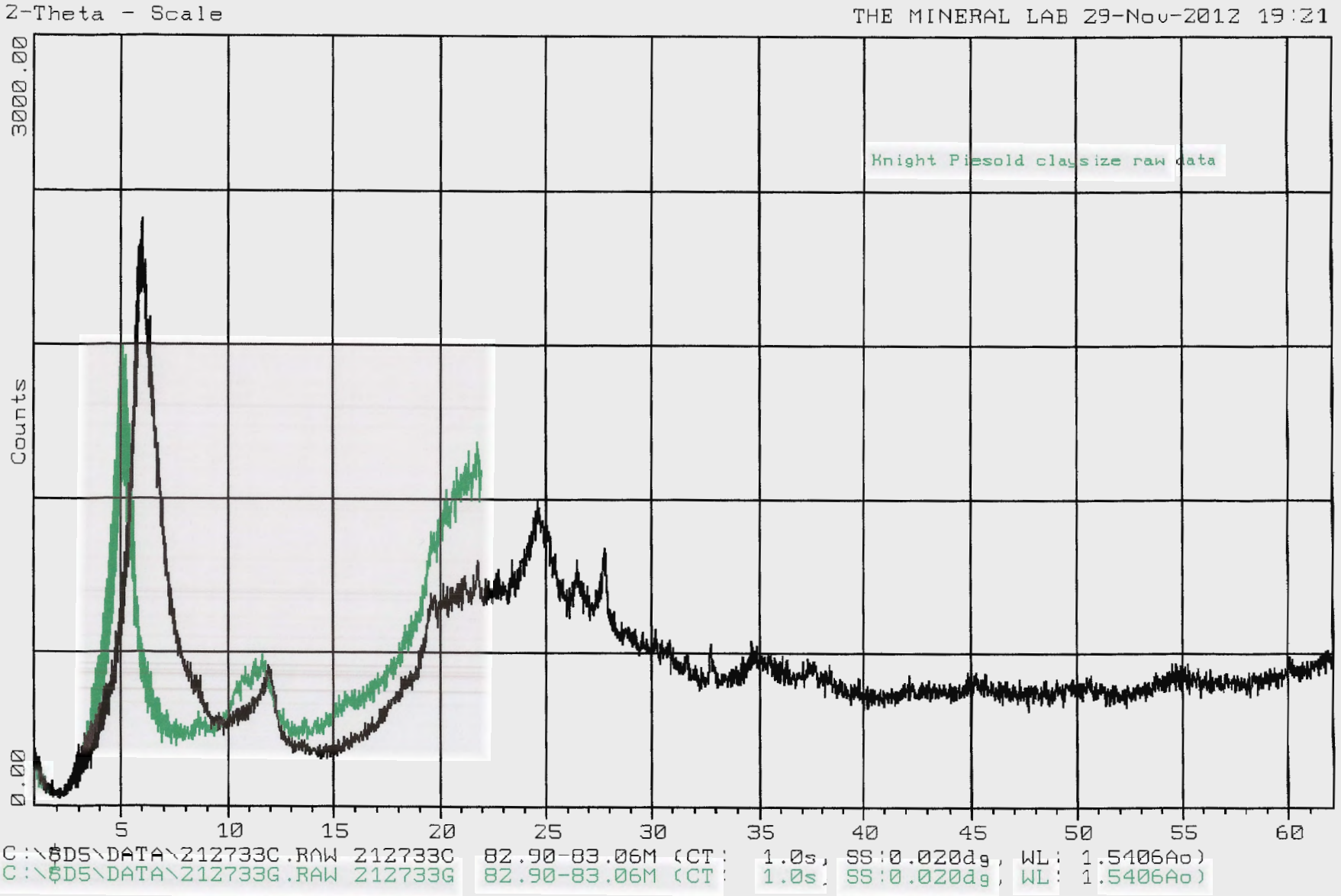
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APPENDIX D3

ROCK TESTING

(Pages D3-1 to D3-9)



NORMAN B. KEEVIL
INSTITUTE OF MINING ENGINEERING

Rock Strength Laboratory Report

Prepared for: Knight Piesold Ltd.
Blackwater Project

May 5, 2012

LABORATORY TESTING

May 2012

Testing Date: May, 2012

Tested by: Paul Hughes

Tested at: Norman B Keevil Institute of Mining Engineering, University of British Columbia

Testing Program: This program consisted of thirty-one (31) core samples for Unconfined Compressive Strength Testing with Elastic Modulus readings. Twenty-five (25) samples were suitable for testing.

Samples GT12-02/UCS 02-06; GT12-02/UCS02-07; GM12-03/UCS03-03; GM12-03/UCS03-04; GM12-03/UCS03-06; and GM12-05/UCS05-01 were not competent for testing.

Equipment: MTS Electro-Hydraulic Testing Machine

Method: ISRM-1979 (UCS & Modulus)

Procedure: UCS samples identified as competent were wet cut, surface polished and tested per ISRM specifications.

Comments: Samples GM12-05/UCS05-03 & GT12-08/UCS 2 had audible breaking noises during loading before failure. The audible noise corresponded with the deviations in the stress-strain graphs. The audible cracking is likely slippage along a pre-existing discontinuity plane.

For GT12-05/UCS05-03 2 the listed elastic modulus properties readings were obtained by calculating the slope for data points per ISRM standard at the 50% point

of UCS. Although these points are shown as negative strain (relative to initial reading), it can be seen through inspection of the graph that the near-linear trend between the data points before and after the audible crack is similar.

Sample GM12-01/UCS 01-02 did not behave elastically during loading. Caution should be used when using the Young's Modulus for this samples. Poisson's Ratio was not reported for this samples as the value exceeds the physical limit of Poisson's Ratio of 0.5.

Samples GM12-01/UCS01-2.5; GM12-01/UCS01-4; GM12-02/UCS02-1; GM12-02/UCS02-2; GM12-02/UCS02-3; and GM12-08/UCS 1 were high strength samples. These samples exceeded the 320 kN load capacity of the strain gauges used in testing (nominal 110 MPa stress). As such the complete stress-strain profiles of the samples were not recorded. It was found that this was not an issue when determining the elastic modulus values of the samples as the recorded stress-strain behavior included the 50% of UCS point that is used to obtain the elastic modulus values per ISRM standards.

Summary

Unconfined Compressive and Elastic Modulus Test Results

Borehole ID	Sample ID	Depth From: (m)	Depth To: (m)	Lithology	Height H	Diameter d (mm)	Ratio H/d	UCS (MPa)	UCS (psi)	Young Modulus E (GPa)	Poisson Ratio ν ( )
GM12-01	UCS01-02	76.80	77.00	Intermediate Metavolcanics	142.19	59.55	2.39	54.4	7893	110.53	N/A
GM12-01	UCS01-02.5	110.76	110.90	Mafic Intrusive	122.34	59.62	2.05	152.8	22153	87.07	0.214
GM12-01	UCS01-03	124.70	124.98	Mafic Metavolcanics	172.42	59.76	2.89	56.1	8134	56.23	0.199
GM12-01	UCS01-04	171.00	171.17	Synvolcanic Felsic to Intermediate Intrusives	153.00	59.94	2.55	184.3	26719	69.65	0.167
GM12-01	UCS01-05	212.62	212.98	Intermediate Metavolcanics	176.33	59.63	2.96	31.3	4539	69.25	0.173
GM12-01	UCS01-06	322.77	323.12	Mafic Intrusive	165.97	59.99	2.77	38.5	5581	56.56	0.200
GM12-01	UCS01-07	340.73	341.03	Mafic Metavolcanics	125.14	59.65	2.10	36.3	5262	45.96	0.285
GM12-01	UCS01-08	385.60	386.00	Synvolcanic Felsic to Intermediate Intrusives	167.72	60.31	2.78	73.2	10615	76.91	0.167
GM12-02	UCS02-01	103.57	103.84	Intermediate Metavolcanics	172.34	60.74	2.84	137.1	19874	40.53	0.199
GM12-02	UCS02-02	140.60	140.76	Mafic Intrusive	141.15	60.30	2.34	180.7	26197	63.03	0.183
GM12-02	UCS02-03	248.71	248.93	Mafic Metavolcanics	176.34	60.38	2.92	169.1	24519	72.87	0.189
GM12-02	UCS02-04	42.35	42.63	Synvolcanic Felsic to Intermediate Intrusives	135.85	59.64	2.28	53.4	7746	15.75	0.360
GM12-02	UCS02-05	352.64	352.82	Intermediate Metavolcanics	150.49	60.41	2.49	57.9	8389	71.74	0.249
GM12-02	UCS02-08	397.00	397.20	Synvolcanic Felsic to Intermediate Intrusives	153.85	60.37	2.55	66.4	9622	69.59	0.164
GM12-03	UCS03-01	60.75	61.00	Intermediate Metavolcanics	181.35	60.32	3.01	107.8	15629	17.13	0.167
GM12-03	UCS03-05	254.75	255.02	Synvolcanic Felsic to Intermediate Intrusives	177.95	60.34	2.95	25.9	3752	66.51	0.136
GM12-05	UCS05-02	173.11	173.38	Mafic Metavolcanics	178.58	60.14	2.97	23.5	3407	38.92	0.217
GM12-05	UCS05-03	235.25	235.52	Synvolcanic Felsic to Intermediate Intrusives	181.04	60.50	2.99	102.0	14797	25.69	0.159
GM12-05	UCS05-04	290.63	290.94	Intermediate Metavolcanics	180.73	60.74	2.98	98.5	14277	53.59	0.213
GM12-05	UCS05-05	339.74	339.94	Mafic Intrusive	185.53	60.34	3.07	27.8	4033	63.18	0.186
GT12-03	UCS 1	71.70	72.09	Mafic Metavolcanics	159.55	60.55	2.64	37.7	5468	28.33	0.203
GT12-07	UCS 1	21.94	22.23	Synvolcanic Felsic to Intermediate Intrusives	178.93	60.48	2.96	70.9	10282	29.95	0.246
GT12-07	UCS 2	32.48	32.99	Intermediate Metavolcanics	181.34	60.49	3.00	91.9	13319	23.45	0.195
GT12-08	UCS 1	3.72	4.04	Mafic Intrusive	181.96	60.55	3.01	193.0	27991	67.44	0.253
GT12-08	UCS 2	27.28	27.70	Mafic Metavolcanics	179.62	60.24	2.98	90.6	13131	62.28	0.218

ELASTIC MODULUS AND UNCONFINED COMPRESSIVE STRENGTH TEST
(ISRM-1979)

Borehole ID	GT12-03
Sample ID	UCS 1
Depth From (m):	71.7
Depth To (m):	72.09
Lithology	Mafic Metavolcanics
Tested By:	P.Hughes
Young Modulus, E (GPa)	**28.33**
Poisson Ratio, ν	**0.20**
Failure Mode:	**Shear**

Before Test

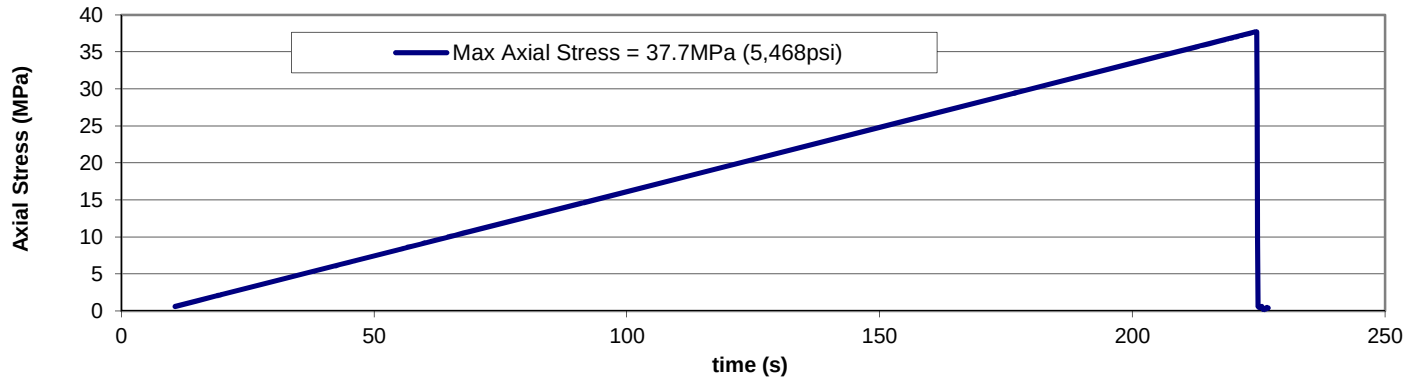


After Test

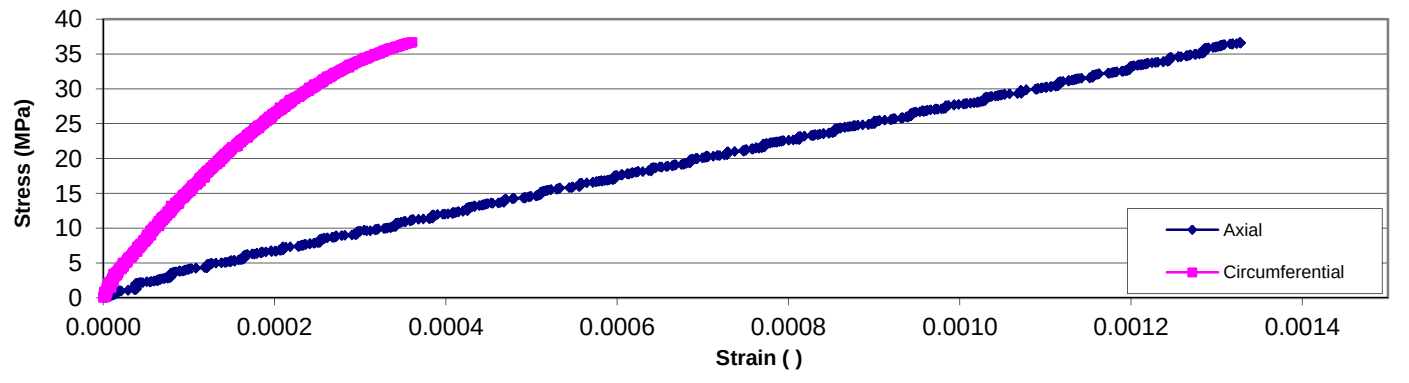


Diameter, (ϕ)	Area, (A)	Height, (h)	Ratio	Peak Load	σ_{UCS}	
(mm)	(mm^2)	(mm)	h/ϕ	(kN)	(MPa)	(psi)
60.55	2879.5	159.55	2.6	108.6	37.7	5,468

Unconfined Compressive Strength Test



Stress-Strain Curves



ELASTIC MODULUS AND UNCONFINED COMPRESSIVE STRENGTH TEST
(ISRM-1979)

Borehole ID	GT12-07
Sample ID	UCS 1
Depth From (m):	21.94
Depth To (m):	22.23
Lithology	Synvolcanic Felsic to Intermediate Intrusives
Tested By:	P.Hughes
Young Modulus, E (GPa)	**29.95**
Poisson Ratio, ν	**0.25**
Failure Mode:	**Shear**

Before Test

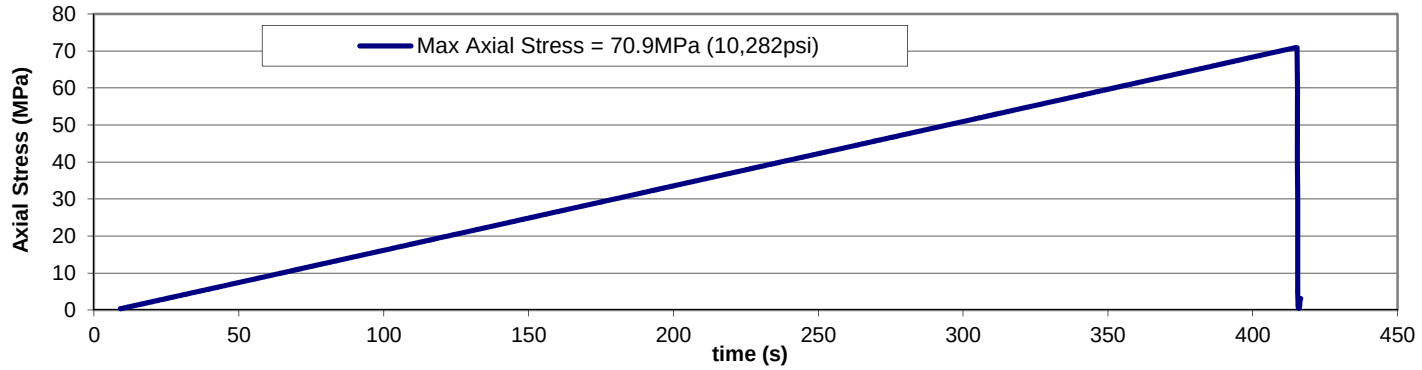


After Test

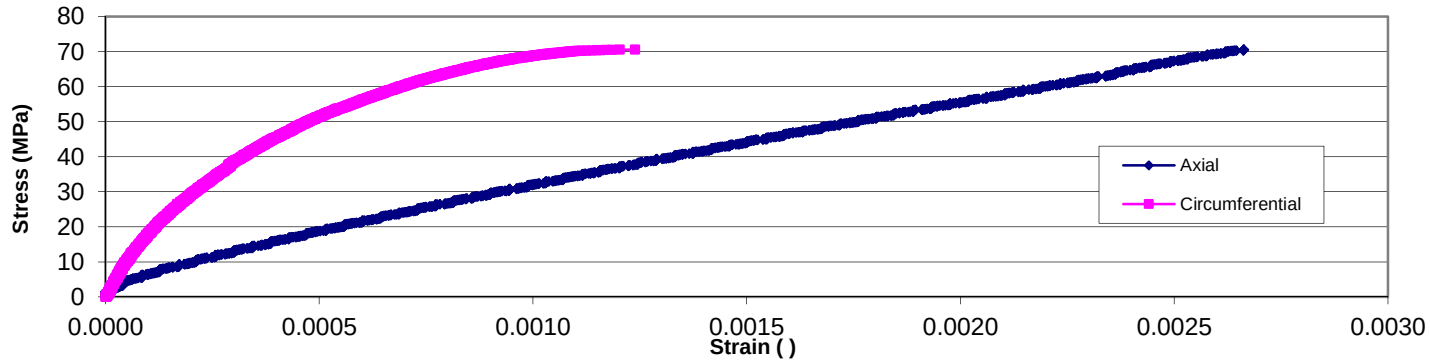


Diameter, (ϕ)	Area, (A)	Height, (h)	Ratio	Peak Load	σ_{UCS}	
(mm)	(mm^2)	(mm)	h/ϕ	(kN)	(MPa)	(psi)
60.48	2872.9	178.93	3.0	203.7	70.9	10,282

Unconfined Compressive Strength Test



Stress-Strain Curves



ELASTIC MODULUS AND UNCONFINED COMPRESSIVE STRENGTH TEST
(ISRM-1979)

Borehole ID	GT12-07
Sample ID	UCS 2
Depth From (m):	32.48
Depth To (m):	32.99
Lithology	Intermediate Metavolcanics
Tested By:	P.Hughes
Young Modulus, E (GPa)	**23.45**
Poisson Ratio, ν	**0.19**
Failure Mode:	**Shear**

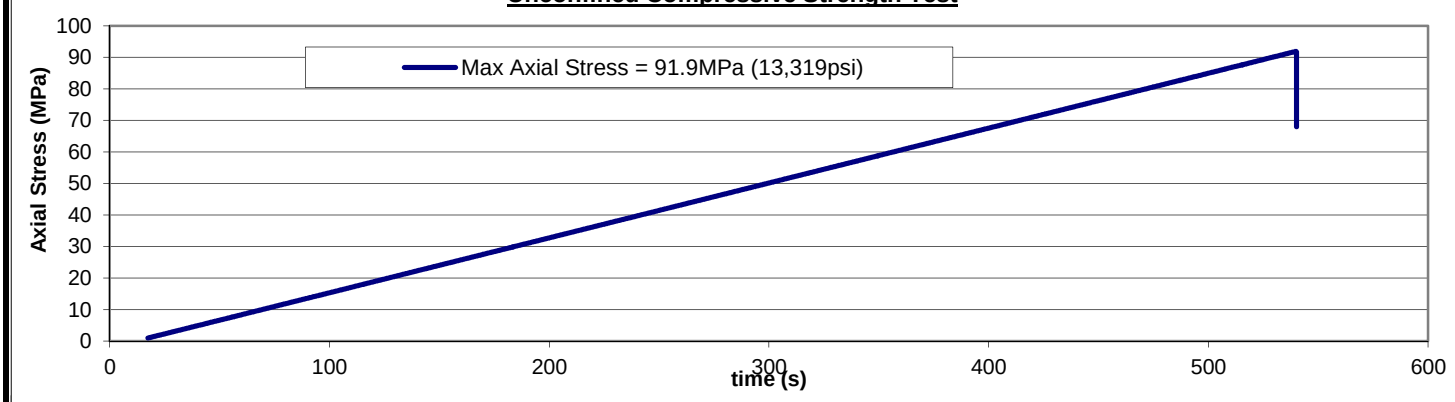
Before Test

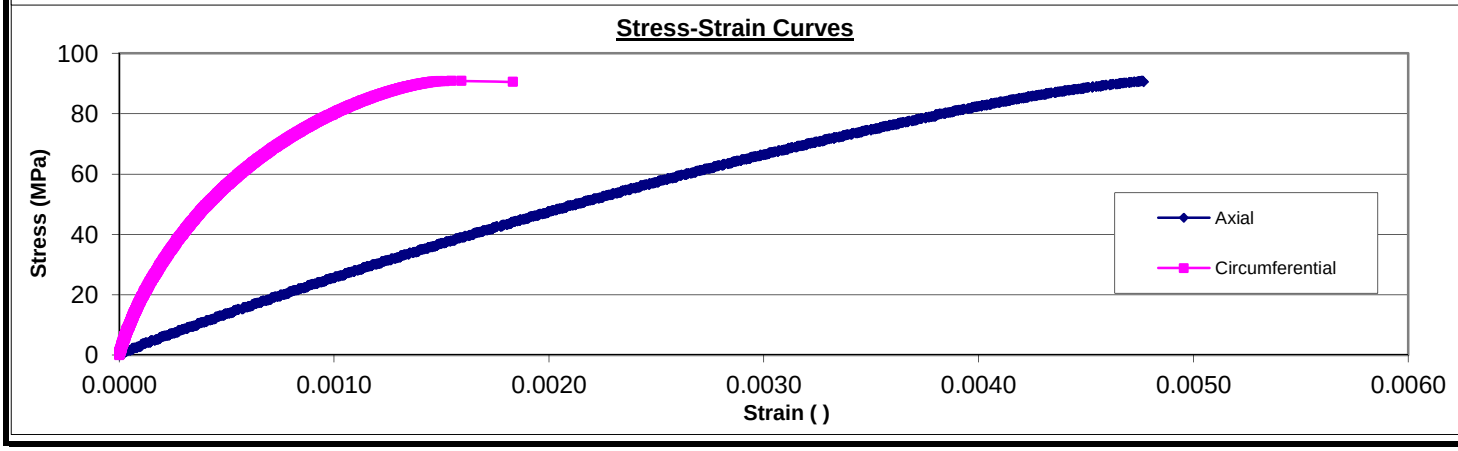


After Test



Diameter, (ϕ)	Area, (A)	Height, (h)	Ratio	Peak Load	σ_{UCS}	
(mm)	(mm^2)	(mm)	h/ϕ	(kN)	(MPa)	(psi)
60.49	2873.8	181.34	3.0	264.0	91.9	13,319





ELASTIC MODULUS AND UNCONFINED COMPRESSIVE STRENGTH TEST
(ISRM-1979)

Sample:	GT12-08
Borehole:	UCS 1
Depth (m):	3.72
Geological Unit:	4.04
Description:	Mafic Intrusive
Tested By:	P.Hughes
Young Modulus, E (GPa)	**67.44**
Poisson Ratio, ν	**0.25**
Failure Mode:	**Shear**

Before Test

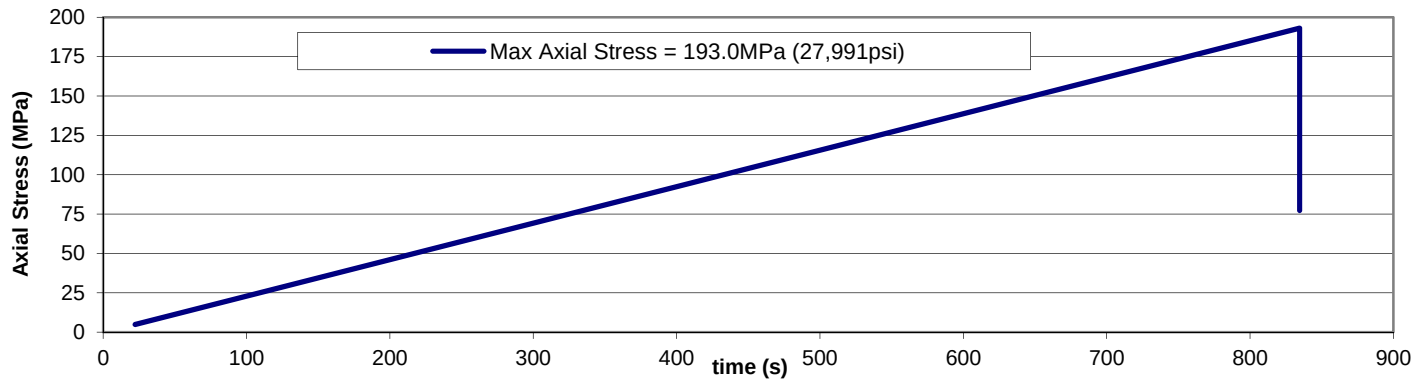


After Test

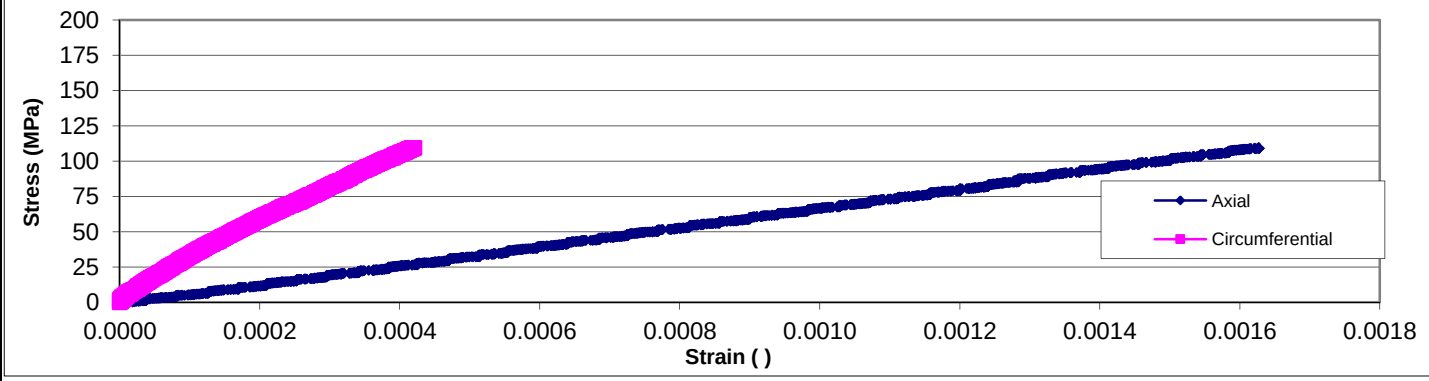


Diameter, (ϕ)	Area, (A)	Height, (h)	Ratio	Peak Load	σ_{UCS}	
(mm)	(mm^2)	(mm)	h/ϕ	(kN)	(MPa)	(psi)
60.55	2879.5	181.96	3.0	555.9	193.0	27,991

Unconfined Compressive Strength Test



Stress-Strain Curves



ELASTIC MODULUS AND UNCONFINED COMPRESSIVE STRENGTH TEST
(ISRM-1979)

Sample:	GT12-08
Borhehole:	UCS 2
Depth (m):	27.28
Geological Unit:	27.70
Description:	Mafic Metavolcanics
Tested By:	P.Hughes
Young Modulus, E (GPa)	**62.28**
Poisson Ratio, ν	**0.22**
Failure Mode:	**Shear**

Before Test

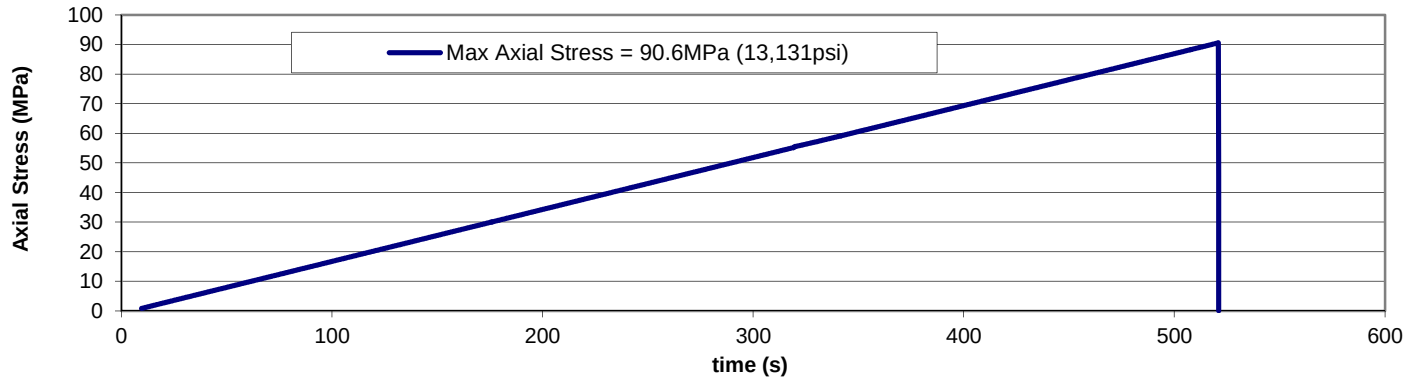


After Test

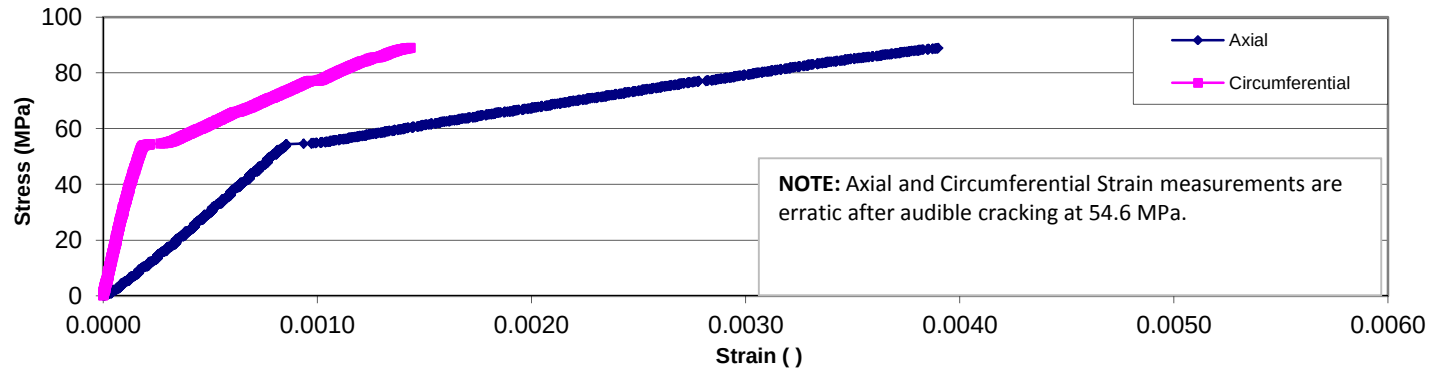


Diameter, (ϕ)	Area, (A)	Height, (h)	Ratio	Peak Load	σ_{UCS}	
(mm)	(mm^2)	(mm)	h/ϕ	(kN)	(MPa)	(psi)
60.24	2850.1	179.62	3.0	258.1	90.6	13,131

Unconfined Compressive Strength Test



Stress-Strain Curves



APPENDIX E

SEISMIC REFRACTION REPORT

(Pages E1-1 to E1-95)

KNIGHT PIESOLD LTD.

NEW GOLD INC.

REPORT ON

SEISMIC REFRACTION &

MASW INVESTIGATION

BLACKWATER PROJECT

VANDERHOOF AREA, B.C.

by

Alex Smith, M.Sc.

Cliff Candy, P.Geo.

August, 2012 **PROJECT FGI-1262**

Frontier Geosciences Inc. 237 St. Georges Avenue, North Vancouver, B.C., Canada V7L 4T4
Tel: 604.987.3037 Fax: 604.984.3074

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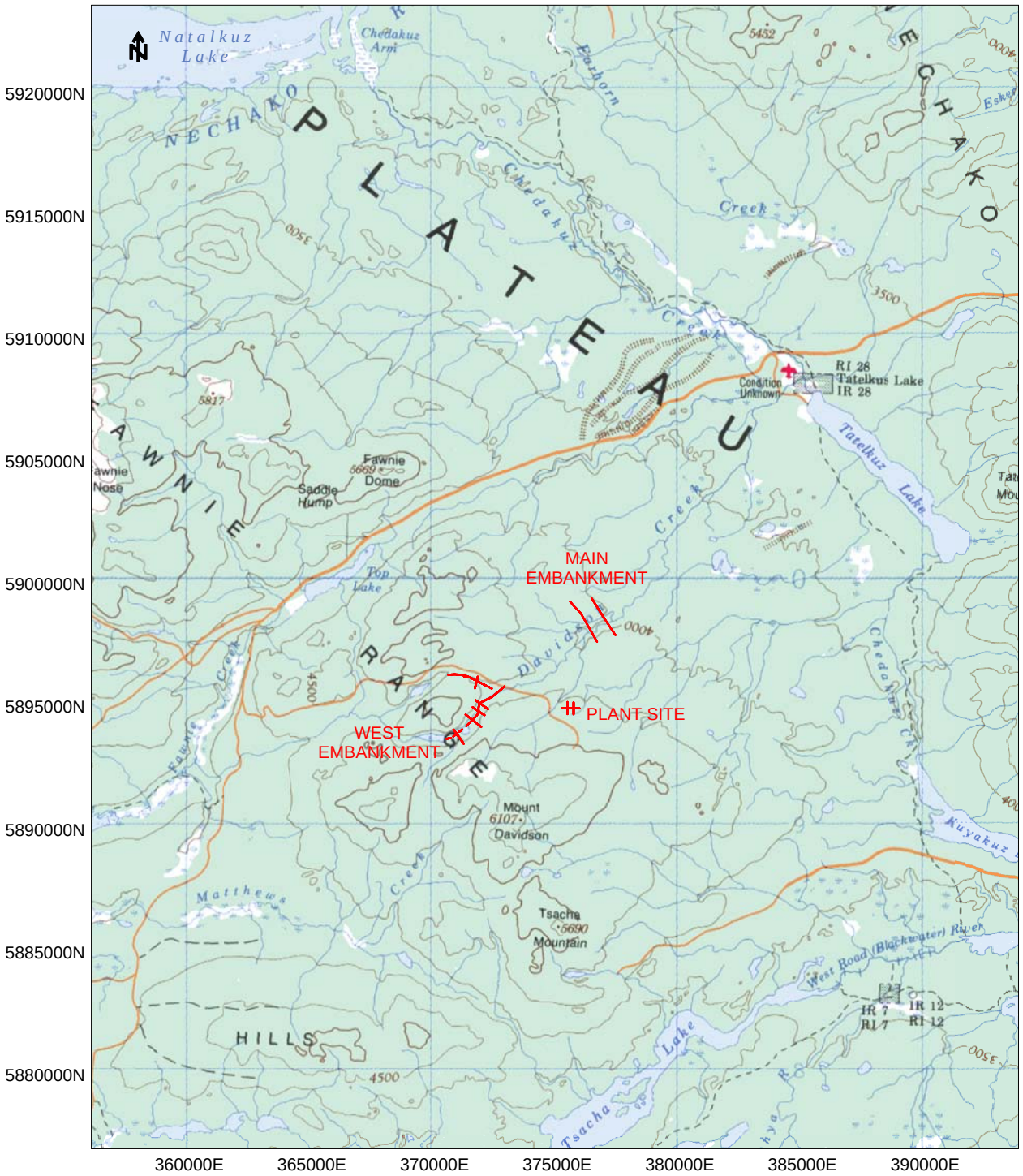
DWG: SL-1-375-M	MASW Interpreted Profile SL-1, Station 375M	Appendix
DWG: SL-1-395-M	MASW Interpreted Profile SL-1, Station 395M	Appendix
DWG: SL-1-465-M	MASW Interpreted Profile SL-1, Station 465M	Appendix
DWG: SL-1-485-M	MASW Interpreted Profile SL-1, Station 485M	Appendix
DWG: SL-1-505-M	MASW Interpreted Profile SL-1, Station 505M	Appendix
DWG: SL-1-595-M	MASW Interpreted Profile SL-1, Station 595M	Appendix
DWG: SL-1-615-M	MASW Interpreted Profile SL-1, Station 615M	Appendix
DWG: SL-1-650-M	MASW Interpreted Profile SL-1, Station 650M	Appendix
DWG: SL-1-670-M	MASW Interpreted Profile SL-1, Station 670M	Appendix
DWG: SL-1-690-M	MASW Interpreted Profile SL-1, Station 690M	Appendix
DWG: SL-2-035-M	MASW Interpreted Profile SL-2, Station 35M	Appendix
DWG: SL-2-055-M	MASW Interpreted Profile SL-2, Station 55M	Appendix
DWG: SL-2-075-M	MASW Interpreted Profile SL-2, Station 75M	Appendix
DWG: SL-2-140-M	MASW Interpreted Profile SL-2, Station 140M	Appendix
DWG: SL-2-160-M	MASW Interpreted Profile SL-2, Station 160M	Appendix
DWG: SL-2-180-M	MASW Interpreted Profile SL-2, Station 180M	Appendix
DWG: SL-2-265-M	MASW Interpreted Profile SL-2, Station 265M	Appendix
DWG: SL-2-285-M	MASW Interpreted Profile SL-2, Station 285M	Appendix
DWG: SL-2-355-M	MASW Interpreted Profile SL-2, Station 355M	Appendix
DWG: SL-2-375-M	MASW Interpreted Profile SL-2, Station 375M	Appendix
DWG: SL-2-395-M	MASW Interpreted Profile SL-2, Station 395M	Appendix
DWG: SL-2-415-M	MASW Interpreted Profile SL-2, Station 415M	Appendix
DWG: SL-2-435-M	MASW Interpreted Profile SL-2, Station 435M	Appendix
DWG: SL-2-455-M	MASW Interpreted Profile SL-2, Station 455M	Appendix
DWG: SL-3-055-M	MASW Interpreted Profile SL-3, Station 55M	Appendix
DWG: SL-3-070-M	MASW Interpreted Profile SL-3, Station 70M	Appendix
DWG: SL-3-145-M	MASW Interpreted Profile SL-3, Station 145M	Appendix
DWG: SL-3-160-M	MASW Interpreted Profile SL-3, Station 160M	Appendix
DWG: SL-3-180-M	MASW Interpreted Profile SL-3, Station 180M	Appendix
DWG: SL-3-200-M	MASW Interpreted Profile SL-3, Station 200M	Appendix
DWG: SL-3-250-M	MASW Interpreted Profile SL-3, Station 250M	Appendix
DWG: SL-3-270-M	MASW Interpreted Profile SL-3, Station 270M	Appendix
DWG: SL-3-290-M	MASW Interpreted Profile SL-3, Station 290M	Appendix
DWG: SL-3-360-M	MASW Interpreted Profile SL-3, Station 360M	Appendix
DWG: SL-3-380-M	MASW Interpreted Profile SL-3, Station 380M	Appendix
DWG: SL-3-415-M	MASW Interpreted Profile SL-3, Station 415M	Appendix
DWG: SL-3-455-M	MASW Interpreted Profile SL-3, Station 455M	Appendix

1. INTRODUCTION

In the period August 23 to September 22, 2012, Frontier Geosciences Inc. carried out a seismic refraction and Multi-Channel Analysis of Surface Wave (MASW) investigation for Knight Piesold Ltd. at the Blackwater Project near Vanderhoof, British Columbia. The project area is located approximately 110 km southwest of Vanderhoof, accessed by the Kluskus and Kluskus-Ootsa Forest Service Roads. A Survey Location Plan of the survey area is shown at a scale of 1:250,000 in Figure 1.

The purpose of the survey was to determine geological conditions at the proposed Plant Site area, West Embankment and Main Embankment. Site Plans of the Plant Site, Main Embankment area and West Embankment area are illustrated in Figures 2, 7, and 14 at respective scales of 1:5,000, 1:10,000 and 1:10,000.

In all, thirteen seismic traverses were completed in the investigation. Three lines were surveyed at the proposed Plant Site, with two lines completed at the Main Embankment area and eight lines at the West Embankment region. A total of approximately 15.6 kilometres of detailed seismic refraction surveying was carried out in the investigation, on 103 separate seismic spreads. The MASW analysis of the 17 spreads of seismic data located at the Plant Site resulted in 47 shear velocity soundings.



KNIGHT PIESOLD LTD.
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

SURVEY LOCATION PLAN

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:250,000	FIG. 1

2. THE SEISMIC REFRACTION SURVEY METHOD

2.1 Equipment

The seismic refraction investigation was carried out using a Geometrics, Geode, 24 channel, signal enhancement seismograph and Oyo Geo Space, 10 Hz geophones. Geophone intervals along the multicored seismic cables were maintained at 5, 7.5, 10 and 15 metres in order to ensure high resolution data on subsurface layering and effectively image deeper bedrock onsets. The zero delay or instantaneous blasting caps in the small explosive charges used for energy input, were detonated electrically with an Ideal, 5 cap, high voltage, capacitor type blaster.

2.2 Survey Procedure

For each spread, the seismic cable was stretched out in a straight line and the geophones implanted. Six separate 'shots' were then initiated: one at either end of the geophone array, two at intermediate locations along the seismic cable, and one off each end of the line to ensure adequate coverage of the basal layer. The shots were detonated individually and arrival times for each geophone were recorded digitally in the seismograph. Data recorded during field surveying operations was generally of good to excellent quality.

Throughout the survey, notes were recorded regarding seismic line positions in relation to topographic and geological features in the area. Individual geophone locations were labelled in the field. Relative elevations on the seismic lines were recorded by chain and inclinometer with absolute elevations provided by Knight Piesold Ltd.

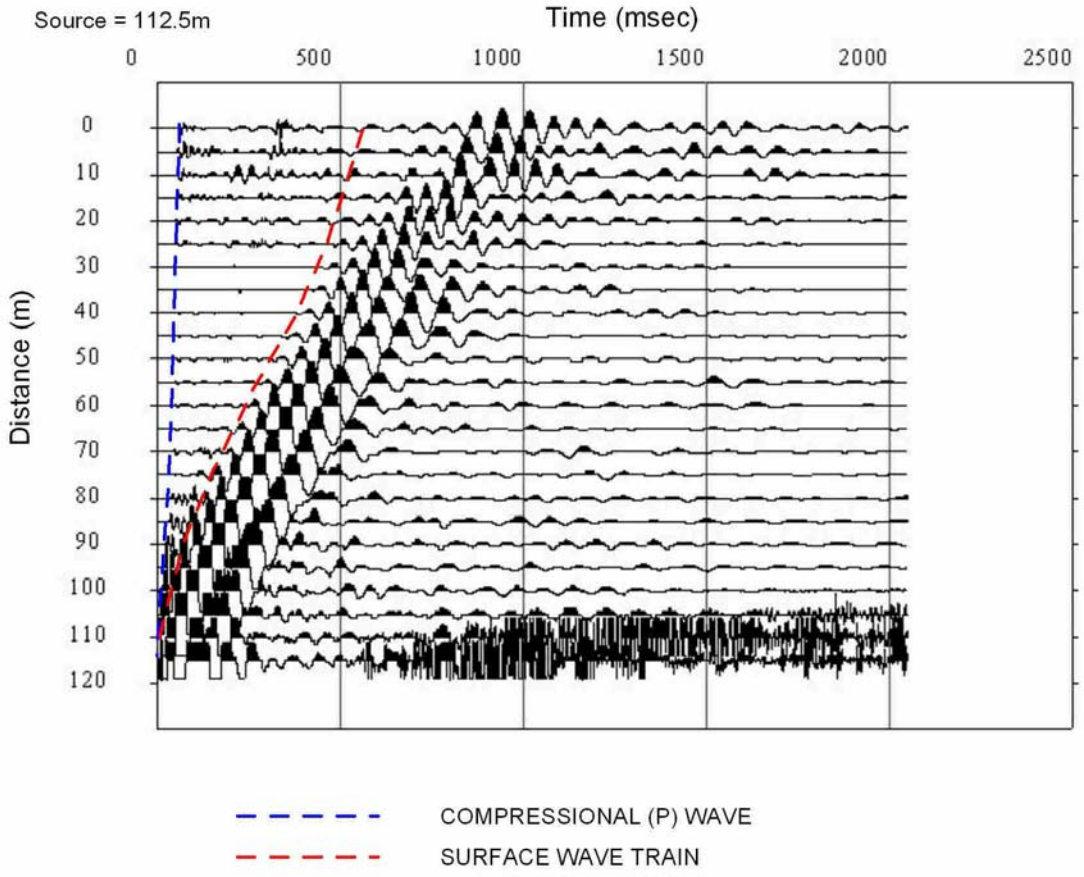
2.3 Interpretive Method

The final interpretation of the seismic data was arrived at using the method of differences technique. This method utilises the time taken to travel to a geophone from shotpoints located to either side of the geophone. Using the total time, a small vertical time is computed which represents the time taken to travel from the refractor up to the ground surface. This time is then multiplied by the velocity of each overburden layer to obtain the thickness of each layer at that point.

3. MULTI-SPECTRAL ANALYSIS OF SURFACE WAVES (MASW)

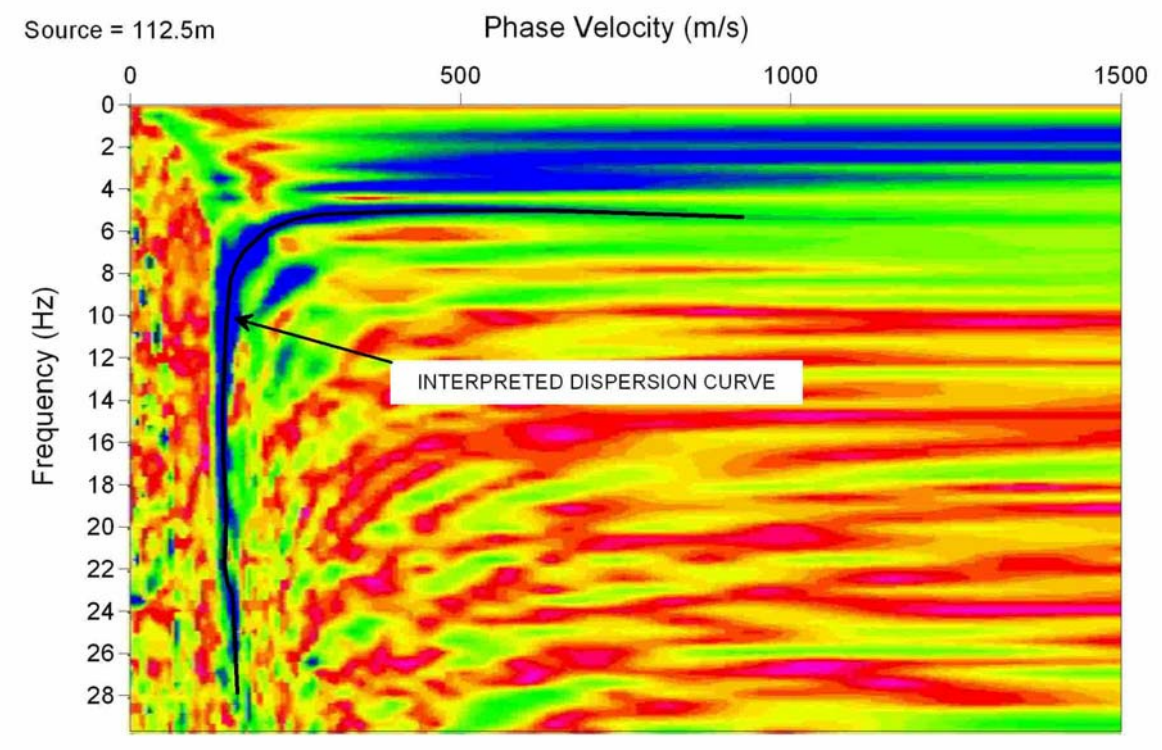
3.1 Equipment and Field Procedure

MASW data was collected using the seismic cables and vertical compressional wave geophones that were employed for the seismic refraction survey work. The MASW method of determining the shear wave profile can be carried out in the active or passive mode, or a combination of the two methods. In the passive mode, background noise or microtremors are utilized as a signal source, thus an active energy source such as a dynamite or weight drop system is not required. In urban environments for instance, the abundant background noise from street traffic provides the necessary surface wave energy for data acquisition. In quieter environments and when the data is gathered as part of a compressional wave refraction survey, the active source method is used. In the passive source approach, a long record (16 seconds) is obtained. The record lengths for active source work are planned to be sufficiently long to capture the full surface wave train. For shear velocity assessment of the Plant site area, only active MASW data were gathered for analysis. An example of an extended record, in shot gather format is shown in the following figure.



3.2 Data Reduction and Interpretation

Interpretation of the MASW data involves a wavefield transformation of the seismogram record. This converts the seismogram from a multichannel shot gather to a dispersion curve that shows the phase velocity of the signal as a function of frequency. The following figure shows an example of the above shot gather converted into a dispersion curve plot.



The fundamental event is then picked on the dispersion curve and this data is inputted into the SeisImager modelling program. The resulting model reveals the shear wave layer velocity structure, and is generally plotted at the centre of the seismic spread. The MASW method is able to identify zones of lower velocity beneath those of higher velocity, often described as velocity inversions.

4. GEOPHYSICAL RESULTS

4.1 General

The results of the seismic interpretations for the Blackwater Plant Site area are illustrated at 1:1000 scale in Figures 3 to 6 in the Appendix. The Tailings Facility main embankment results are shown in Figures 8 to 13. The west embankment results are shown at 1:1000 scale in Figures 15 to 35. Seismic line intersections and drillhole locations were recorded in the field and are indicated on the seismic profiles. MASW results for the Plant Site are plotted at a vertical scale of 1:250 in the Appendix.

4.2 Discussion

4.2.1 Plant Site Area

Analysis of the seismic data at the Plant Site indicates the area is mainly underlain by four distinct velocity layers, with a fifth layer observed near the ends of profile SL-1. There is a thin surficial layer underlying the site with compressional wave velocities that vary from 205 m/s to 320 m/s. Up to 2.3 metres in thickness, this layer is directly correlated with drillhole intersections of loose silty sands and gravel.

Underlying the surficial layer throughout most of the area is a thicker intermediate layer with velocities from 600 m/s to 1250 m/s. This shallow intermediate layer is correlated with drillhole intersections of compact silty sands and gravels. Average thickness for this layer is 3.6 metres, with thinner zones occurring at lower elevations and thicker zones associated with topographic highs.

This intermediate layer is underlain on the eastern and western edges of profile SL-1 by a thick layer of material with velocities of 1400 m/s to 1650 m/s. This layer is interpreted as compact, saturated sands, gravels and silts.

Consistent throughout the Plant Site seismic sections is a thicker, basal, intermediate layer with generally high velocities that range from 1350 m/s to 3300 m/s. Velocities at the southern end of profile SL-2 and western end of profile SL-1A may indicate the presence of a very dense till layer or a combination of dense till and highly weathered bedrock. Other regions are interpreted to contain andesite bedrock in various stages of weathering. Interpreted thicknesses for this intermediate till and rock layer vary from 2.6 to 45.3 metres.

The basal layer with velocities of 3300 m/s to 5325 m/s is the interpreted andesite bedrock surface. Low velocities were observed at 0N and 200N on profile SL-3 and at 450N on profile SL-2. These zones may represent possible shear or fault zones or localized deeper bedrock weathering.

Shear velocities obtained from MASW indicate high shear velocities at depths below 10 metres over large parts of the plant site area. Exceptions are observed from 0E to 180E and 650E to 725E of profile SL-1, and 0N to 40N and 415N to 490N of SL-2. Low shear velocities are also observed from 180N to 200N on profile SL-3, which coincides with lower basal bedrock velocities.

4.2.2 Tailings Management Facility Main Embankment

Interpretation of the data at the Tailings Management Facility (TMF) main embankment indicates the site is underlain by four distinct velocity layers. A thin surficial layer was identified in the data with compressional wave velocities of 315 m/s to 1050 m/s. A maximum of 15 metres in thickness, this surficial layer is consistent with drillhole intersections of firm to stiff, sandy silt, and loose to dense, sand and gravel. An average thickness of 2.7 metres is consistent across seismic lines SL-4 and SL-5.

The surficial layer is underlain by a thick, intermediate layer with compressional wave velocities ranging from 850 m/s to 1825 m/s. Drillholes logs indicate loose to very dense sand and gravel, loose to dense gravelly sand and sandy silt, and very stiff clay and gravel within this layer. This shallow intermediate layer ranges from 2.9 m to 32.2 metres in thickness, with an average thickness of 16.9 metres.

There is throughout the TMF main embankment seismic coverage, a thick basal intermediate layer with velocities varying from 1750 m/s to 2600 m/s. Generally high in velocity, this layer is consistent with drillhole intersections of dense to very dense silts sands and gravels, glacial till, and completely or highly weathered bedrock. This layer varies in thickness in the site area, from a minimum of 24.9 metres to a maximum of 107.8 metres.

The basal layer in the site area with velocities from 3150 m/s to 5400 m/s is the interpreted andesite bedrock surface. Variations in bedrock velocity may indicate the presence of increased zones of weathering or areas of higher fracture frequency or jointing in the rock mass.

4.2.3 Tailings Management Facility West Embankment

4.2.3.1 West Embankment - North Valley

The North Valley of the West Embankment consists of profiles SL-6, SL-7 and SL-8. Interpretations of these profiles indicates the site is underlain by three or four velocity layers. In general, the interpretation indicates either one or two, near-surface, thin layers overlying a thicker sequence of high velocity till or extremely weathered bedrock, which in turn overlies more competent, basal, andesite bedrock.

A surficial layer was identified in the data with compressional wave velocities of 250 m/s to 1400 m/s. The average velocity is approximately 475 m/s. Lower velocities are indicative of loose to compact sands and gravels. Higher velocities indicate more compact to dense sands, gravels and silts.

On profiles SL-6 and SL-8, a significant portion of the surficial layer is underlain by a relatively thin, intermediate layer with compressional wave velocities ranging from 1000 m/s to 1850 m/s. Drillhole MW12-05D, located 43 metres off SL-6, indicates this layer is likely consistent with very stiff to hard sandy silt with traces of gravel. This shallow intermediate layer varies in thickness from 0.4 to 8 metres, with an average thickness of 2.8 metres.

Throughout the North Valley area, a thick basal intermediate layer with velocities varying from 1600 m/s to 3200 m/s was identified. Drillhole MW12-05D indicates this layer is comprised of very stiff to hard silts, sands and gravels and moderately weathered bedrock. Interpreted thicknesses for this layer vary from a minimum of 1.6 metres to a maximum of 25 metres.

The basal layer with compressional wave velocities ranging from 2415 m/s to 6165 m/s is the interpreted competent bedrock surface. The bedrock surface is gently undulating and generally parallels the ground surface on the sections. Lower velocities are extant from 1020ESE to the end of seismic line SL-6 and from 160NNE to 420NNE on line SL-8. This region of lower velocity bedrock suggest either a change in bedrock stratigraphy or increased weathering of the basal layer. Shear velocity analysis using MASW for spread 9 of SL-6 indicate velocities exceeding 760 m/s at depths of 16 metres. By comparison, shear velocity 'rock' conditions from MASW analysis are not interpreted for spread 17 until a depth of 35 metres.

4.2.3.2 West Embankment - South Valley

Interpretations of the South Valley seismic data at the West Embankment indicate the site is underlain by three or four velocity layers. Similar to the North Valley, most areas are underlain by one or two thin surficial layers. Geophone spacings can be significant in determining whether a single velocity layer is interpreted or whether surficial data can be differentiated into loose sediments and an underlying layer of more compact sands and gravels. Overall, the surficial layer exhibits compressional wave velocities of 250 m/s to 1325 m/s and ranges in interpreted thickness from 0 to 10 metres. The average thickness of the layer is 1.9 metres. The underlying intermediate layer is apparent on profiles SL-9, SL-10; significant portions of SL-11, SL-12 and from 0NE to 1540NE and 2790NE to 2940NE on SL-13. Compressional wave velocities for this layer vary from 450 m/s to 2000 m/s. Lower velocities are associated with lines SL-12 and SL-13 which are located in the south of the survey area. Borehole MW12-13D intersected dry sands, gravels and silts in this area. To the northeast, velocities are generally higher, and average 1115 m/s. These velocities are consistent with intersections of dense gravel, sands and clay in borehole GT12-28.

This shallower intermediate layer is underlain by a second intermediate layer with velocities varying from 1450 m/s to 3650 m/s. Borehole GT12-28 indicates this layer is comprised of dense to very dense sands and gravel with some clay. To the southeast, borehole MW12-13D indicates the onset of this intermediate layer coincides with an increase in water content at 10 metres depth and the presence of very dense glacial till at a depth of 17 metres. Areas with compressional wave velocities exceeding 2500 m/s are indicative of very dense glacial till or highly to extremely weathered bedrock.

The basal layer in the site area with velocities from 2845 m/s to 5550 m/s is the interpreted competent bedrock surface. There are isolated areas with lower compressional wave velocities which may represent degrees of weathering within the basal bedrock layer, separate lithologies or areas of higher fracture frequency or jointing in the bedrock.

5. LIMITATIONS

The depths to subsurface boundaries derived from seismic refraction surveys are generally accepted as accurate to within fifteen percent of the true depths to the boundaries. In some cases, unusual geological conditions may produce false or misleading data points with the result that computed depths to subsurface boundaries may be less accurate. In seismic refraction surveying difficulties with a 'hidden layer' or a velocity inversion may produce erroneous depths. The first condition is caused by the inability to detect the existence of a layer because of insufficient velocity contrasts or layer thicknesses. A velocity inversion exists when an underlying layer has a lower velocity than the layer directly above it. The interpreted depths shown on drawings are to the closest interface location, which may not be vertically below the measurement point if the refractor dip direction departs significantly from the survey line location.

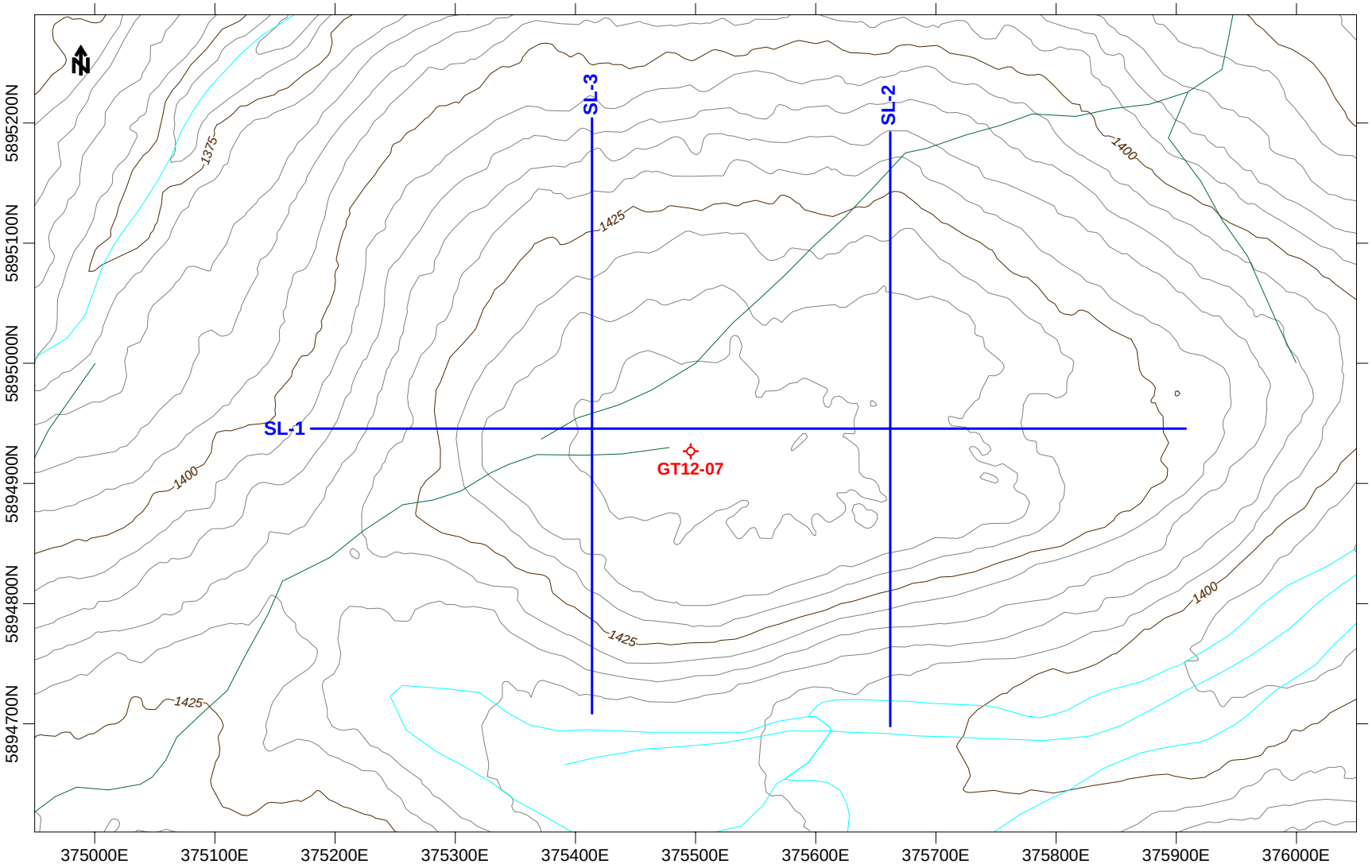
The multi-spectral analysis of surface waves (MASW) method is carried out in the Active or Passive mode with the Active mode generally the most accurate for determination of shallow, shear wave velocities. The method entails collection of data over a full seismic spread with the results plotted at the centre of geophone groupings along the traverse. Limitations include reflection and scattering of surface and body waves due to extreme surface topography and inhomogeneous conditions in the subsurface such as boulder concentrations or isolated soil lenses with contrasting properties. In addition, the averaging of data over a full seismic spread frequently encompasses highly variable conditions, resulting in a general smoothing over the spread length. The method is generally accepted as an effective means of determining shear wave velocities of geological units.

The results are interpretive in nature and are considered to be a reasonably accurate representation of existing subsurface conditions within the limitations of the seismic refraction and MASW methods.

For: Frontier Geosciences Inc.

Alex Smith, M.Sc.

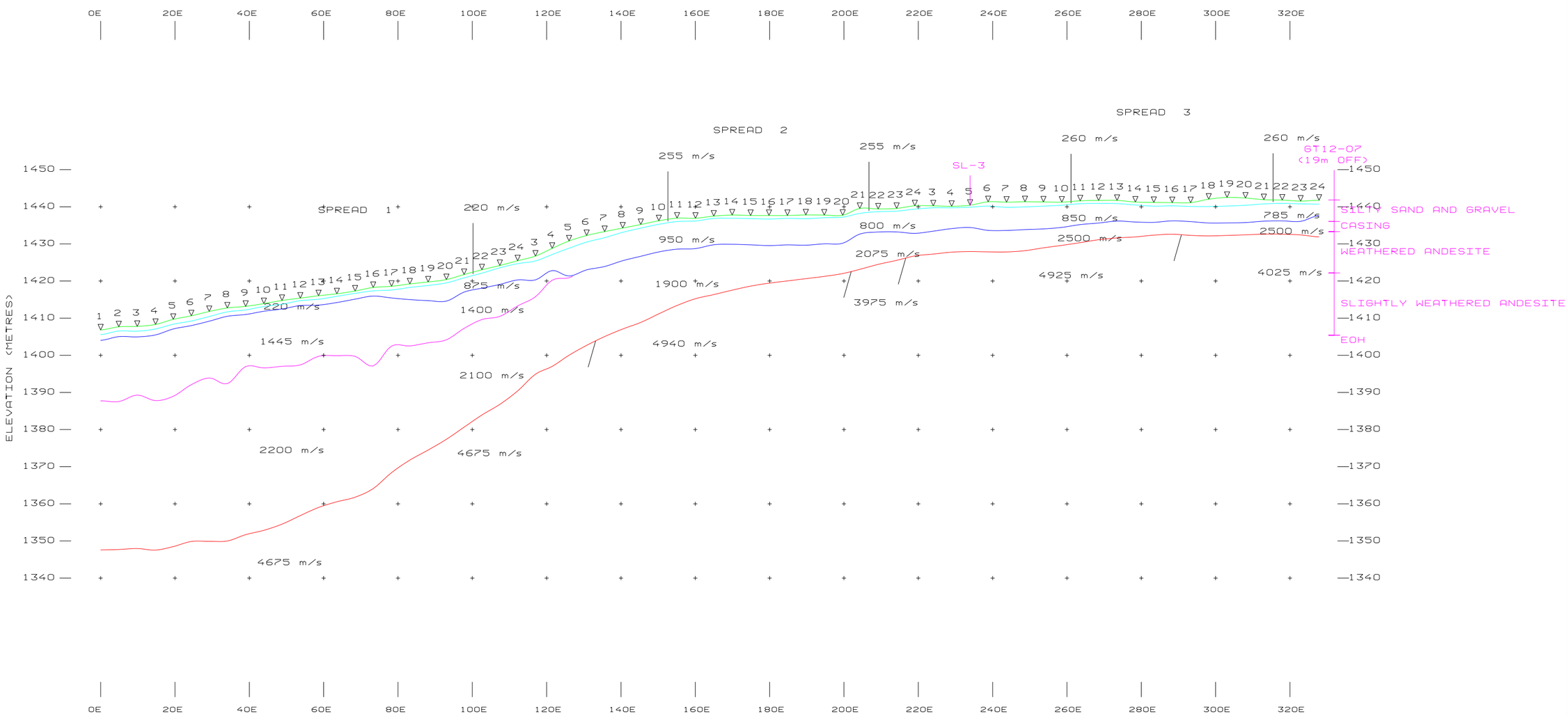
Cliff Candy, P.Geo.



0 50 100 150 200

METRES

KNIGHT PIESOLD LTD. BLACKWATER PROJECT		
SEISMIC REFRACTION SURVEY		
SITE PLAN PLANT SITE		
FRONTIER GEOSCIENCES INC.		
DATE: AUGUST 2012	SCALE 1:5,000	FIG. 2



SEISMIC LINE SL-1A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

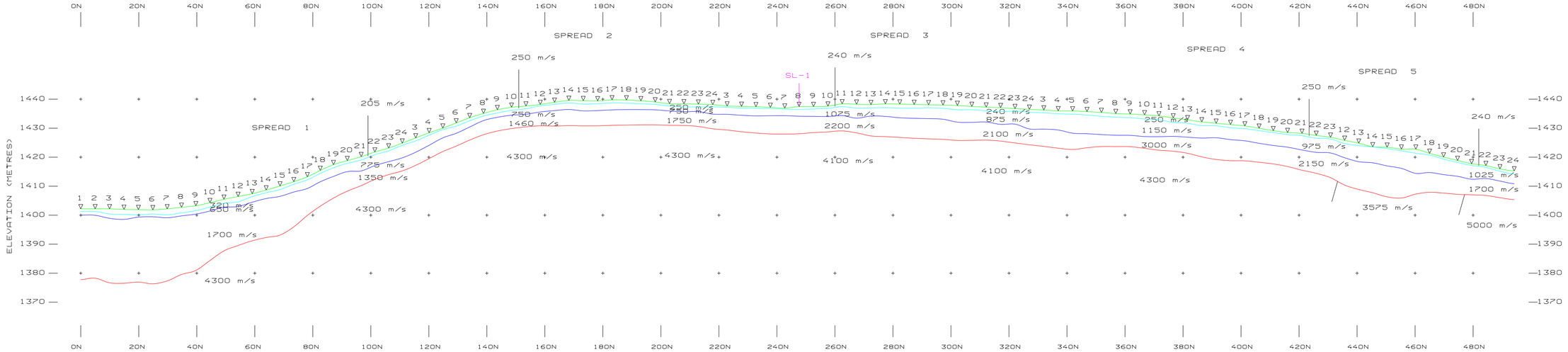
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-1A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.3



SEISMIC LINE SL-2

INSTRUMENT: GEOMETRICS GEODE

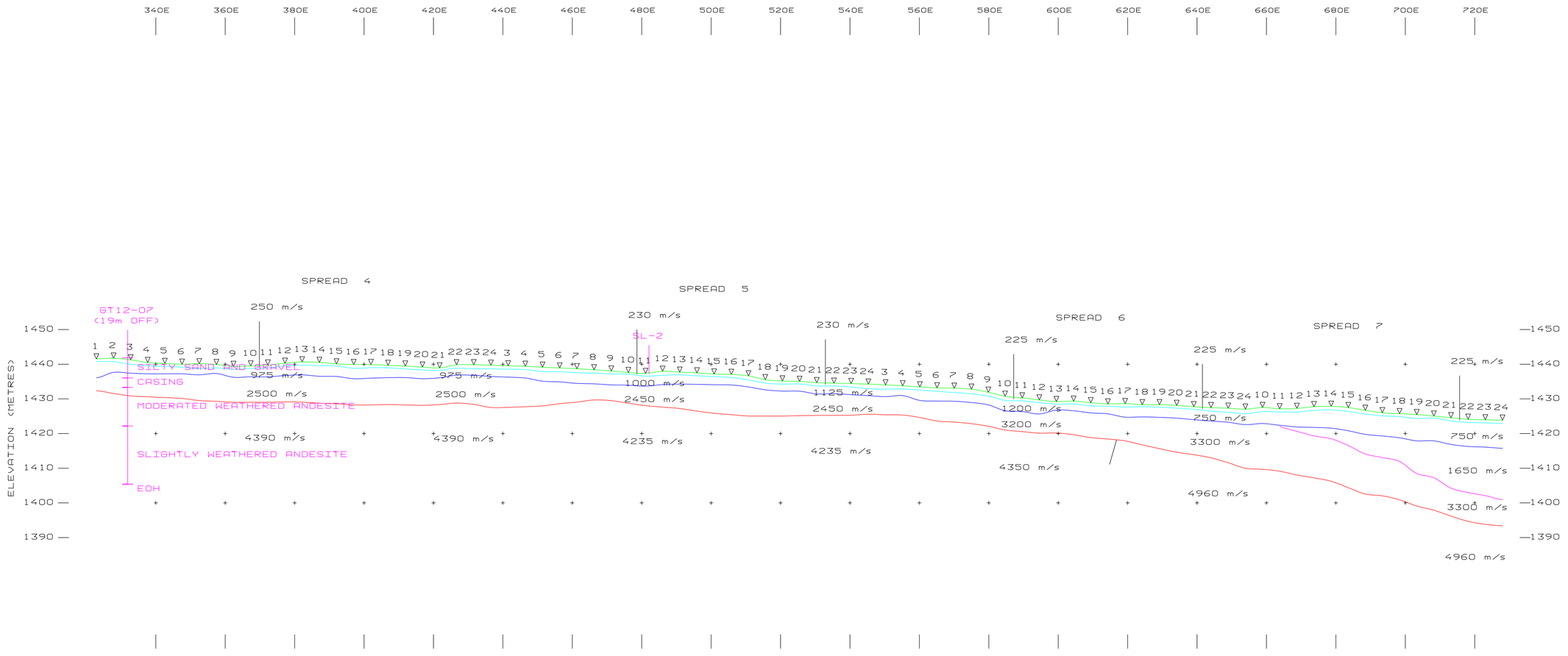
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.5



SEISMIC LINE SL-1B

INSTRUMENT: GEOMETRICS GEODE

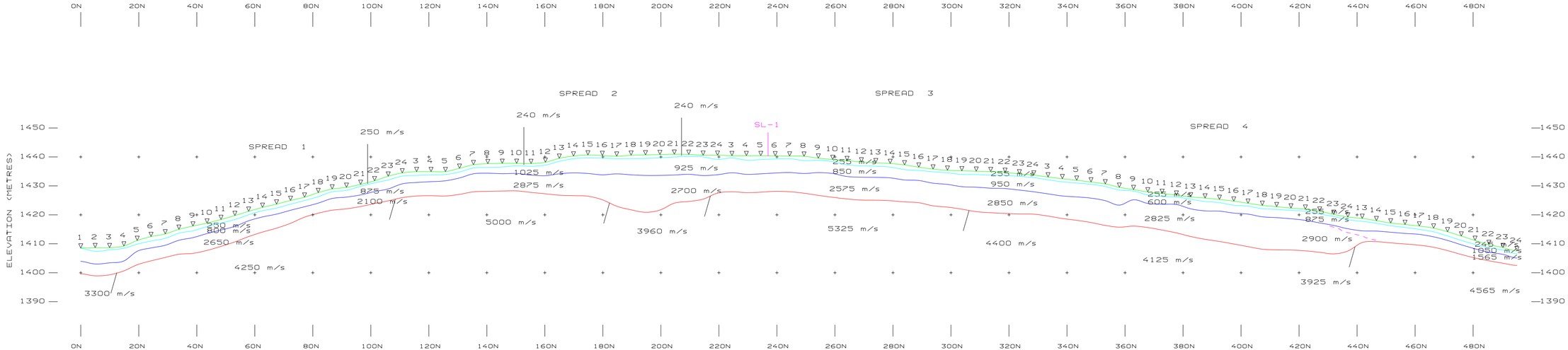
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-1B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.4



SEISMIC LINE SL-3

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

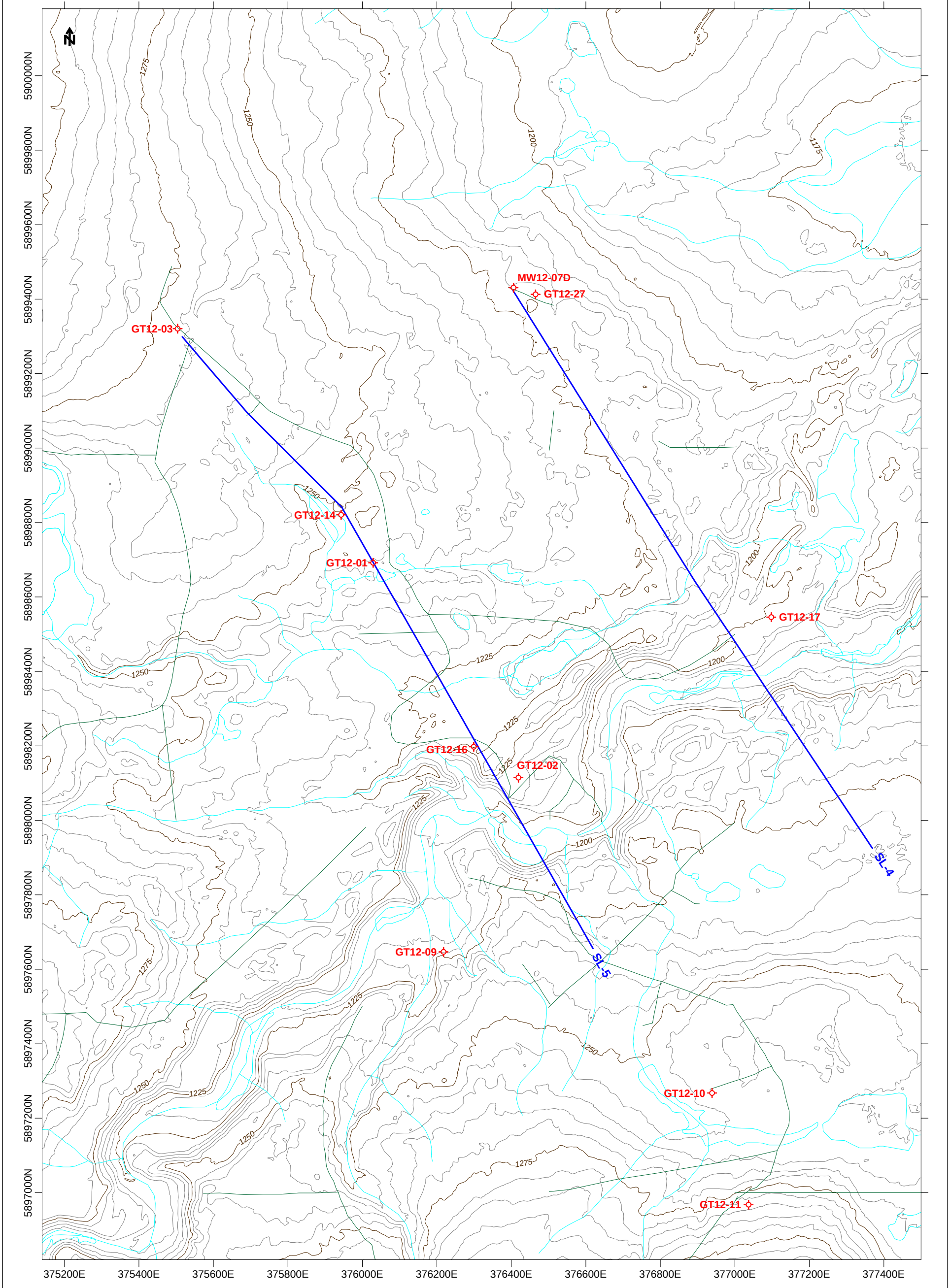
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

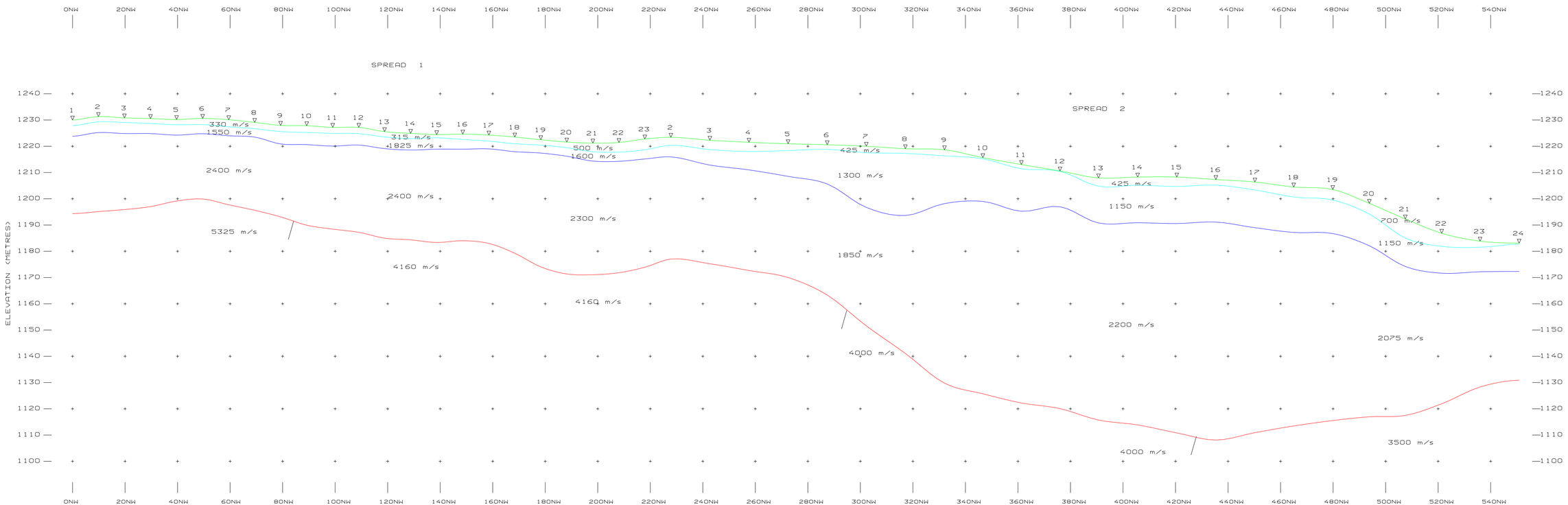
INTERPRETED DEPTH SECTION SL-3

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.6



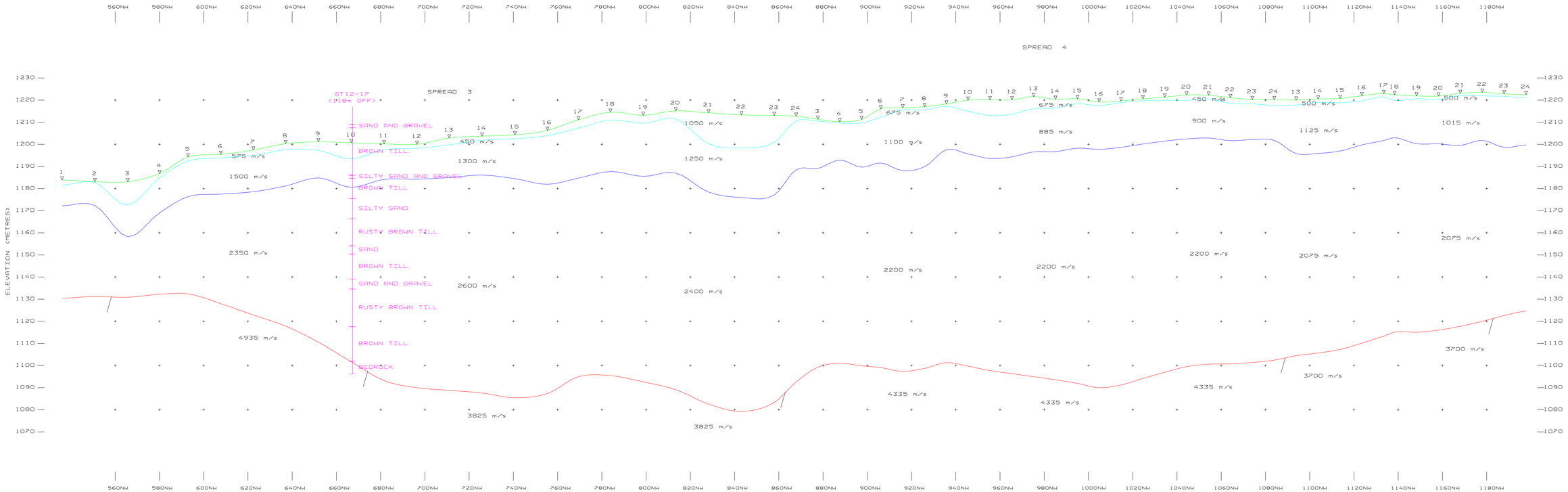
KNIGHT PIESOLD LTD. BLACKWATER PROJECT		
SEISMIC REFRACTION SURVEY		
SITE PLAN MAIN EMBANKMENT		
FRONTIER GEOSCIENCES INC.		
DATE: AUGUST 2012	SCALE 1:10,000	FIG. 7



SEISMIC LINE SL-4A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD		
BLACKWATER PROJECT		
SEISMIC REFRACTION SURVEY		
INTERPRETED DEPTH SECTION SL-4A		
FRONTIER GEOSCIENCES INC.		
DATE: AUGUST 2012	SCALE 1:1000	FIG.8



SEISMIC LINE SL-4B

INSTRUMENT: GEOMETRICS GEODE

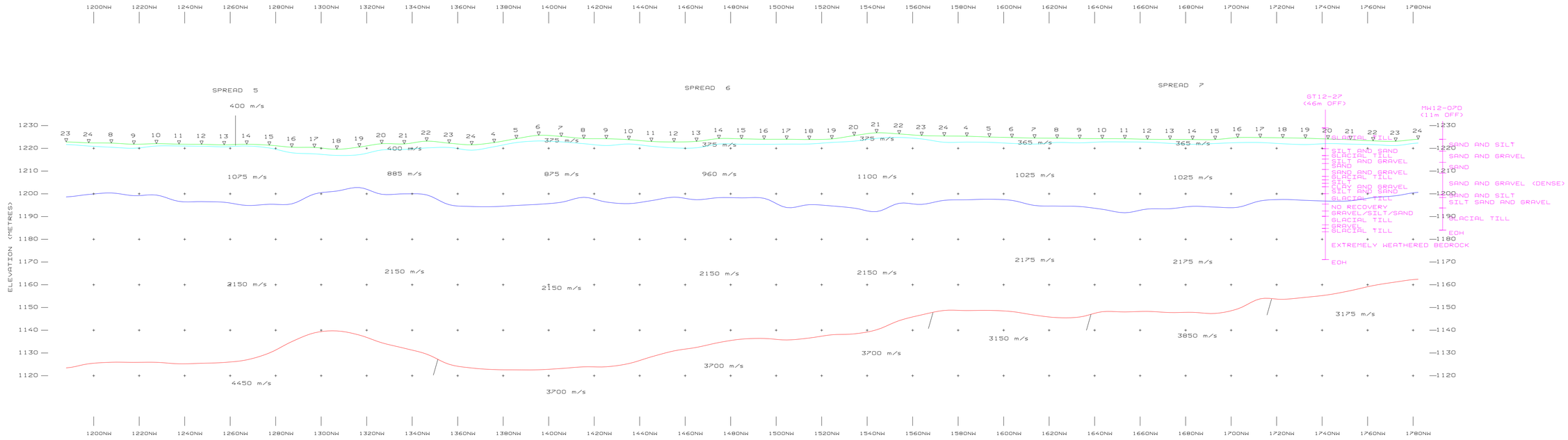
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-4B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.9



SEISMIC LINE SL-4C

INSTRUMENT: GEOMETRICS GEODE

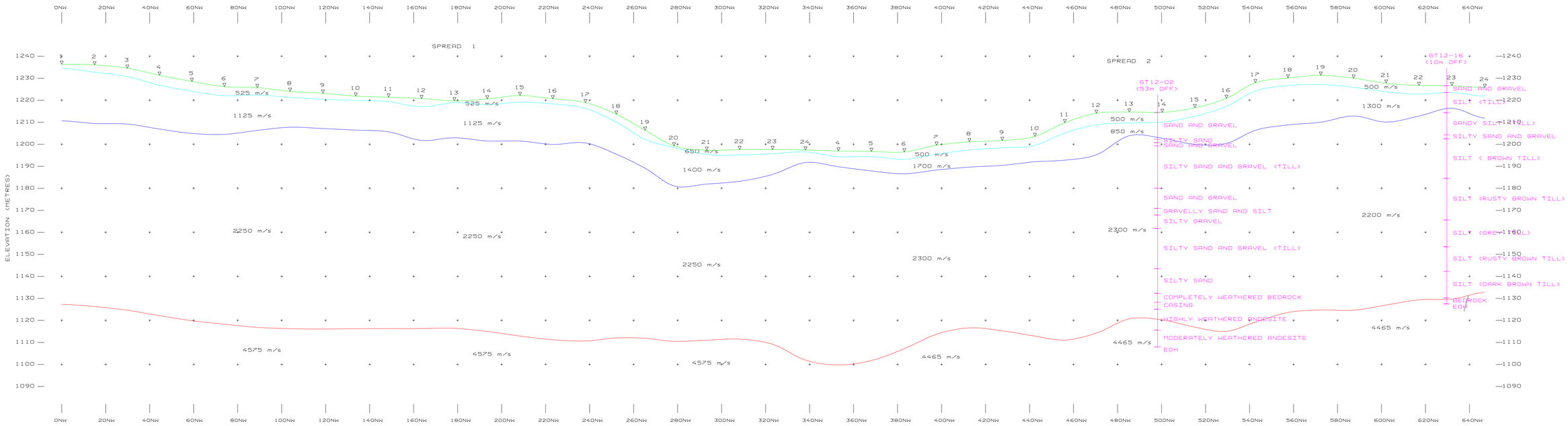
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-4C

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.10



SEISMIC LINE SL-5A

INSTRUMENT: GEOMETRICS GEODE

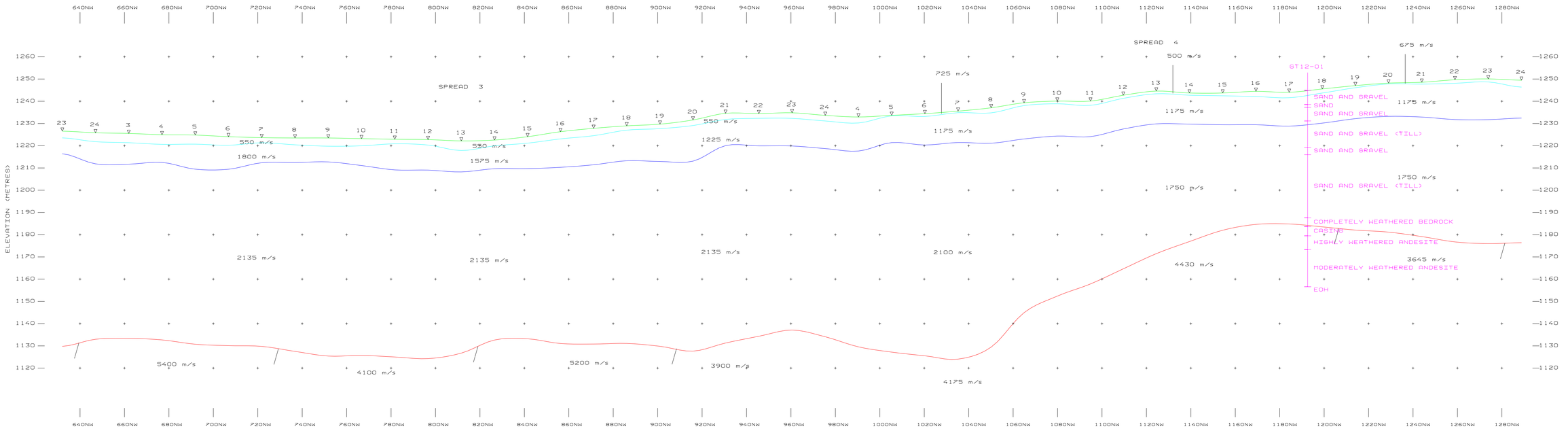
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.11



SEISMIC LINE SL-5B

INSTRUMENT: GEOMETRICS GEODE

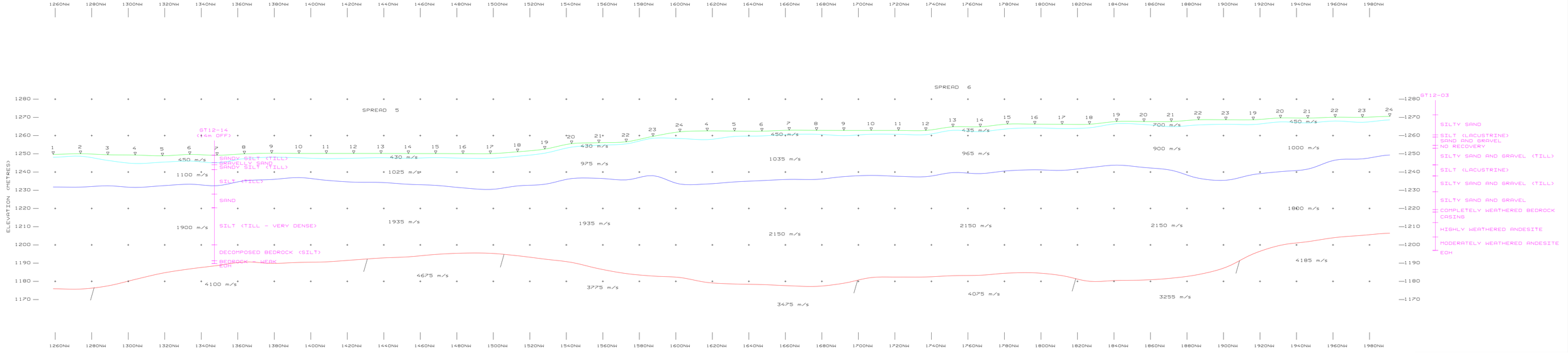
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5B

FRONTIER GEOSCIENCES INC.

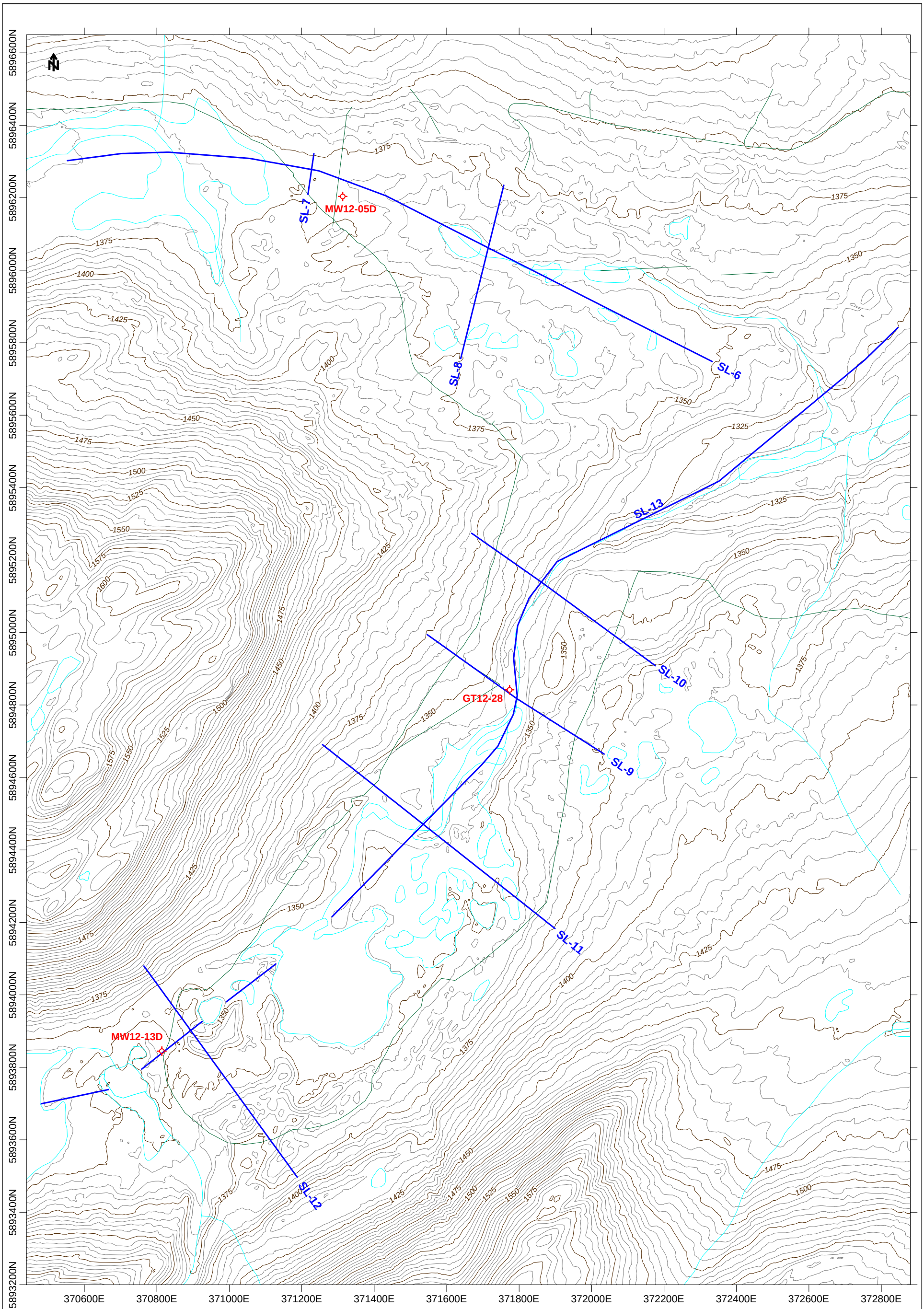
DATE: AUGUST 2012 | SCALE 1:1000 | FIG.12



SEISMIC LINE SL-5C

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD
BLACKWATER PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5C
FRONTIER GEOSCIENCES INC.
DATE: AUGUST 2012 | SCALE 1:1000 | FIG.13



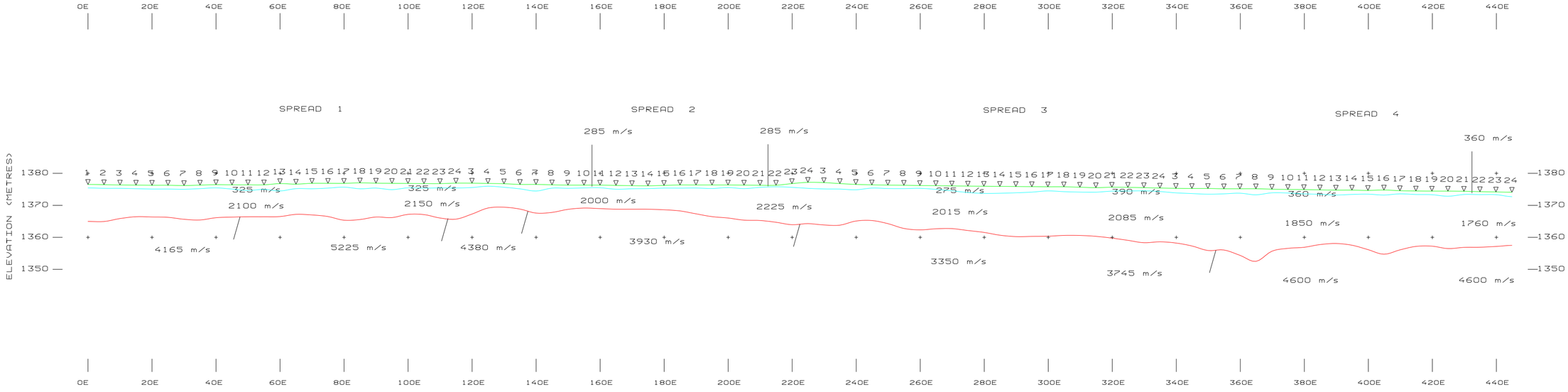
KNIGHT PIESOLD LTD.
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

SITE PLAN
WEST EMBANKMENT

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:10,000	FIG. 14



SEISMIC LINE SL-6A

INSTRUMENT: GEOMETRICS GEODE

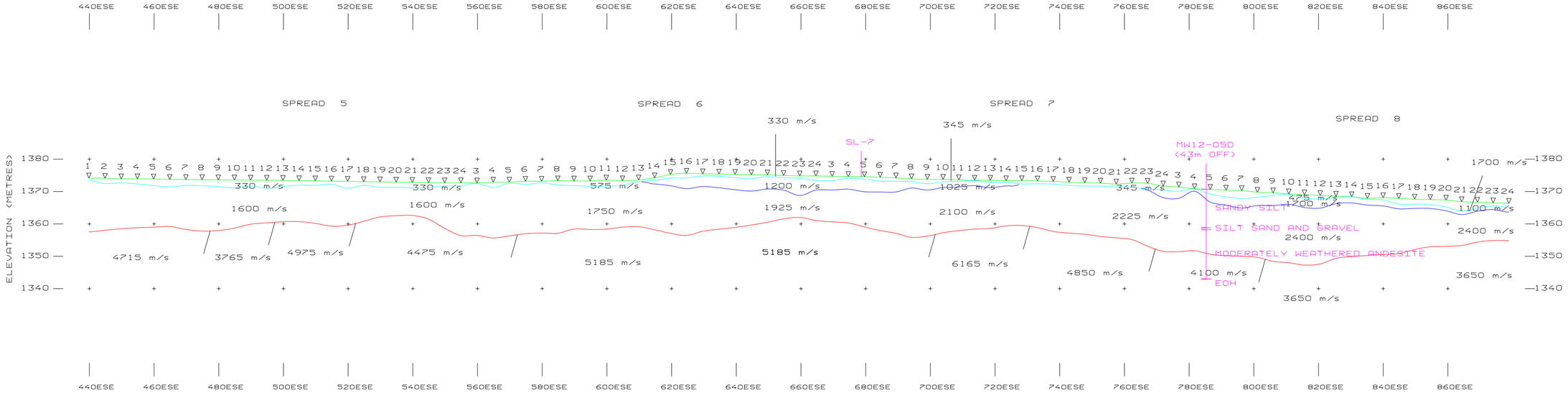
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-6A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.15



SEISMIC LINE SL-6B

INSTRUMENT: GEOMETRICS GEODE

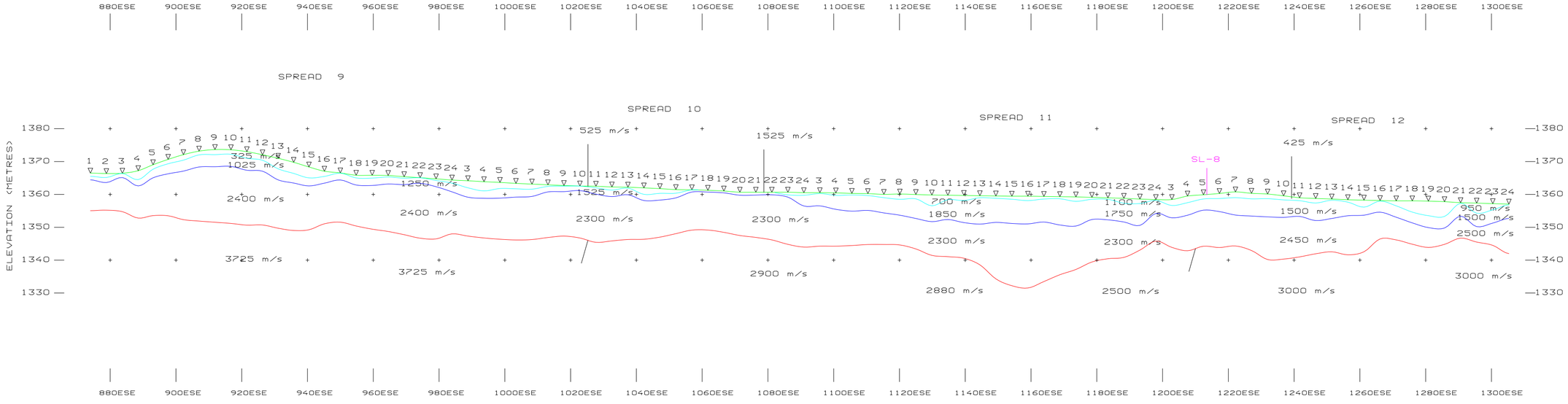
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-6B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.16



SEISMIC LINE SL-6C

INSTRUMENT: GEOMETRICS GEODE

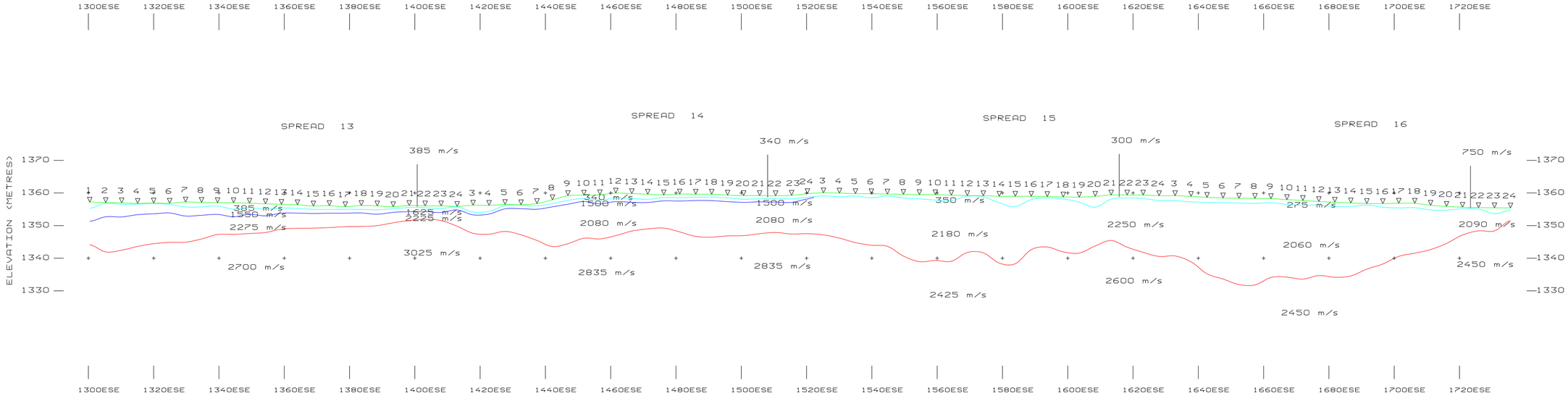
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-6C

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.17



SEISMIC LINE SL-6D

INSTRUMENT: GEOMETRICS GEODE

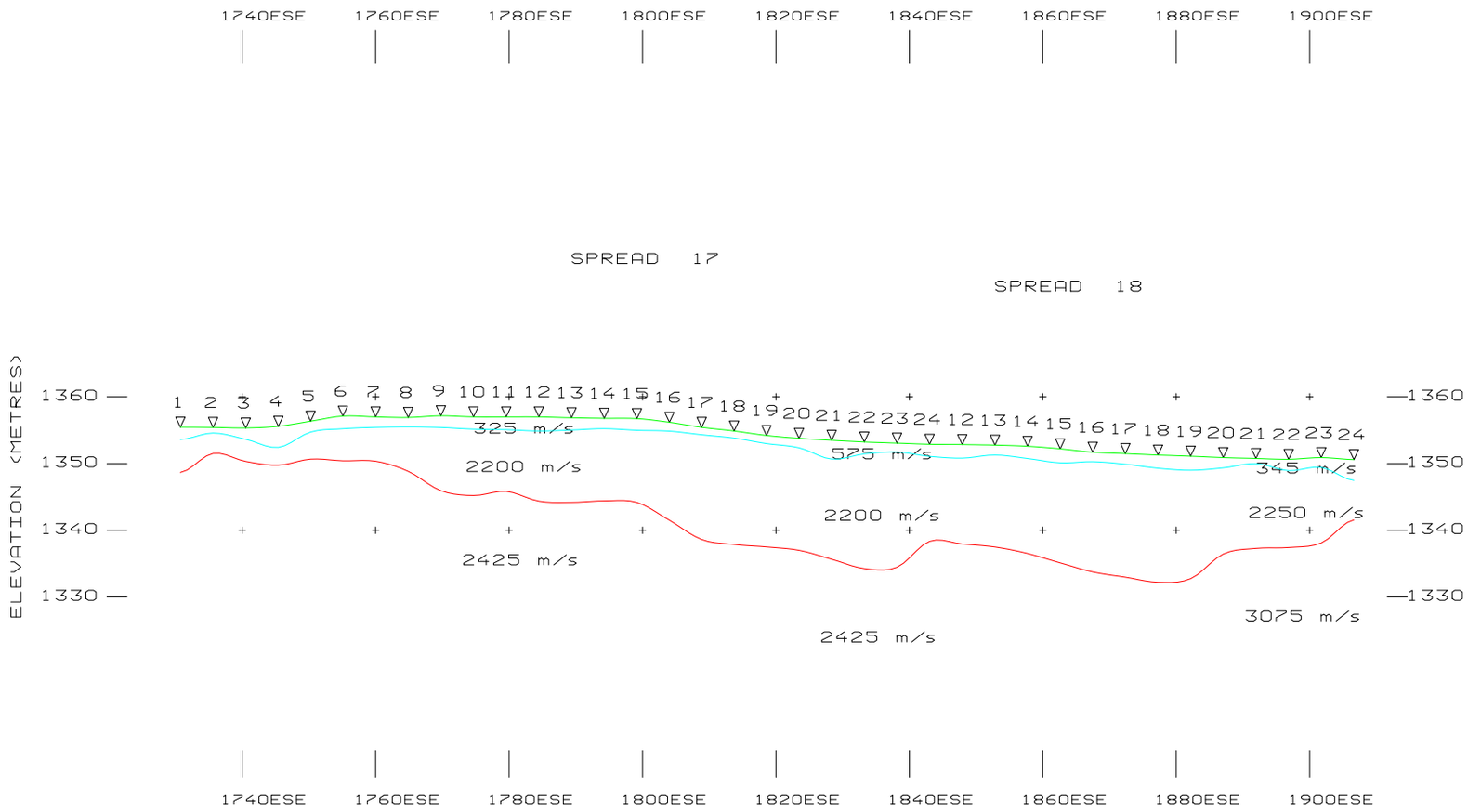
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-6D

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.18



SEISMIC LINE SL-6E

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

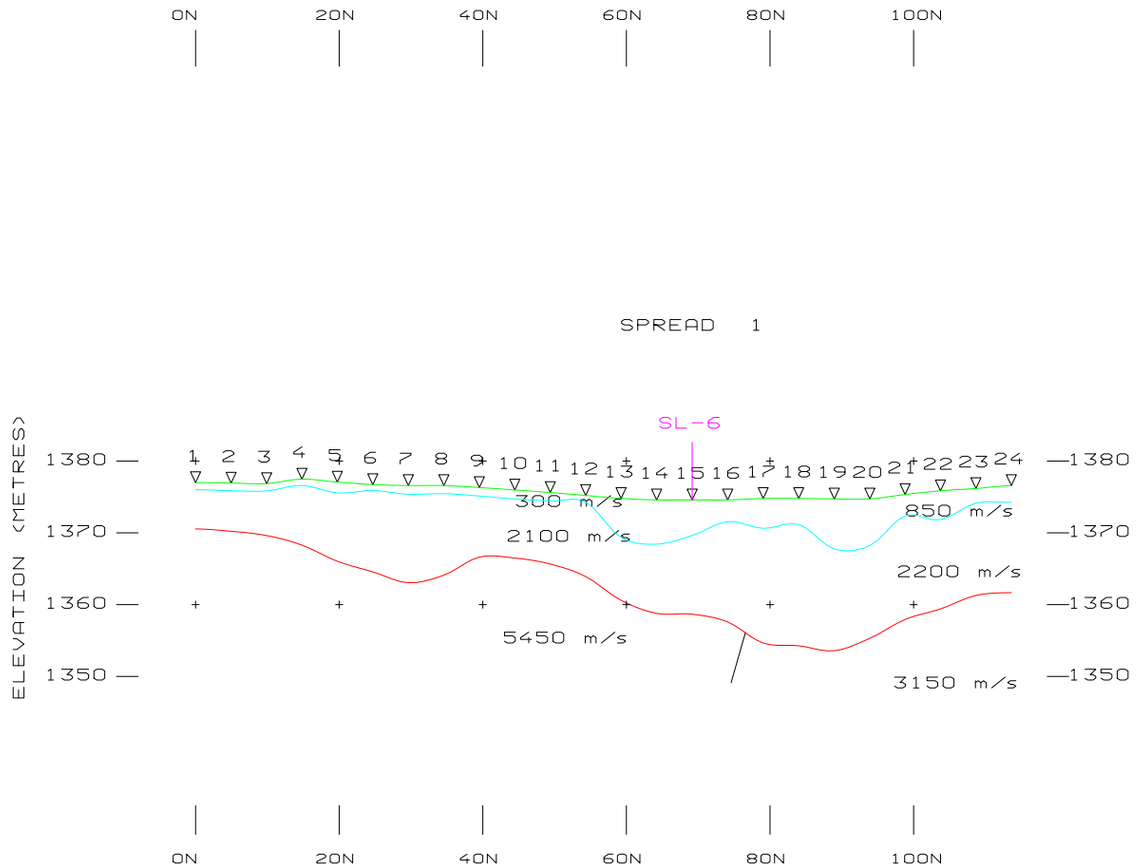
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-6E

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.19



SEISMIC LINE SL-7

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

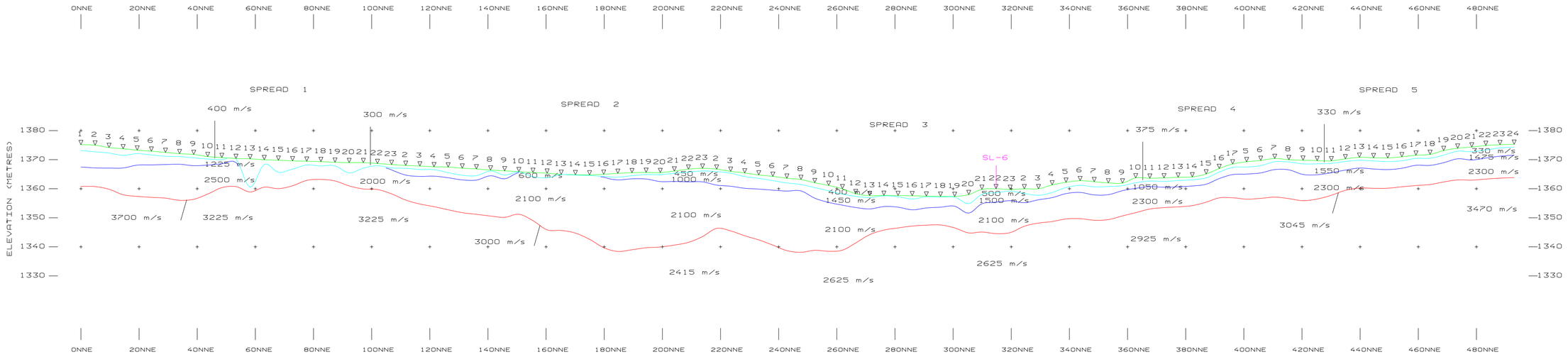
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-7

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.20



SEISMIC LINE SL-8

INSTRUMENT: GEOMETRICS GEODE

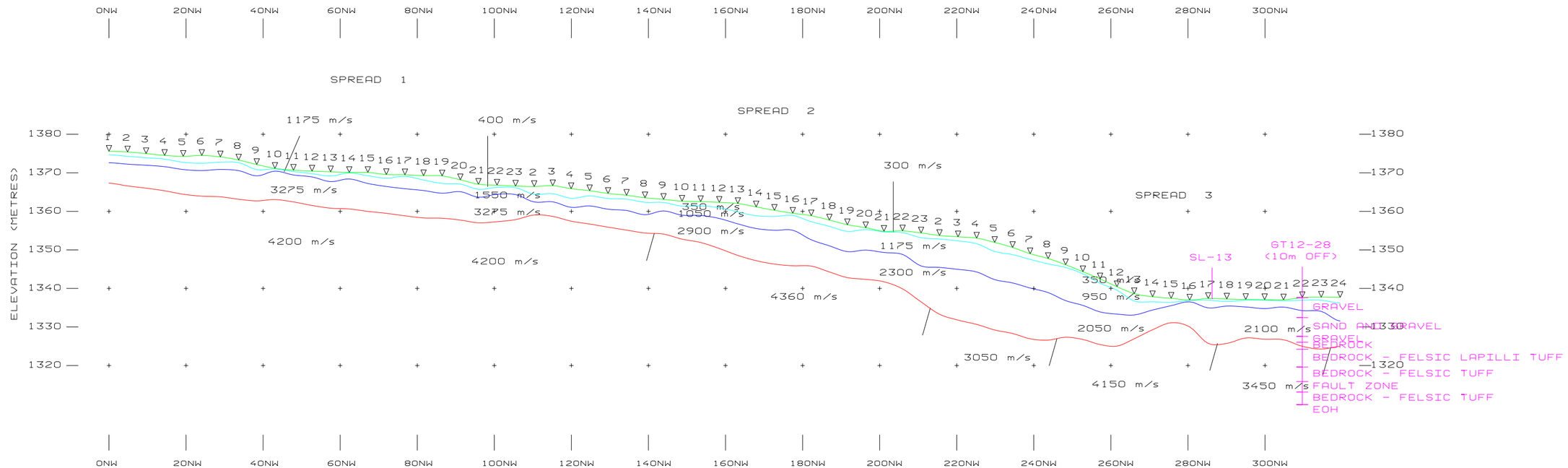
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-8

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.21



SEISMIC LINE SL-9A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

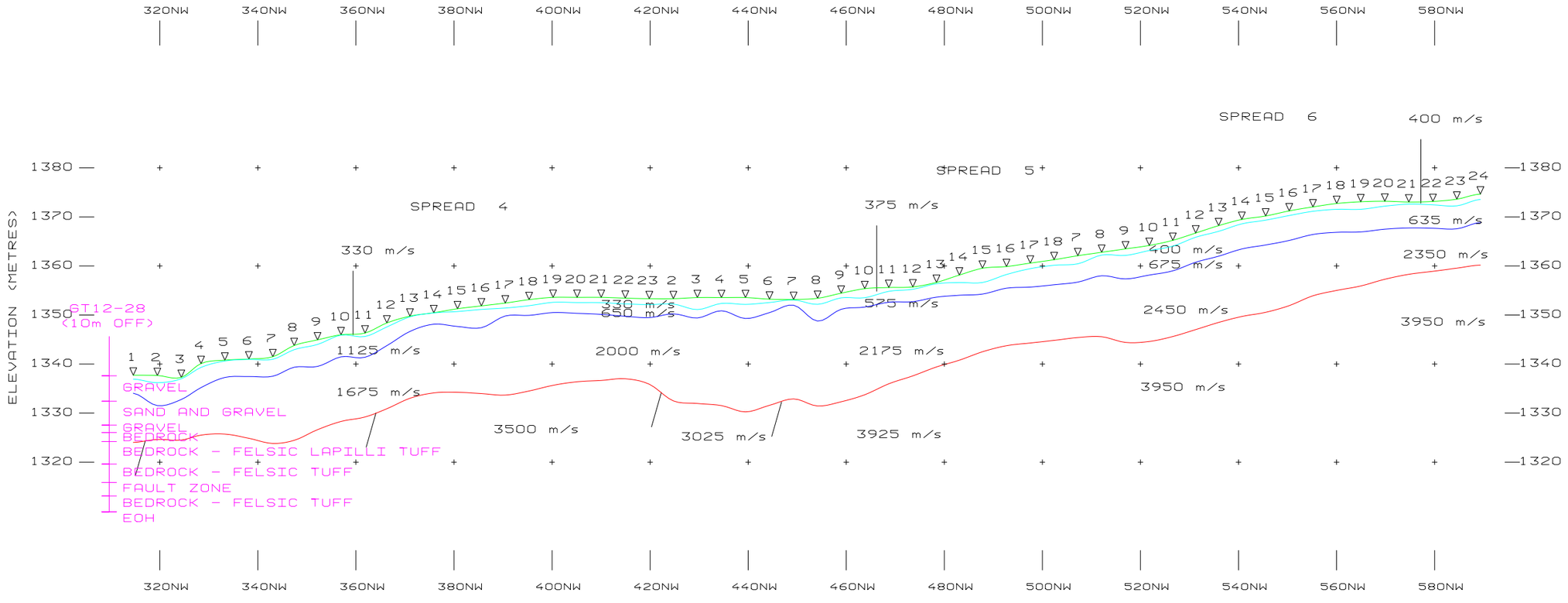
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-9A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.22



SEISMIC LINE SL-9B

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

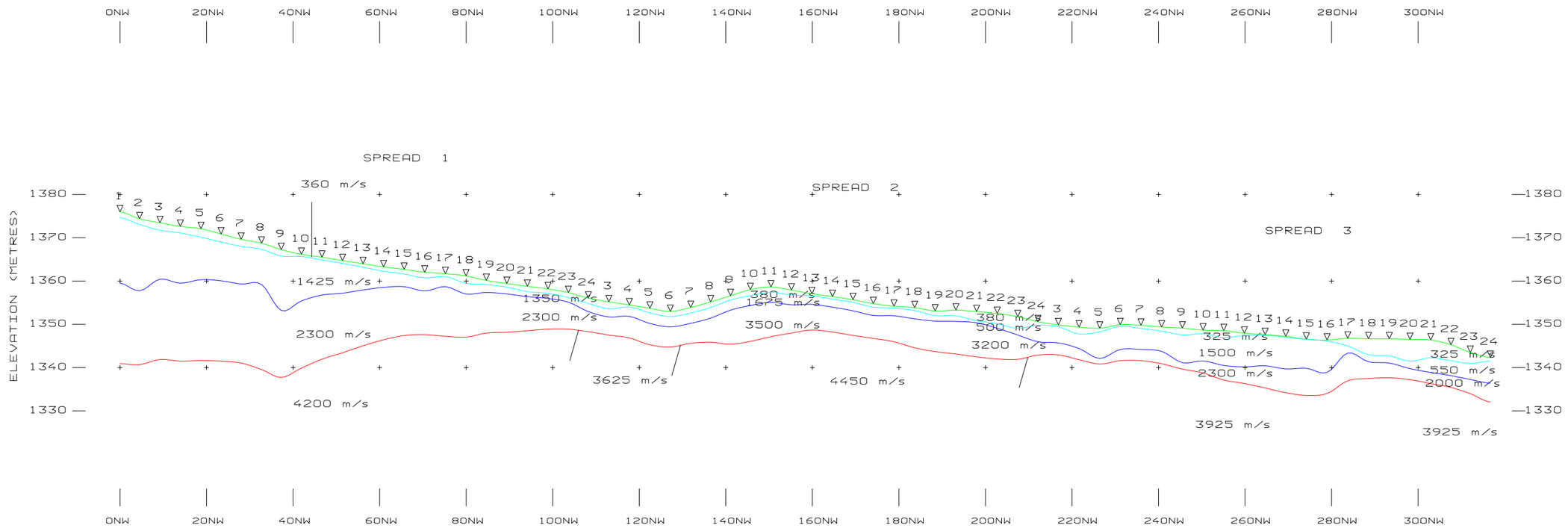
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-9B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.23



SEISMIC LINE SL-10A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

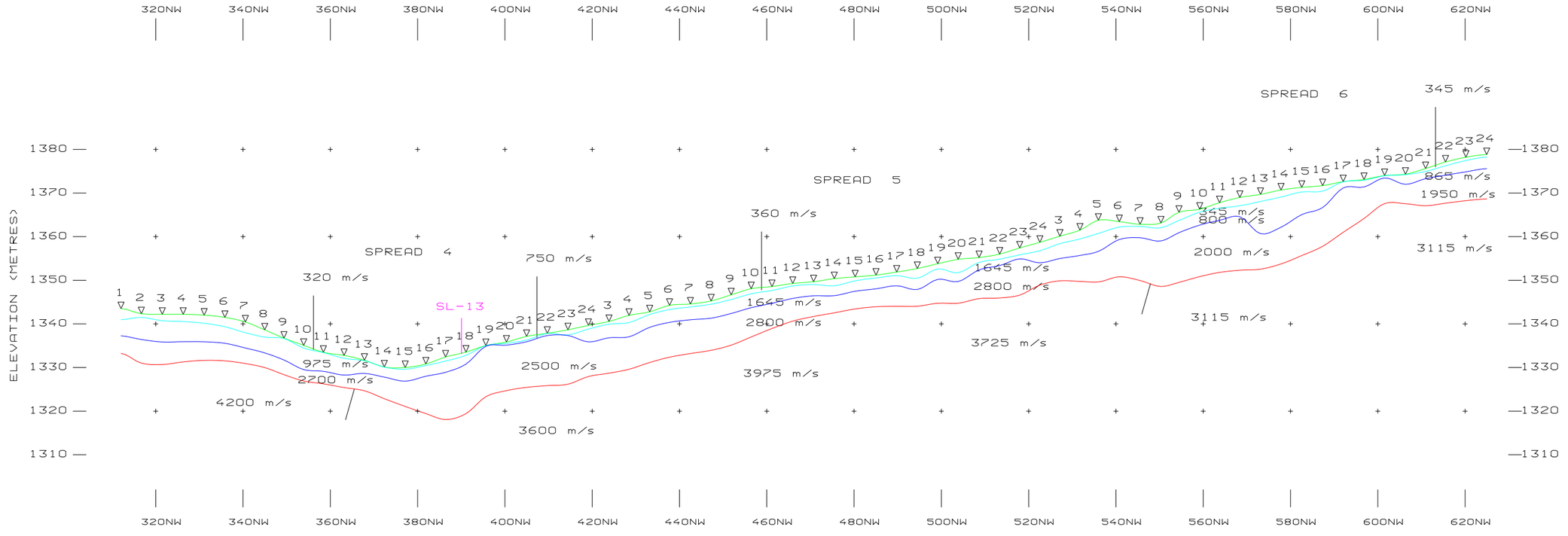
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-10A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.24



SEISMIC LINE SL-10B

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

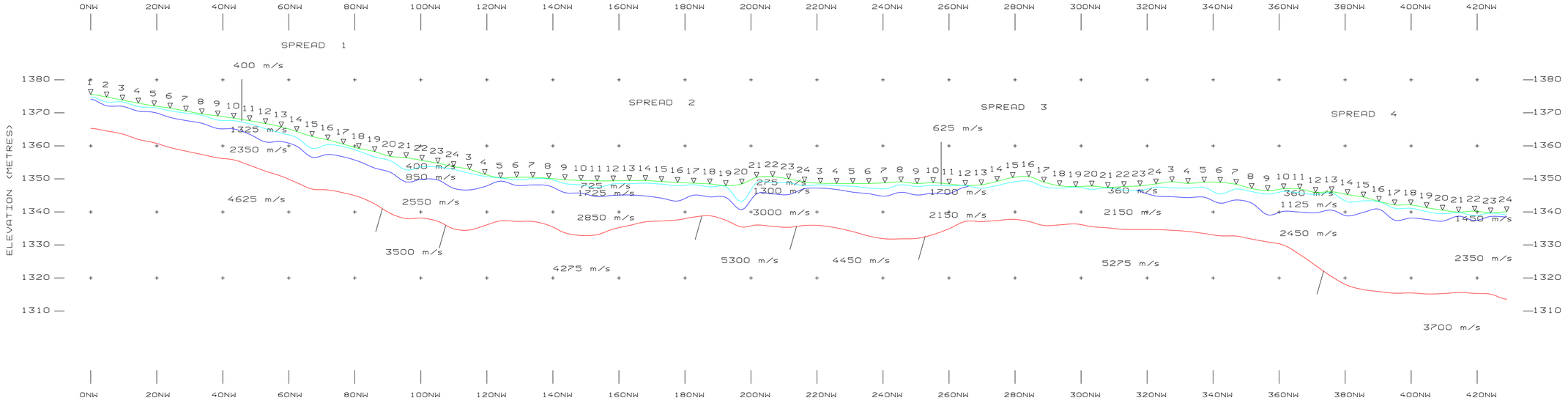
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-10B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.25



SEISMIC LINE SL-11A

INSTRUMENT: GEOMETRICS GEODE

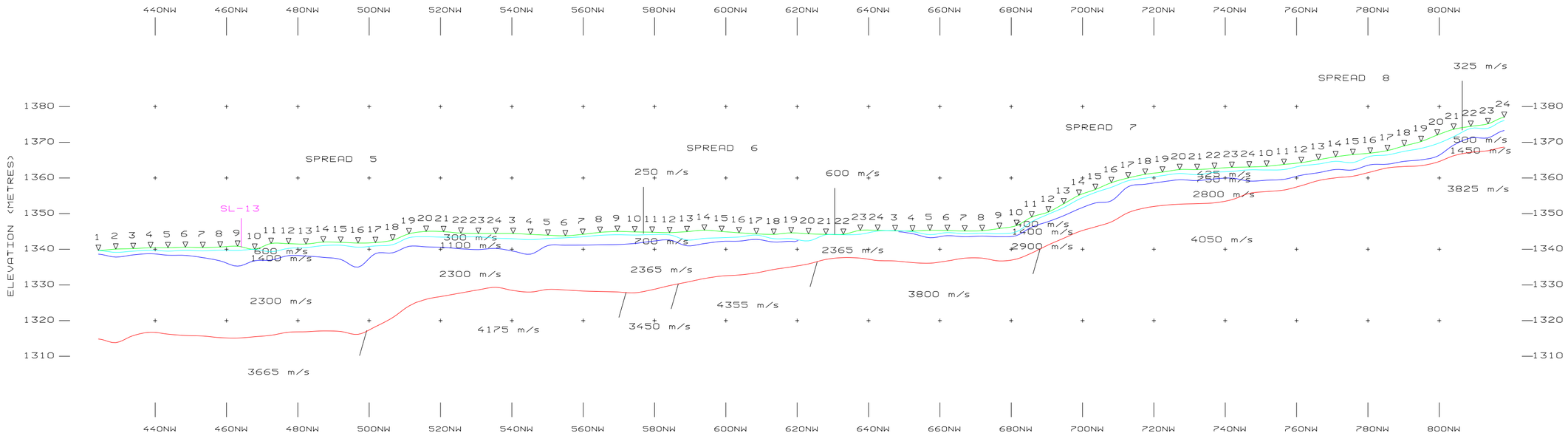
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-11A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.26



SEISMIC LINE SL-11B

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

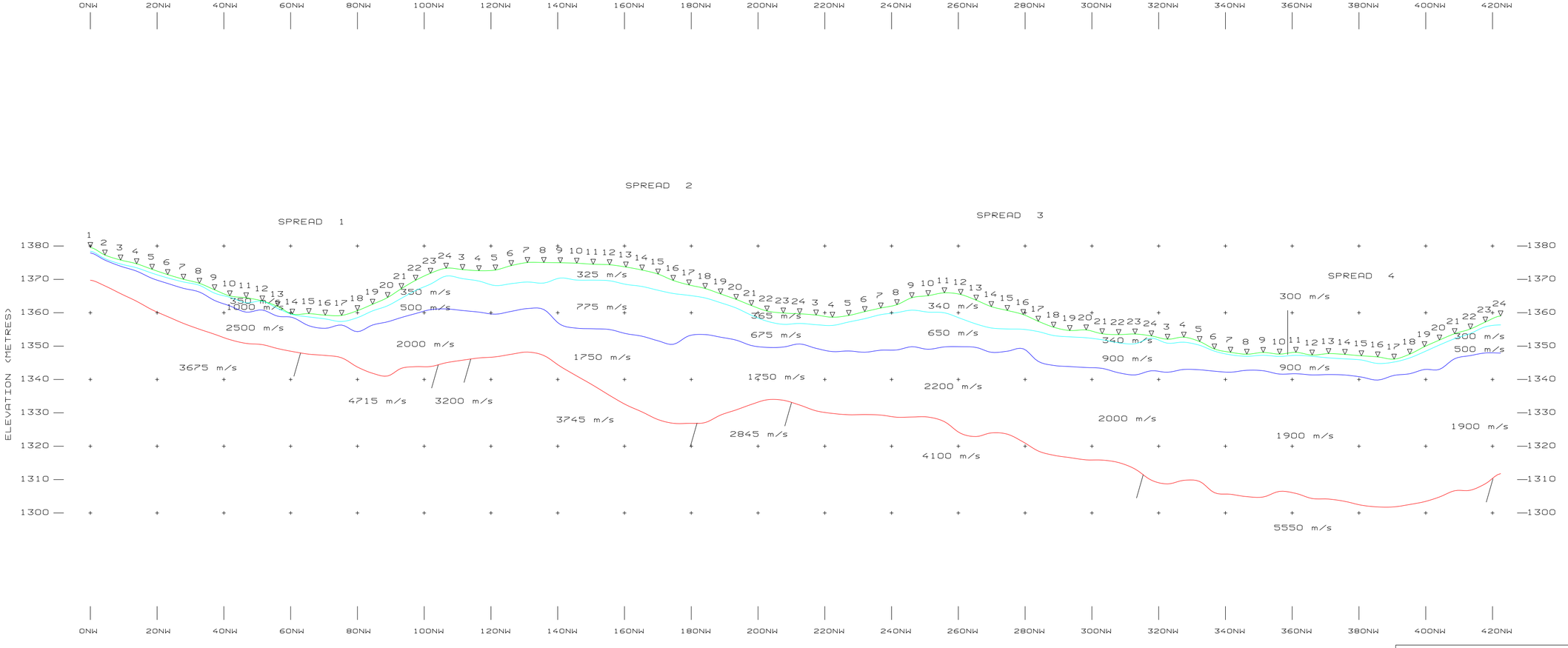
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-11B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.27



SEISMIC LINE SL-12A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

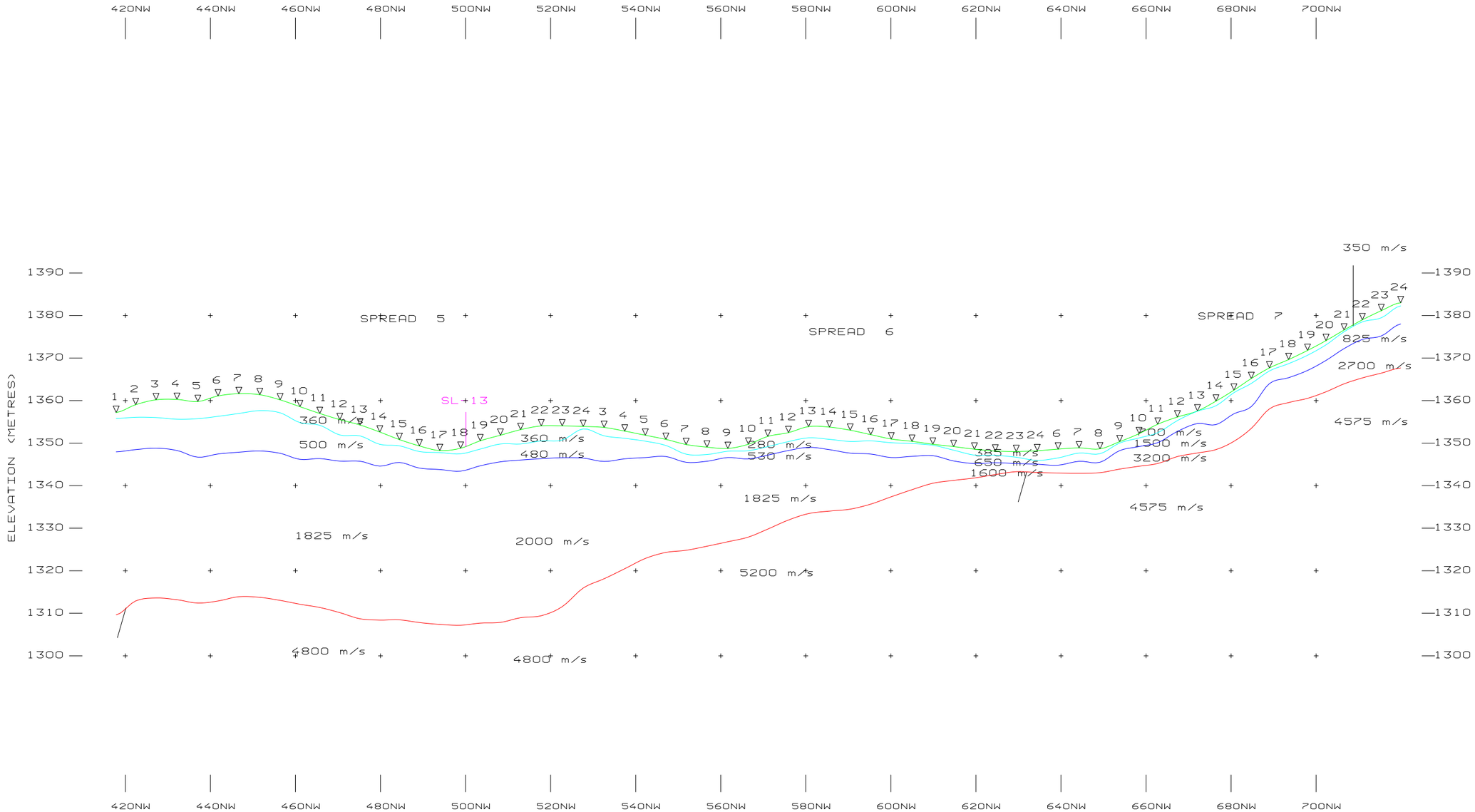
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-12A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.28



SEISMIC LINE SL-12B

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

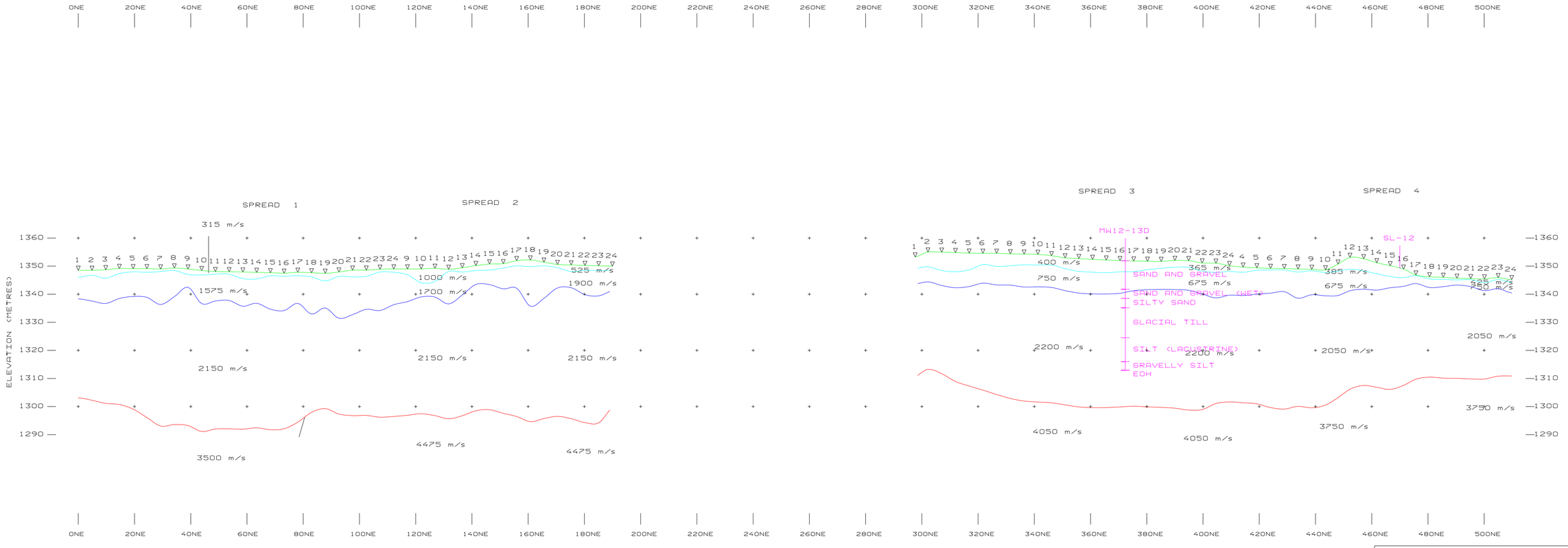
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-12B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.29



SEISMIC LINE SL-13A

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

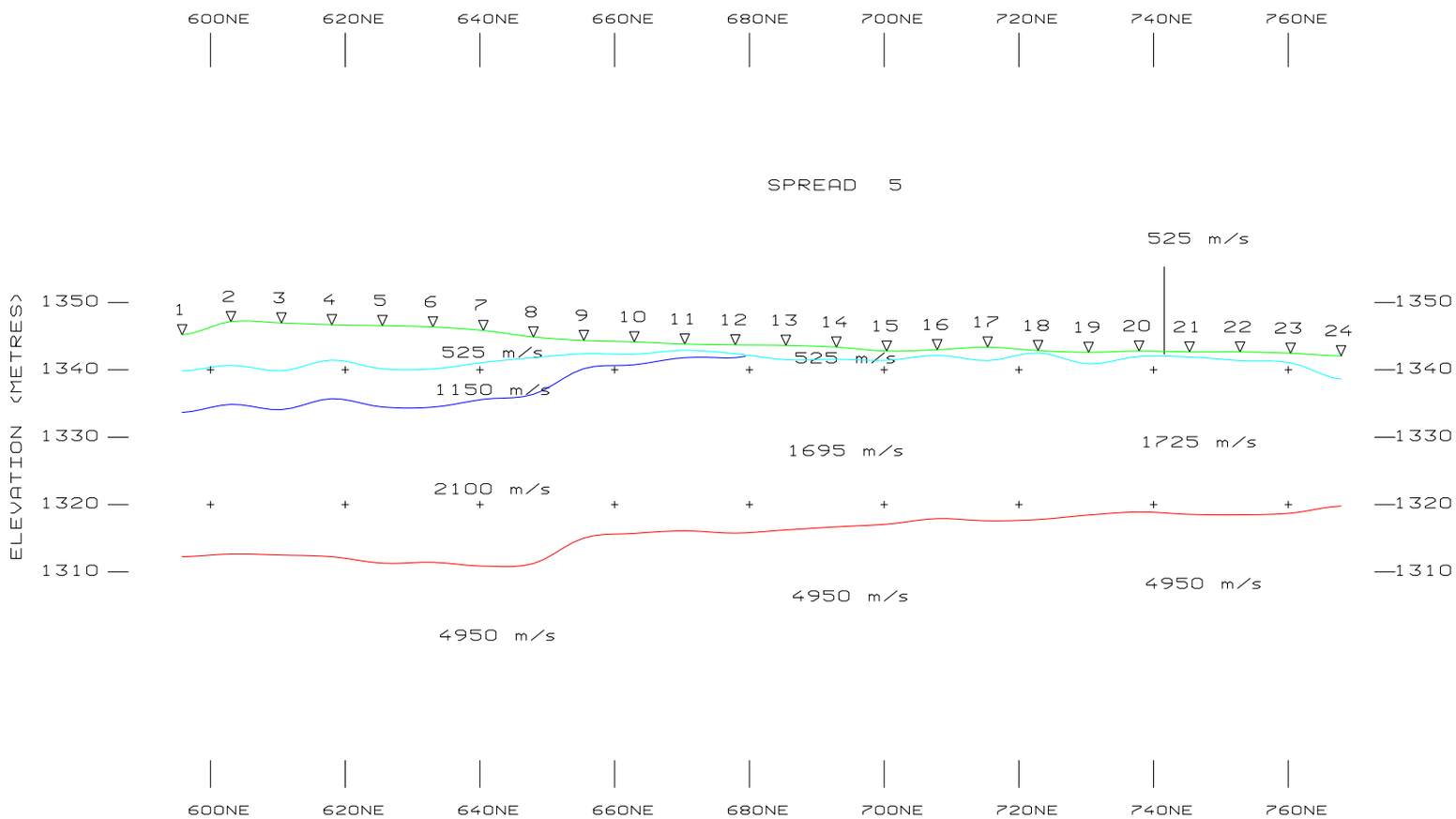
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13A

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012 | SCALE 1:1000 | FIG.30



SEISMIC LINE SL-13B

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

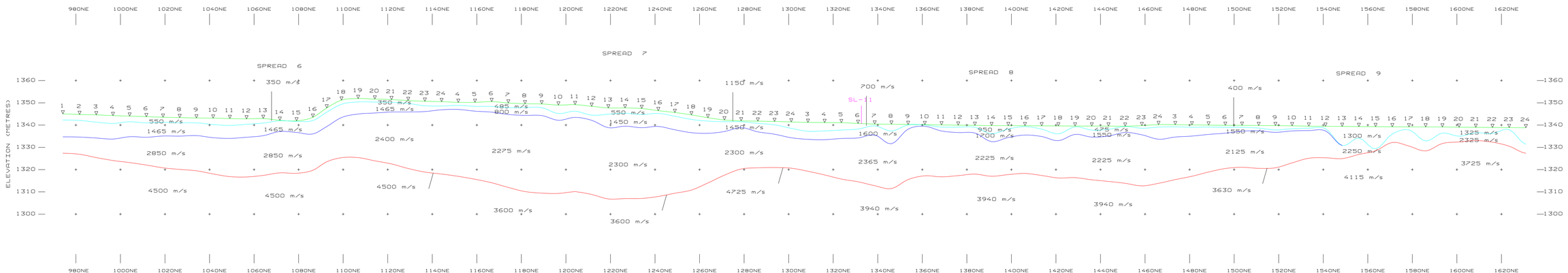
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13B

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.31



SEISMIC LINE SL-13C

INSTRUMENT: GEOMETRICS GEODE

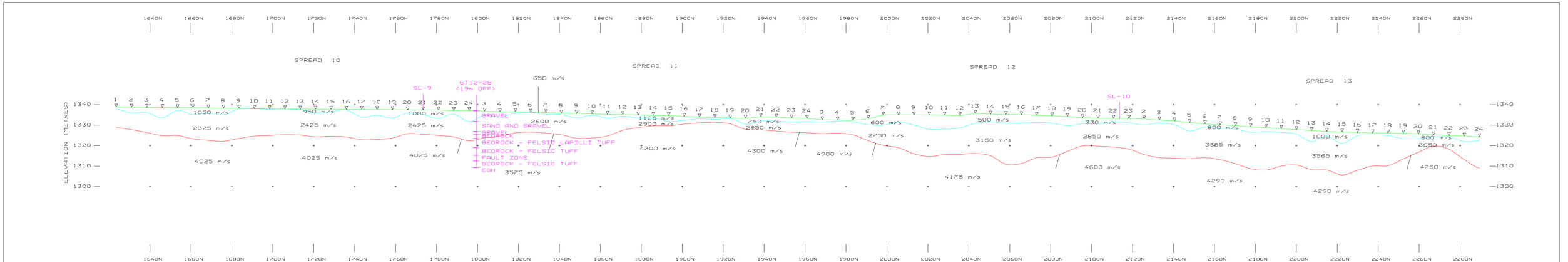
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13C

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.32



SEISMIC LINE SL-13D

INSTRUMENT: GEOMETRICS GEODE

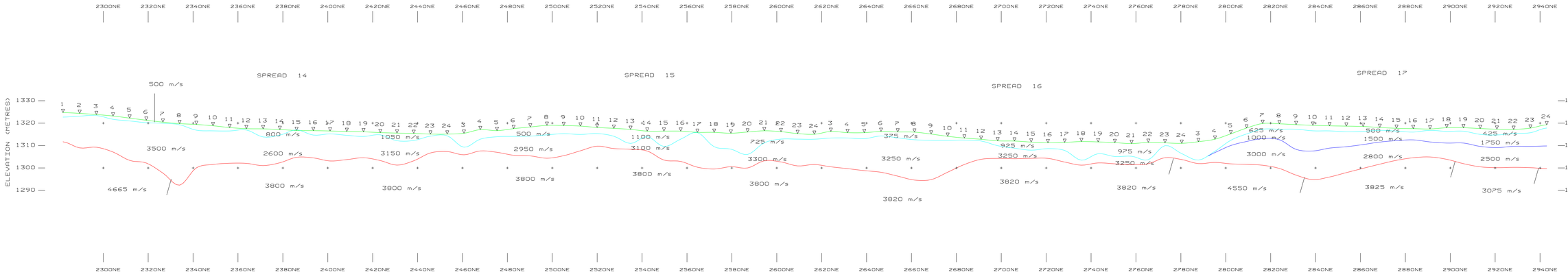
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13D

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.33



SEISMIC LINE SL-13E

INSTRUMENT: GEOMETRICS GEODE

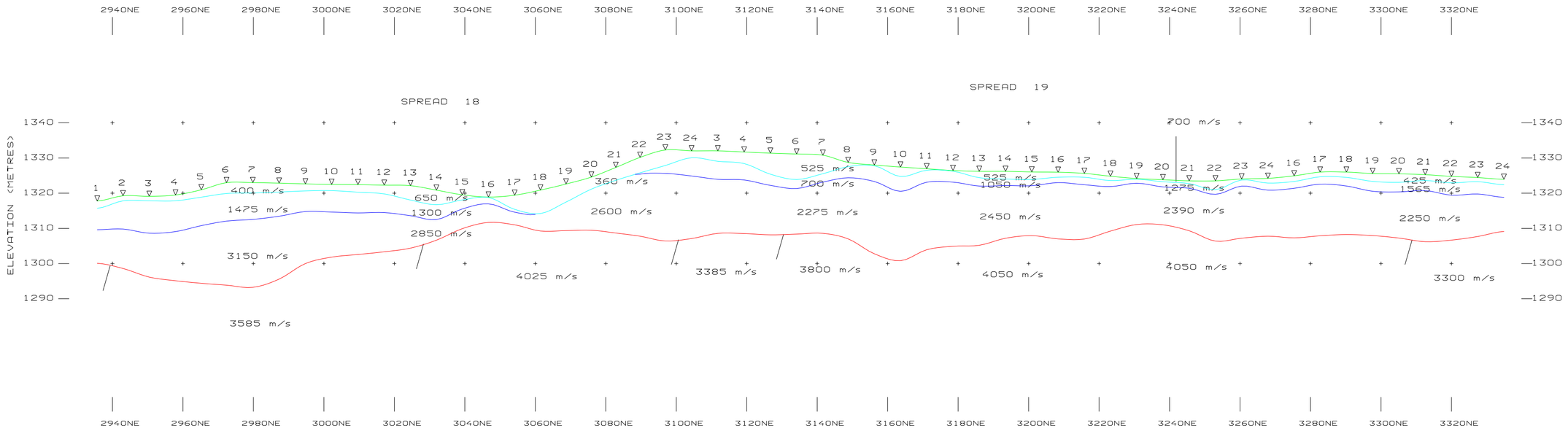
KNIGHT PIESOLD
BLACKWATER PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13E

FRONTIER GEOSCIENCES INC.

DATE: AUGUST 2012	SCALE 1:1000	FIG.34



SEISMIC LINE SL-13F

INSTRUMENT: GEOMETRICS GEODE

KNIGHT PIESOLD

BLACKWATER PROJECT

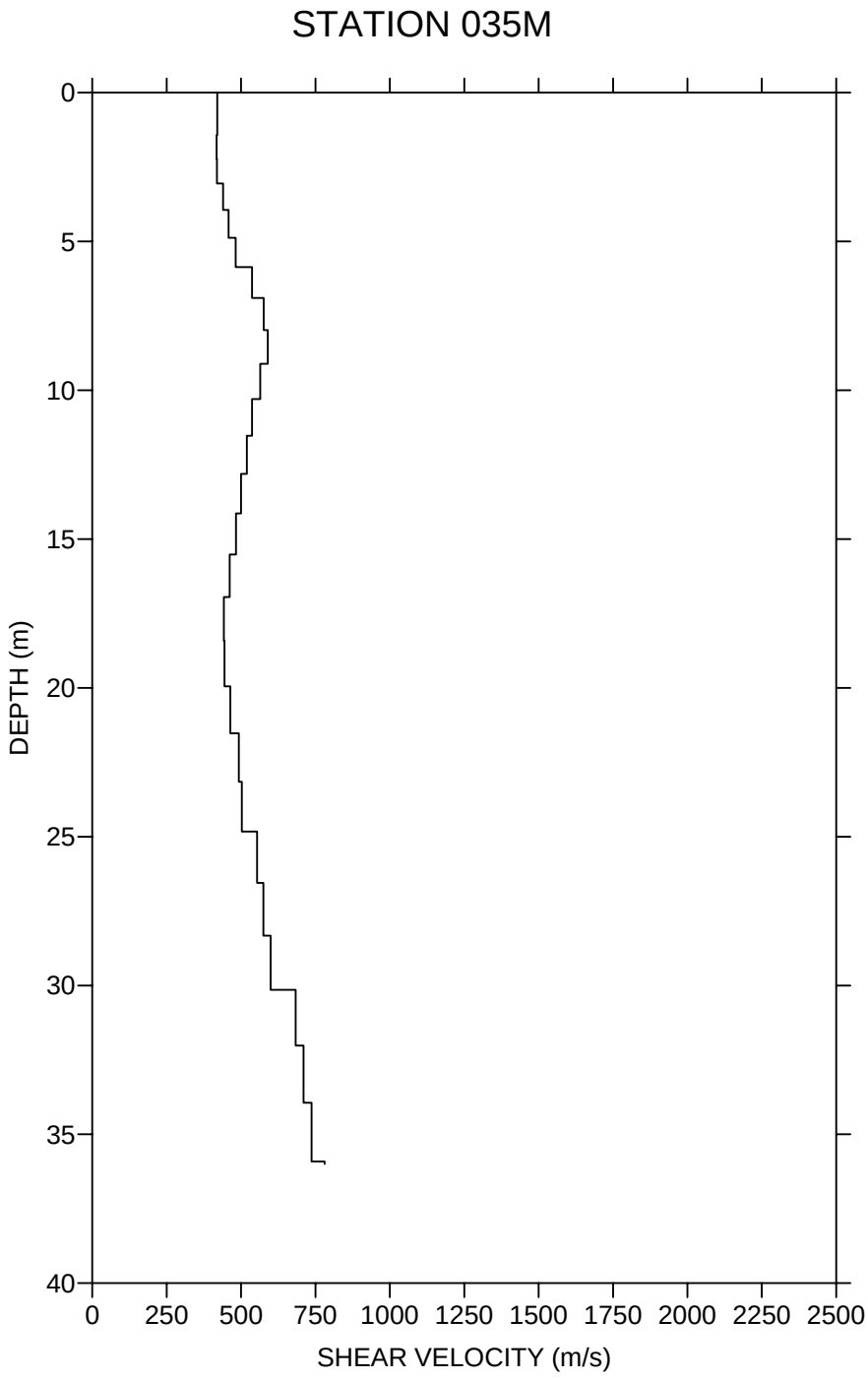
SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-13F

FRONTIER GEOSCIENCES INC.

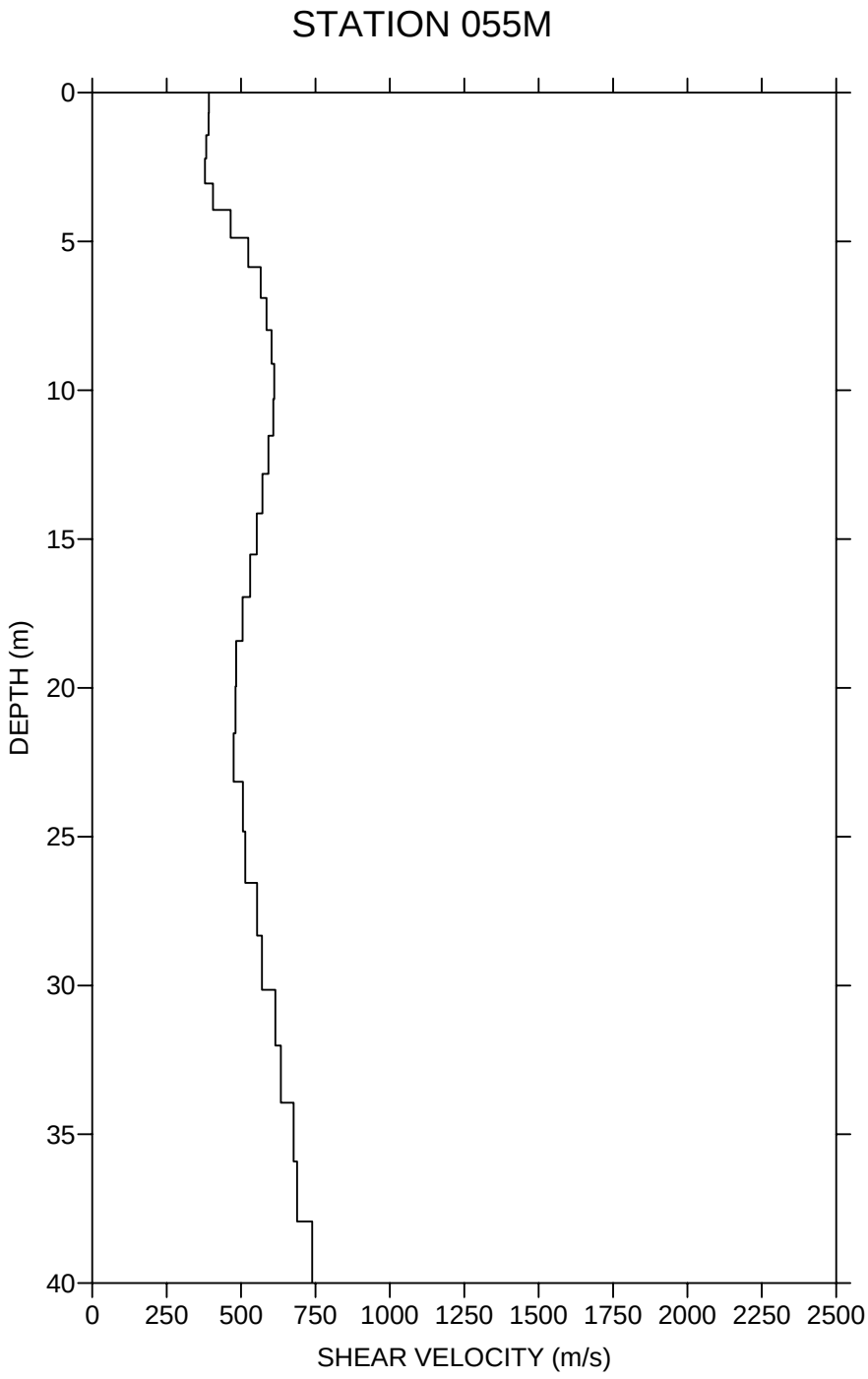
DATE: AUGUST 2012	SCALE 1:1000	FIG.35

PLANT SITE - SL-1



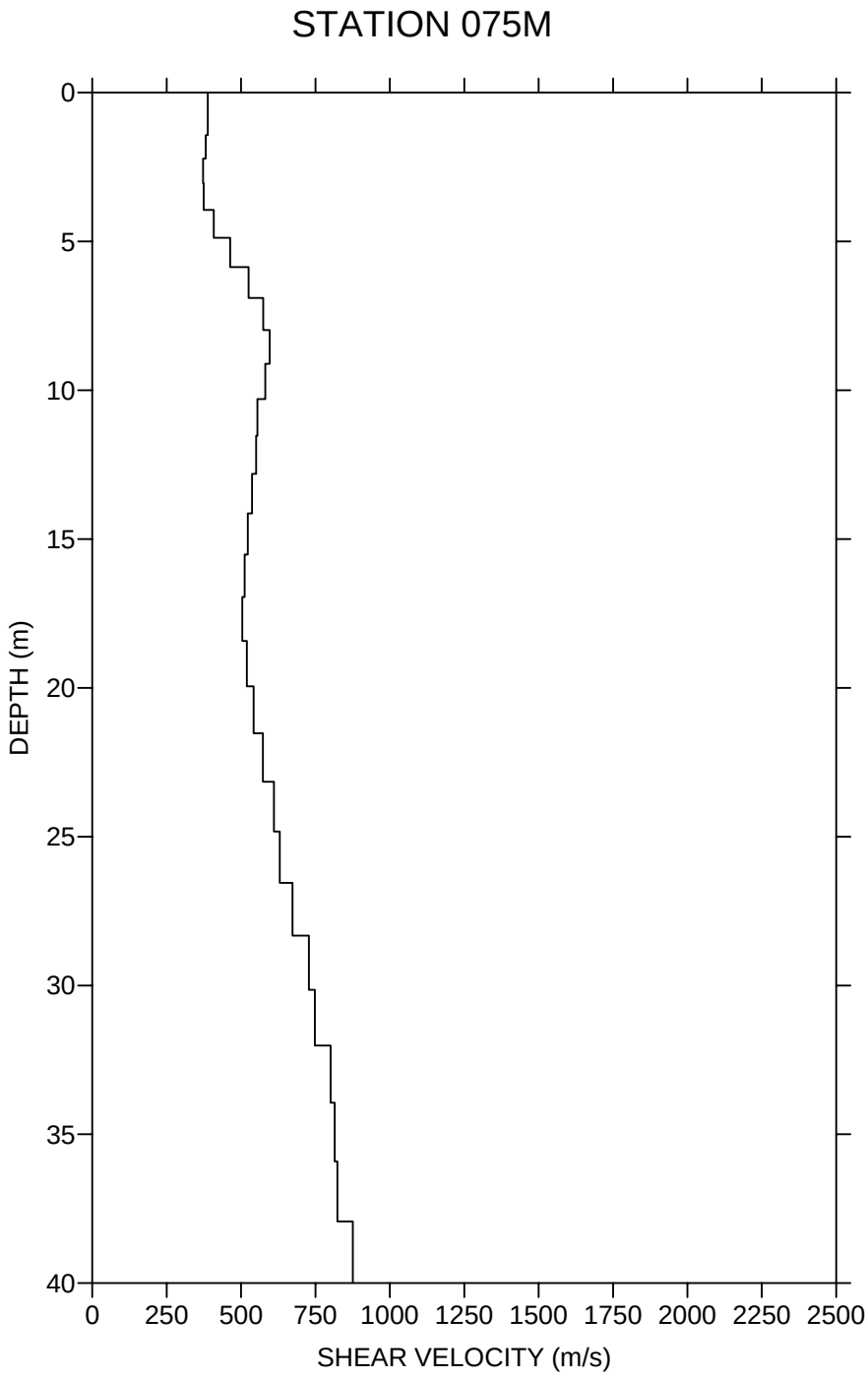
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 035 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-035-M

PLANT SITE - SL-1



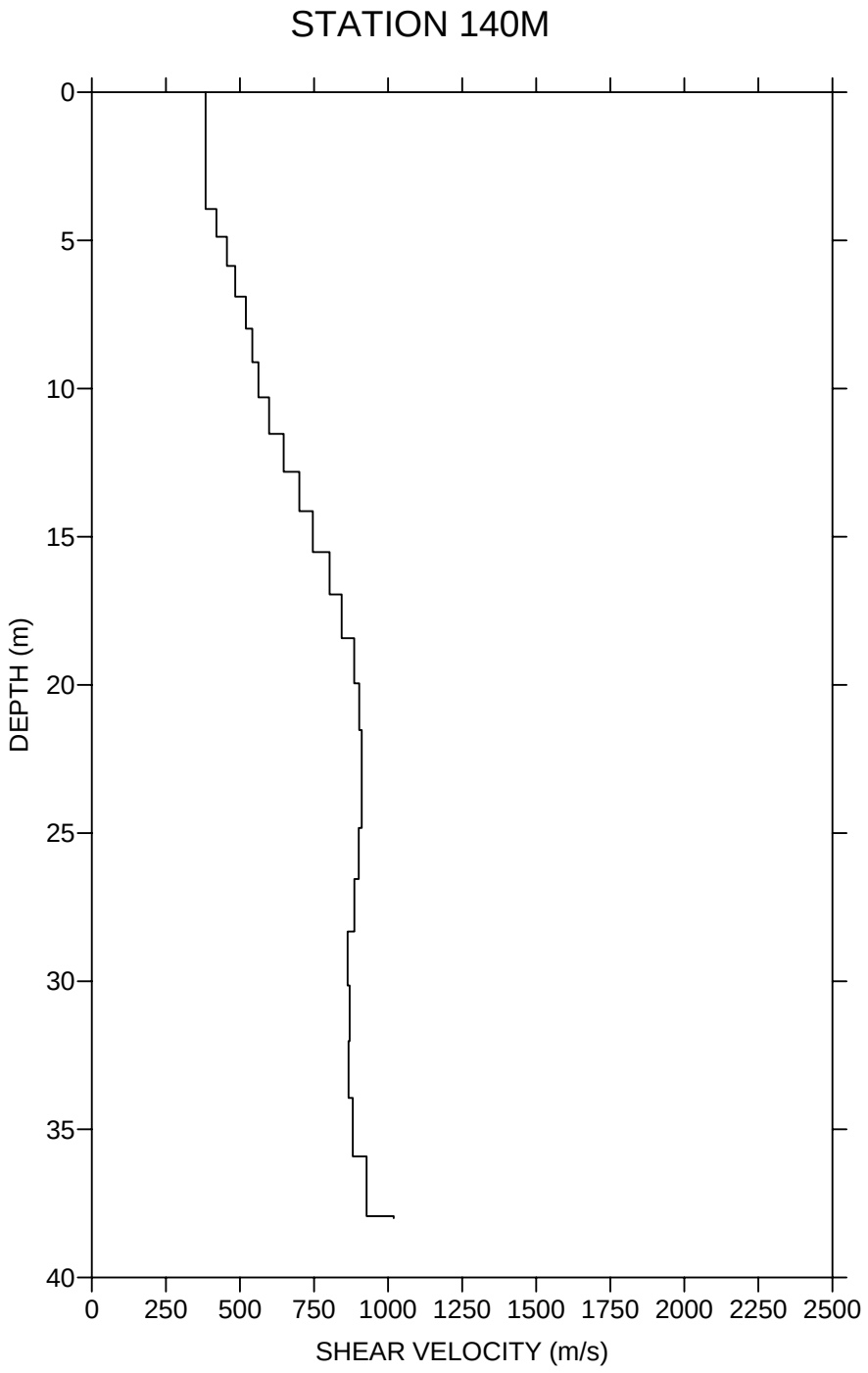
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 055 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-055-M

PLANT SITE - SL-1



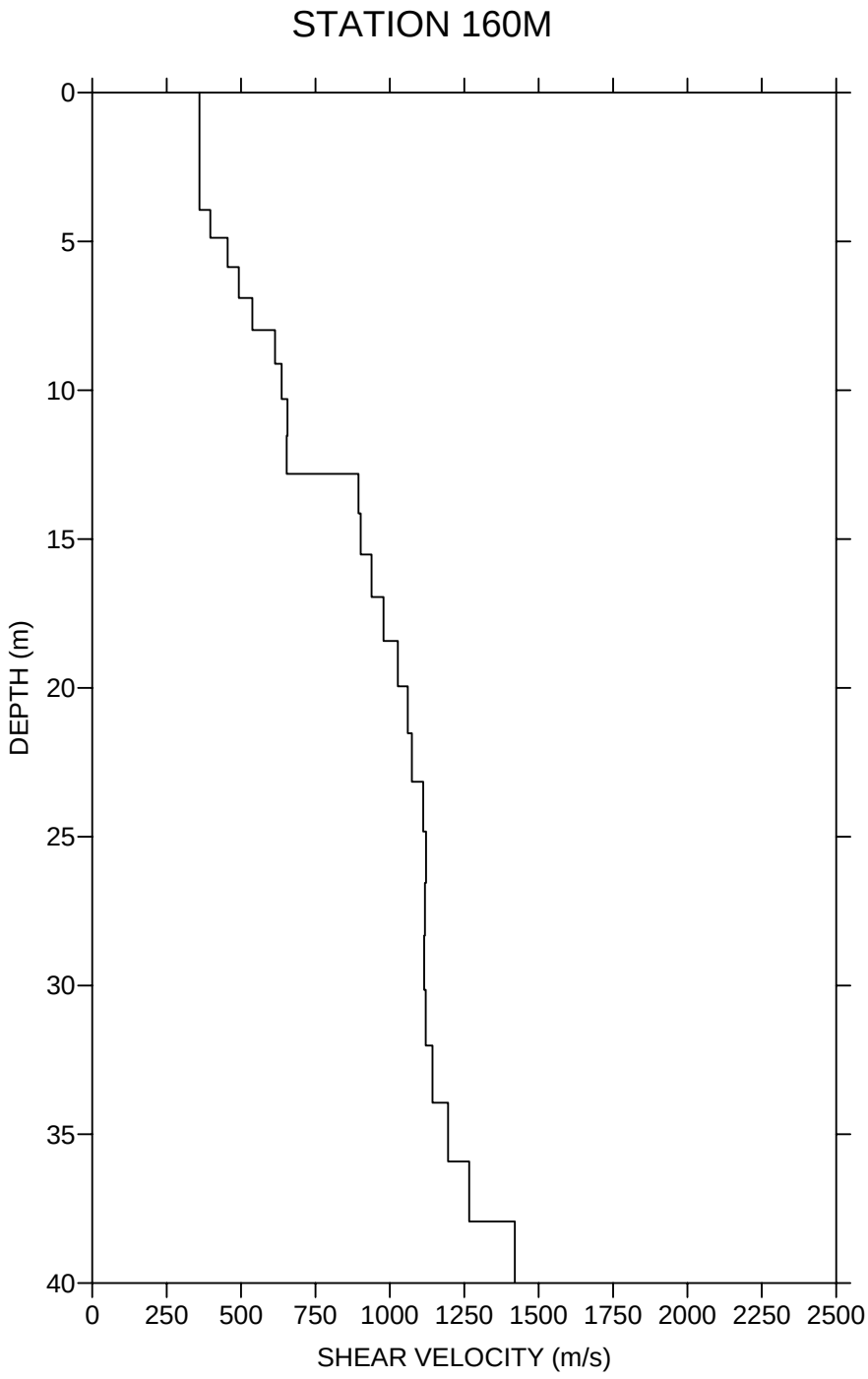
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 075 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-075-M

PLANT SITE - SL-1



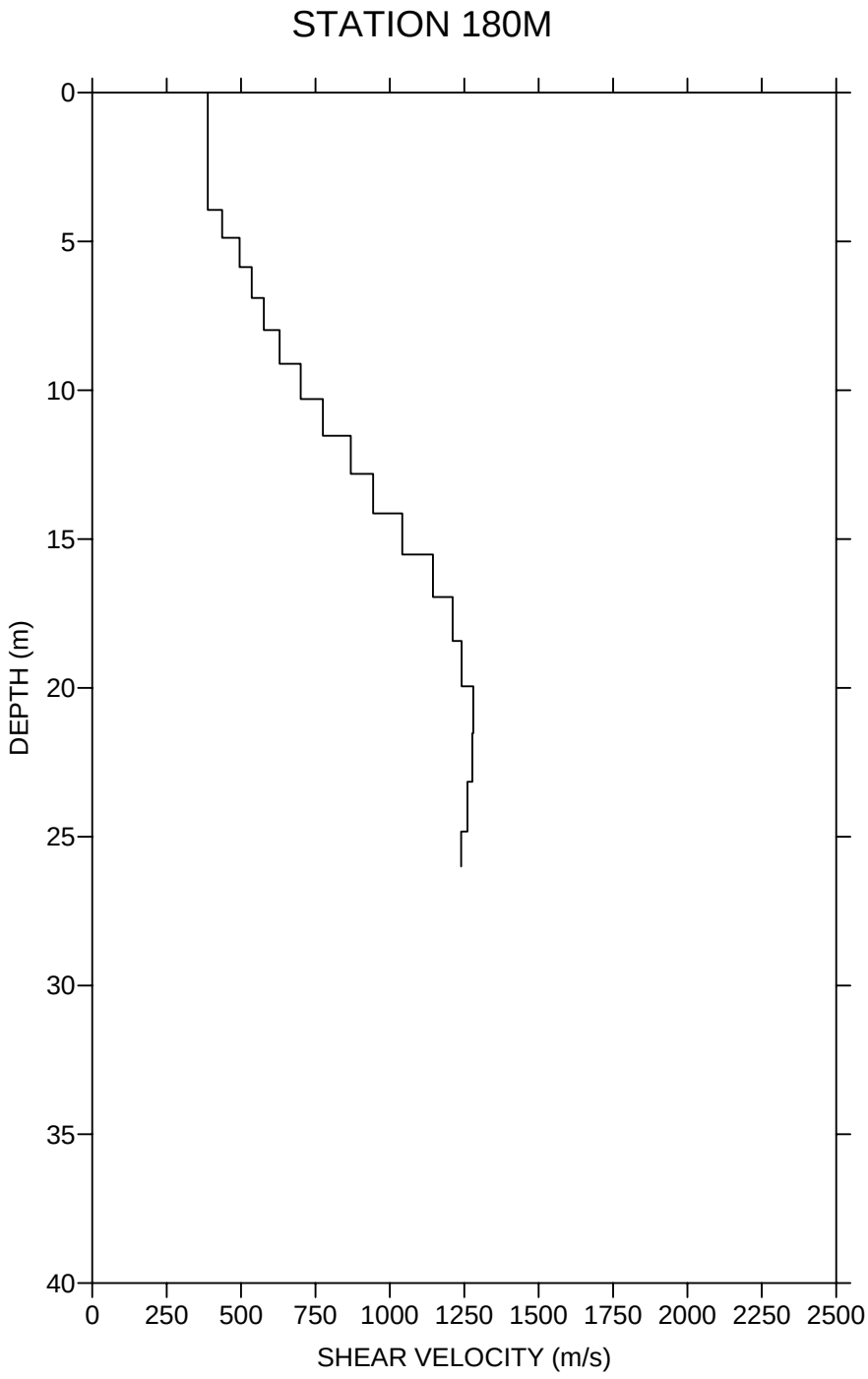
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 140 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-140-M

PLANT SITE - SL-1



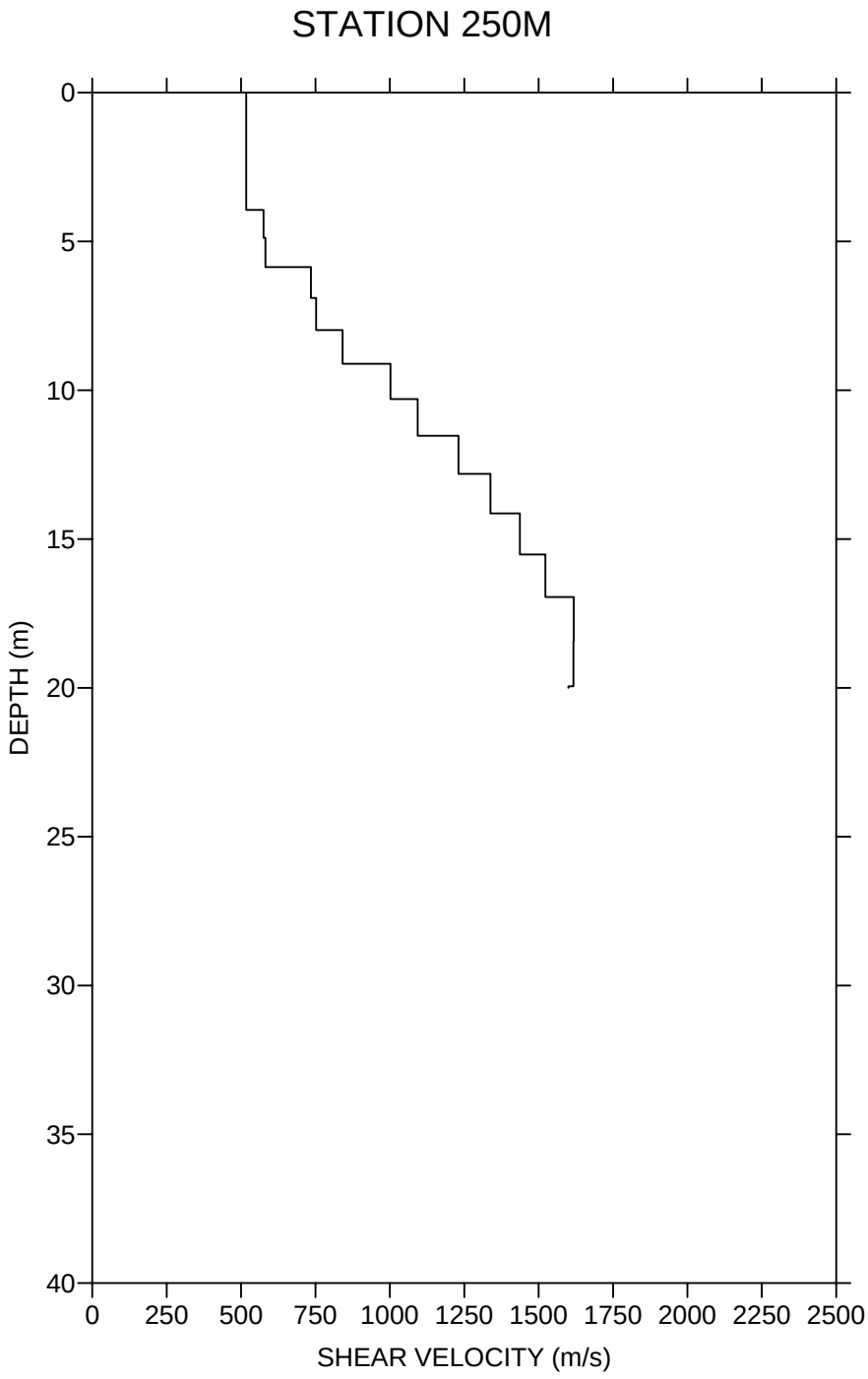
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 160 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-160-M

PLANT SITE - SL-1



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 180 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-180-M

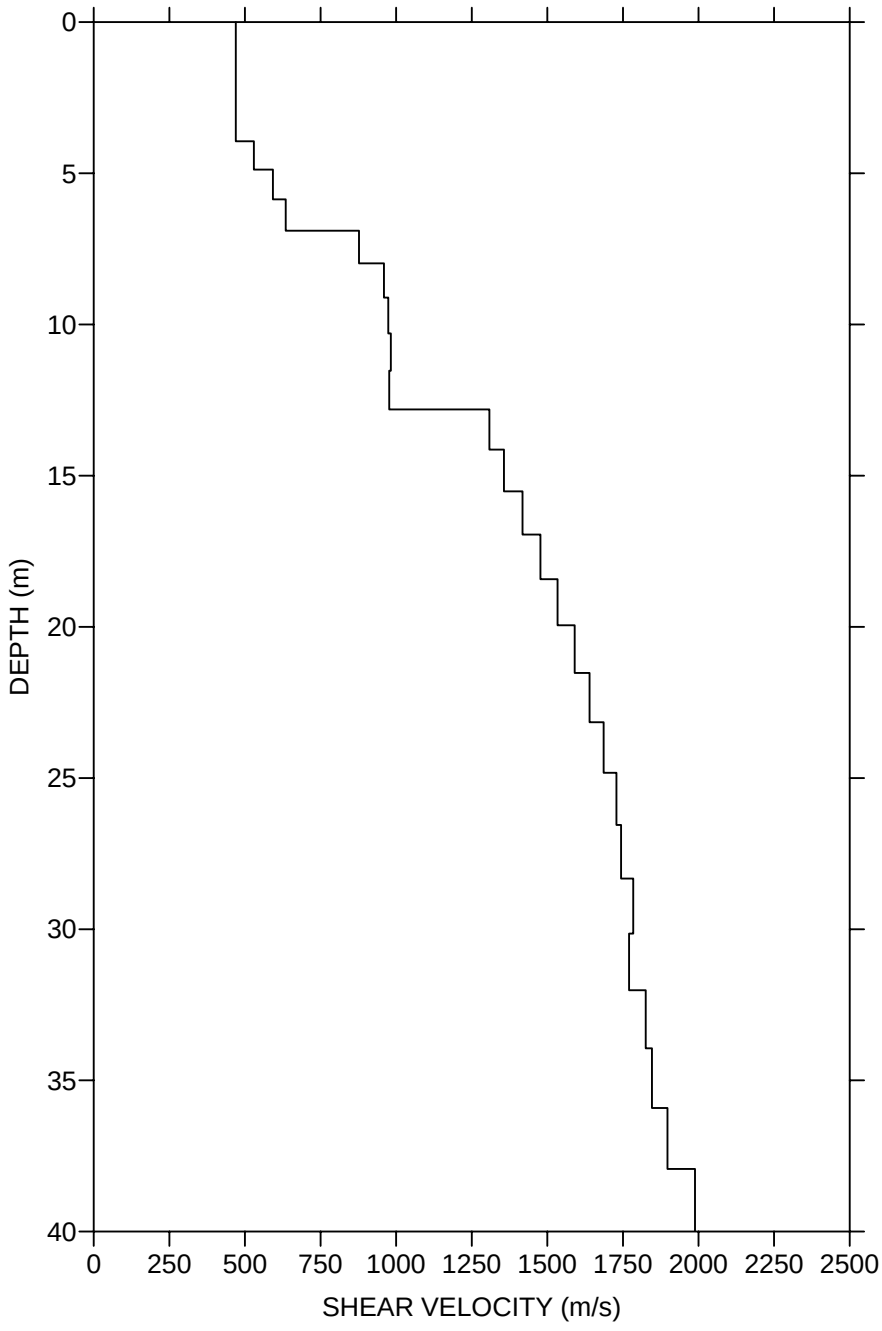
PLANT SITE - SL-1



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 250 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-250-M

PLANT SITE - SL-1

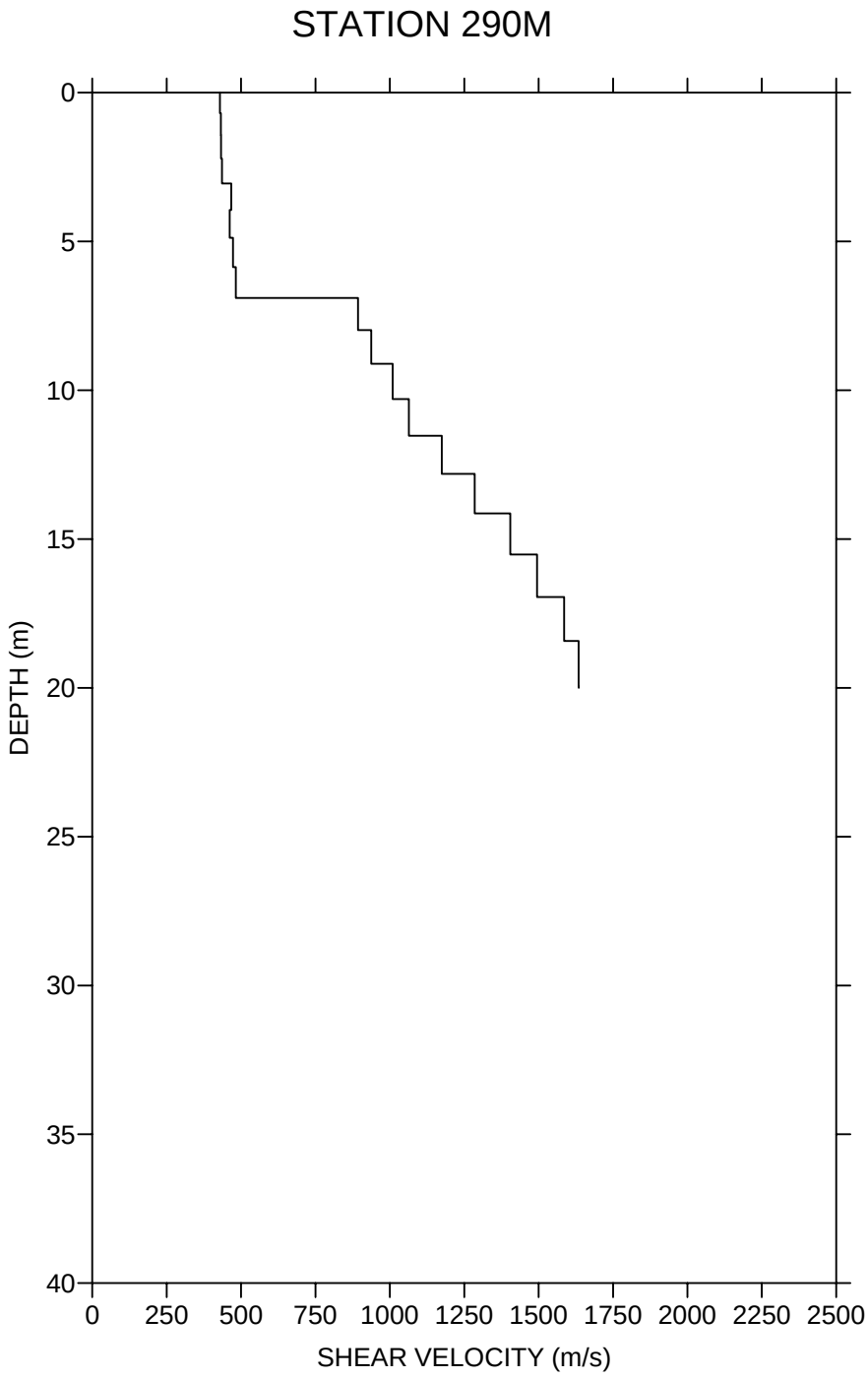
STATION 270M



KNIGHT PIESOLD BLACKWATER PROJECT
GEOPHYSICAL SURVEY
MASW INTERPRETED PROFILE SL-1 STATION 270 METRES
FRONTIER GEOSCIENCES INC.

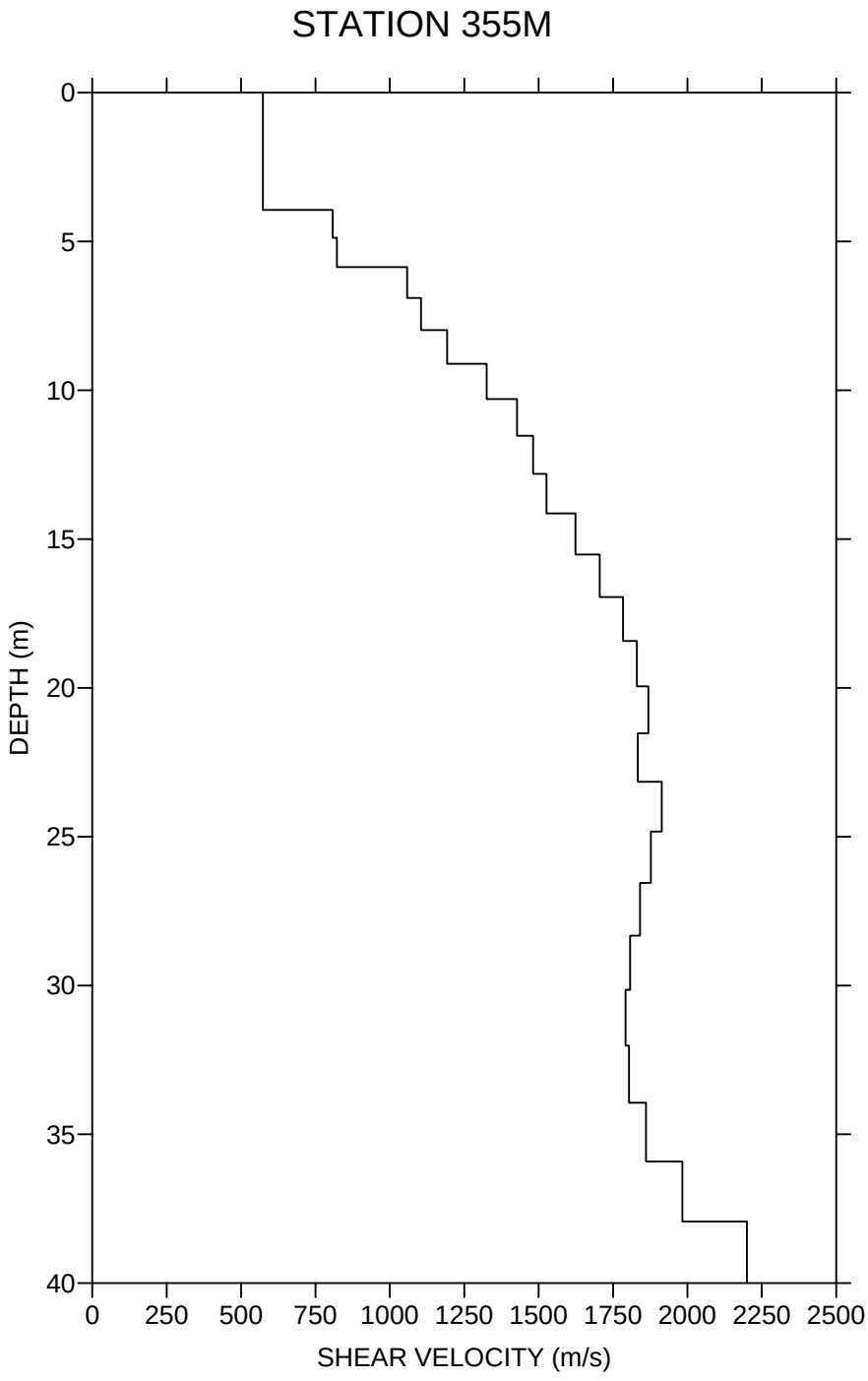
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-270-M

PLANT SITE - SL-1



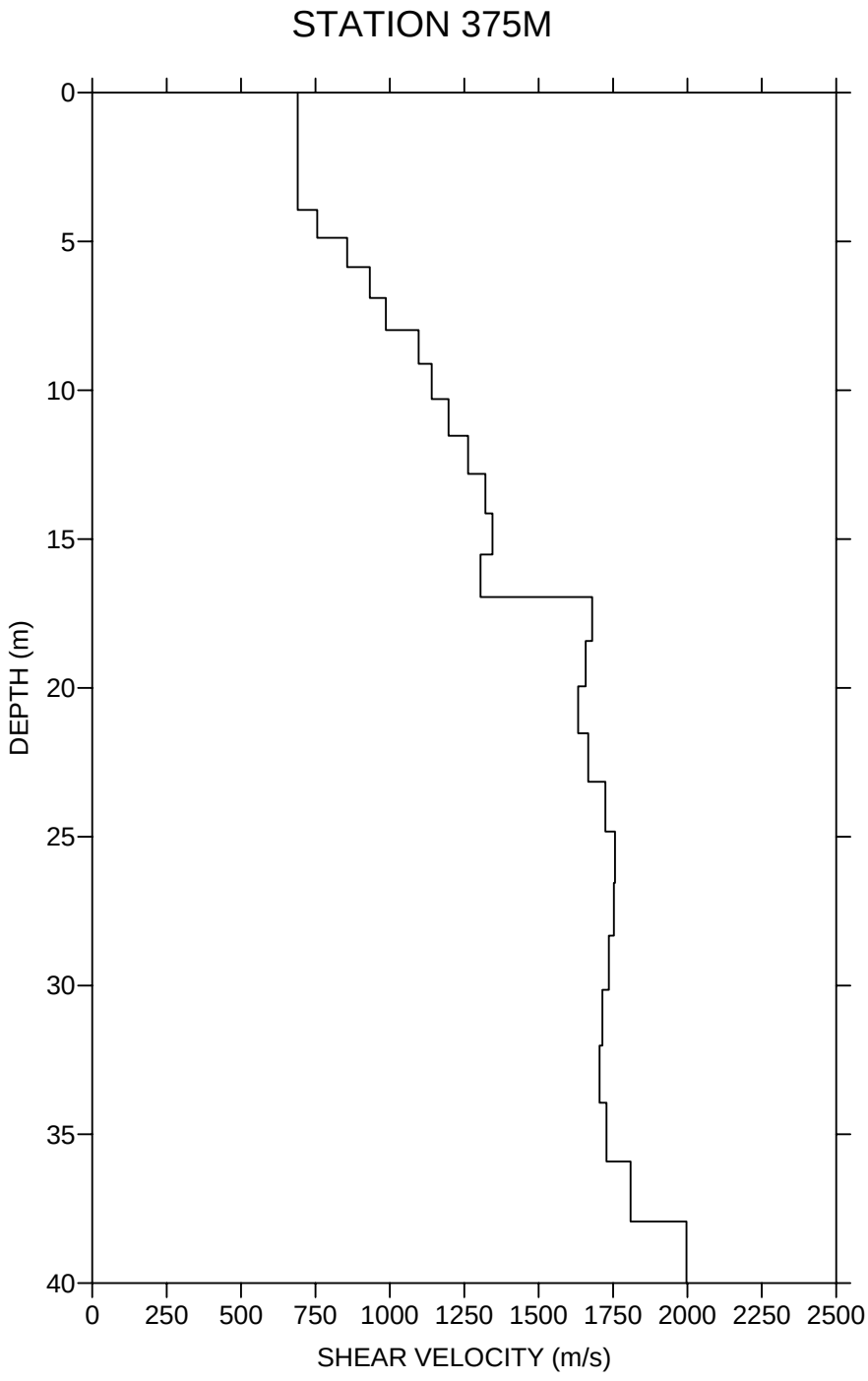
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 290 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-290-M

PLANT SITE - SL-1



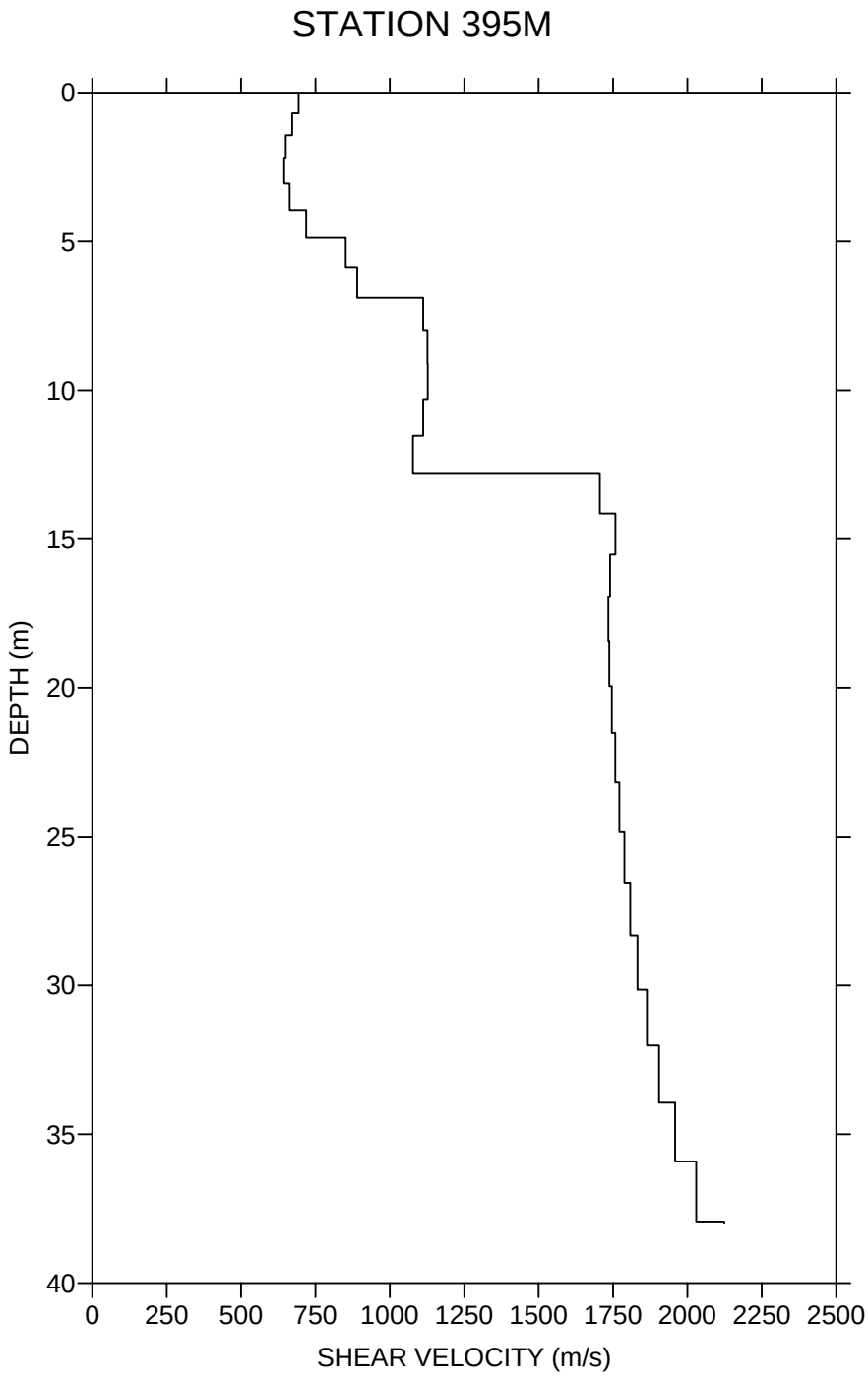
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 355 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-355-M

PLANT SITE - SL-1



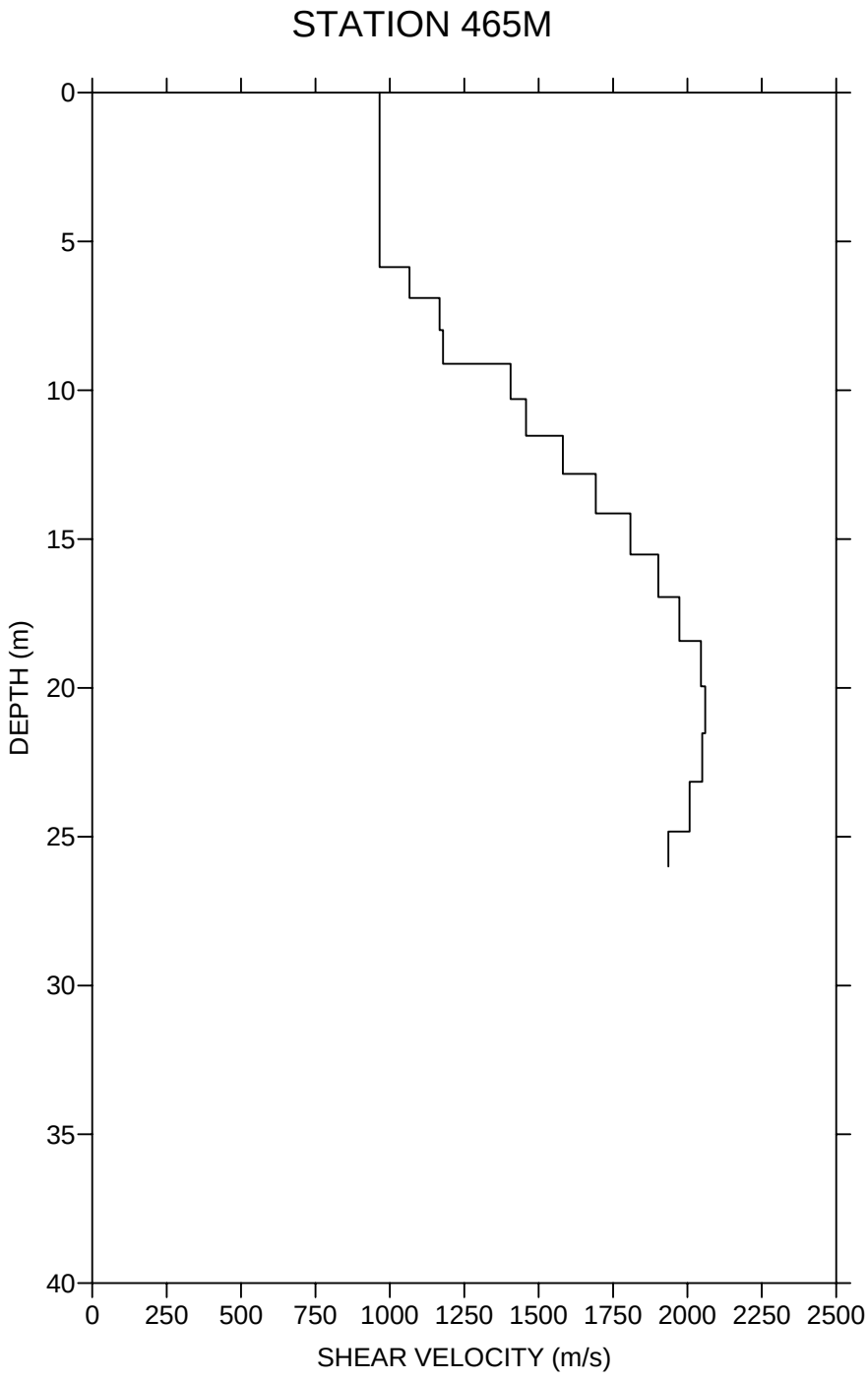
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 375 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-375-M

PLANT SITE - SL-1



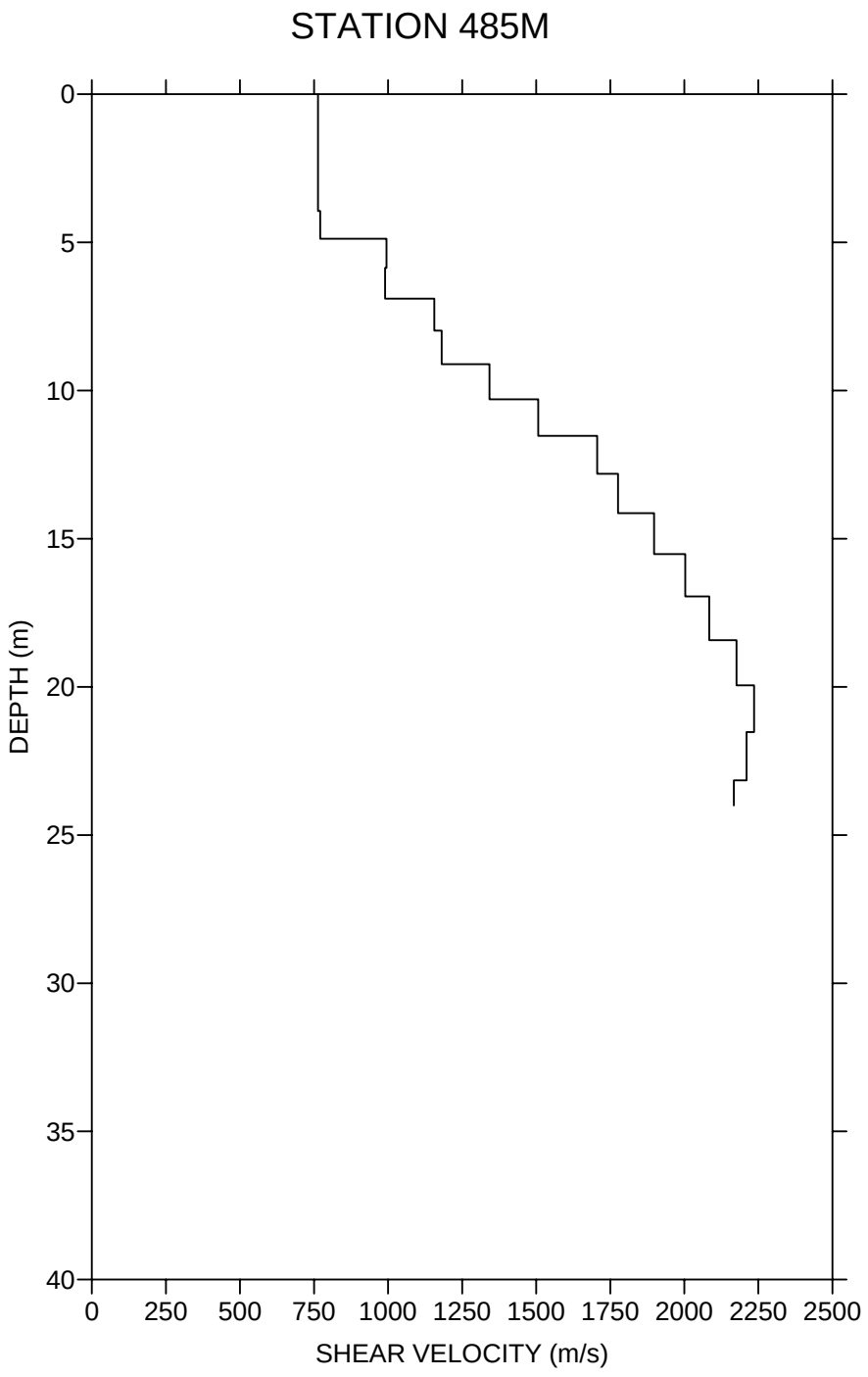
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 395 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-395-M

PLANT SITE - SL-1



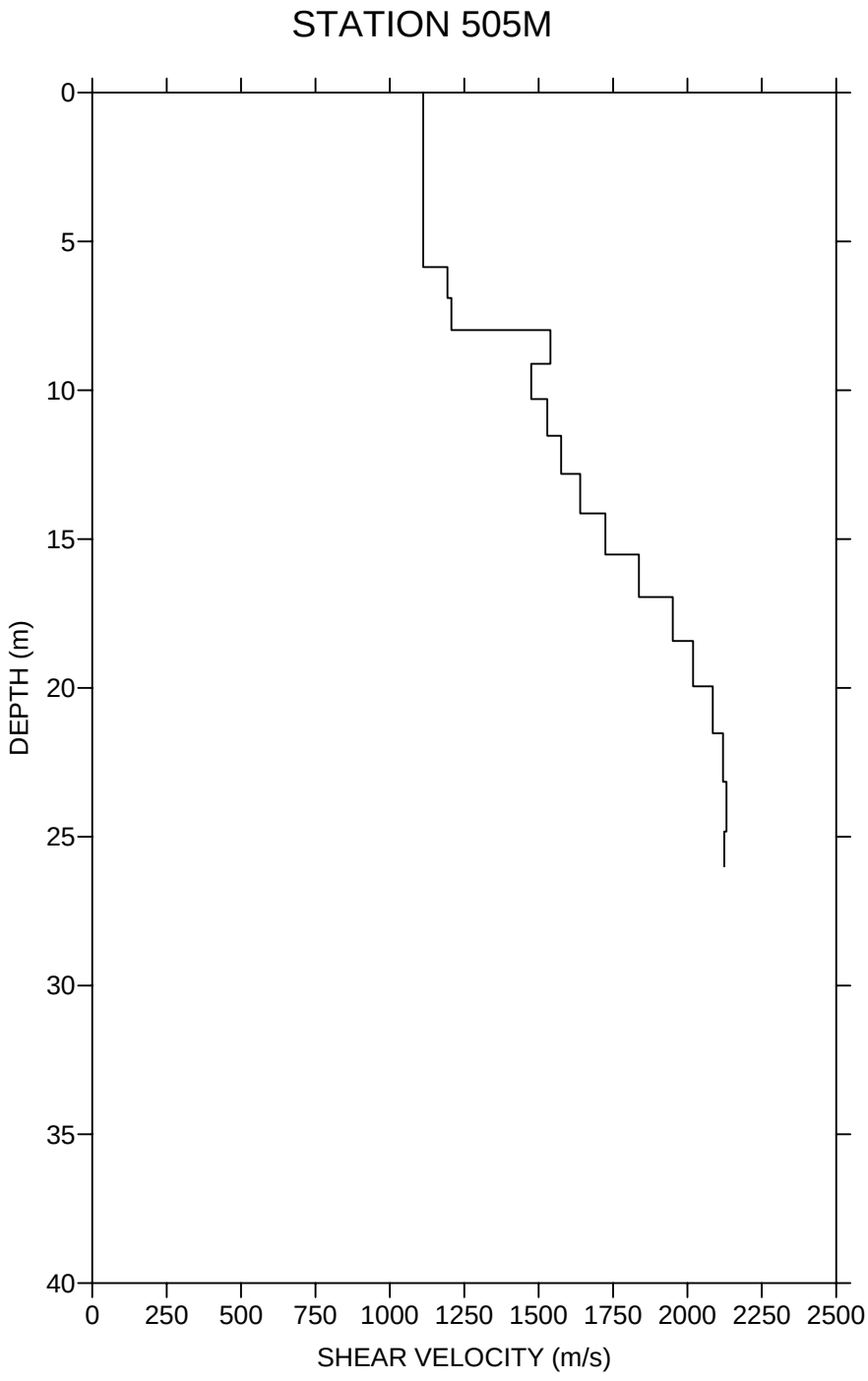
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 465 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-465-M

PLANT SITE - SL-1



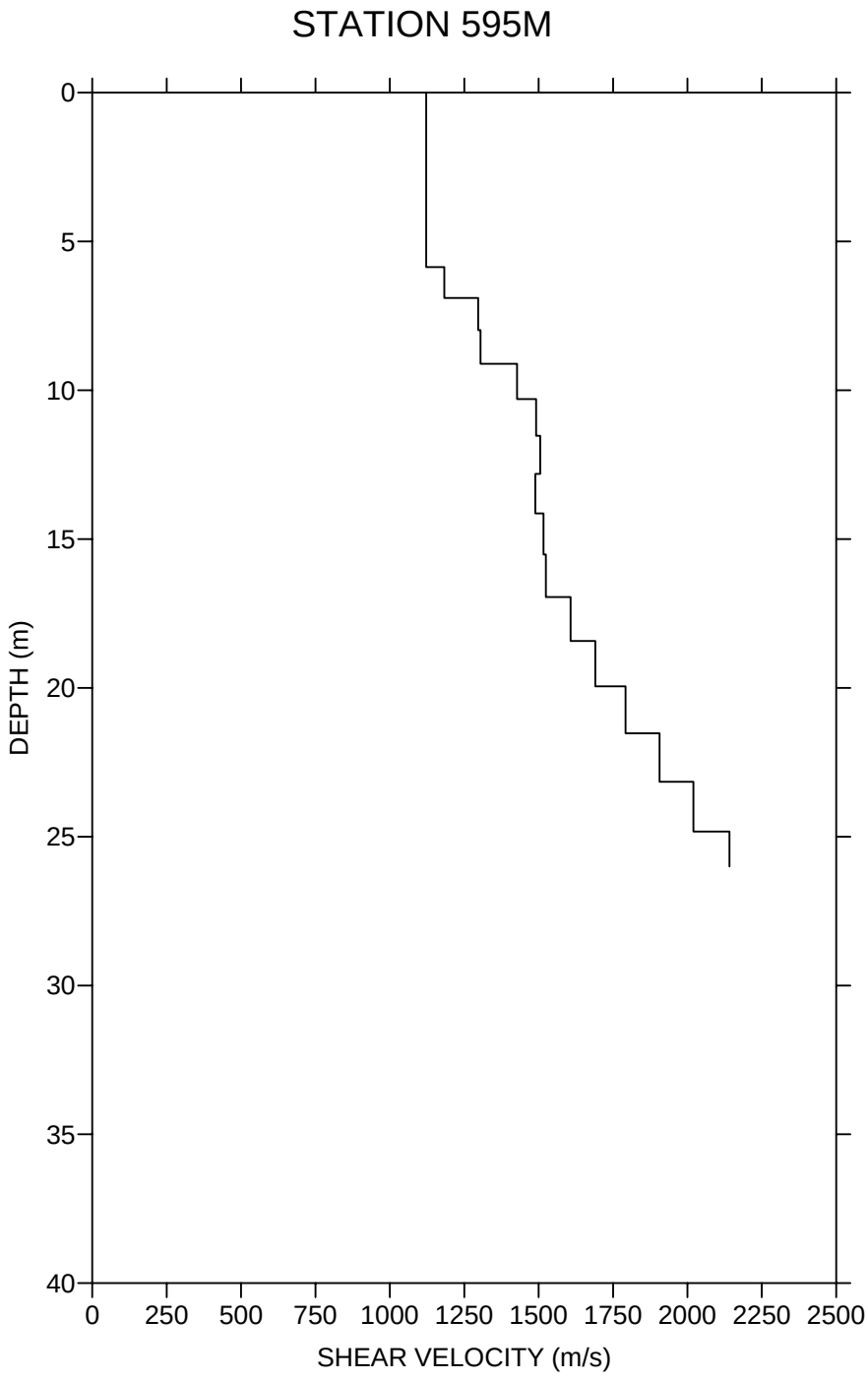
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 485 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-485-M

PLANT SITE - SL-1



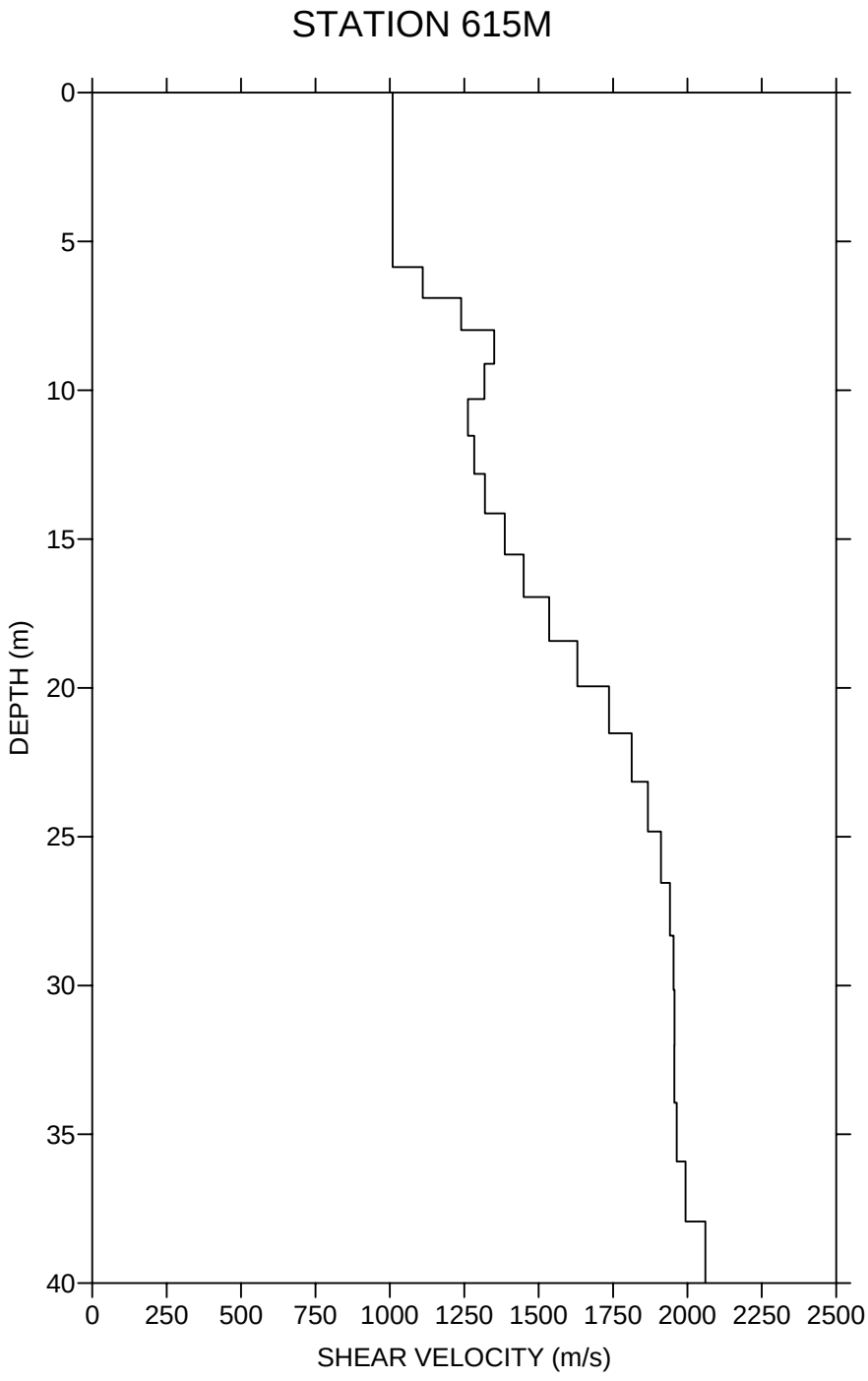
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 505 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-505-M

PLANT SITE - SL-1



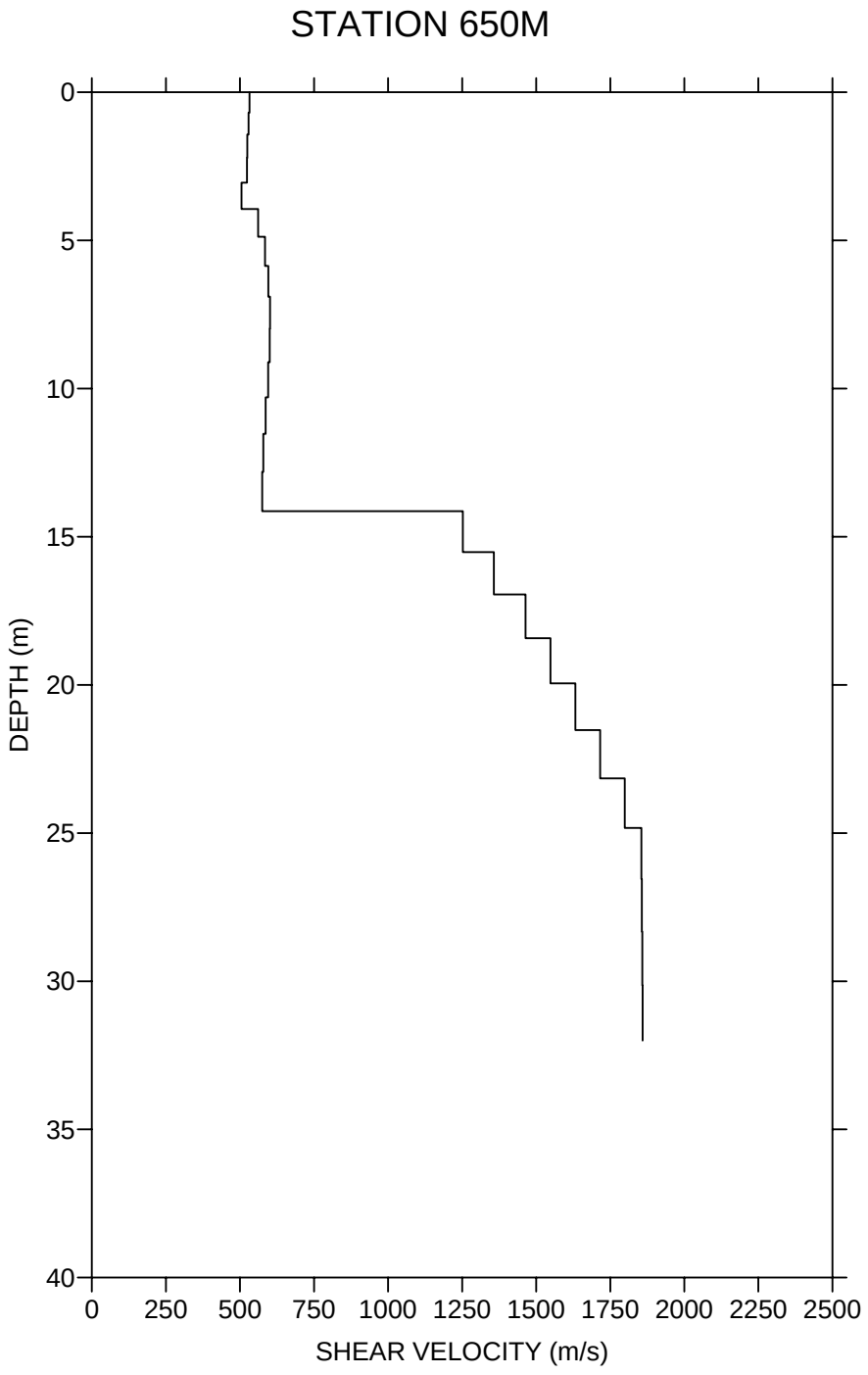
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 595 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-595-M

PLANT SITE - SL-1



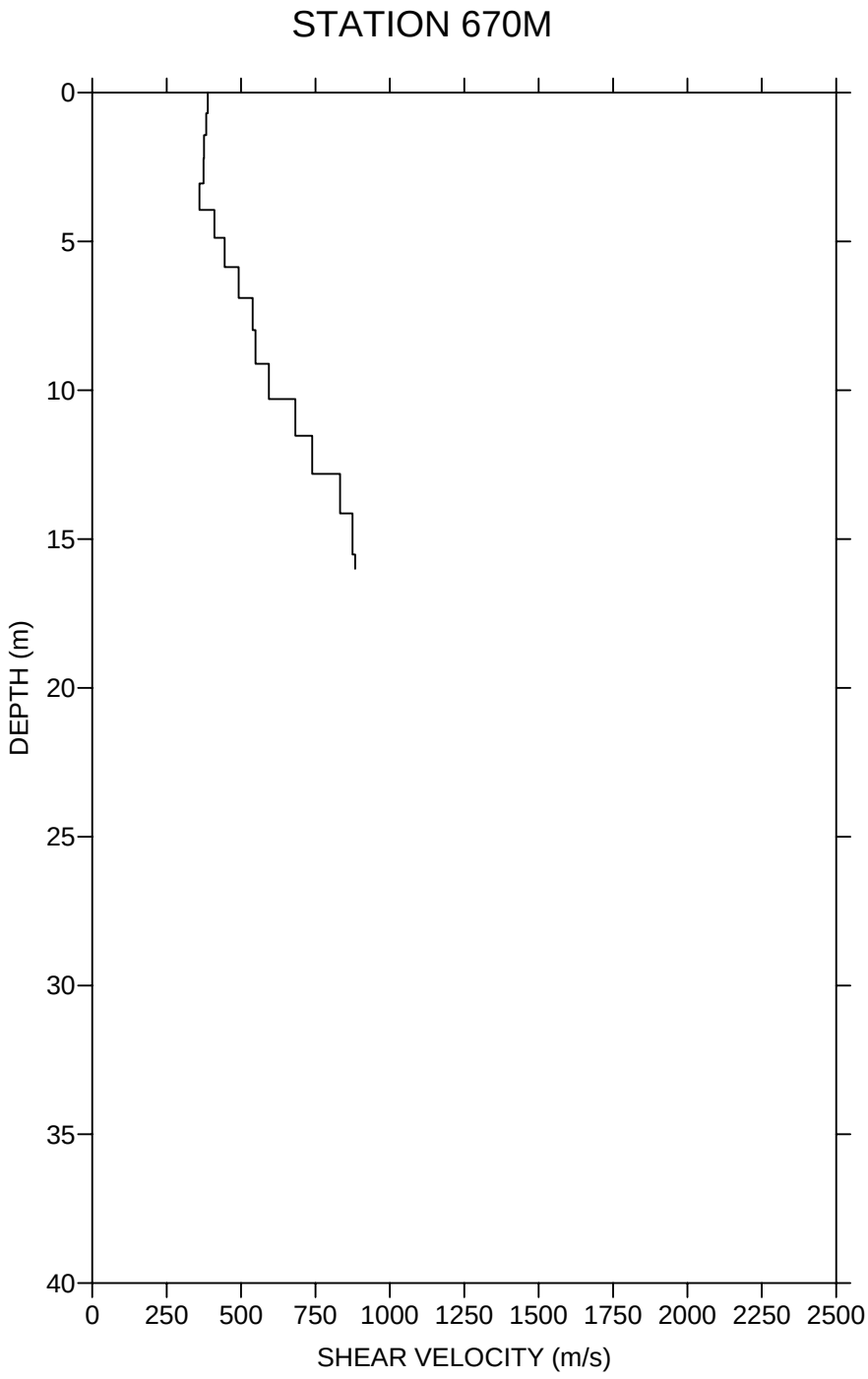
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 615 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-615-M

PLANT SITE - SL-1



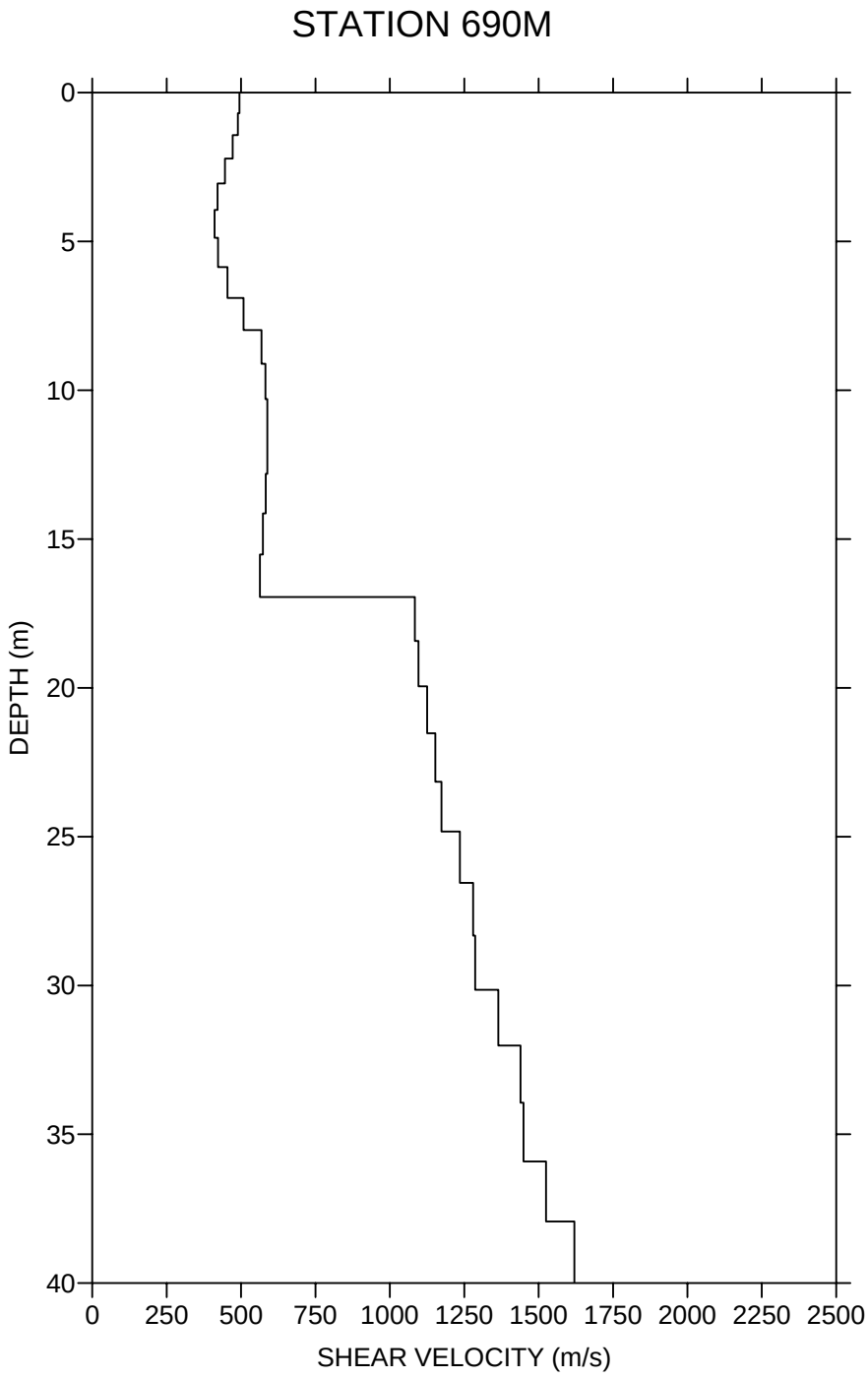
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 650 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-650-M

PLANT SITE - SL-1



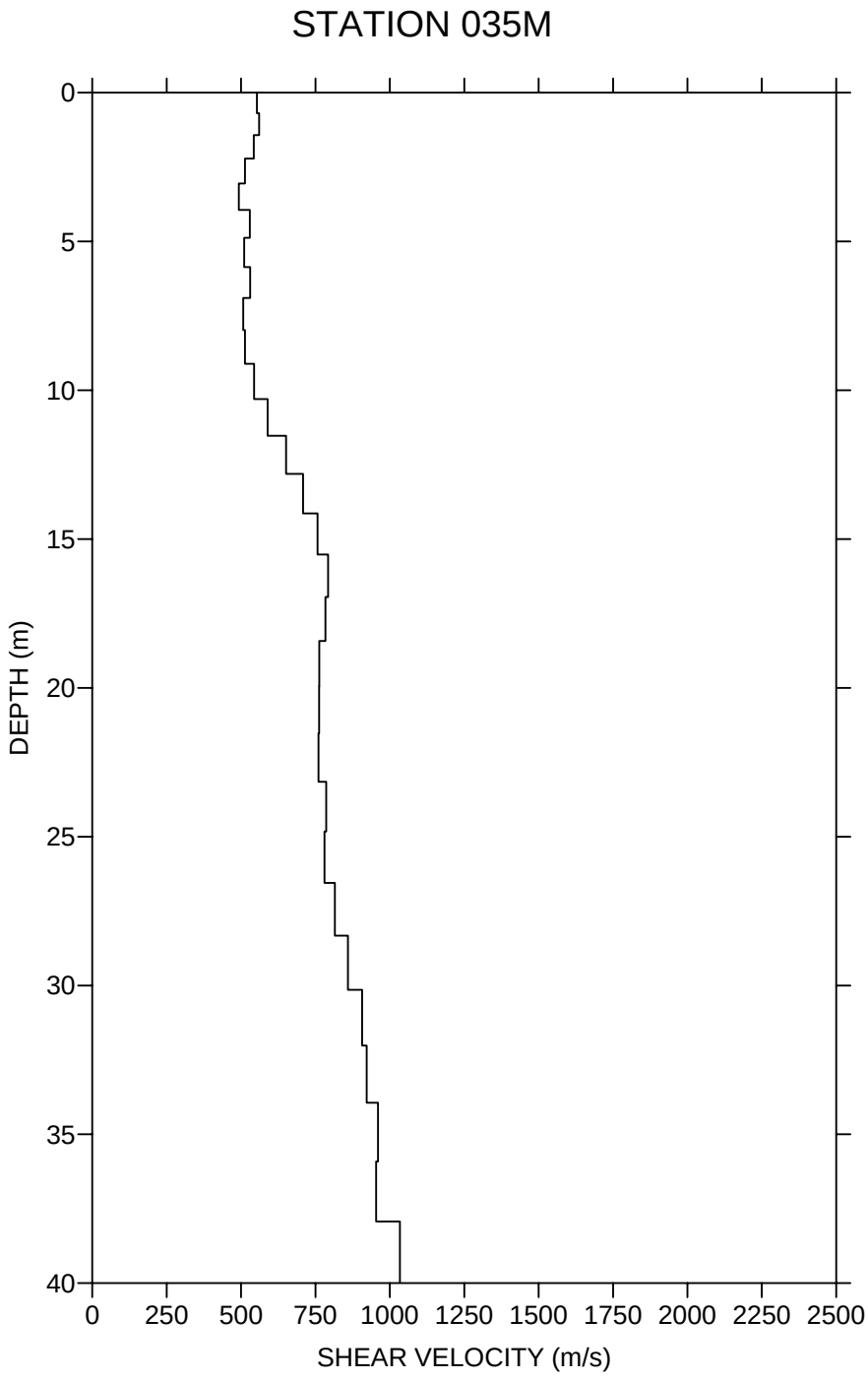
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 670 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-670-M

PLANT SITE - SL-1



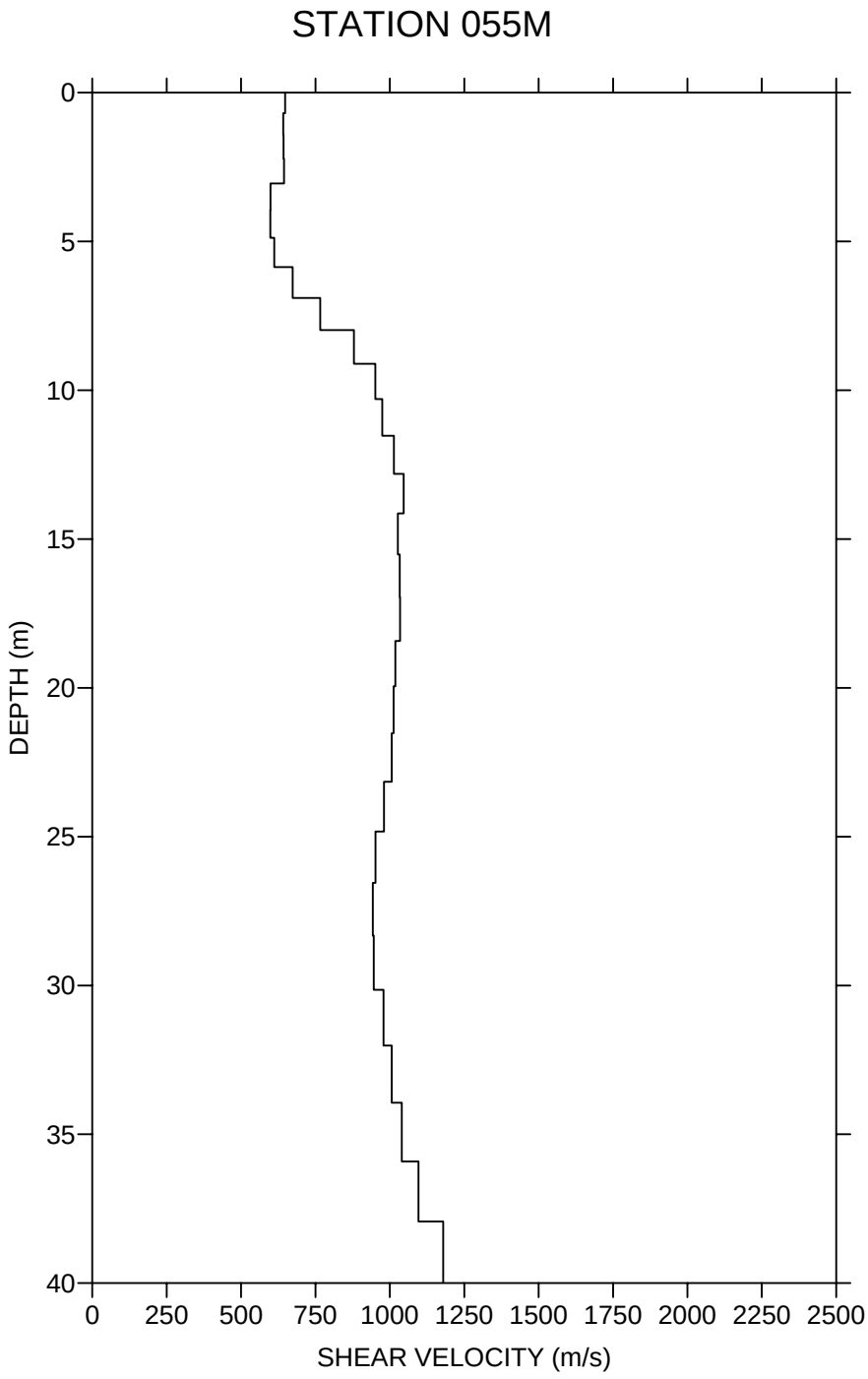
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-1 STATION 690 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-1-690-M

PLANT SITE - SL-2



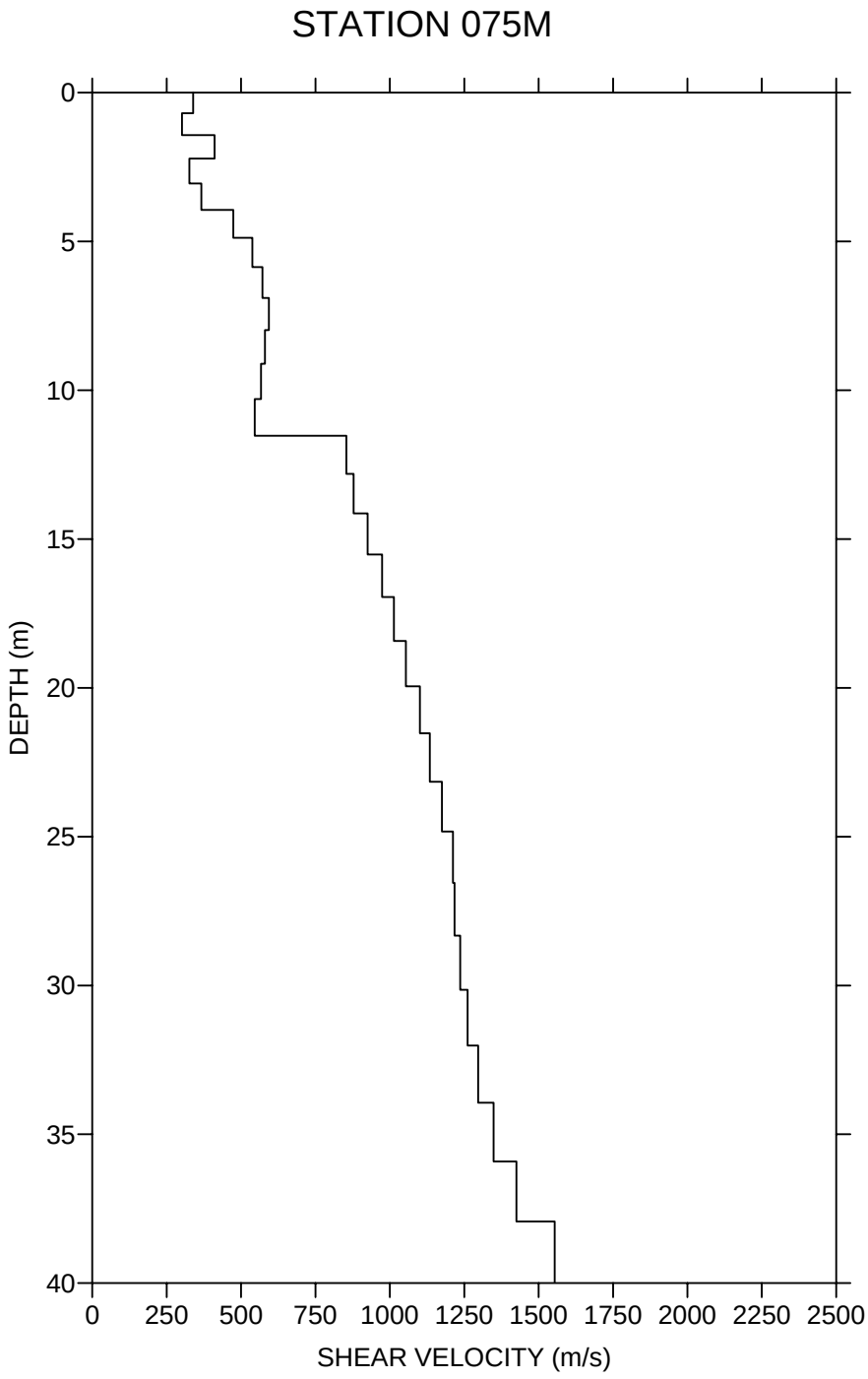
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 035 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-035-M

PLANT SITE - SL-2



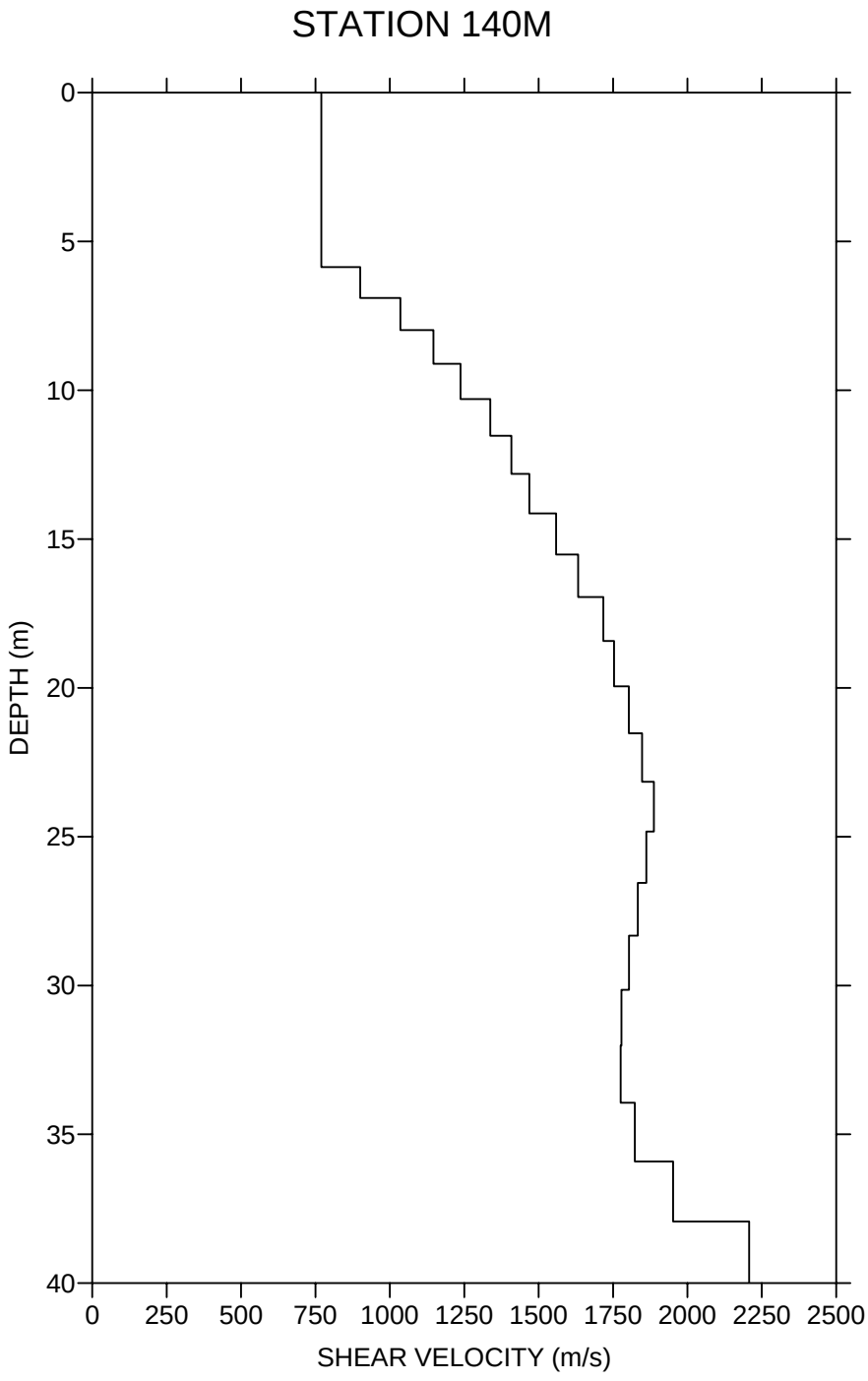
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 055 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-055-M

PLANT SITE - SL-2



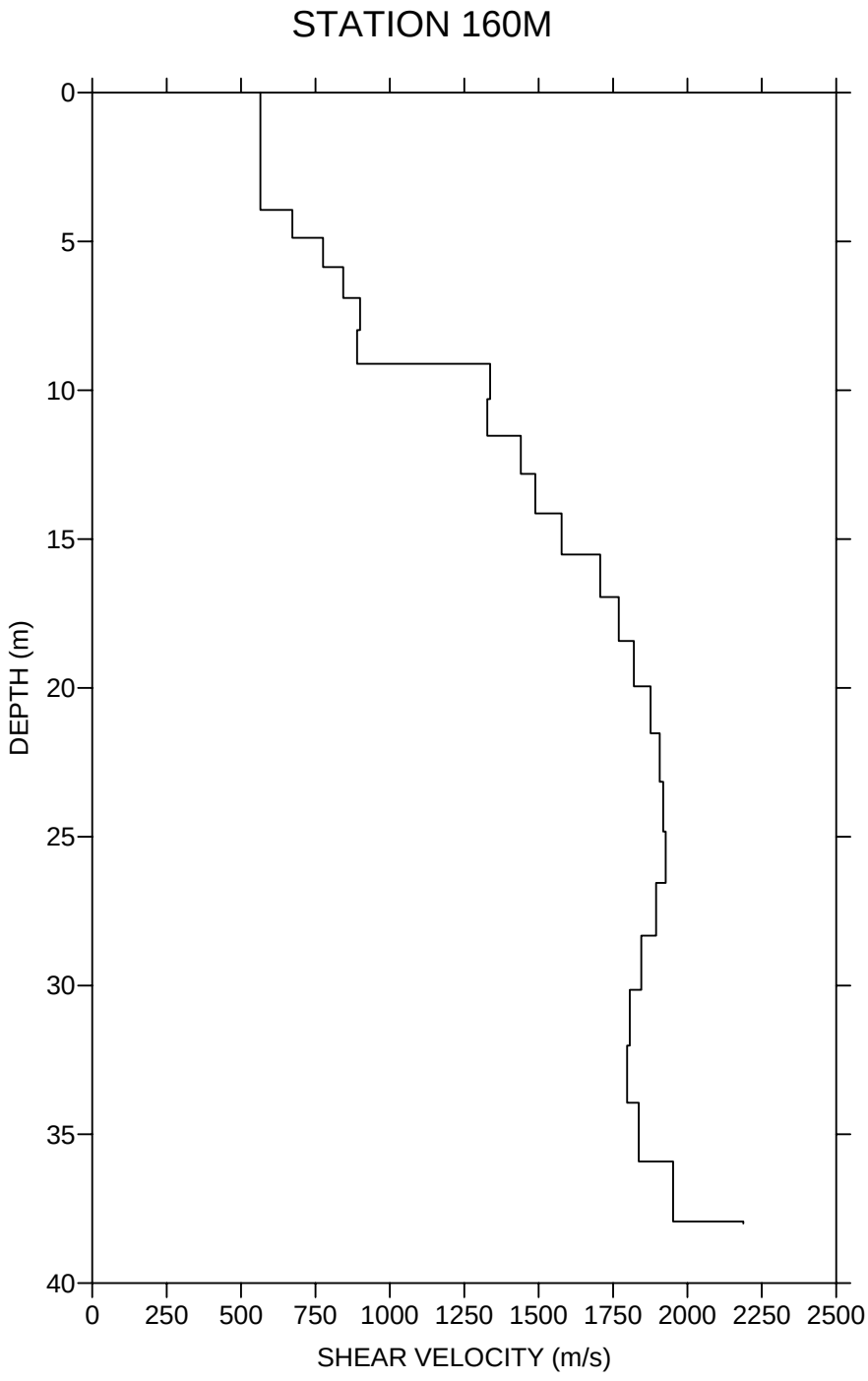
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 075 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-075-M

PLANT SITE - SL-2



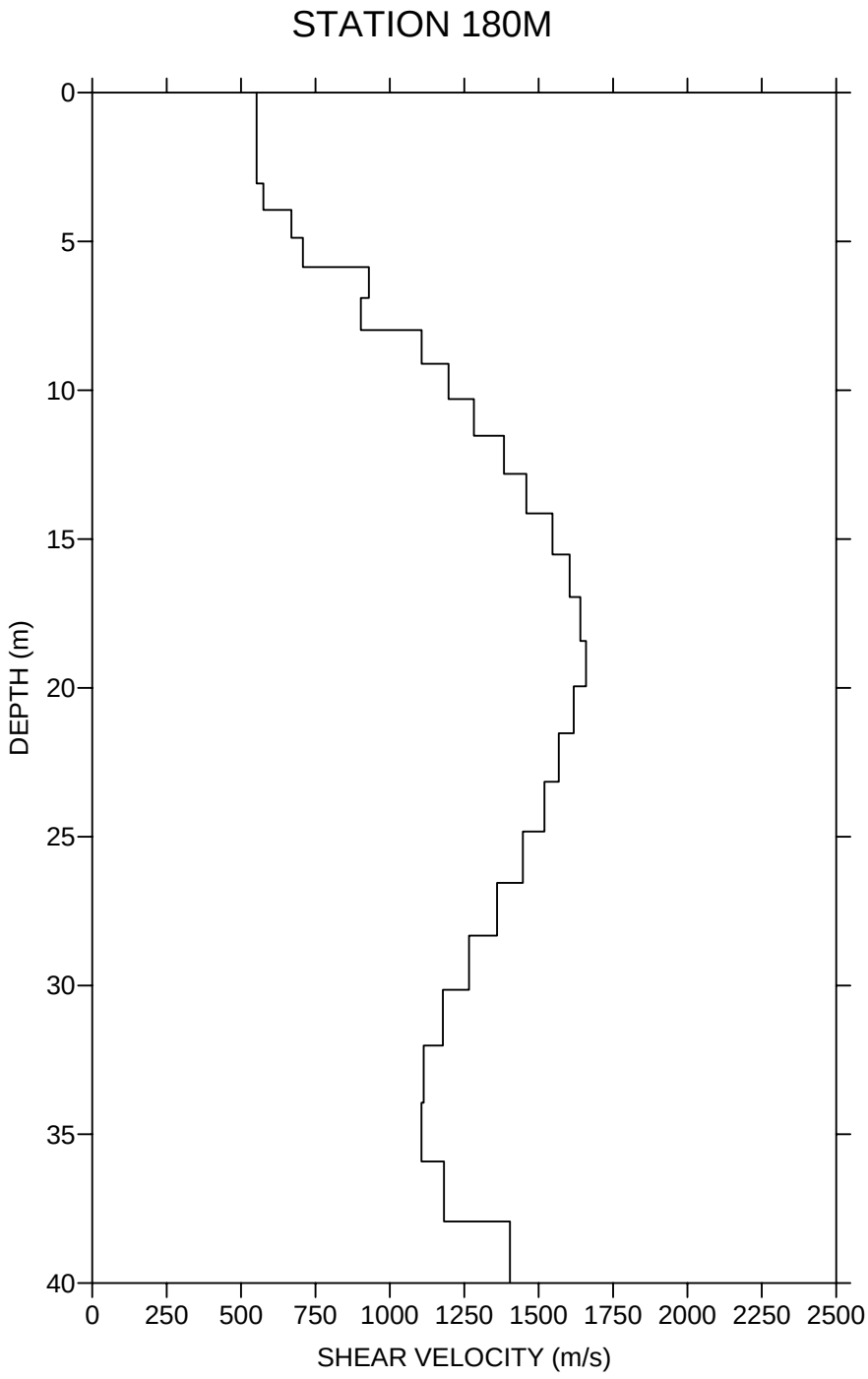
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 140 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-140-M

PLANT SITE - SL-2



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 160 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-160-M

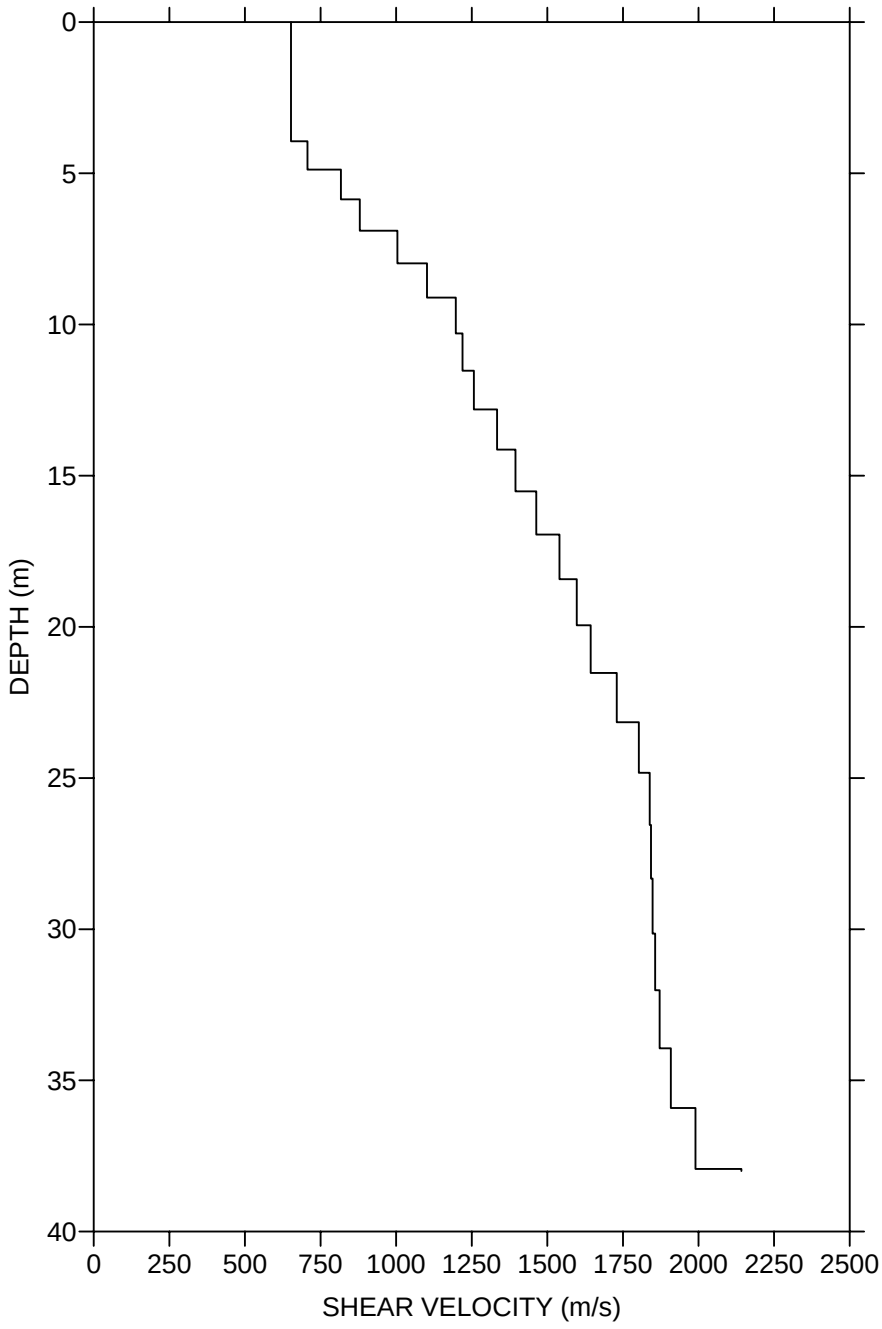
PLANT SITE - SL-2



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 180 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-180-M

PLANT SITE - SL-2

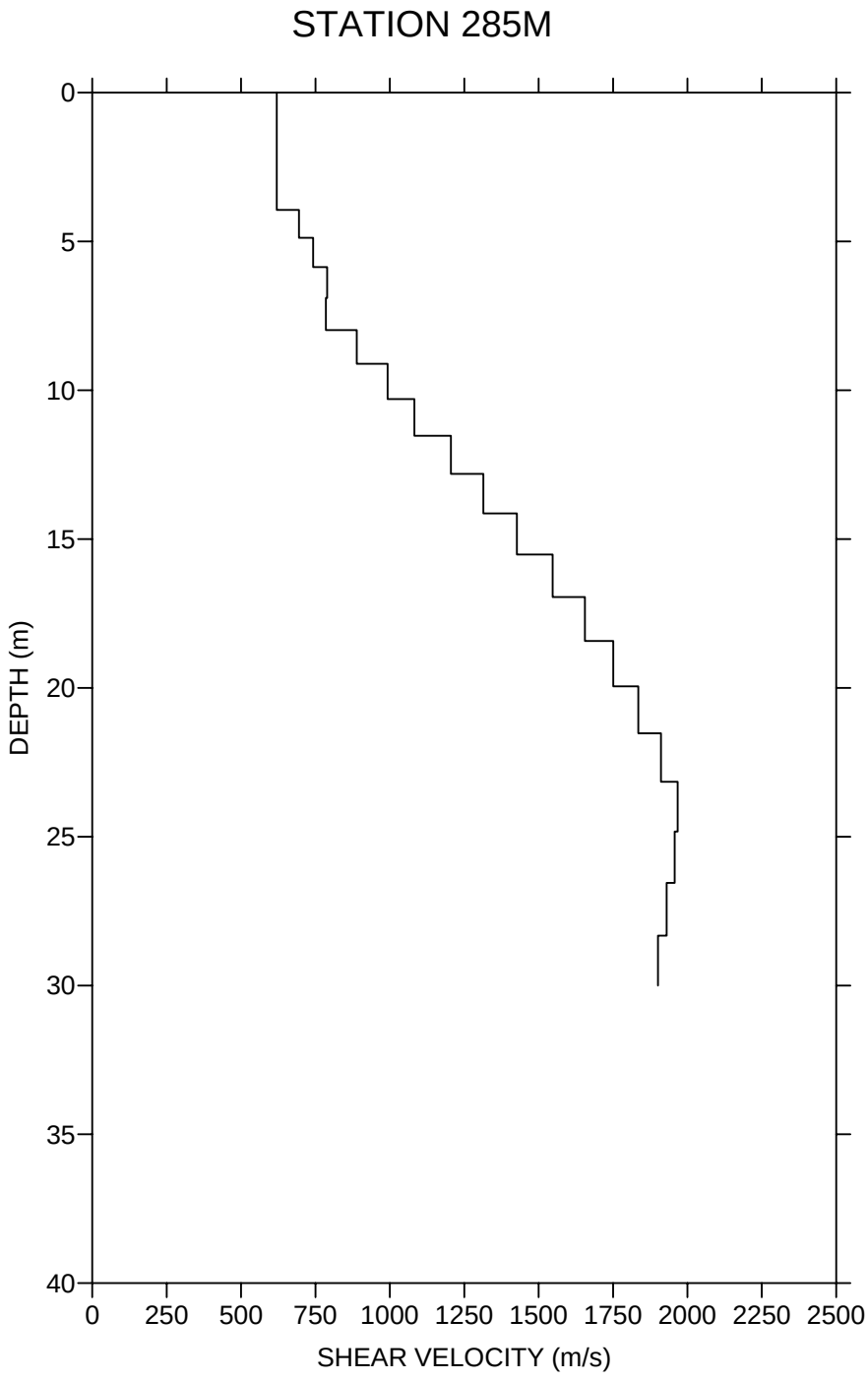
STATION 265M



KNIGHT PIESOLD BLACKWATER PROJECT
GEOPHYSICAL SURVEY
MASW INTERPRETED PROFILE SL-2 STATION 265 METRES
FRONTIER GEOSCIENCES INC.

DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-265-M

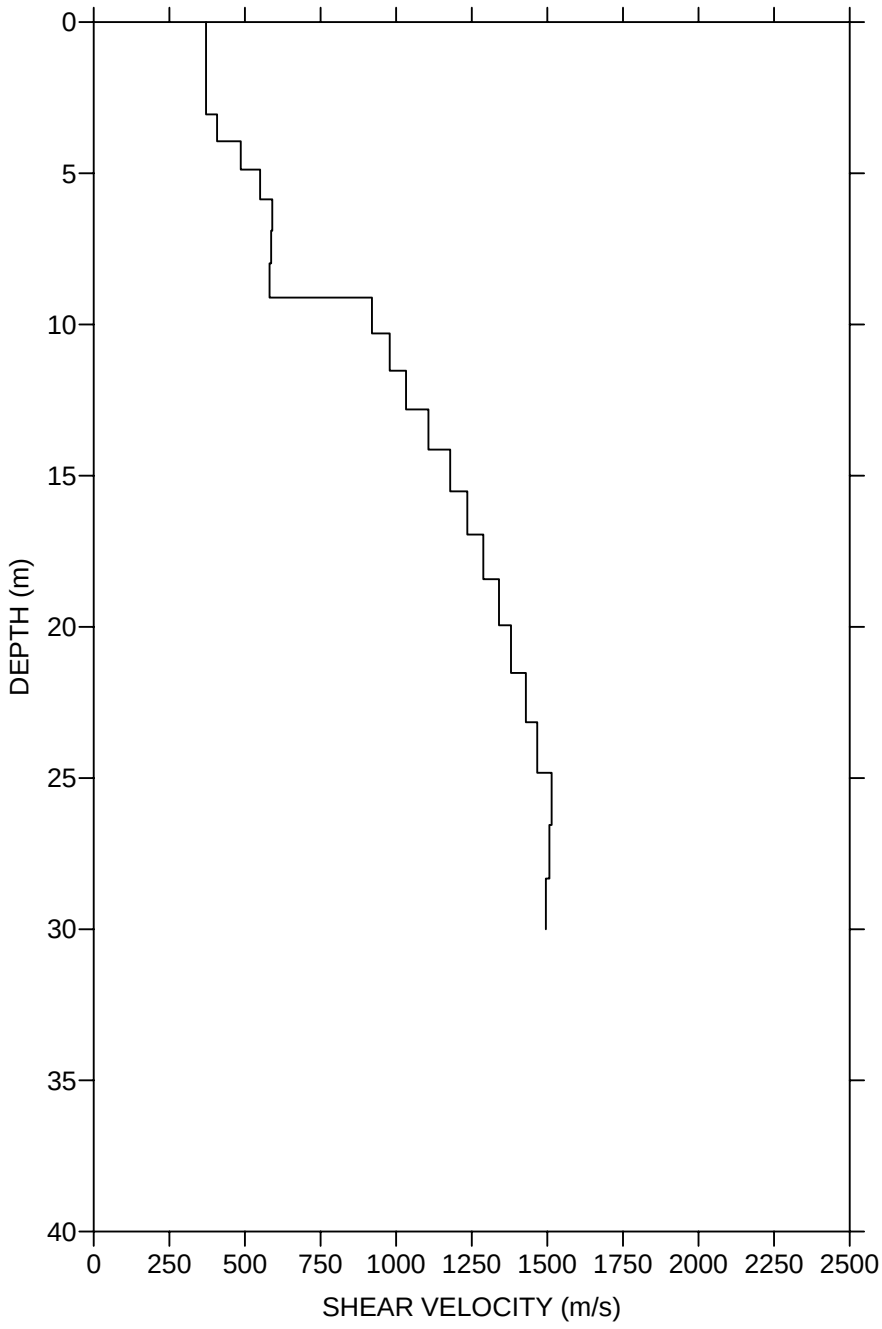
PLANT SITE - SL-2



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 285 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-285-M

PLANT SITE - SL-2

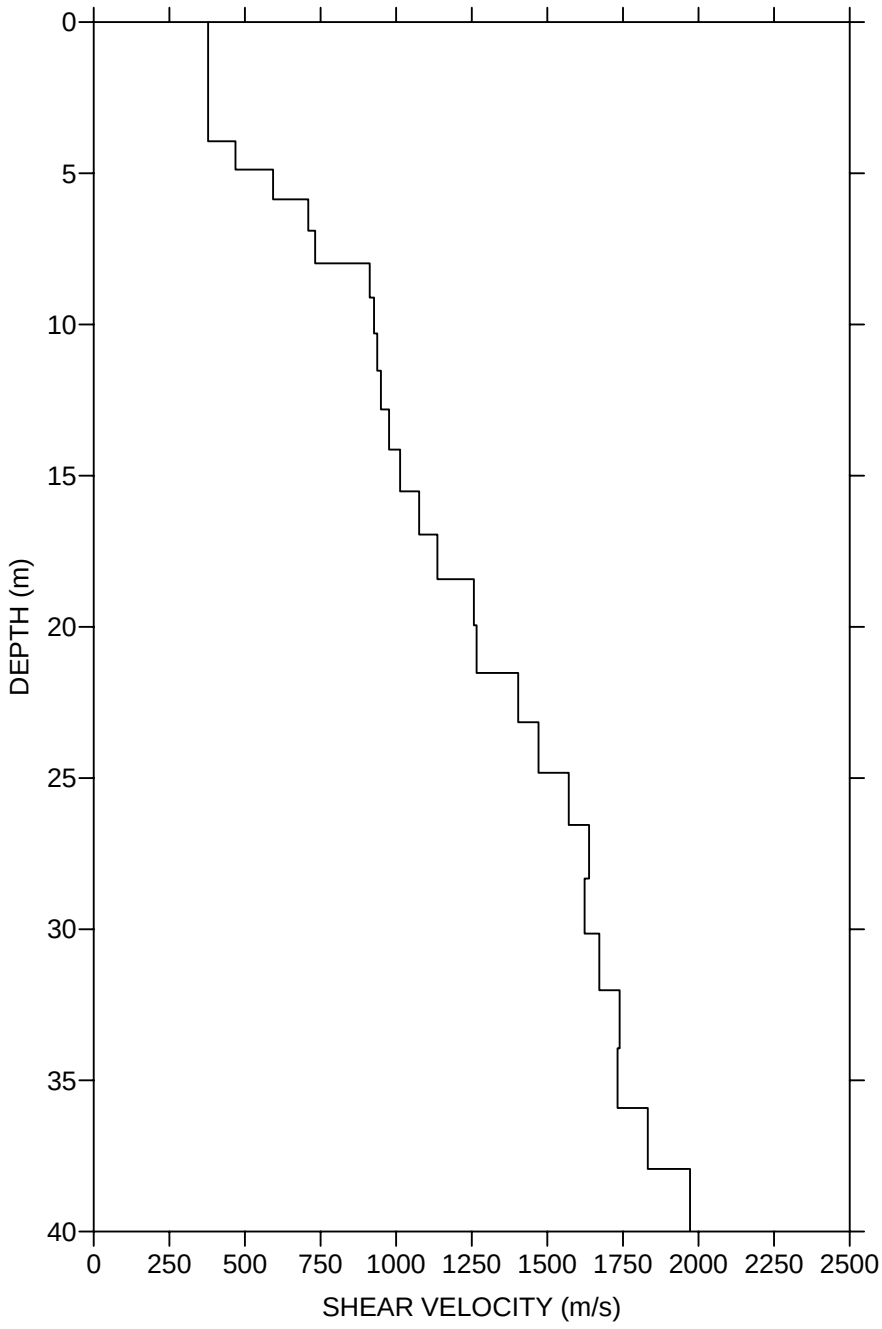
STATION 355M



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 355 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-355-M

PLANT SITE - SL-2

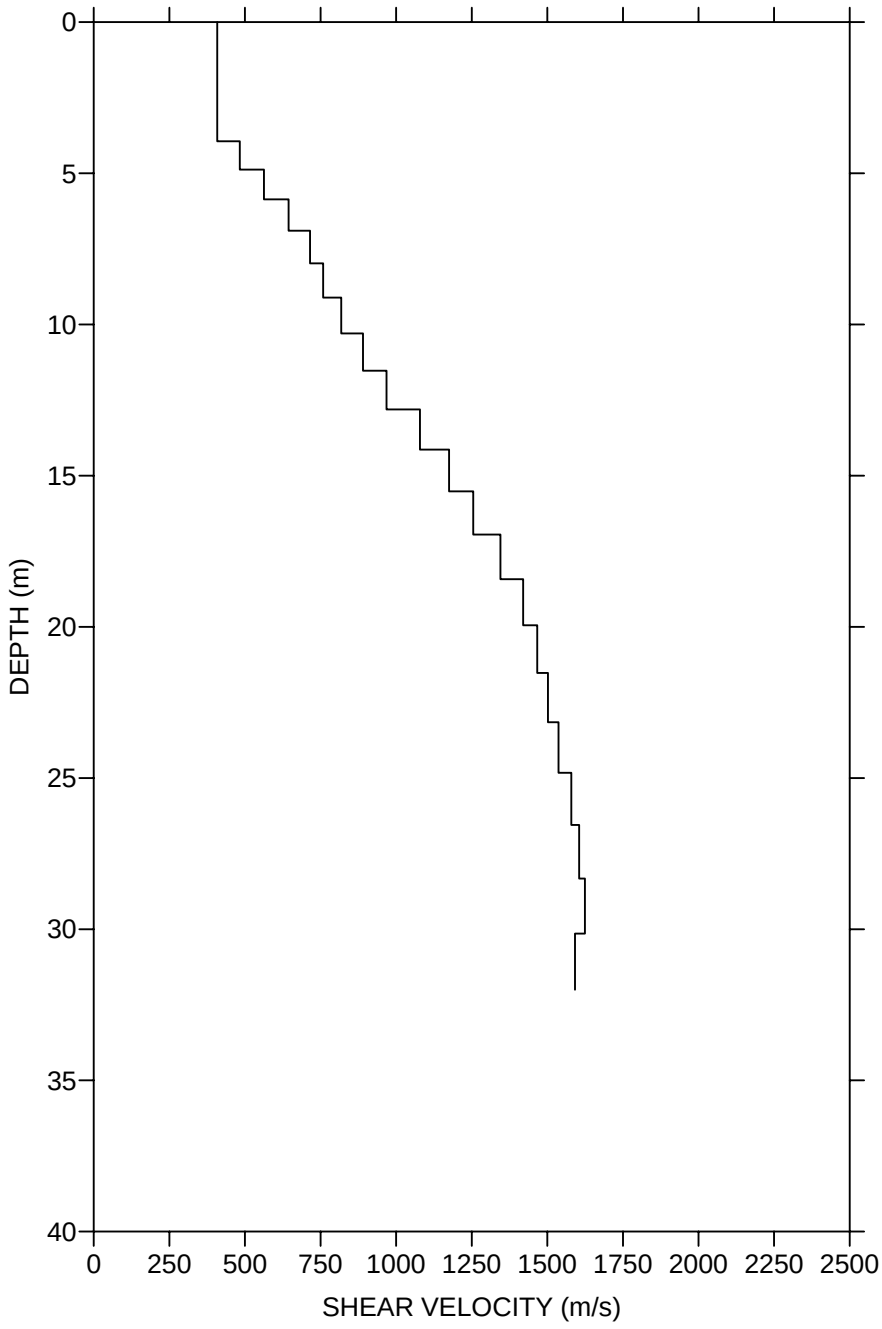
STATION 375M



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 375 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-375-M

PLANT SITE - SL-2

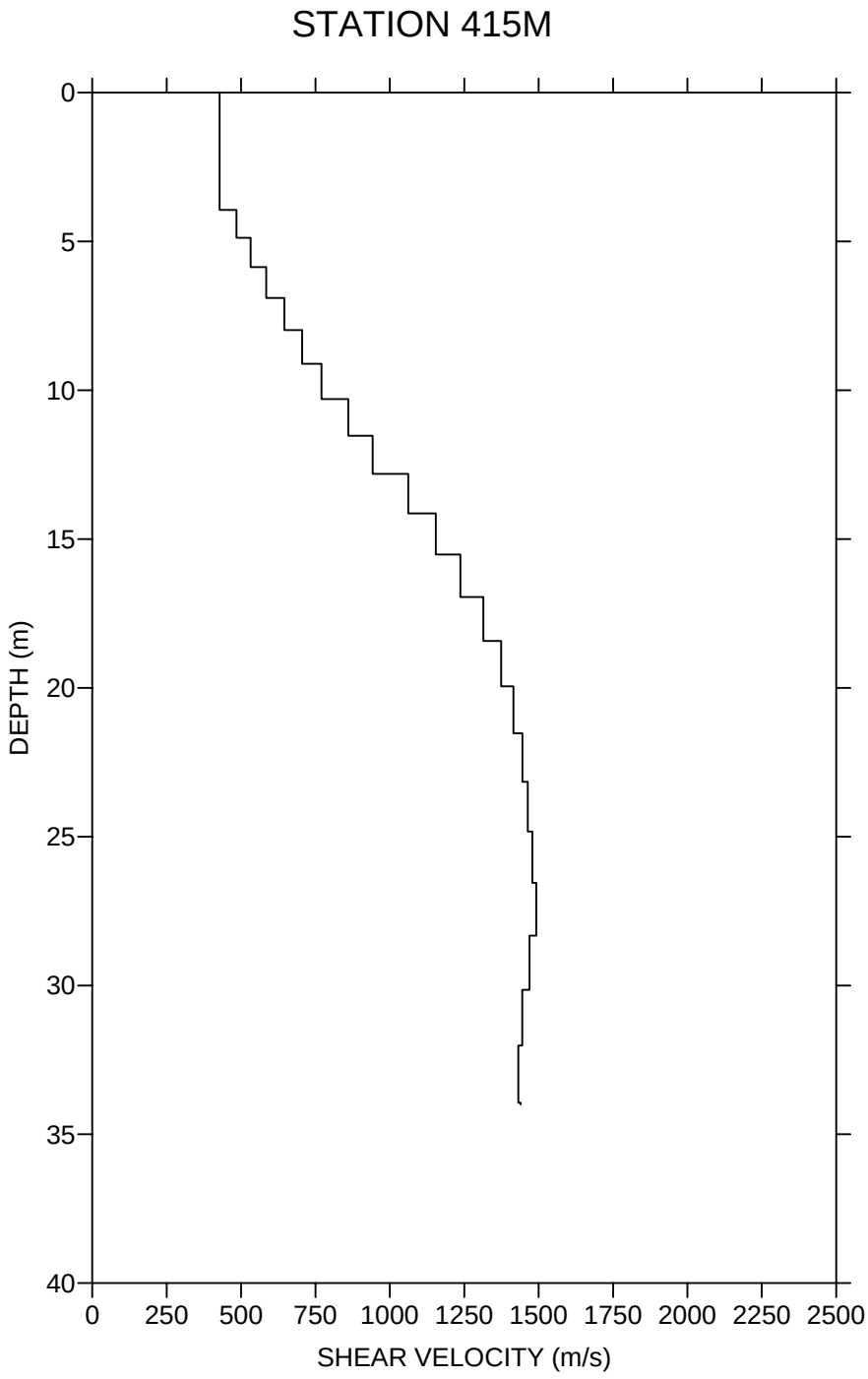
STATION 395M



KNIGHT PIESOLD BLACKWATER PROJECT
GEOPHYSICAL SURVEY
MASW INTERPRETED PROFILE SL-2 STATION 395 METRES
FRONTIER GEOSCIENCES INC.

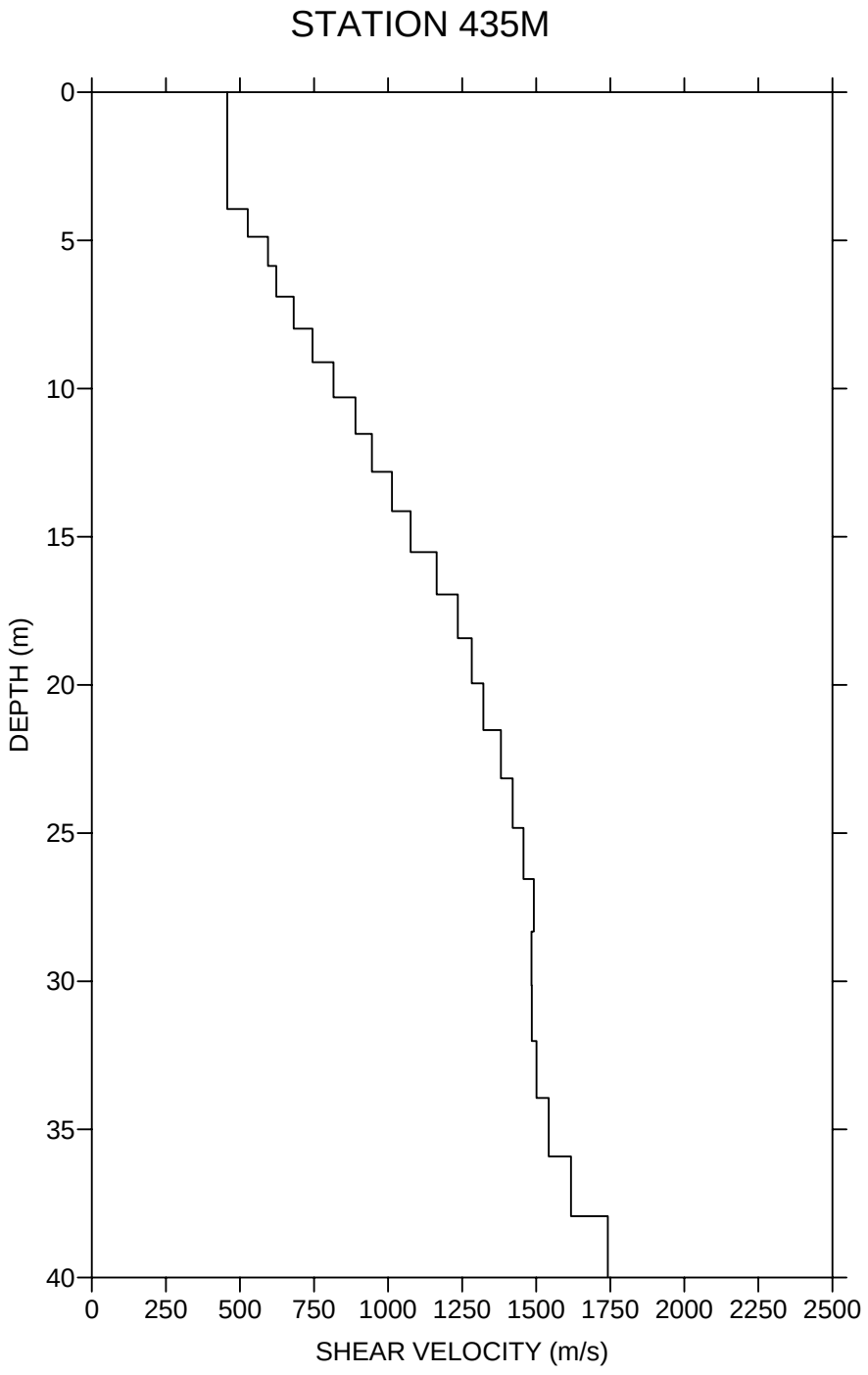
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-395-M

PLANT SITE - SL-2



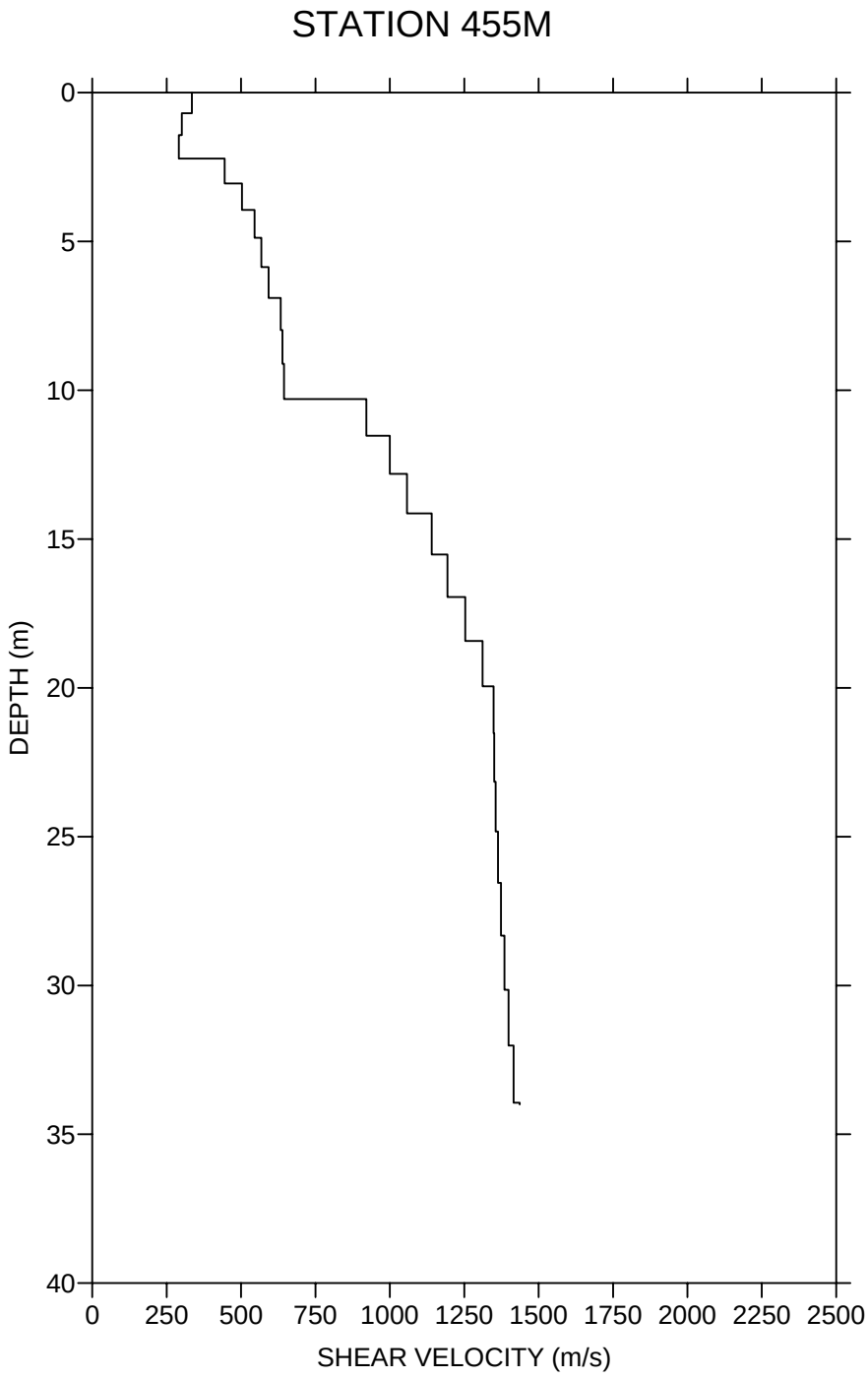
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 415 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-415-M

PLANT SITE - SL-2



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 435 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-435-M

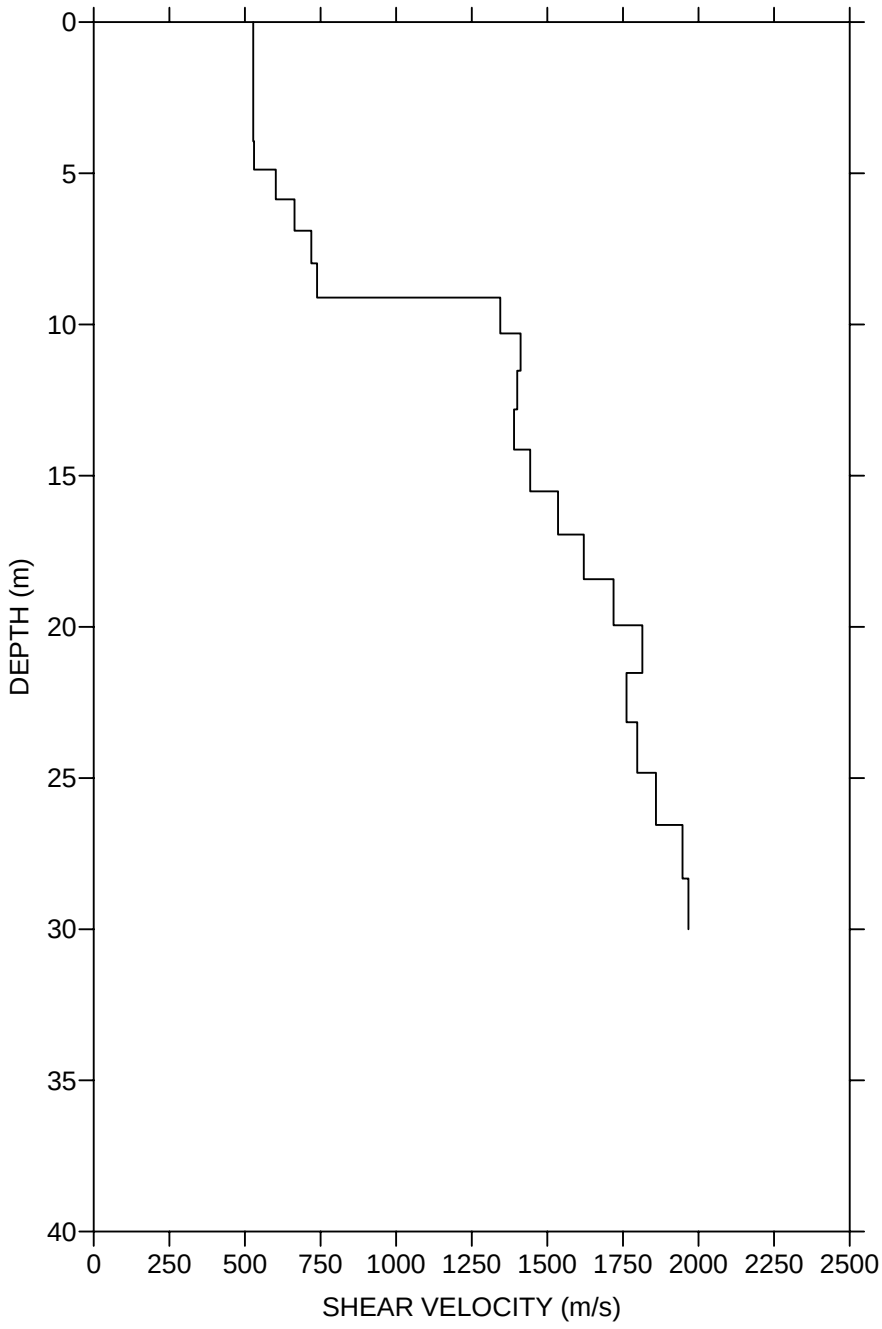
PLANT SITE - SL-2



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-2 STATION 455 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-2-455-M

PLANT SITE - SL-3

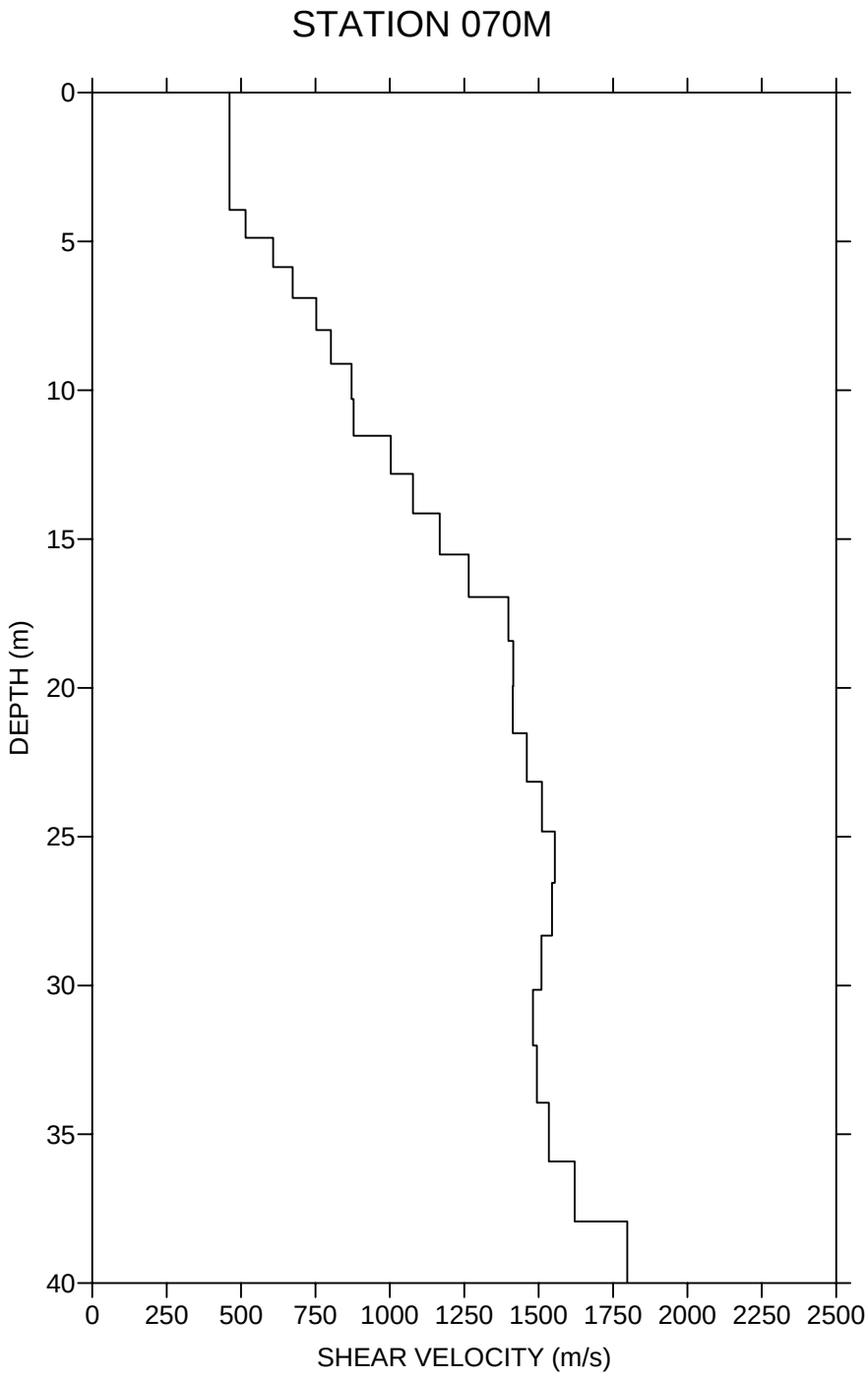
STATION 055M



KNIGHT PIESOLD BLACKWATER PROJECT
GEOPHYSICAL SURVEY
MASW INTERPRETED PROFILE SL-3 STATION 055 METRES
FRONTIER GEOSCIENCES INC.

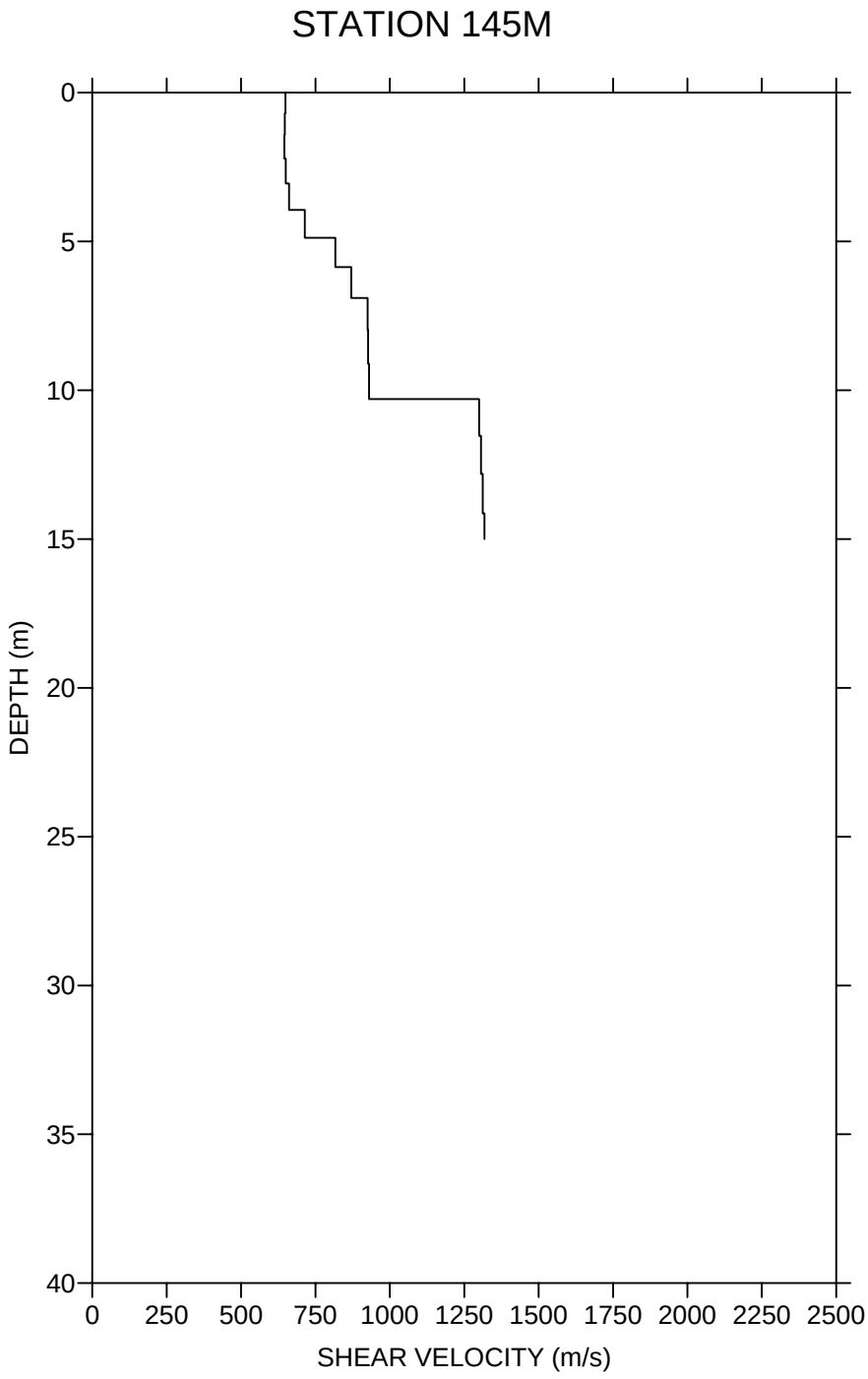
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-055-M

PLANT SITE - SL-3



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 070 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-070-M

PLANT SITE - SL-3



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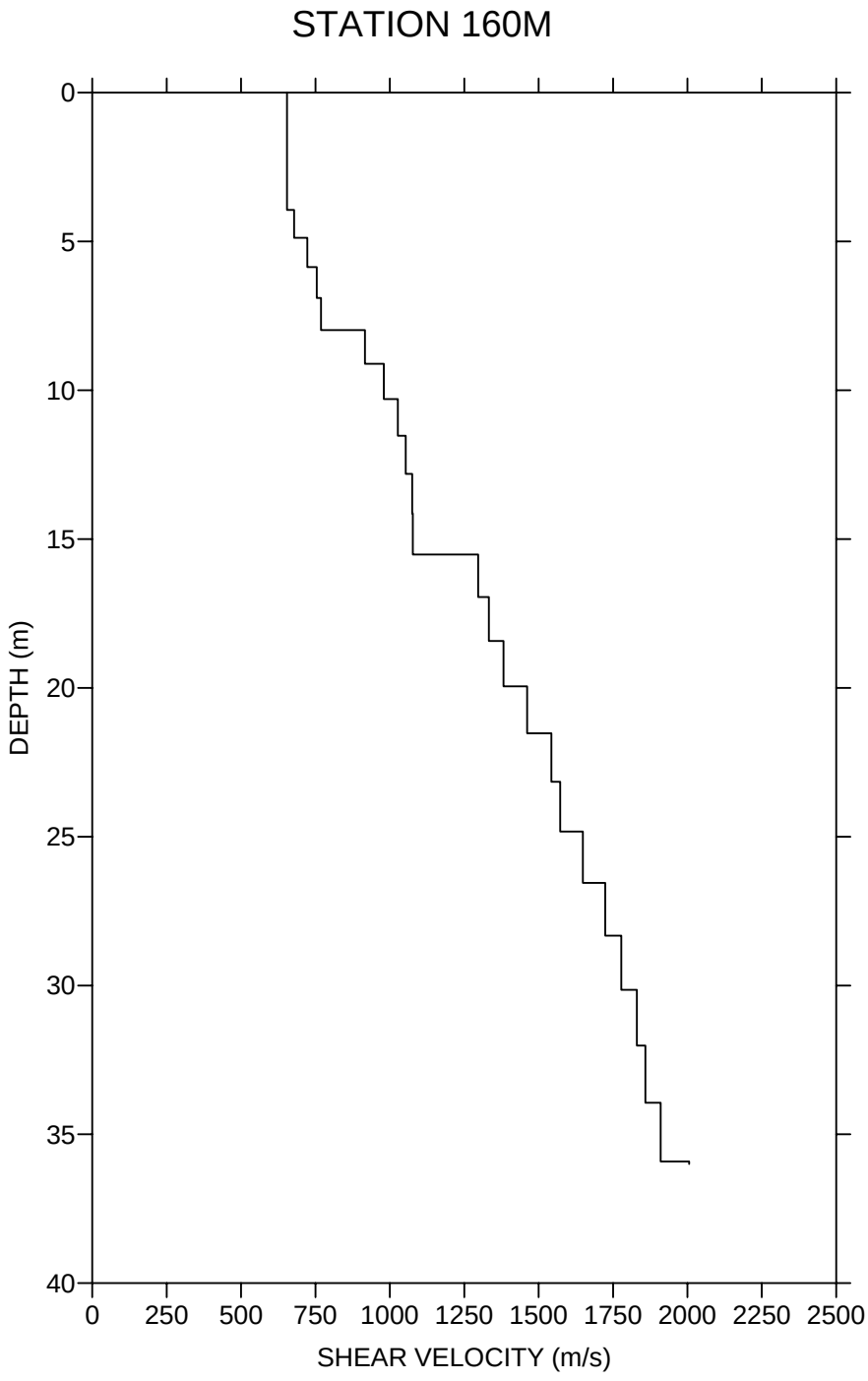
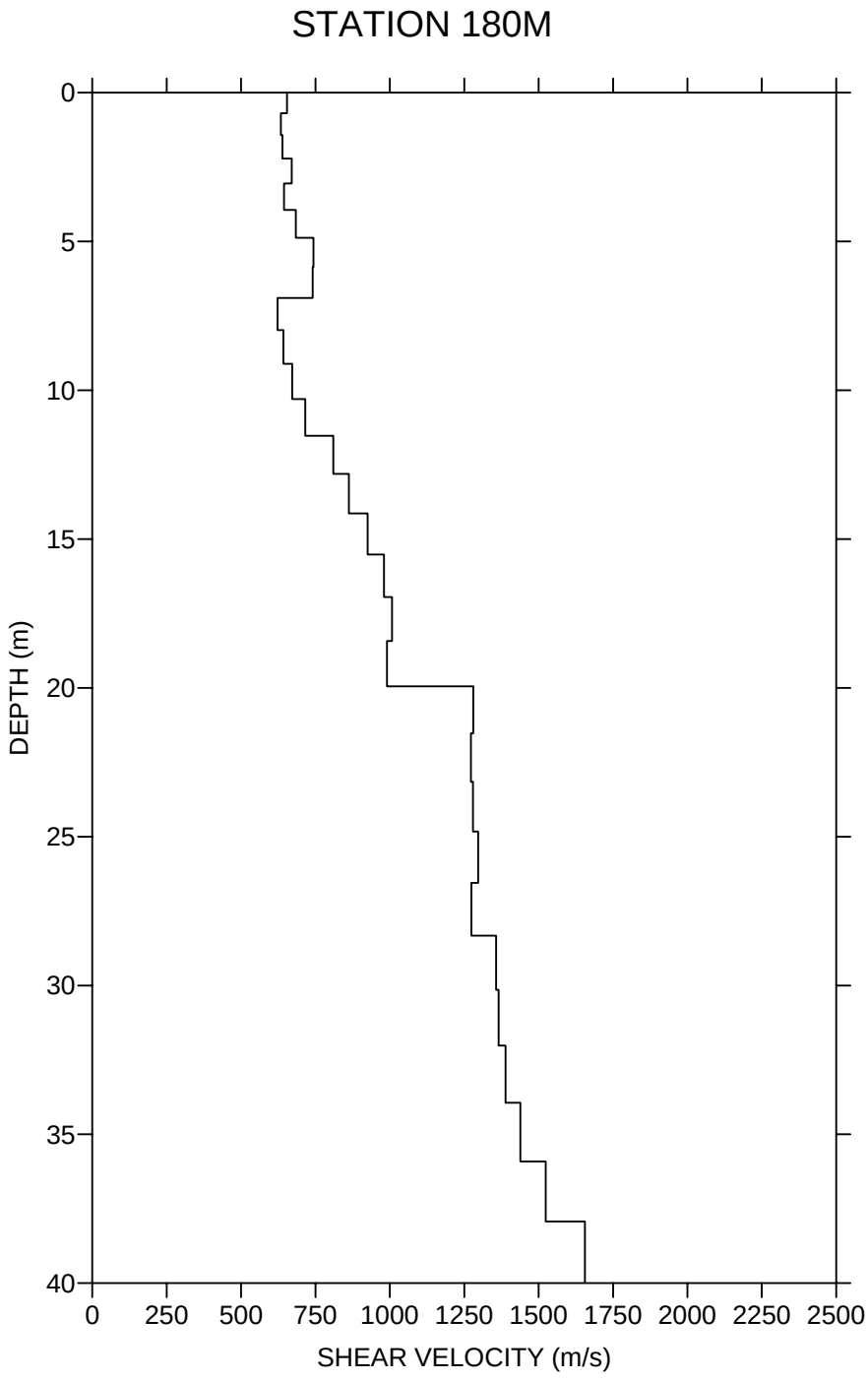
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 145 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-145-M

PLANT SITE - SL-3



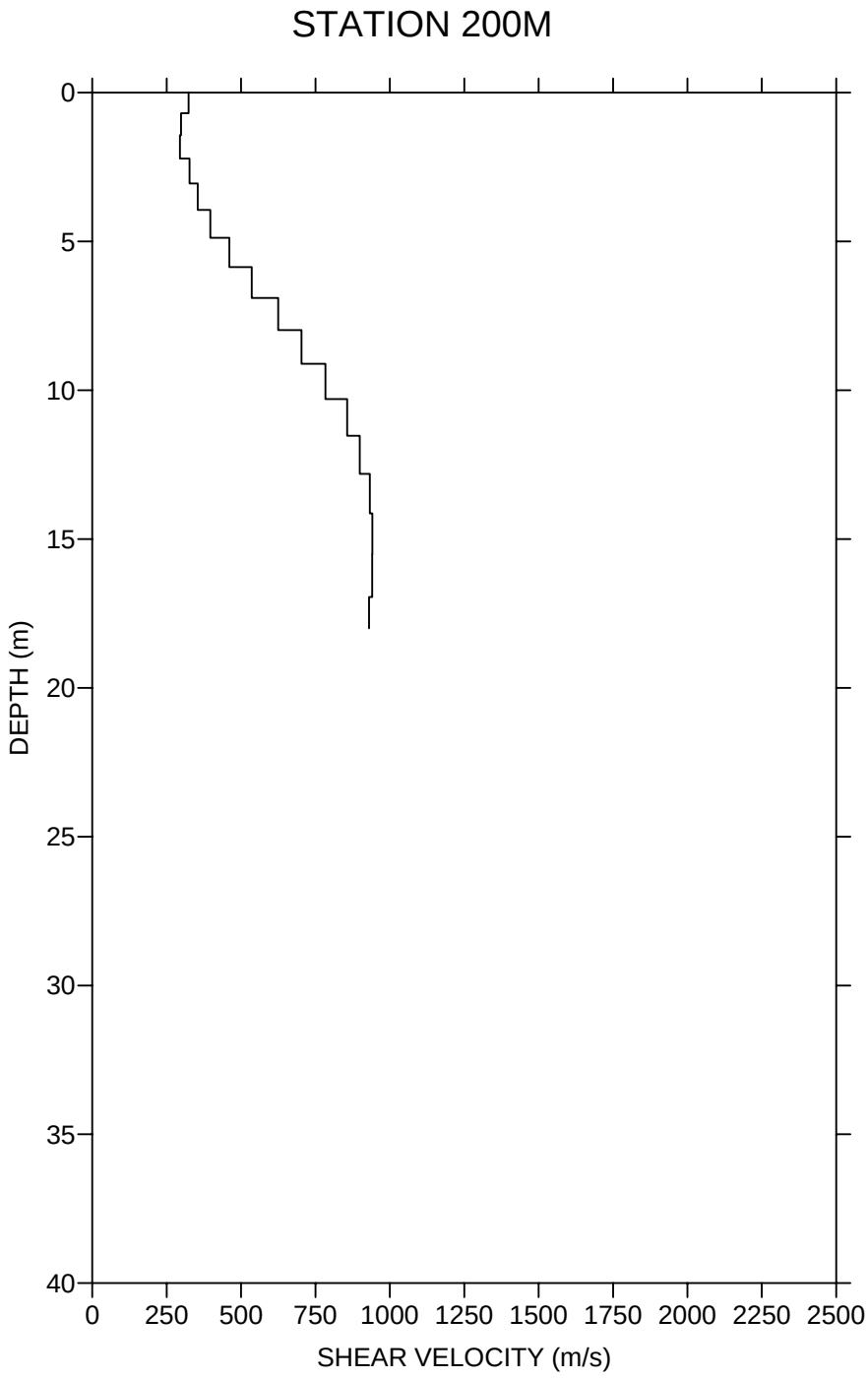
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 160 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-160-M

PLANT SITE - SL-3



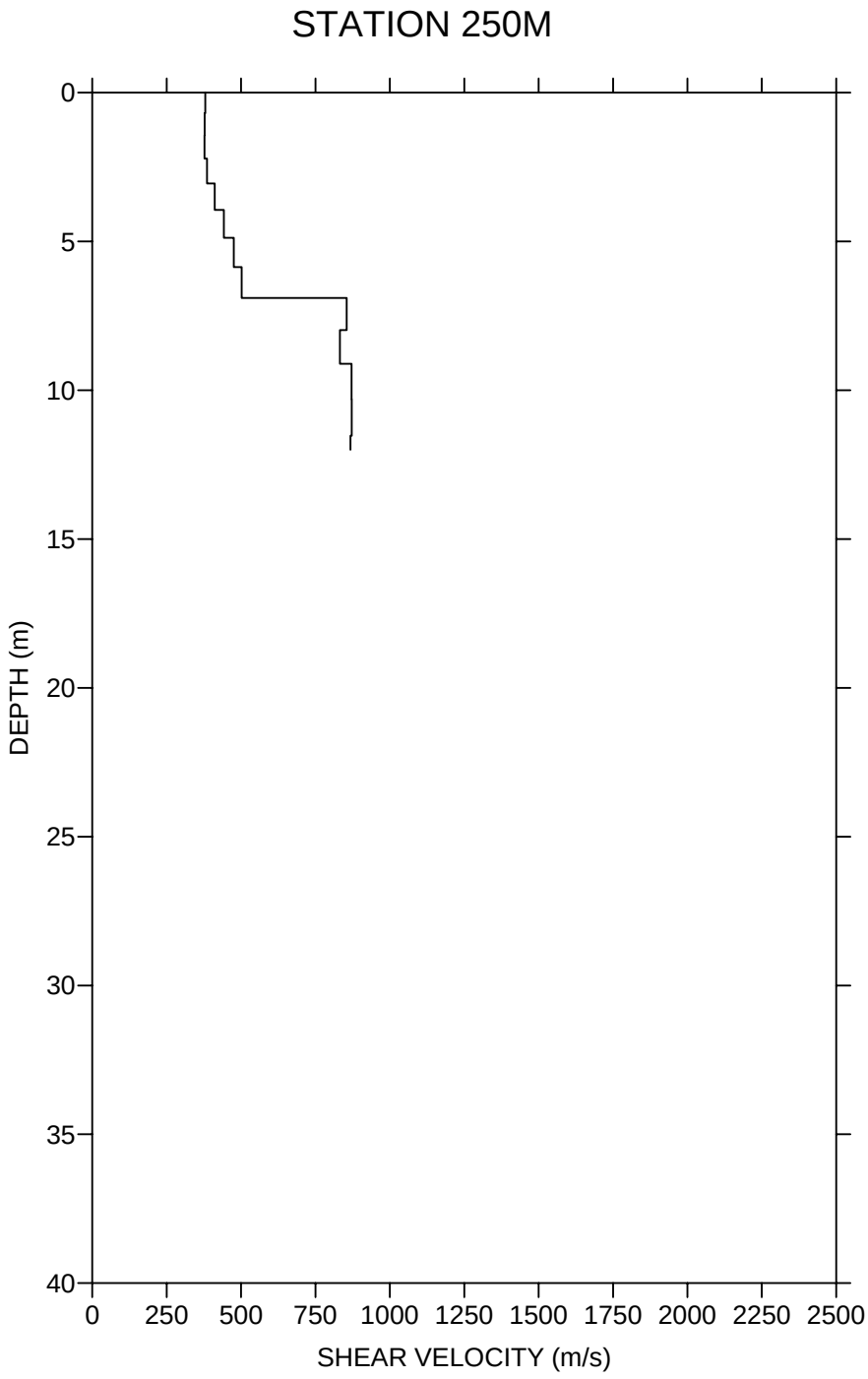
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 180 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-180-M

PLANT SITE - SL-3



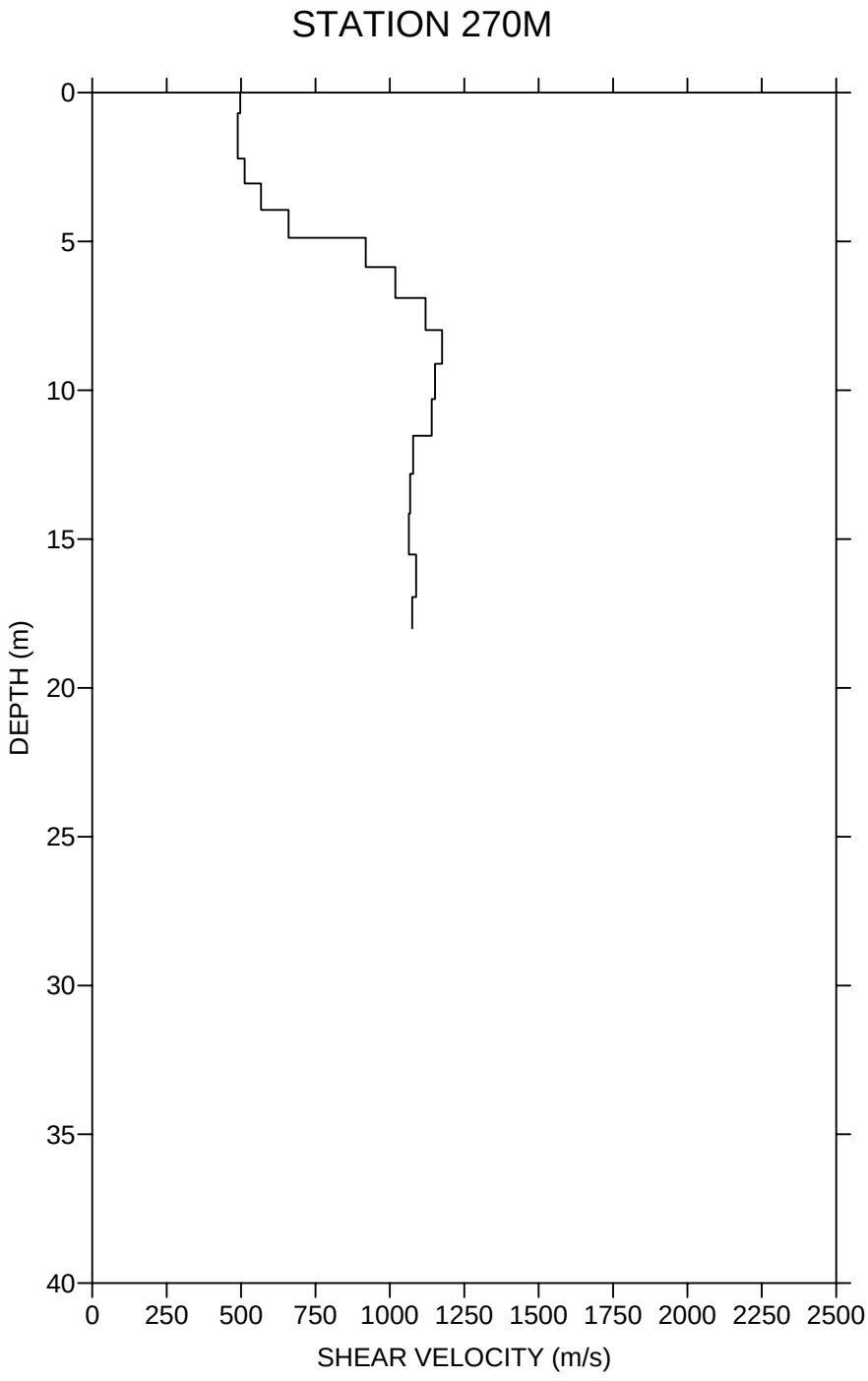
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 200 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-200-M

PLANT SITE - SL-3



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 250 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-250-M

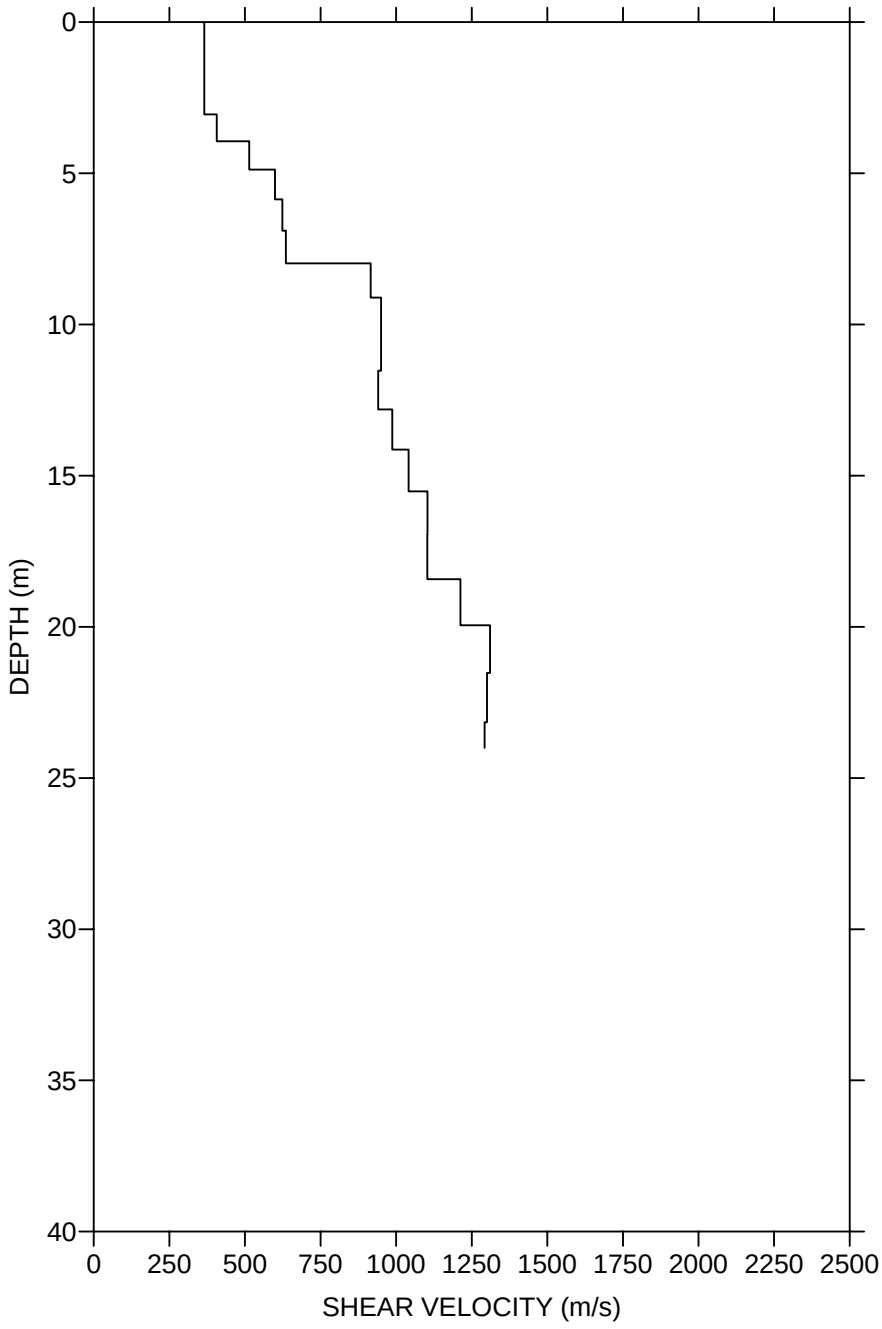
PLANT SITE - SL-3



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 270 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-270-M

PLANT SITE - SL-3

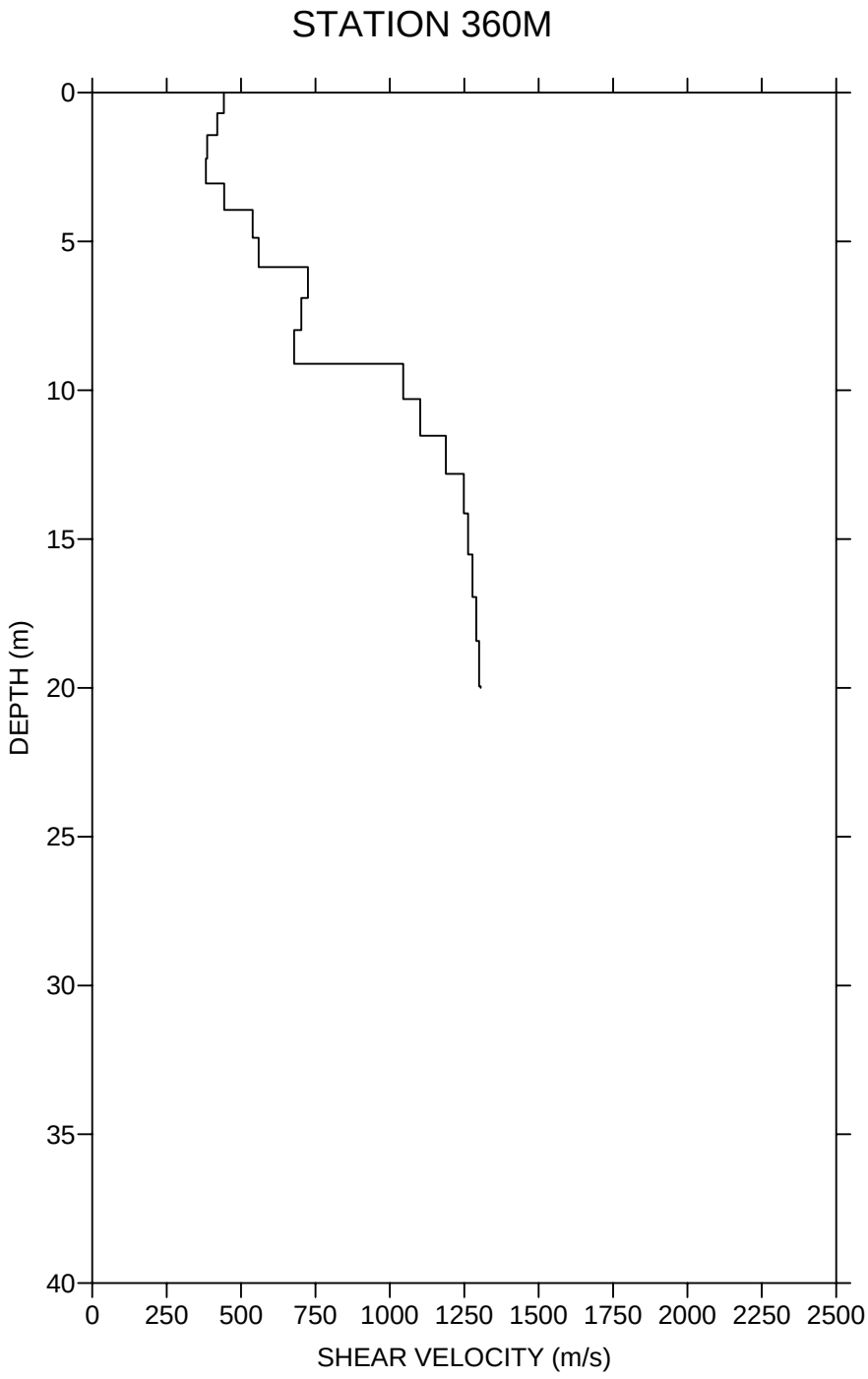
STATION 290M



KNIGHT PIESOLD BLACKWATER PROJECT
GEOPHYSICAL SURVEY
MASW INTERPRETED PROFILE SL-3 STATION 290 METRES
FRONTIER GEOSCIENCES INC.

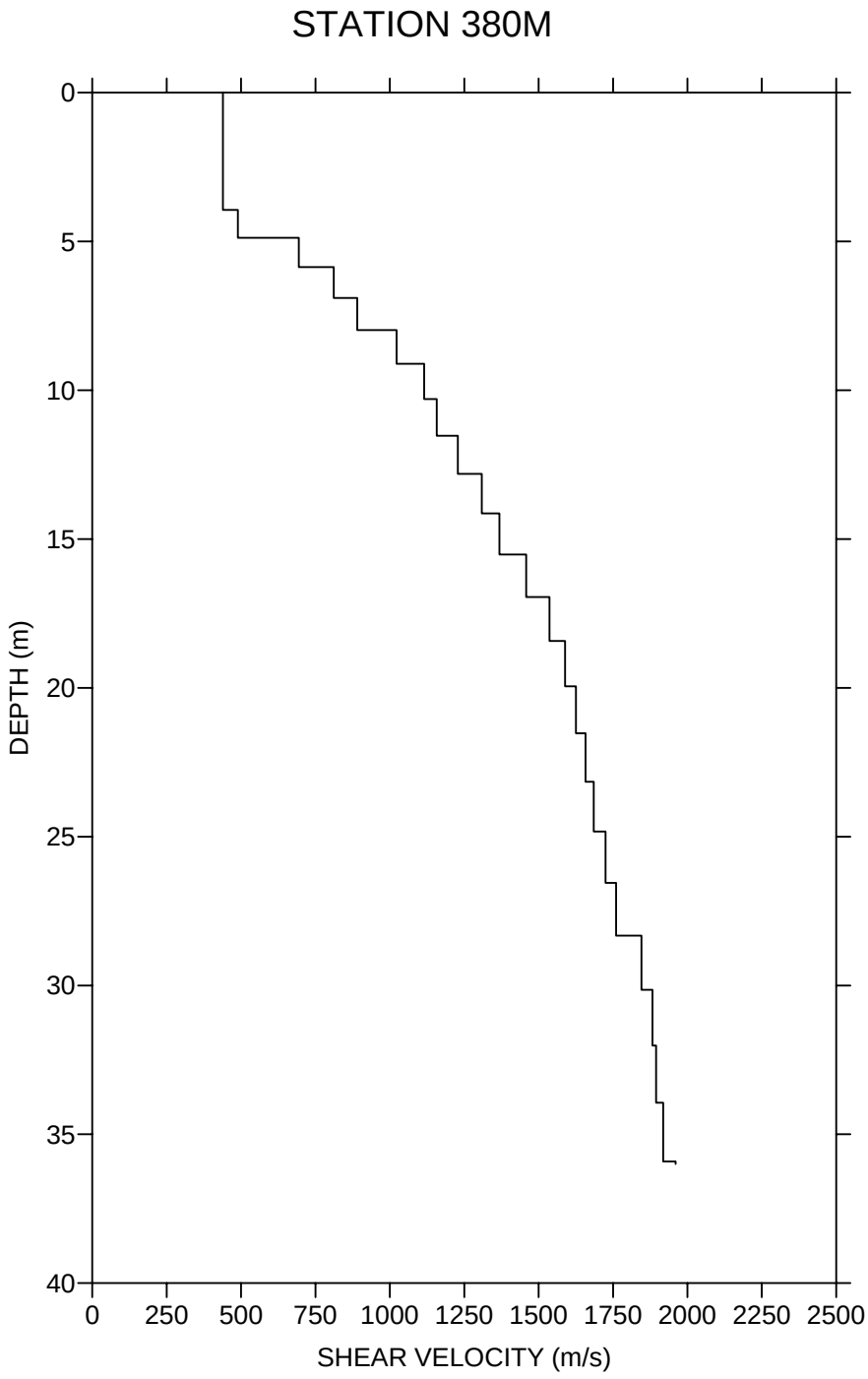
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-290-M

PLANT SITE - SL-3



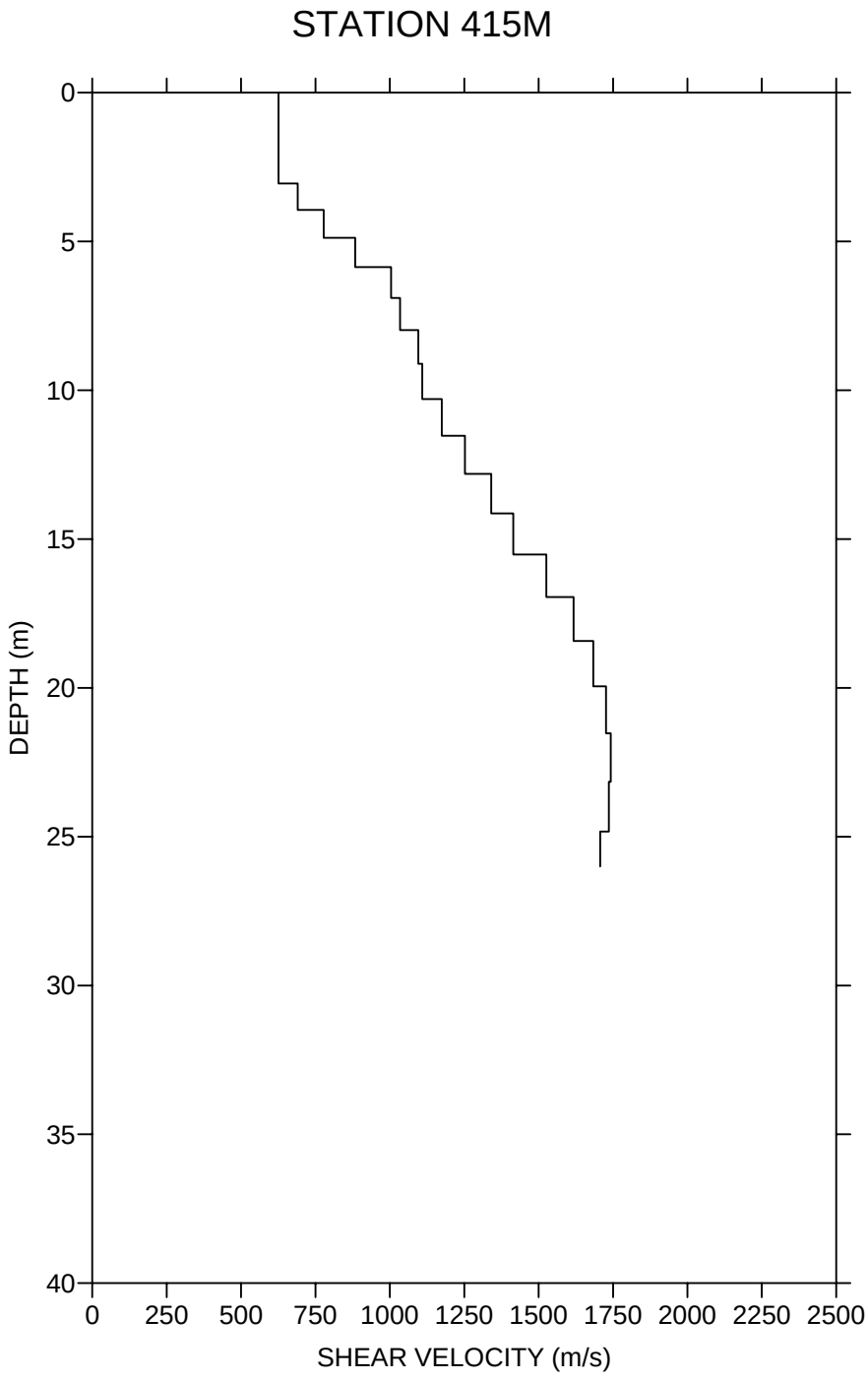
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 360 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-360-M

PLANT SITE - SL-3



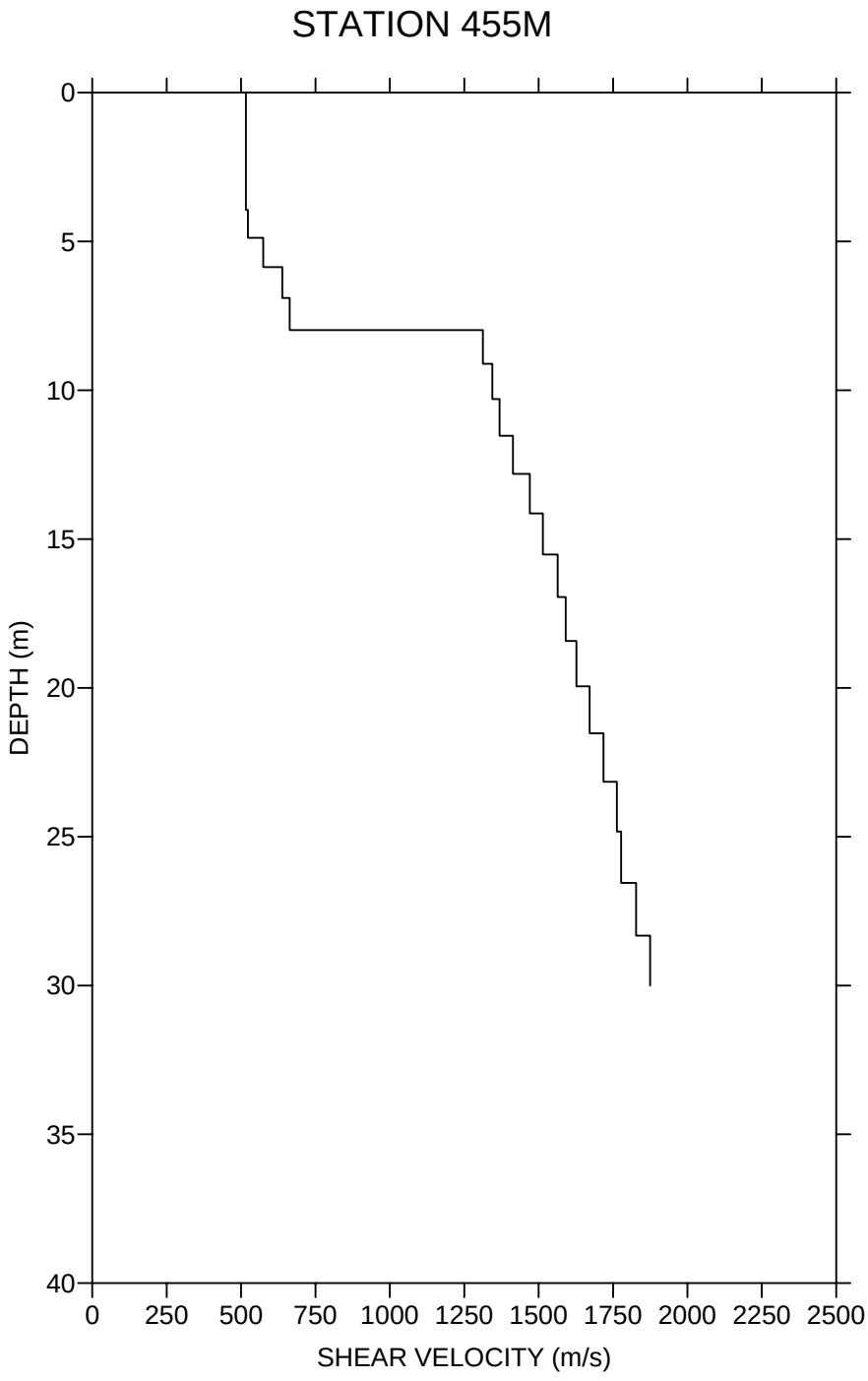
KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 380 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-380-M

PLANT SITE - SL-3



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 415 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-415-M

PLANT SITE - SL-3



KNIGHT PIESOLD BLACKWATER PROJECT		
GEOPHYSICAL SURVEY		
MASW INTERPRETED PROFILE SL-3 STATION 455 METRES		
FRONTIER GEOSCIENCES INC.		
DATE: AUG. 2012	SCALE 1:250	DWG: SL-3-455-M

APPENDIX F

PHOTOGRAPHS

Appendix F1 Drill Site Photographs
Appendix F2 SPT Photographs
Appendix F3 Surficial material Core Photographs
Appendix F4 Bedrock Core Photographs
Appendix F5 Test Pit Photographs

APPENDIX F1

DRILL SITE PHOTOGRAPHS

(Pages F1-1 to F1-28)



PHOTO 1 GT12-19 Looking East



PHOTO 2 GT12-19 Looking North



PHOTO 3 GT12-19 Looking South



PHOTO 4 GT12-19 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 5 GT12-20 Looking East



PHOTO 6 GT12-20 Looking North



PHOTO 7 GT12-20 Looking South



PHOTO 8 GT12-20 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 9 GT12-21 Looking East



PHOTO 10 GT12-21 Looking North



PHOTO 11 GT12-21 Looking South



PHOTO 12 GT12-21 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 13 GT12-22 Looking East



PHOTO 14 GT12-22 Looking North



PHOTO 15 GT12-22 Looking South



PHOTO 16 GT12-22 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 17 GT12-23 Looking East



PHOTO 18 GT12-23 Looking North



PHOTO 19 GT12-23 Looking South



PHOTO 20 GT12-23 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 21 MW12-01 Looking East



PHOTO 22 MW12-01 Looking North



PHOTO 23 MW12-01 Looking South



PHOTO 24 MW12-01 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 25 MW12-02 Looking East

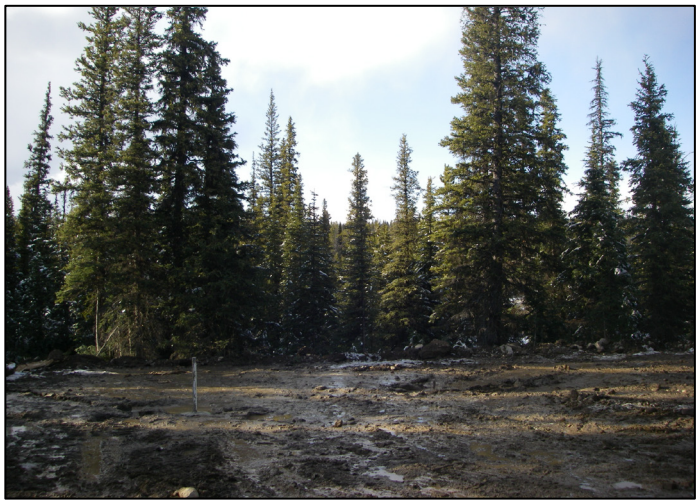


PHOTO 26 MW12-02 Looking North



PHOTO 27 MW12-02 Looking South



PHOTO 28 MW12-02 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 29 MW12-03 Looking East



PHOTO 30 MW12-03 Looking North



PHOTO 31 MW12-03 Looking South



PHOTO 32 MW12-03 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 33 MW12-04 Looking East



PHOTO 34 MW12-04 Looking North



PHOTO 35 MW12-04 Looking South



PHOTO 36 MW12-04 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 37 MW12-05 Looking East



PHOTO 38 MW12-05 Looking North



PHOTO 39 MW12-05 Looking South



PHOTO 40 MW12-05 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 41 MW12-06 Looking East



PHOTO 42 MW12-06 Looking North



PHOTO 43 MW12-06 Looking South



PHOTO 44 MW12-06 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 45 MW12-07 Looking East



PHOTO 46 MW12-07 Looking North



PHOTO 47 MW12-07 Looking South



PHOTO 48 MW12-07 Looking West

NEW GOLD INC.
BLACKWATER GOLD PROJECT

APPENDIX F2

SPT PHOTOGRAPHS

(Pages F2-1 to F2-94)



PHOTO 1 GT12-01 SPT #1



PHOTO 2 GT12-01 SPT #10



PHOTO 3 GT12-01 SPT #11



PHOTO 4 GT12-01 SPT #12

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 5 GT12-01 SPT #13



PHOTO 6 GT12-01 SPT #14



PHOTO 7 GT12-01 SPT #15



PHOTO 8 GT12-01 SPT #16

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 9 GT12-01 SPT #17



PHOTO 10 GT12-01 SPT #18



PHOTO 11 GT12-01 SPT #19

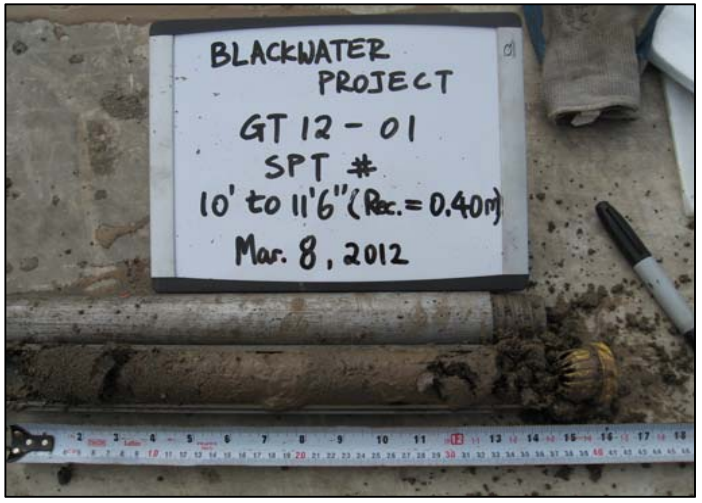


PHOTO 12 GT12-01 SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 13 GT12-01 SPT #20



PHOTO 14 GT12-01 SPT #21



PHOTO 15 GT12-01 SPT #22



PHOTO 16 GT12-01 SPT #23

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 17 GT12-01 SPT #24



PHOTO 18 GT12-01 SPT #25

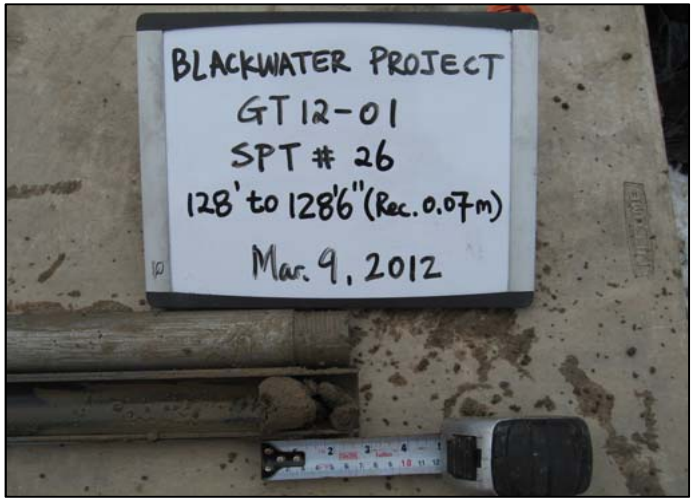


PHOTO 19 GT12-01 SPT #26



PHOTO 20 GT12-01 SPT #27

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 21 GT12-01 SPT #28



PHOTO 22 GT12-01 SPT #29



PHOTO 23 GT12-01 SPT #3



PHOTO 24 GT12-01 SPT #30

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 25 GT12-01 SPT #31



PHOTO 26 GT12-01 SPT #32



PHOTO 27 GT12-01 SPT #33



PHOTO 28 GT12-01 SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT

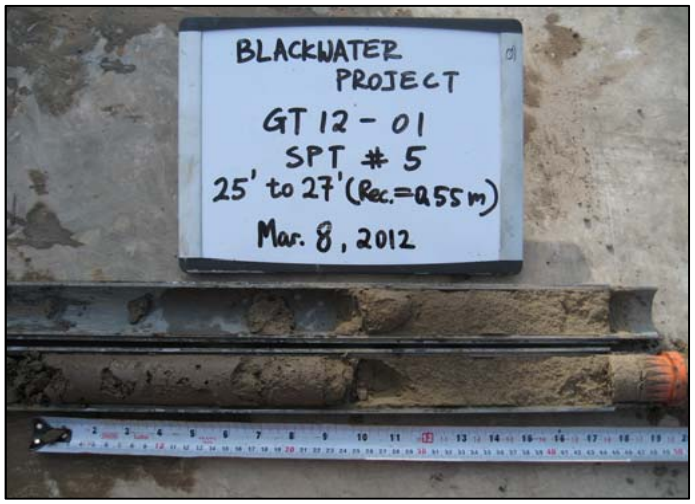


PHOTO 29 GT12-01 SPT #5



PHOTO 30 GT12-01 SPT #6



PHOTO 31 GT12-01 SPT #7



PHOTO 32 GT12-01 SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 33 GT12-01 SPT #9



PHOTO 34 GT12-02 SPT #1



PHOTO 35 GT12-02 SPT #10



PHOTO 36 GT12-02 SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 37 GT12-02 SPT #12

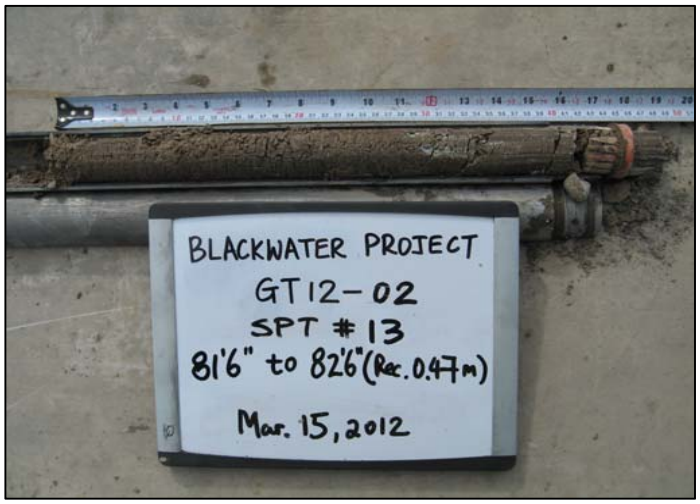


PHOTO 38 GT12-02 SPT #13



PHOTO 39 GT12-02 SPT #14



PHOTO 40 GT12-02 SPT #15

NEW GOLD INC.
BLACKWATER GOLD PROJECT

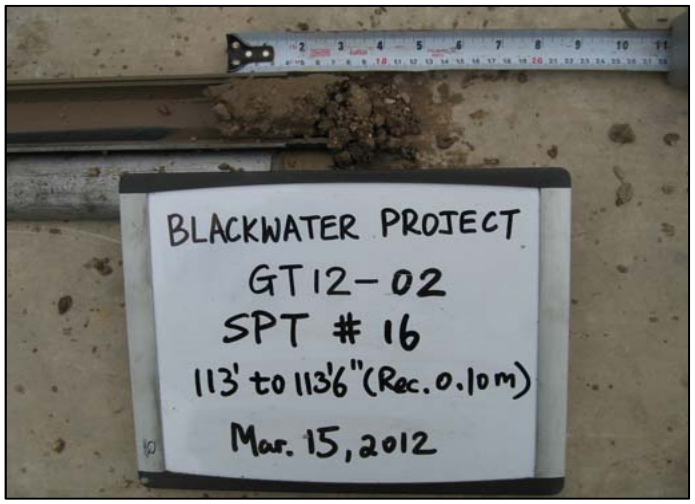


PHOTO 41 GT12-02 SPT #16



PHOTO 42 GT12-02 SPT #17



PHOTO 43 GT12-02 SPT #18



PHOTO 44 GT12-02 SPT #19

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 45 GT12-02 SPT #2



PHOTO 46 GT12-02 SPT #20



PHOTO 47 GT12-02 SPT #21



PHOTO 48 GT12-02 SPT #22

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 49 GT12-02 SPT #23



PHOTO 50 GT12-02 SPT #24



PHOTO 51 GT12-02 SPT #25



PHOTO 52 GT12-02 SPT #26

NEW GOLD INC.
BLACKWATER GOLD PROJECT

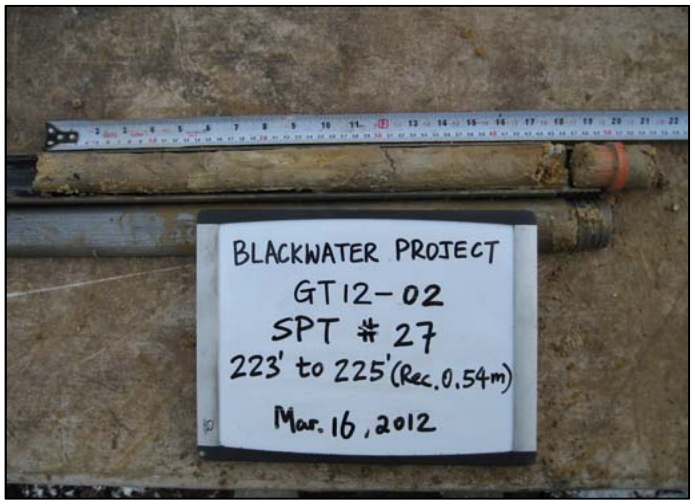


PHOTO 53 GT12-02 SPT #27



PHOTO 54 GT12-02 SPT #28



PHOTO 55 GT12-02 SPT #29



PHOTO 56 GT12-02 SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 57 GT12-02 SPT #30



PHOTO 58 GT12-02 SPT #31



PHOTO 59 GT12-02 SPT #32



PHOTO 60 GT12-02 SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 61 GT12-02 SPT #5



PHOTO 62 GT12-02 SPT #6



PHOTO 63 GT12-02 SPT #7



PHOTO 64 GT12-02 SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 65 GT12-02 SPT #9



PHOTO 66 GT12-03 SPT #1



PHOTO 67 GT12-03 SPT #10



PHOTO 68 GT12-03 SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT

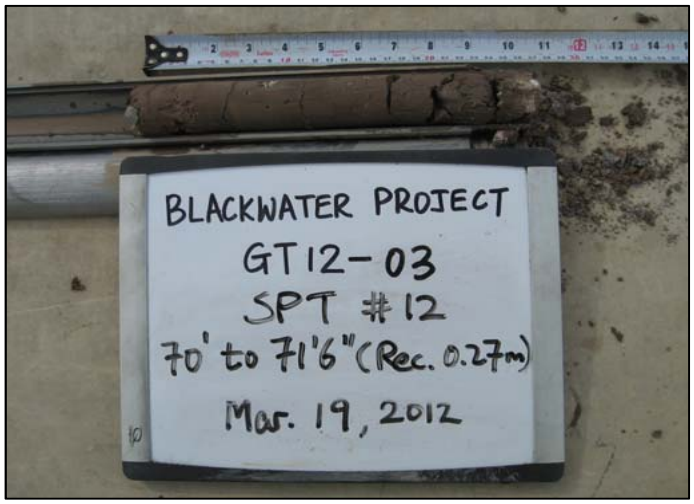


PHOTO 69 GT12-03 SPT #12



PHOTO 70 GT12-03 SPT #13



PHOTO 71 GT12-03 SPT #14



PHOTO 72 GT12-03 SPT #15

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 73 GT12-03 SPT #16



PHOTO 74 GT12-03 SPT #17



PHOTO 75 GT12-03 SPT #18



PHOTO 76 GT12-03 SPT #19

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 77 GT12-03 SPT #2



PHOTO 78 GT12-03 SPT #20



PHOTO 79 GT12-03 SPT #21



PHOTO 80 GT12-03 SPT #22

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 81 GT12-03 SPT #23



PHOTO 82 GT12-03 SPT #3



PHOTO 83 GT12-03 SPT #4



PHOTO 84 GT12-03 SPT #5

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 85 GT12-03 SPT #6



PHOTO 86 GT12-03 SPT #7



PHOTO 87 GT12-03 SPT #8



PHOTO 88 GT12-03 SPT #9

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 89 GT12-04 SPT #1



PHOTO 90 GT12-04 SPT #10



PHOTO 91 GT12-04 SPT #11



PHOTO 92 GT12-04 SPT #12

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 93 GT12-04 SPT #13



PHOTO 94 GT12-04 SPT #14



PHOTO 95 GT12-04 SPT #15



PHOTO 96 GT12-04 SPT #16

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 97 GT12-04 SPT #17



PHOTO 98 GT12-04 SPT #18



PHOTO 99 GT12-04 SPT #19



PHOTO 100 GT12-04 SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 101 GT12-04 SPT #20



PHOTO 102 GT12-04 SPT #21



PHOTO 103 GT12-04 SPT #22



PHOTO 104 GT12-04 SPT #23

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 105 GT12-04 SPT #24

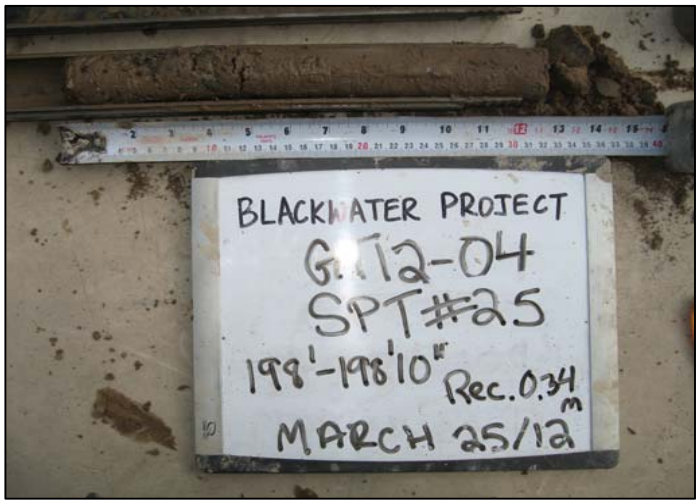


PHOTO 106 GT12-04 SPT #25



PHOTO 107 GT12-04 SPT #26



PHOTO 108 GT12-04 SPT #27

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 109 GT12-04 SPT #28



PHOTO 110 GT12-04 SPT #29



PHOTO 111 GT12-04 SPT #3



PHOTO 112 GT12-04 SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 113 GT12-04 SPT #5



PHOTO 114 GT12-04 SPT #6



PHOTO 115 GT12-04 SPT #7



PHOTO 116 GT12-04 SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 117 GT12-04 SPT #9



PHOTO 118 GT12-05 SPT #1



PHOTO 119 GT12-05 SPT #10



PHOTO 120 GT12-05 SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 121 GT12-05 SPT #12



PHOTO 122 GT12-05 SPT #13



PHOTO 123 GT12-05 SPT #14



PHOTO 124 GT12-05 SPT #15

NEW GOLD INC.
BLACKWATER GOLD PROJECT

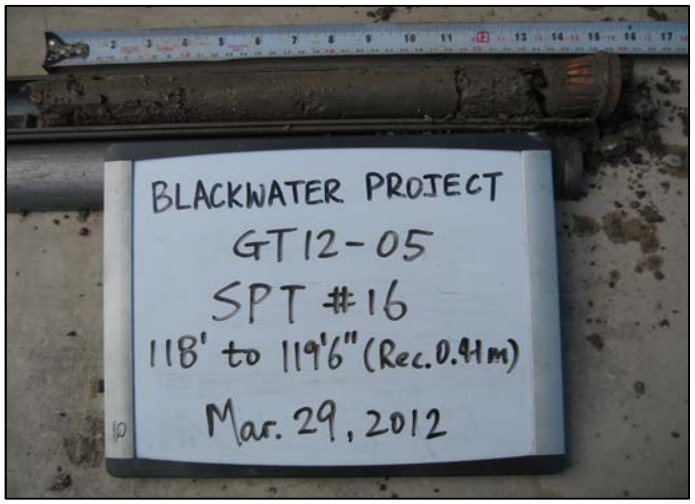


PHOTO 125 GT12-05 SPT #16



PHOTO 126 GT12-05 SPT #17



PHOTO 127 GT12-05 SPT #18



PHOTO 128 GT12-05 SPT #19

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 129 GT12-05 SPT #2



PHOTO 130 GT12-05 SPT #20



PHOTO 131 GT12-05 SPT #21

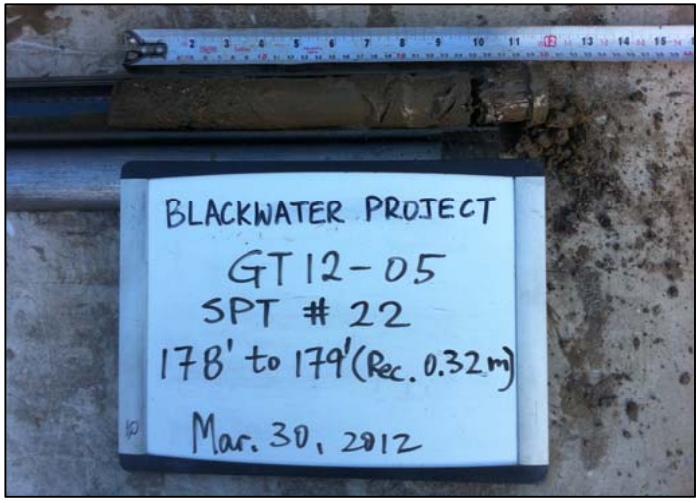


PHOTO 132 GT12-05 SPT #22

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 133 GT12-05 SPT #23



PHOTO 134 GT12-05 SPT #24



PHOTO 135 GT12-05 SPT #25



PHOTO 136 GT12-05 SPT #26

NEW GOLD INC.
BLACKWATER GOLD PROJECT

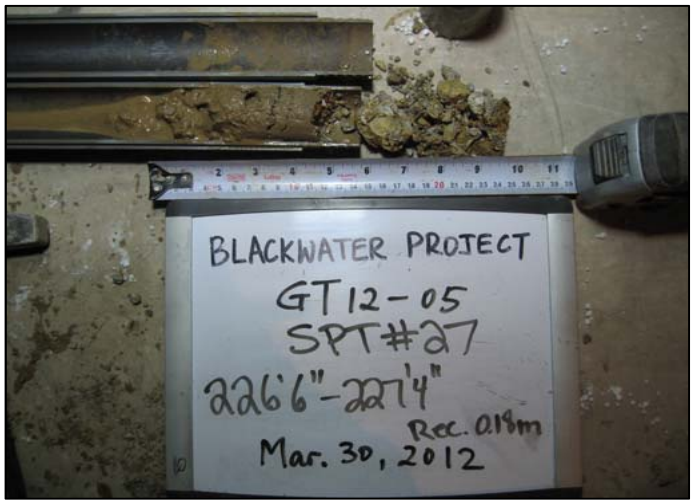


PHOTO 137 GT12-05 SPT #27

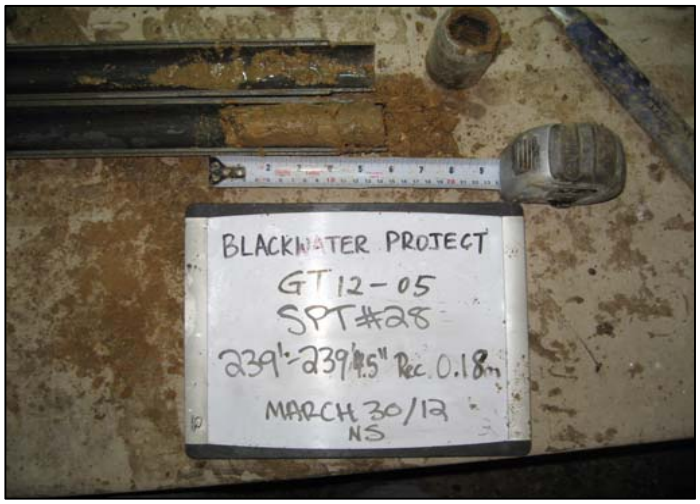


PHOTO 138 GT12-05 SPT #28

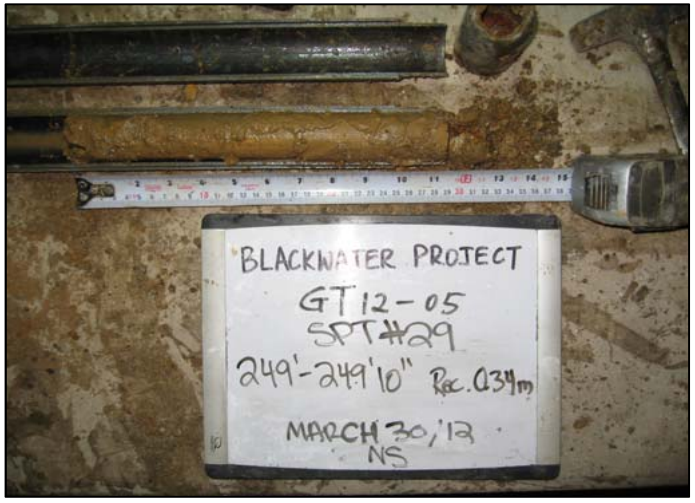


PHOTO 139 GT12-05 SPT #29



PHOTO 140 GT12-05 SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 141 GT12-05 SPT #4



PHOTO 142 GT12-05 SPT #5



PHOTO 143 GT12-05 SPT #6



PHOTO 144 GT12-05 SPT #7

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 145 GT12-05 SPT #8



PHOTO 146 GT12-05 SPT #9



PHOTO 147 GT12-06 SPT #1



PHOTO 148 GT12-06 SPT #10

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 149 GT12-06 SPT #11



PHOTO 150 GT12-06 SPT #12



PHOTO 151 GT12-06 SPT #13



PHOTO 152 GT12-06 SPT #14

NEW GOLD INC.
BLACKWATER GOLD PROJECT

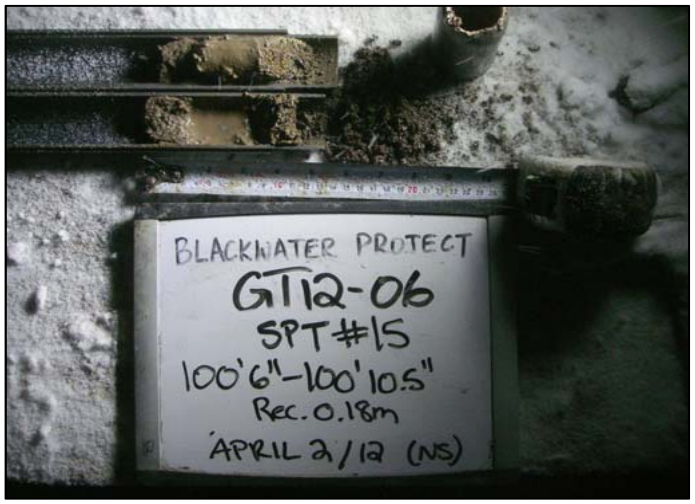


PHOTO 153 GT12-06 SPT #15



PHOTO 154 GT12-06 SPT #16



PHOTO 155 GT12-06 SPT #17



PHOTO 156 GT12-06 SPT #18

NEW GOLD INC.
BLACKWATER GOLD PROJECT

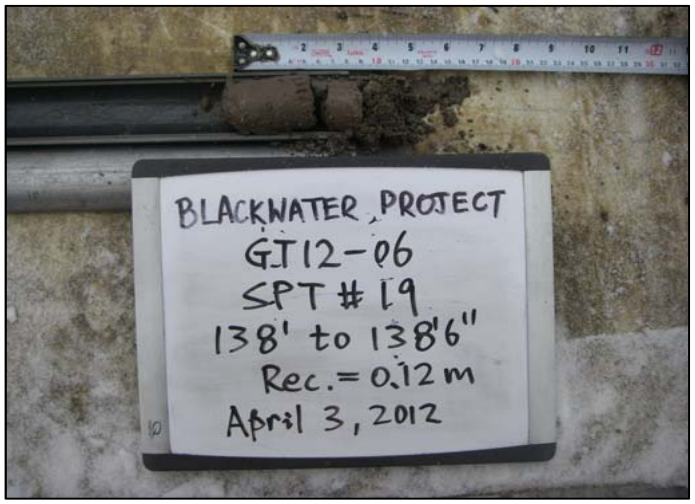


PHOTO 157 GT12-06 SPT #19



PHOTO 158 GT12-06 SPT #2



PHOTO 159 GT12-06 SPT #3



PHOTO 160 GT12-06 SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 161 GT12-06 SPT #5



PHOTO 162 GT12-06 SPT #6



PHOTO 163 GT12-06 SPT #7



PHOTO 164 GT12-06 SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 165 GT12-06 SPT #9



PHOTO 166 GT12-07 SPT #1



PHOTO 167 GT12-07 SPT #2



PHOTO 168 GT12-07 SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 169 GT12-07 SPT #4



PHOTO 170 GT12-09 SPT #1



PHOTO 171 GT12-09 SPT #10

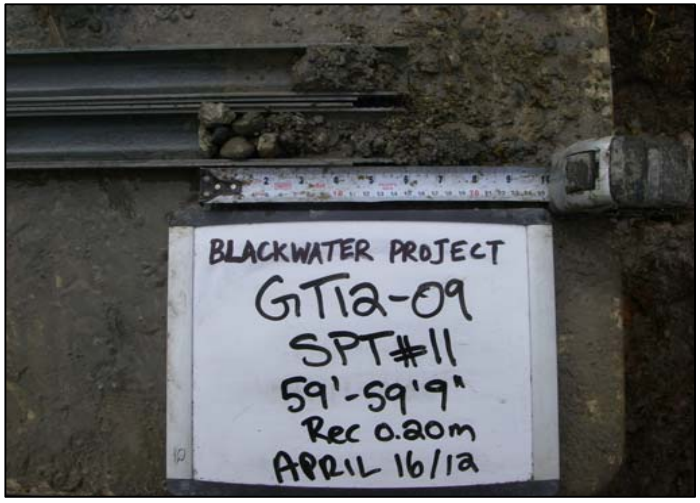


PHOTO 172 GT12-09 SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 173 GT12-09 SPT #12



PHOTO 174 GT12-09 SPT #13



PHOTO 175 GT12-09 SPT #14



PHOTO 176 GT12-09 SPT #15

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 177 GT12-09 SPT #16



PHOTO 178 GT12-09 SPT #17



PHOTO 179 GT12-09 SPT #18



PHOTO 180 GT12-09 SPT #19

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 181 GT12-09 SPT #2



PHOTO 182 GT12-09 SPT #20



PHOTO 183 GT12-09 SPT #21



PHOTO 184 GT12-09 SPT #22

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 185 GT12-09 SPT #23



PHOTO 186 GT12-09 SPT #24



PHOTO 187 GT12-09 SPT #25



PHOTO 188 GT12-09 SPT #26

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 189 GT12-09 SPT #27



PHOTO 190 GT12-09 SPT #28



PHOTO 191 GT12-09 SPT #29



PHOTO 192 GT12-09 SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 193 GT12-09 SPT #30



PHOTO 194 GT12-09 SPT #31



PHOTO 195 GT12-09 SPT #4



PHOTO 196 GT12-09 SPT #5

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 197 GT12-09 SPT #6



PHOTO 198 GT12-09 SPT #7



PHOTO 199 GT12-09 SPT #8



PHOTO 200 GT12-09 SPT #9

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 201 GT12-10 SPT #1

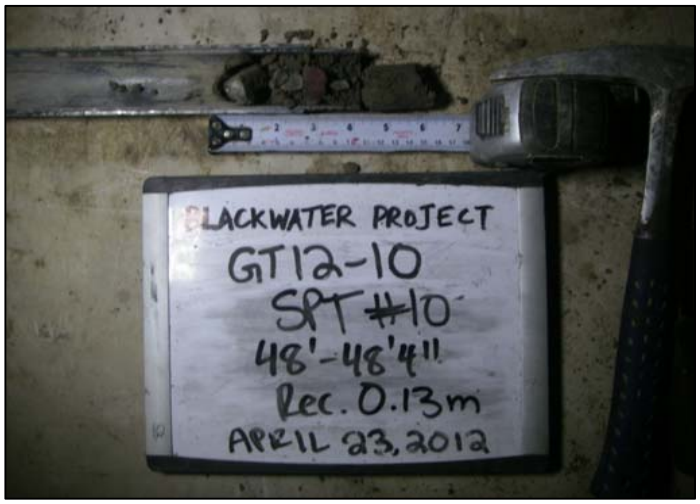


PHOTO 202 GT12-10 SPT #10



PHOTO 203 GT12-10 SPT #11



PHOTO 204 GT12-10 SPT #12

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 205 GT12-10 SPT #13



PHOTO 206 GT12-10 SPT #2



PHOTO 207 GT12-10 SPT #3



PHOTO 208 GT12-10 SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 209 GT12-10 SPT #5



PHOTO 210 GT12-10 SPT #6



PHOTO 211 GT12-10 SPT #7



PHOTO 212 GT12-10 SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 213 GT12-10 SPT #9

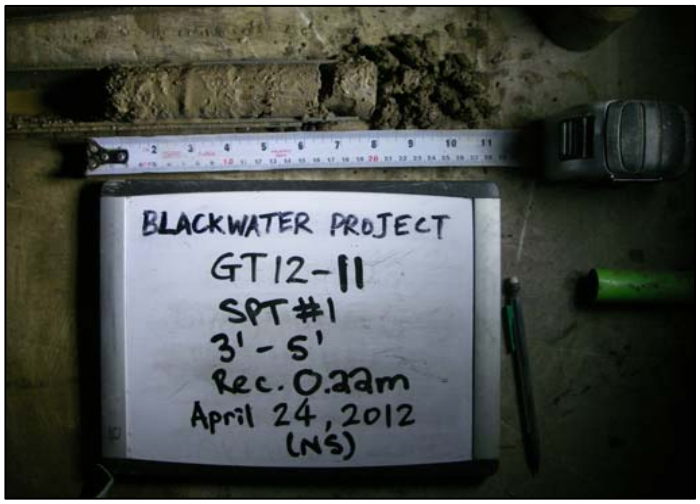


PHOTO 214 GT12-11 SPT #1

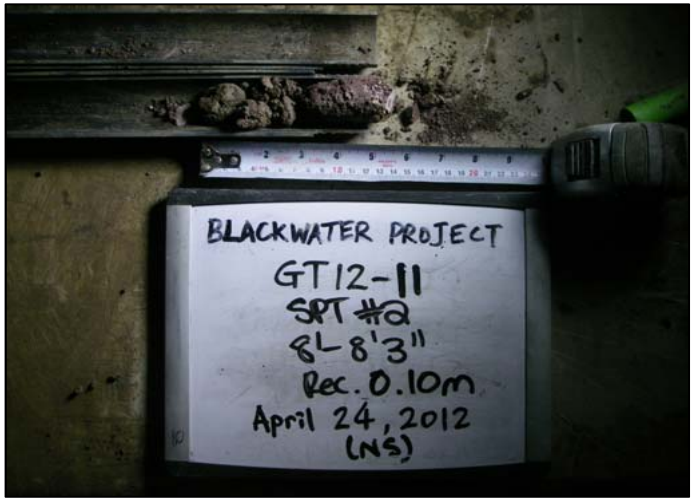


PHOTO 215 GT12-11 SPT #2



PHOTO 216 GT12-12 SPT #1

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 217 GT12-12 SPT #10



PHOTO 218 GT12-12 SPT #11



PHOTO 219 GT12-12 SPT #12



PHOTO 220 GT12-12 SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 221 GT12-12 SPT #3

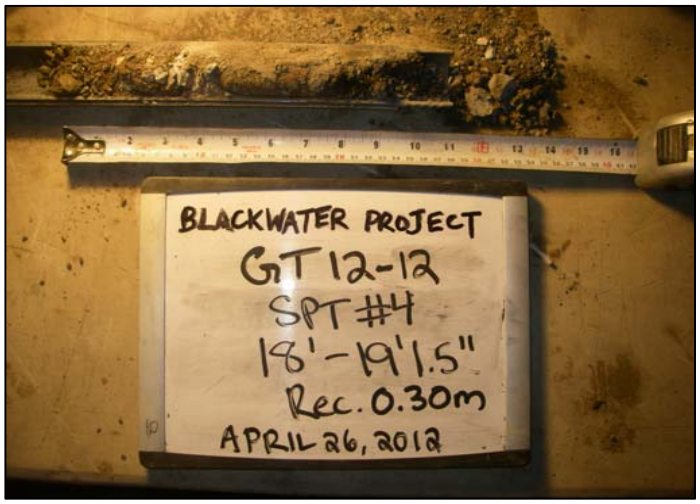


PHOTO 222 GT12-12 SPT #4



PHOTO 223 GT12-12 SPT #5



PHOTO 224 GT12-12 SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 225 GT12-12 SPT #7



PHOTO 226 GT12-12 SPT #8



PHOTO 227 GT12-12 SPT #9



PHOTO 228 GT12-28 SPT #1

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 229 GT12-28 SPT #2



PHOTO 230 GT12-28 SPT #3



PHOTO 231 GT12-28 SPT #4



PHOTO 232 GT12-28 SPT #5

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 233 GT12-28 SPT #6



PHOTO 234 MW12-01-D SPT #1



PHOTO 235 MW12-01-D SPT #2



PHOTO 236 MW12-01-D SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 237 MW12-01-D SPT #4



PHOTO 238 MW12-01-D SPT #5



PHOTO 239 MW12-01-D SPT #6



PHOTO 240 MW12-01-D SPT #7

NEW GOLD INC.
BLACKWATER GOLD PROJECT

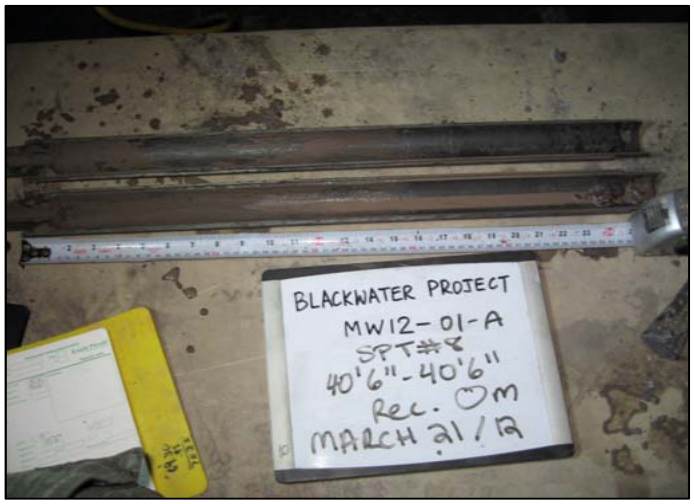


PHOTO 241 MW12-01-D SPT #8



PHOTO 242 MW12-01-D SPT #9



PHOTO 243 MW12-01-S SPT #1



PHOTO 244 MW12-01-S SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 245 MW12-01-S SPT #3



PHOTO 246 MW12-01-S SPT #4



PHOTO 247 MW12-01-S SPT #5



PHOTO 248 MW12-01-S SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 249 MW12-02-D SPT #1



PHOTO 250 MW12-02-D SPT #10



PHOTO 251 MW12-02-D SPT #11



PHOTO 252 MW12-02-D SPT #12

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 253 MW12-02-D SPT #13



PHOTO 254 MW12-02-D SPT #14



PHOTO 255 MW12-02-D SPT #15



PHOTO 256 MW12-02-D SPT #16

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 257 MW12-02-D SPT #17



PHOTO 258 MW12-02-D SPT #18



PHOTO 259 MW12-02-D SPT #19



PHOTO 260 MW12-02-D SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 261 MW12-02-D SPT #3

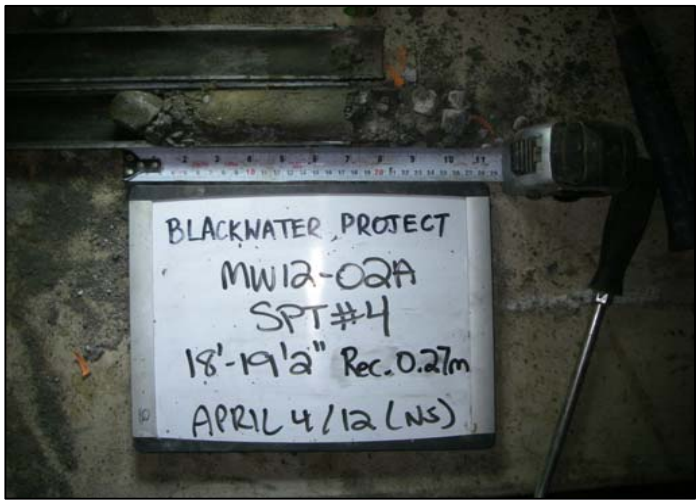


PHOTO 262 MW12-02-D SPT #4



PHOTO 263 MW12-02-D SPT #5



PHOTO 264 MW12-02-D SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT

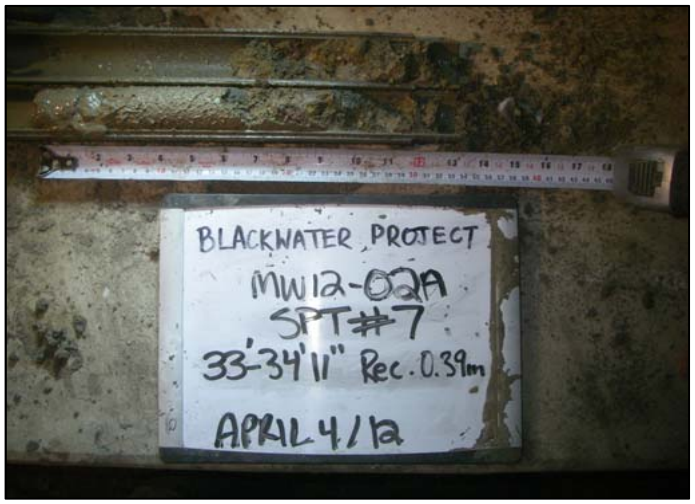


PHOTO 265 MW12-02-D SPT #7



PHOTO 266 MW12-02-D SPT #8



PHOTO 267 MW12-02-D SPT #9



PHOTO 268 MW12-02-S SPT #1

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 269 MW12-02-S SPT #2



PHOTO 270 MW12-02-S SPT #3



PHOTO 271 MW12-02-S SPT #4



PHOTO 272 MW12-02-S SPT #5

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 273 MW12-02-S SPT #6

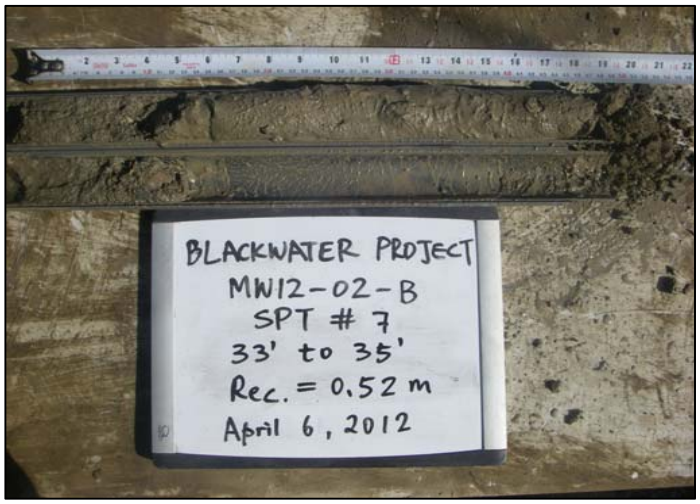


PHOTO 274 MW12-02-S SPT #7



PHOTO 275 MW12-02-S SPT #8



PHOTO 276 MW12-03-D SPT #1

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 277 MW12-03-D SPT #10



PHOTO 278 MW12-03-D SPT #11



PHOTO 279 MW12-03-D SPT #12



PHOTO 280 MW12-03-D SPT #13

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 281 MW12-03-D SPT #14



PHOTO 282 MW12-03-D SPT #15



PHOTO 283 MW12-03-D SPT #16



PHOTO 284 MW12-03-D SPT #17

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 285 MW12-03-D SPT #18



PHOTO 286 MW12-03-D SPT #2



PHOTO 287 MW12-03-D SPT #3



PHOTO 288 MW12-03-D SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 289 MW12-03-D SPT #5



PHOTO 290 MW12-03-D SPT #6



PHOTO 291 MW12-03-D SPT #7



PHOTO 292 MW12-03-D SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 293 MW12-03-D SPT #9



PHOTO 294 MW12-04-D SPT #1



PHOTO 295 MW12-04-D SPT #10



PHOTO 296 MW12-04-D SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 297 MW12-04-D SPT #12



PHOTO 298 MW12-04-D SPT #13



PHOTO 299 MW12-04-D SPT #2



PHOTO 300 MW12-04-D SPT #3

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 301 MW12-04-D SPT #4



PHOTO 302 MW12-04-D SPT #5



PHOTO 303 MW12-04-D SPT #6



PHOTO 304 MW12-04-D SPT #7

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 305 MW12-04-D SPT #8



PHOTO 306 MW12-04-D SPT #9



PHOTO 307 MW12-04-S SPT #1



PHOTO 308 MW12-04-S SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 309 MW12-04-S SPT #3



PHOTO 310 MW12-04-S SPT #4



PHOTO 311 MW12-04-S SPT #5



PHOTO 312 MW12-04-S SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 313 MW12-04-S SPT #7



PHOTO 314 MW12-04-S SPT #8



PHOTO 315 MW12-05-D SPT #1



PHOTO 316 MW12-05-D SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT

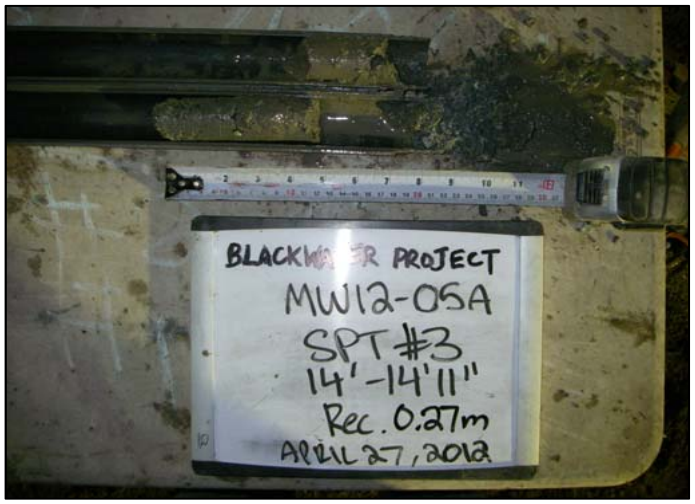


PHOTO 317 MW12-05-D SPT #3



PHOTO 318 MW12-05-D SPT #4



PHOTO 319 MW12-05-D SPT #5

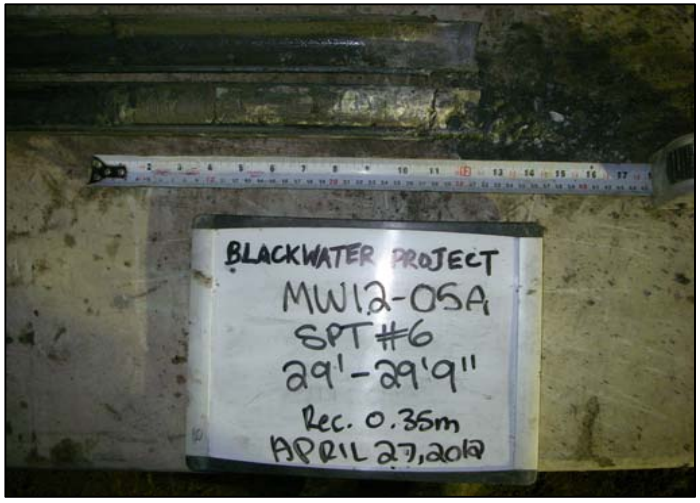


PHOTO 320 MW12-05-D SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 321 MW12-05-D SPT #7



PHOTO 322 MW12-05-D SPT #8



PHOTO 323 MW12-05-S SPT #1



PHOTO 324 MW12-05-S SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 325 MW12-05-S SPT #3



PHOTO 326 MW12-05-S SPT #4



PHOTO 327 MW12-05-S SPT #5



PHOTO 328 MW12-05-S SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 329 MW12-05-S SPT #7



PHOTO 330 MW12-05-S SPT #8

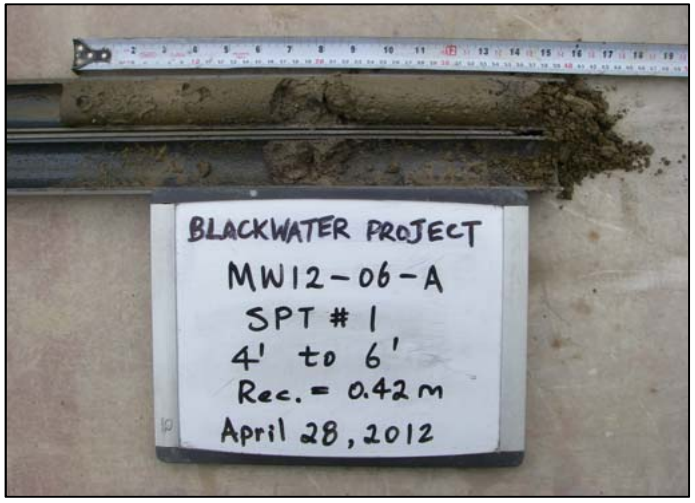


PHOTO 331 MW12-06-D SPT #1



PHOTO 332 MW12-06-D SPT #10

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 333 MW12-06-D SPT #11



PHOTO 334 MW12-06-D SPT #12

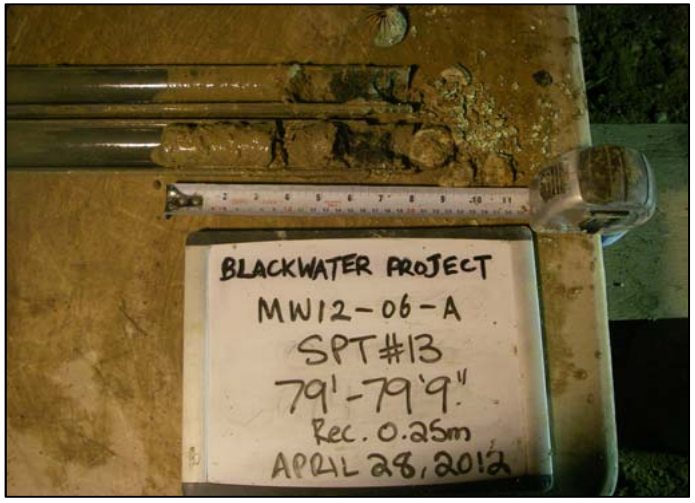


PHOTO 335 MW12-06-D SPT #13



PHOTO 336 MW12-06-D SPT #14

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 337 MW12-06-D SPT #15



PHOTO 338 MW12-06-D SPT #2



PHOTO 339 MW12-06-D SPT #3



PHOTO 340 MW12-06-D SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 341 MW12-06-D SPT #5



PHOTO 342 MW12-06-D SPT #6



PHOTO 343 MW12-06-D SPT #7



PHOTO 344 MW12-06-D SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 345 MW12-06-D SPT #9



PHOTO 346 MW12-06-S SPT #1



PHOTO 347 MW12-06-S SPT #10



PHOTO 348 MW12-06-S SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 349 MW12-06-S SPT #12



PHOTO 350 MW12-06-S SPT #2



PHOTO 351 MW12-06-S SPT #3



PHOTO 352 MW12-06-S SPT #4

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 353 MW12-06-S SPT #5



PHOTO 354 MW12-06-S SPT #6



PHOTO 355 MW12-06-S SPT #7



PHOTO 356 MW12-06-S SPT #8

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 357 MW12-06-S SPT #9



PHOTO 358 MW12-07-D SPT #1



PHOTO 359 MW12-07-D SPT #10



PHOTO 360 MW12-07-D SPT #11

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 361 MW12-07-D SPT #12



PHOTO 362 MW12-07-D SPT #13



PHOTO 363 MW12-07-D SPT #14

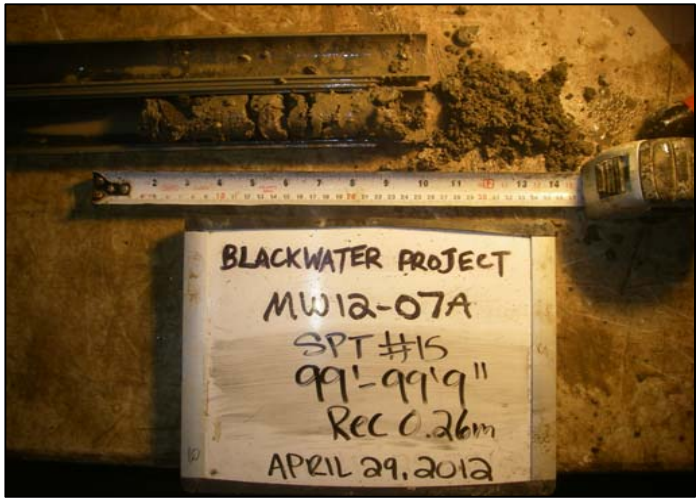


PHOTO 364 MW12-07-D SPT #15

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 365 MW12-07-D SPT #16

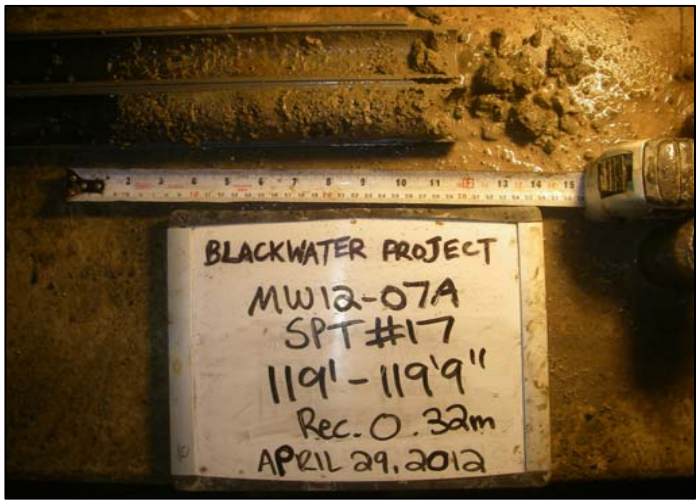


PHOTO 366 MW12-07-D SPT #17



PHOTO 367 MW12-07-D SPT #18



PHOTO 368 MW12-07-D SPT #2

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 369 MW12-07-D SPT #3



PHOTO 370 MW12-07-D SPT #4



PHOTO 371 MW12-07-D SPT #5



PHOTO 372 MW12-07-D SPT #6

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 373 MW12-07-D SPT #7



PHOTO 374 MW12-07-D SPT #8



PHOTO 375 MW12-07-D SPT #9

NEW GOLD INC.
BLACKWATER GOLD PROJECT

APPENDIX F3

SURFICIAL MATERIAL CORE PHOTOGRAPHS

(Pages F3-1 to F3-100)



PHOTO 1 GT12-13 Box 001-002 0.00m-6.10m



PHOTO 2 GT12-13 Box 003-004 6.10m-12.20m



PHOTO 3 GT12-13 Box 005-006 12.20m-18.30m



PHOTO 4 GT12-13 Box 007-008 18.30m-24.40m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 5 GT12-13 Box 009-010 24.40m-30.48m



PHOTO 6 GT12-13 Box 011-012 30.48m-36.58m



PHOTO 7 GT12-13 Box 013-014 36.58m-42.68m



PHOTO 8 GT12-13 Box 015-016 42.68-48.78m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 9 GT12-13 Box 019-020 54.88m-60.96m



PHOTO 10 GT12-13 Box 021-022 60.96m-67.05m (EOH)



PHOTO 11 GT12-13 Box 17-18 48.78m-54.88m



PHOTO 12 GT12-14 Box 001-002 0.00m-6.10m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 13 GT12-14 Box 003-004 6.10m-12.20m



PHOTO 14 GT12-14 Box 005-006 12.20m-18.30m



PHOTO 15 GT12-14 Box 007-008 18.30m-24.40m



PHOTO 16 GT12-14 Box 009-010 24.40m-30.50m

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 17 GT12-14 Box 011-012 30.50m-36.60m



PHOTO 18 GT12-14 Box 013-014 36.60m-42.69m



PHOTO 19 GT12-14 Box 015-016 42.69m-48.79m



PHOTO 20 GT12-14 Box 017-018 48.79m-54.88m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

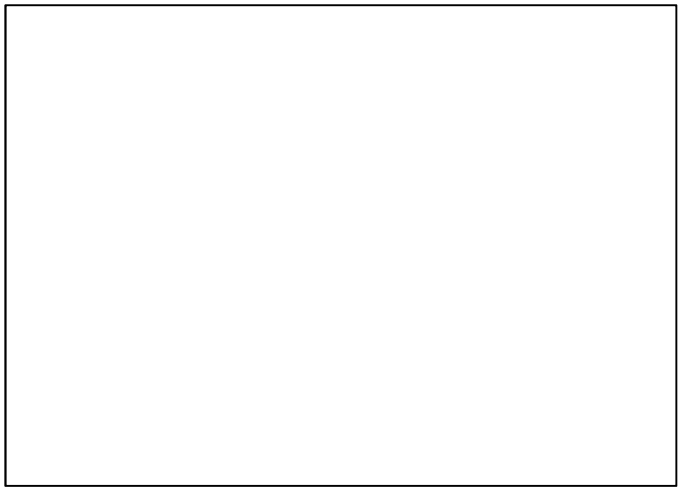


PHOTO 21 GT12-14 Box 019-020 54.88m-59.46m(EOH)

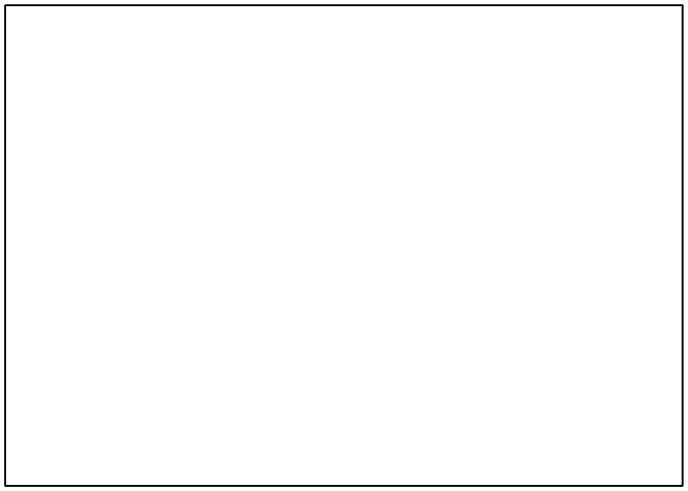


PHOTO 22 GT12-15 Box 001-002 0.00m-6.10m

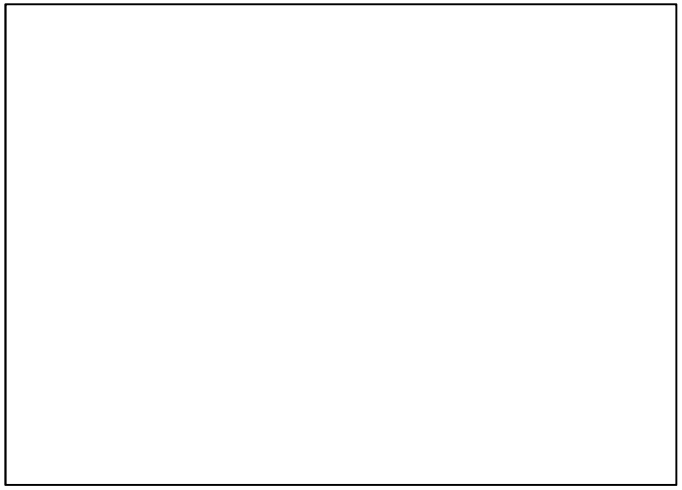


PHOTO 23 GT12-15 Box 003-004 6.10m-12.20m

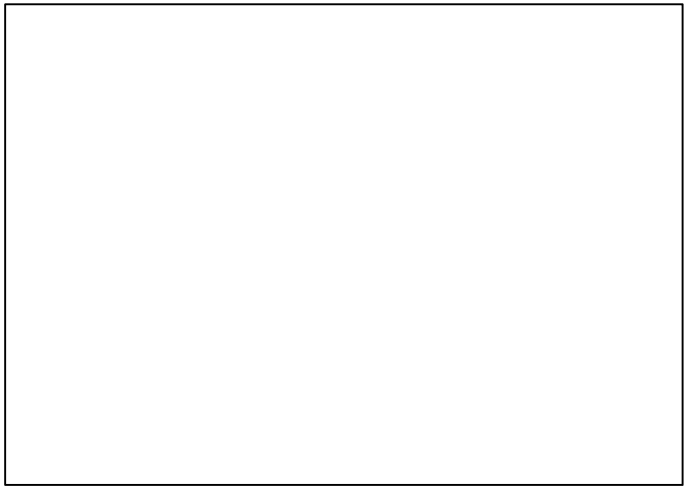


PHOTO 24 GT12-15 Box 005-006 12.20m-18.29m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

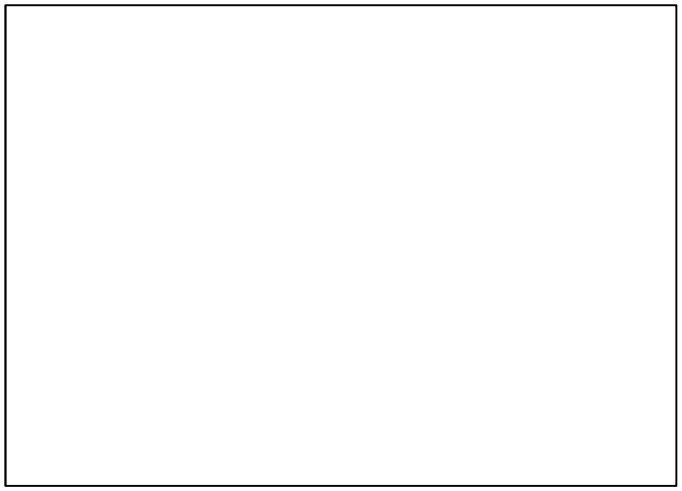


PHOTO 25 GT12-15 Box 007-008 18.29m-24.28m

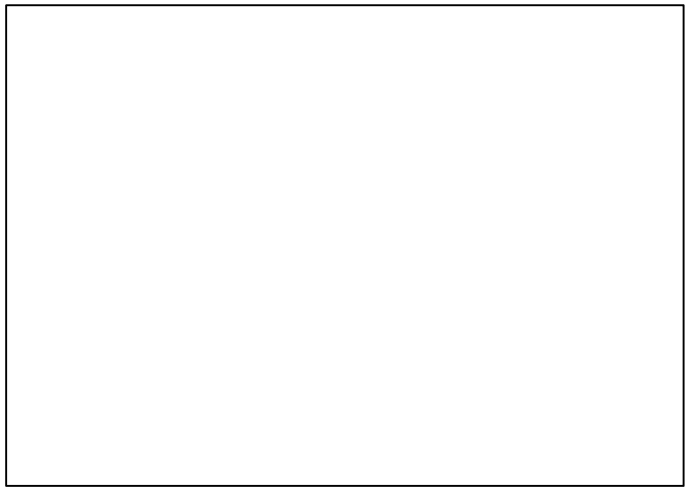


PHOTO 26 GT12-15 Box 009-010 24.28m-34.48m

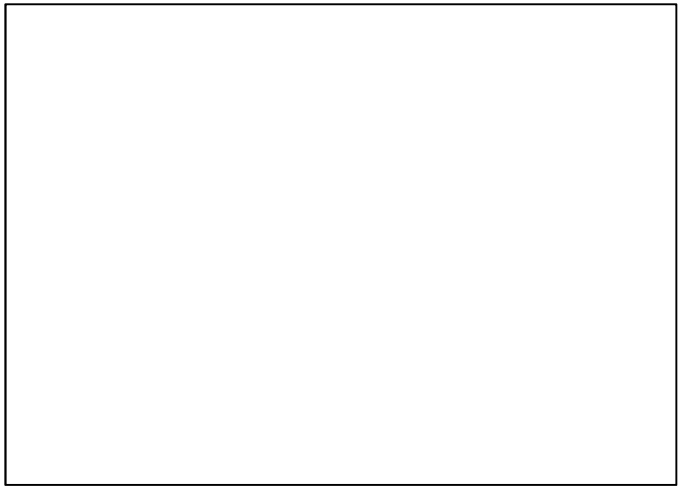


PHOTO 27 GT12-15 Box 011-012 24.28m-36.58m

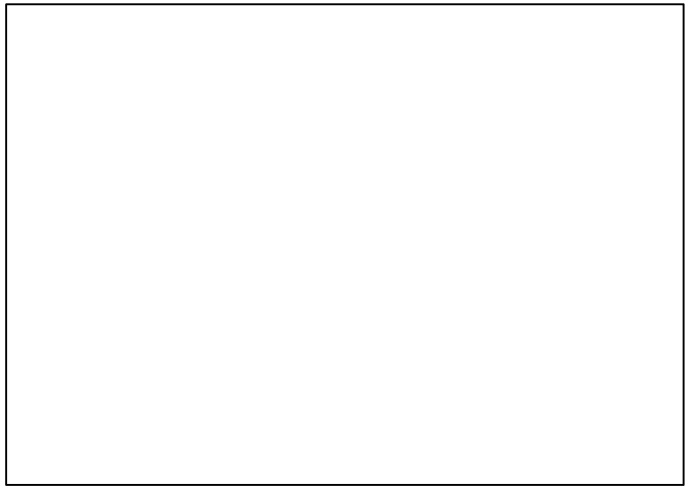


PHOTO 28 GT12-15 Box 013-014 36.58m-42.67m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

PHOTO 29 GT12-15 Box 015-016 36.58m-48.77m



PHOTO 30 GT12-15 Box 017-018 48.77m-54.86m



PHOTO 31 GT12-15 Box 019-020 54.86m-60.96m



PHOTO 32 GT12-15 Box 021-022 60.96m-67.06m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 33 GT12-15 Box 023-024 67.06m-72.15m



PHOTO 34 GT12-15 Box 027-028 72.15m-79.94m



PHOTO 35 GT12-15 Box 029-030 79.94m-84.76m

PHOTO 36 GT12-15 Box 031-032 84.76m-89.39m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 37 GT12-15 Box 033-034 89.39m-93.25m



PHOTO 38 GT12-15 Box 035-036 93.25m-97.54m (EOH)



PHOTO 39 GT12-16 Box 001-002 0.00m-5.10m

PHOTO 40 GT12-16 Box 003-004 5.10m-9.14m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 41 GT12-16 Box 005-006 9.14m-14.00m



PHOTO 42 GT12-16 Box 007-008 14.00m-18.29m



PHOTO 43 GT12-16 Box 009-010 18.29m-22.22m

PHOTO 44 GT12-16 Box 011-012 22.22m-26.37m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 45 GT12-16 Box 013-014 26.37m-30.48m



PHOTO 46 GT12-16 Box 015-016 30.48m-35.53m



PHOTO 47 GT12-16 Box 017-018 35.53m-39.62m

PHOTO 48 GT12-16 Box 019-020 39.62m-42.38m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 49 GT12-16 Box 021-022 42.38m-47.6m



PHOTO 50 GT12-16 Box 023-024 47.6m-51.82m



PHOTO 51 GT12-16 Box 025-026 51.82m-55.79m

PHOTO 52 GT12-16 Box 027-028 55.79m-59.89m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 53 GT12-16 Box 029-030 59.89m-64.01m



PHOTO 54 GT12-16 Box 031-032 64.01m-68.07m



PHOTO 55 GT12-16 Box 033-034 68.07m-72.12m

PHOTO 56 GT12-16 Box 035-036 72.12m-76.2m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 57 GT12-16 Box 037-038 76.2m-79.25m



PHOTO 58 GT12-16 Box 039-040 79.25m-84.27m



PHOTO 59 GT12-16 Box 041-042 84.27m-88.39m

PHOTO 60 GT12-16 Box 043-044 88.39m-92.33m

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 61 GT12-16 Box 045-046 92.33m-96.42m



PHOTO 62 GT12-16 Box 047 96.42m-100.58m (EOH)



PHOTO 63 GT12-17 Box 001-002 0.00m-4.88m

PHOTO 64 GT12-17 Box 003-004 4.88m-9.14m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 65 GT12-17 Box 005-006 9.14m-12.88m



PHOTO 66 GT12-17 Box 007-008 12.88m-17.18m



PHOTO 67 GT12-17 Box 009-010 17.18m-21.34m

PHOTO 68 GT12-17 Box 011-012 21.34m-25.37m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 69 GT12-17 Box 013-014 25.37m-29.44m



PHOTO 70 GT12-17 Box 015-016 29.44m-33.53m



PHOTO 71 GT12-17 Box 017-018 33.53m-37.58m

PHOTO 72 GT12-17 Box 019-020 37.58m-41.54m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 73 GT12-17 Box 021-022 41.54m-45.72m



PHOTO 74 GT12-17 Box 023-024 45.27m-50.75m



PHOTO 75 GT12-17 Box 025-026 50.75m-55.41m

PHOTO 76 GT12-17 Box 027-028 55.41m-59.72m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 77 GT12-17 Box 029-030 59.72m-64.01m



PHOTO 78 GT12-17 Box 030-040 80.26m-84.33m



PHOTO 79 GT12-17 Box 031-032 64.01m-67.48m

PHOTO 80 GT12-17 Box 033-034 67.98m-71.95m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 81 GT12-17 Box 035-036 71.95m-76.20m



PHOTO 82 GT12-17 Box 037-038 76.20m-80.26m



PHOTO 83 GT12-17 Box 041-042 84.33m-88.39m

PHOTO 84 GT12-17 Box 043-044 88.39m-92.43m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 85 GT12-17 Box 045-046 92.43m-96.50m



PHOTO 86 GT12-17 Box 047-048 96.5m-100.59m



PHOTO 87 GT12-17 Box 049-050 100.59m-104.32m

PHOTO 88 GT12-17 Box 051-052 104.32m-108.67

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 89 GT12-17 Box 053-054 108.67m-112.78m (EOH)



PHOTO 90 GT12-18 Box 001-002 0m-6.10m



PHOTO 91 GT12-18 Box 003-004 6.10m-11.06m

PHOTO 92 GT12-18 Box 005-006 11.06m-15.24m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 93 GT12-18 Box 007-008 15.24m-21.34m



PHOTO 94 GT12-18 Box 009-010 21.34m-27.43m



PHOTO 95 GT12-18 Box 011-012 27.43m-33.53m

PHOTO 96 GT12-18 Box 013-014 33.53m-39.62m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 97 GT12-18 Box 015-016 39.62m-45.72m



PHOTO 98 GT12-18 Box 017-018 45.72m-51.82m



PHOTO 99 GT12-18 Box 019-020 51.82m-55.19m

PHOTO 100 GT12-18 Box 023-024 59.72m-65.55m

NEW GOLD INC.

BLACKWATER GOLD PROJECT

APPENDIX F4

BEDROCK CORE PHOTOGRAPHS

(Pages F4-1 to F4-14)



PHOTO 1 GT12-01 Box 001-002 65.38m-72.54m



PHOTO 2 GT12-01 Box 003-004 72.54m-78.79m



PHOTO 3 GT12-01 Box 005-006 78.79m-85.24m



PHOTO 4 GT12-01 Box 007 85.24m-88.29m (EOH)

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 5 GT12-02 Box 001-002 89.31m-96.50m



PHOTO 6 GT12-02 Box 003-004 96.50m-103.48m



PHOTO 7 GT12-02 Box 005 103.48m-106.53m (EOH)



PHOTO 8 GT12-03 Box 001-002 56.39m-63.22m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 9 GT12-03 Box 003-004 63.22m-70.25m



PHOTO 10 GT12-03 Box 005-006 70.25m-74.37m (EOH)



PHOTO 11 GT12-04 Box 001-002 74.06m-80.35m



PHOTO 12 GT12-04 Box 003-004 80.35m-87.02m

NEW GOLD INC.

BLACKWATER GOLD PROJECT



PHOTO 13 GT12-04 Box 005-006 87.02m-91.56m (EOH)



PHOTO 14 GT12-05 Box 001-002 78.94m-86.15m



PHOTO 15 GT12-05 Box 003-004 86.15m-92.93m



PHOTO 16 GT12-05 Box 005-006 92.93m-99.65m

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 17 GT12-05 Box 007-008 99.65m-106.28m



PHOTO 18 GT12-05 Box 009-010 106.28m-112.74m



PHOTO 19 GT12-05 Box 011-012 112.74m-118.57m



PHOTO 20 GT12-05 Box 013 118.57m-120.09m (EOH)

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 21 GT12-06 Box 001-002 42.06m-49.38m



PHOTO 22 GT12-06 Box 003-004 49.38m-56.59m



PHOTO 23 GT12-06 Box 005-006 56.59m-63.16m



PHOTO 24 GT12-06 Box 007-008 63.16m-67.05m (EOH)

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 25 GT12-07 Box 001-002 8.53m-15.01m



PHOTO 26 GT12-07 Box 003-004 15.01m-21.44m



PHOTO 27 GT12-07 Box 005-006 21.44m-27.62m



PHOTO 28 GT12-07 Box 007-008 27.62m-33.98m

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 29 GT12-07 Box 009 33.98m-36.42m (EOH)



PHOTO 30 GT12-08 Box 001-002 2.59m-8.86m



PHOTO 31 GT12-08 Box 003-004 8.86m-15.06m



PHOTO 32 GT12-08 Box 005-006 15.06m-21.39m

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 33 GT12-08 Box 007-008 21.39m-27.71m



PHOTO 34 GT12-08 Box 009 27.71m-30.33m (EOH)



PHOTO 35 GT12-09 Box 001-002 83.21m-96.42m



PHOTO 36 GT12-09 Box 003-004 96.42m-104.97m

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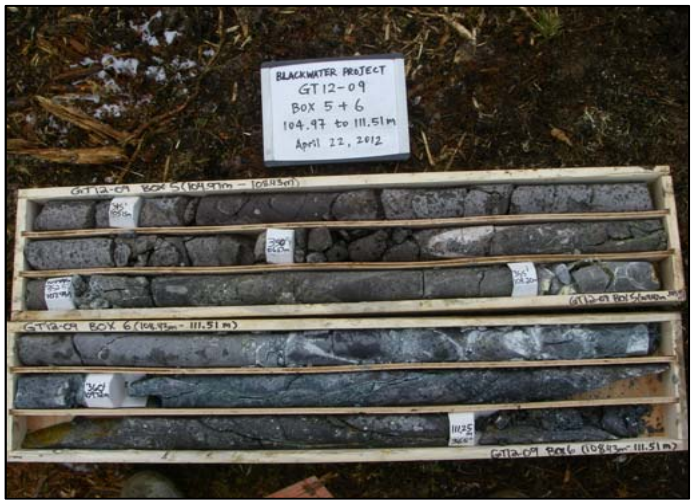

PHOTO 37 GT12-09 Box 005-006 104.97m-111.51m



PHOTO 38 GT12-09 Box 007-008 111.51m-117.75m



PHOTO 39 GT12-09 Box 009-010 117.75m-123.94m



PHOTO 40 GT12-09 Box 011 123.94m-124.97m (EOH)

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PHOTO 41 GT12-10 Box 001-002 26.97m-33.78m



PHOTO 42 GT12-10 Box 003-004 33.78m-40.01m



PHOTO 43 GT12-10 Box 005-006 40.01m-45.72m (EOH)



PHOTO 44 GT12-11 Box 001-002 4.11m-10.77m

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PHOTO 45 GT12-11 Box 003-004 10.77m-17.51m



PHOTO 46 GT12-11 Box 005-006 17.51m-23.88m



PHOTO 47 GT12-11 Box 007-008 23.88m-30.48m



PHOTO 48 GT12-11 Box 009-010 30.48m-36.94m

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PHOTO 49 GT12-11 Box 011-012 36.94m-43.73m



PHOTO 50 GT12-11 Box 013-014 43.73m-50.41m



PHOTO 51 GT12-11 Box 015-016 50.41m-57.26m



PHOTO 52 GT12-11 Box 017-018 57.26m-63.85m

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PHOTO 53 GT12-11 Box 019-020 63.85m-68.58m (EOH)



PHOTO 54 GT12-12 Box 001-002 24.05m-30.85m



PHOTO 55 GT12-12 Box 003-004 30.85m-37.39m



PHOTO 56 GT12-12 Box 005 37.39m-39.62m (EOH)

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APPENDIX F5

TEST PIT PHOTOGRAPHS

(Pages F5-1 to F5-40)



PHOTO 1 TP12-001



PHOTO 2 TP12-002



PHOTO 3 TP12-003



PHOTO 4 TP12-004

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PHOTO 5 TP12-005



PHOTO 6 TP12-006



PHOTO 7 TP12-007



PHOTO 8 TP12-008

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PHOTO 9 TP12-009



PHOTO 10 TP12-010



PHOTO 11 TP12-011



PHOTO 12 TP12-012

NEW GOLD INC.
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PHOTO 13 TP12-013



PHOTO 14 TP12-014



PHOTO 15 TP12-015

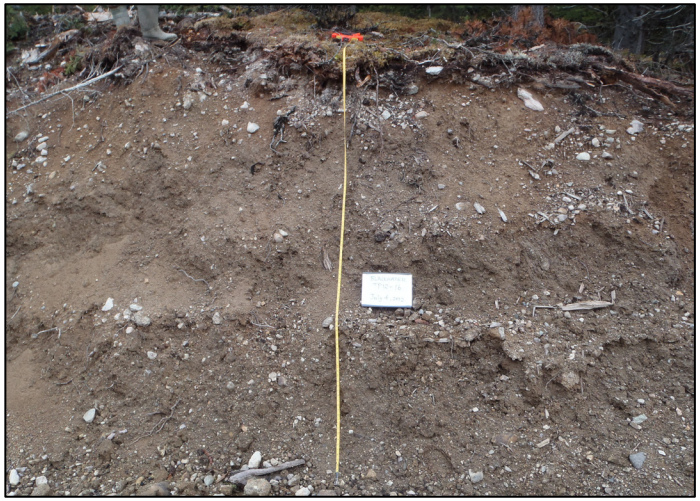

PHOTO 16 TP12-016

NEW GOLD INC.
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PHOTO 17 TP12-017



PHOTO 18 TP12-018



PHOTO 19 TP12-019



PHOTO 20 TP12-020

NEW GOLD INC.
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PHOTO 21 TP12-021



PHOTO 22 TP12-022



PHOTO 23 TP12-023



PHOTO 24 TP12-024

NEW GOLD INC.
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PHOTO 25 TP12-025



PHOTO 26 TP12-026



PHOTO 27 TP12-027



PHOTO 28 TP12-028

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PHOTO 29 TP12-029



PHOTO 30 TP12-030



PHOTO 31 TP12-031



PHOTO 32 TP12-032

NEW GOLD INC.
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PHOTO 33 TP12-033



PHOTO 34 TP12-034



PHOTO 35 TP12-035



PHOTO 36 TP12-036

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PHOTO 37 TP12-037



PHOTO 38 TP12-038



PHOTO 39 TP12-039



PHOTO 40 TP12-040

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PHOTO 41 TP12-041



PHOTO 42 TP12-042



PHOTO 43 TP12-043



PHOTO 44 TP12-044

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PHOTO 45 TP12-045



PHOTO 46 TP12-046



PHOTO 47 TP12-047



PHOTO 48 TP12-048

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PHOTO 49 TP12-049



PHOTO 50 TP12-050



PHOTO 51 TP12-051



PHOTO 52 TP12-052

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PHOTO 53 TP12-053



PHOTO 54 TP12-054



PHOTO 55 TP12-055



PHOTO 56 TP12-056

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PHOTO 57 TP12-057



PHOTO 58 TP12-058



PHOTO 59 TP12-059



PHOTO 60 TP12-060

NEW GOLD INC.
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PHOTO 61 TP12-061



PHOTO 62 TP12-062



PHOTO 63 TP12-063



PHOTO 64 TP12-064

NEW GOLD INC.
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PHOTO 65 TP12-065



PHOTO 66 TP12-066



PHOTO 67 TP12-067



PHOTO 68 TP12-068

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PHOTO 69 TP12-069



PHOTO 70 TP12-070



PHOTO 71 TP12-071



PHOTO 72 TP12-072

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PHOTO 73 TP12-073



PHOTO 74 TP12-074



PHOTO 75 TP12-075



PHOTO 76 TP12-076

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PHOTO 77 TP12-077



PHOTO 78 TP12-078



PHOTO 79 TP12-079



PHOTO 80 TP12-080

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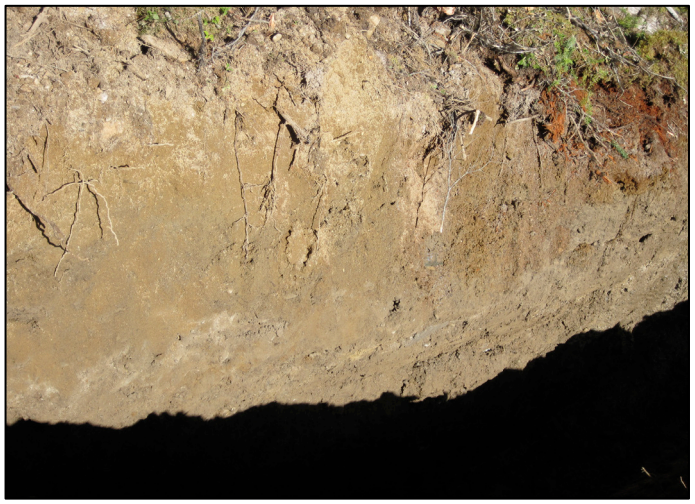

PHOTO 81 TP12-081



PHOTO 82 TP12-082



PHOTO 83 TP12-083



PHOTO 84 TP12-084

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PHOTO 85 TP12-085



PHOTO 86 TP12-086



PHOTO 87 TP12-087



PHOTO 88 TP12-088

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PHOTO 89 TP12-089



PHOTO 90 TP12-090



PHOTO 91 TP12-091



PHOTO 92 TP12-092

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PHOTO 93 TP12-093



PHOTO 94 TP12-094



PHOTO 95 TP12-095



PHOTO 96 TP12-096

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PHOTO 97 TP12-097

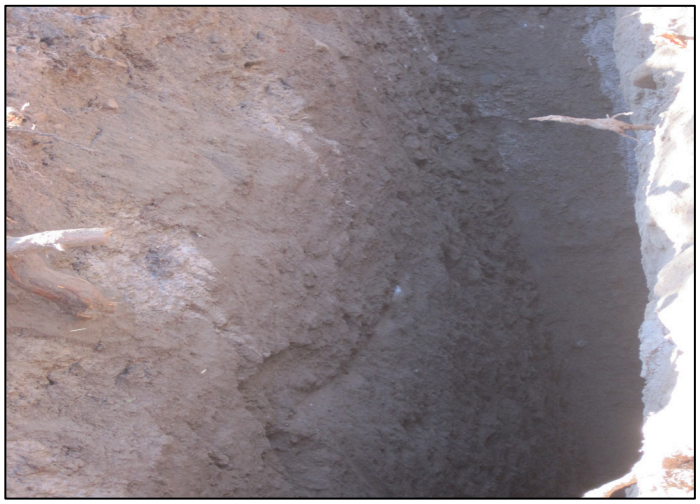

PHOTO 98 TP12-098



PHOTO 99 TP12-099



PHOTO 100 TP12-100

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PHOTO 101 TP12-101



PHOTO 102 TP12-102



PHOTO 103 TP12-103



PHOTO 104 TP12-104

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PHOTO 105 TP12-105



PHOTO 106 TP12-106



PHOTO 107 TP12-107



PHOTO 108 TP12-108

NEW GOLD INC.
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PHOTO 109 TP12-109



PHOTO 110 TP12-110

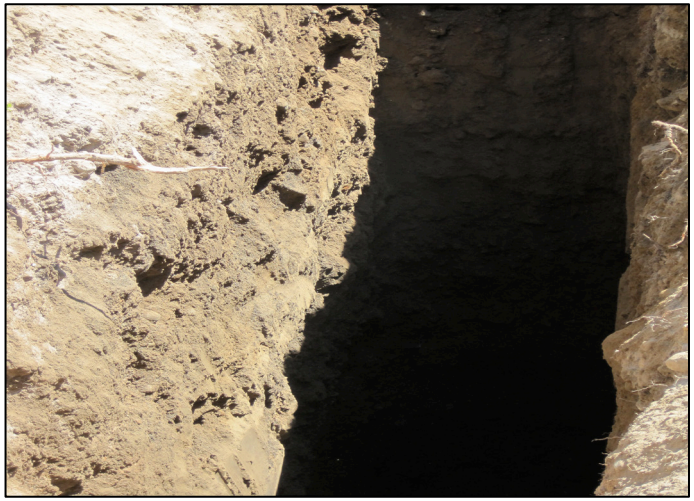

PHOTO 111 TP12-112



PHOTO 112 TP12-113

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PHOTO 113 TP12-114



PHOTO 114 TP12-115



PHOTO 115 TP12-116



PHOTO 116 TP12-117

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PHOTO 117 TP12-118



PHOTO 118 TP12-119



PHOTO 119 TP12-120



PHOTO 120 TP12-121

NEW GOLD INC.
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PHOTO 121 TP12-122



PHOTO 122 TP12-123



PHOTO 123 TP12-124



PHOTO 124 TP12-125

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PHOTO 125 TP12-126



PHOTO 126 TP12-127



PHOTO 127 TP12-128



PHOTO 128 TP12-129

NEW GOLD INC.
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PHOTO 129 TP12-130



PHOTO 130 TP12-131



PHOTO 131 TP12-132



PHOTO 132 TP12-133

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 133 TP12-134



PHOTO 134 Tp12-135



PHOTO 135 TP12-136



PHOTO 136 TP12-137

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 137 TP12-138



PHOTO 138 TP12-139



PHOTO 139 TP12-140



PHOTO 140 TP12-141

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 141 TP12-142



PHOTO 142 TP12-143



PHOTO 143 TP12-144



PHOTO 144 TP12-145

NEW GOLD INC.
BLACKWATER GOLD PROJECT



PHOTO 145 TP12-146



PHOTO 146 TP12-147



PHOTO 147 TP12-148



PHOTO 148 TP12-149

NEW GOLD INC.
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PHOTO 149 TP12-150



PHOTO 150 TP12-151



PHOTO 151 TP12-152



PHOTO 152 TP12-153

NEW GOLD INC.
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PHOTO 153 TP12-154



PHOTO 154 TP12-155



PHOTO 155 TP12-156



PHOTO 156 TP12-157

NEW GOLD INC.
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PHOTO 157 TP12-158



PHOTO 158 TP12-159

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