

BC Geological Survey
Assessment Report
30157b

APPENDIX I

Site Selection Study

- Annotative Bibliography
- Minutes of Project Brainstorming Meeting
- December 7, 2006 Correspondence – Site Comparison
- Site B and Site E Comparative Costs

MEMORANDUM

TO: Erik Tornquist
Harvey McLeod

DATE: March 5, 2007

FROM: Terence Jibiki

FILE NO: M09382A01.200
LOG NO:

SUBJECT: Morrison Copper/Gold Project - Annotative Bibliography of Existing Reports

The following is a summary of existing reports on the Morrison Copper/Gold Project, reviewed by KCBL:

1. “Preliminary Assessment”, Beacon Hill Consultants Ltd. August 1, 2004:

- Property description, regional history and geology.
- Assessment of mining economics at production rates of 20,000 tpd, 25,000 tpd, and 30,000 tpd; and sensitivity analyses.
- Resource estimation, mine plan, processing, capital and operating costs and financial analysis.
- Waste disposal based on Site B, and previous reports on site alternative studies.
- Waste rock transportation comparison between conveyor and haul trucks.
- Environmental assessment program and processes including land use, setting and effects.

2. “Report on Initial Waste Management Site Alternatives Study” (Ref. No. VA101-00102/1-1), Knight Piesold Ltd. October 7, 2002:

- Comparison of waste management site alternatives, including sites A to D.
- Includes design parameters used in the site alternatives study, and comparison of catchment area, disturbance area, crest elevation, embankment volume, storage volume, length of haul road, and other items.
- Appendix A – “Babine Porphyry Belt Project: Quaternary Geology and Regional Till Geochemistry Sampling in the Old Fort Mountain (93M/01) and Fulton Lake (93L/16) Map Areas, British Columbia”, Huntley et al., 1996.

3. “Report on Initial Site Visit and Updated Concepts for Waste Management” (Ref. No. VA101-00102/1-2), Knight Piesold Ltd. August 20, 2003:

- Summary of site visits including Huckleberry Mine, Bell Copper and Morrison sites.
- Concepts A (now B), E (now A) and AE for waste management including a qualitative comparison of the concepts.
- Maps showing climate stations, hydrology stations, water quality measuring points, orthophoto, and surficial geology.
- Fly-over photos.

4. **“Tailings and Waste Rock Management - Input to Scoping Study” (Ref. No. VA101-00102/03-1), Knight Piesold Ltd. June 17, 2004:**
 - Concept level design layouts and cost estimates for Sites A and B.
 - Option 1 for site A, Option 2 (till core) and Option 3 (HDPE lining) for site B and Option 4 for sites A and B combined.
5. **“Geotechnical Site Investigation Report” (Ref. No. VA101-102/7-1), Knight Piesold Ltd. July 7, 2003:**
 - Geological background including the regional geology, topography and geomorphology.
 - Geotechnical conditions for the waste management facility (Site B) and plant site in regards to overburden, bedrock and groundwater.
 - Laboratory testing results: moisture content, sieve, pipette and hydrometer particle size analyses, Atterberg limits, particle density, Standard Proctor, and hydraulic conductivity (Proctor compacted and Shelby tube).
 - Overburden and bedrock drilling including soil drilling and sampling and geotechnical logging and testing.
 - Hydrogeological testing including packer permeability tests and groundwater level measurement.
 - Drawings showing site investigation plan and sections.
 - Geotechnical drillhole logs (overburden and bedrock).
 - Packer permeability testing sheets and well completion details.
 - Cantest test results.
 - Test pit and bedrock core photographs.
6. **“2006 Open Pit Geotechnical Investigations Rev. 1” (Ref. No. VA101-102/8-1), Knight Piesold Ltd. September 14, 2006:**
 - Geological background on regional geology, topography, geomorphology and deposit geology.
 - Deposit geology including lithology, alteration and structures.
 - Site investigation program covering bedrock drilling, hydrogeological testing and laboratory testing of the open pit area.
 - Bedrock drilling including core orientation and geotechnical sampling.
 - Hydrogeological testing, including permeability tests, piezometer installation and groundwater measurement.
 - Laboratory testing including point load, unconfined compressive strength and direct shear testing.
 - Geotechnical condition characterizations including geological domains, intact rock strength, rock mass discontinuities, rock mass classification and hydrogeology.
 - Geotechnical bedrock drillhole logs.
 - Permeability test results and well completion details.

- Point load test results.
- Discontinuity characteristic histograms.
- Core and site photographs.

7. “Feasibility Pit Slope Design” (Ref. No. VA101-102/8-2), Knight Piesold Ltd. June 30, 2006:

- Design concepts including pit slope geometries and methodology for slope stability assessment as well as recommended slope angles.
- Interpretation of geotechnical conditions such as pit geology, structural features and groundwater conditions.
- Kinematic stability analyses including modes of failure and stereographic analyses for phase 1 and 2 pits.
- Rock mass stability analyses.
- Concepts for pit water management.
- Summary of pit slope design.
- Rock mass strength curves.
- Recommended open pit geotechnical monitoring.
- Description of open pit designs for similar large mining projects in BC.

MINUTES OF MEETING
MORRISON COPPER/GOLD PROJECT
TAILINGS AND WASTE ROCK STORAGE SITE SELECTION
BRAINSTORMING SESSION

NOVEMBER 6, 2006

Attendees:

Pacific Booker Minerals (PBM)	Erik Tornquist Mike Petrina Clayton Rouse	Executive Director (C) Project Manager Environmental Coordinator
Rescan	Rolf Schmitt Jonathan Olsen Colin Fyfe	(C) Project Manager Environmental Scientist
Minesite Drainage Assessment Group	Kevin Morin	(C) ML/ARD Consultant
Wardrop	Peter Wells Karla Mills Hassan Ghaffari	(C) Project Manager Project Engineer Senior Metallurgist
Nilsson Mine Services	John Nilsson	(C) Mining Engineer
Klohn Crippen Berger Ltd (KCBL)	Harvey McLeod Terence Jibiki Howard Plewes	Project Manager (C) Project Engineer Project Reviewer

"(C)" indicates primary contact for project correspondence.

Location: KCBL Vancouver Office - Kipling Room
#500-2955 Virtual Way (@ Broadway & Renfrew)

ITEM No.	DESCRIPTION	ACTION BY	DUE DATE
1	Current Waste Storage Criteria: - 104 Mt 0.445% Cu Ore - 30 Mt "Low Grade" Ore - 100 Mt Waste Rock - Mill production 36,000 tpd - 11-13 year mine life	Info	
2	ARD Summary: - 100 samples collected so far; 300 more samples to be collected. - Existing data show sulphur ranging from 0.5% to 3.0% <0.01%S to 2.4%S. - 5 humidity cell tests have been in progress for about 1 year. Discharge is still neutral. - Neutral ML will need consideration. Potential metals of concern (copper, selenium, arsenic) - Current data suggests 40% of waste will be NAG, but it is not clear if this can easily be separated from the PAG waste.	Info	
3	Block modeling is needed to determine the schedule of PAG and NAG waste removal from the pit.	J. Nilsson	Jan-Feb 2007
4	Characterize tailings geochemistry using samples from lock cycle tests.	Wardrop	Jan-Feb 2007
5	Aquatic habitat in Morrison Lake, Babine Lake and Morrison River is an important factor for consideration in the site selection process. Fish have not been detected in Booker or Ore Lakes.	Info	
6	First Nations Summary - The Babine Lake Nation (Chief Betty Patrick) has been identified as having interests in the project area. - PBM have held meetings with this group. - Concerns expressed by First Nations: mercury levels in fish, cyanide usage [note: the use of cyanide is not in the current process plans]. - Preference is for a site that drains to the East.	Info	
7	Note: Geochemical and water quality testing should be conducted to adequate detection limits for the intended purpose.	Info	

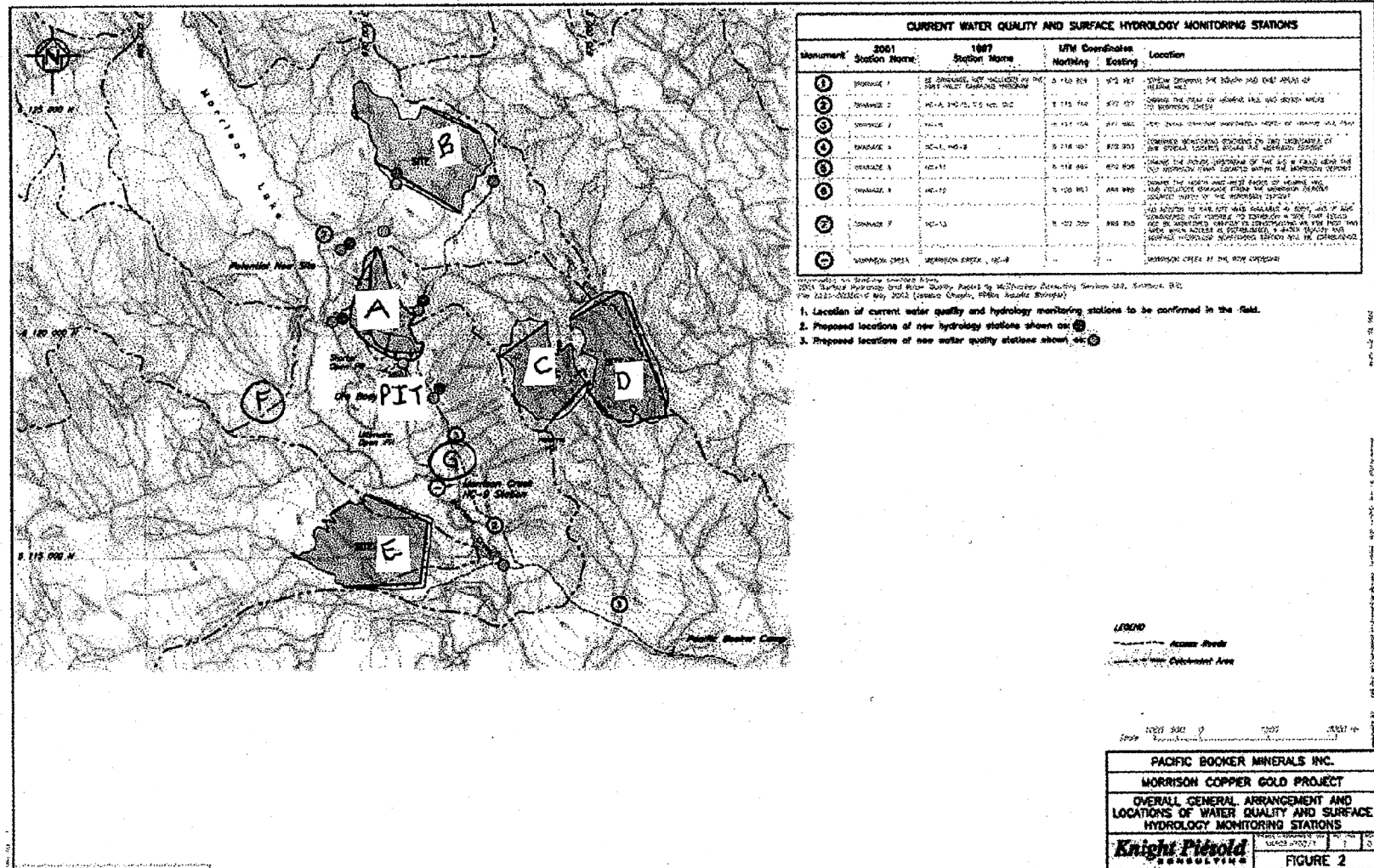
8	Main baseline environmental work remaining: - ML/ARD - Hydrogeology - Archaeology Evaluation of wildlife surveys in progress. Main species of concern: grizzly bear and moose.	Rescan	Spring 2007
9	Transmission line access still to be determined. Baseline environmental work has not been done.	Info	
10	Transportation route from site for concentrate has not been finalized.	Info	
11	Summary of available technologies/options for Waste Rock: - Covers: Able to reduce infiltration but not prevent ARD. May be appropriate for NAG waste rock, reducing neutral ML. - Temporary waste dumps for later replacement in the flooded pit: This will depend on the time for onset of ARD (to be determined). - PAG waste rock needs to be stored with tailings or in flooded pit. Separate dump not recommended. - Bonding for Low Grade Ore stockpile may affect feasibility. - There is potential to end one pit area before the entire pit is complete. This could allow some replacement of waste rock to take place before the end of mine life.	Info	
12	Summary of available technologies/options for Tailings: - Thickening: reduces water in the impoundment; affects pumping cost. - Paste tailings: not recommended. - Note: there will be 2 streams of tailings, ~90% rough scavenger tailings and ~10% clean scavenger tailings. Properties should be similar to HVC or Huckleberry. - Desulphurization: it is not currently clear if this is possible. May cost ~\$0.10/tonne, if possible. - If the tailings are NAG, cycloning for use as a construction material will be considered.	Info	
13	Site energy costs estimated at 4 cents/kW-hr.	Info	
14	Alternative dam geometries will be checked for Site B (in particular Southeast abutment).	KCBL	Dec 2006

15	Overview photos from site will be sent to KCBL	Rescan	Nov 2006
16	An approximate cost of \$0.50/tonne has been estimated for haulage to Site B.	Info	
17	Review plant-site geotechnical information to identify unfavourable conditions.	KCBL	Nov. 2006
18	Consider a diffuser in Morrison Lake for neutral drainage and seepage.	KCBL	Dec 2006
19	Completion of Feasibility Study (note: schedule ties closely to metallurgical testing)	Wardrop	Jul-Dec 2007
20	Continue baseline environmental work.	Rescan	Summer 2007
21	Completion of EIA.	Rescan	Late 2007
22	Site Visit scheduled for November 20.	Info	
23	Review available hydrology data (2 years of flow data from 5 drainages on site may be available)	KCBL/ Rescan	Nov 2006
24	There is no water treatment in the current Wardrop plan.	Info	
25	Provide a section on Waste Management for the Feasibility Study.	KCBL	Jul-Dec 2007
26	Provide available AutoCAD data for site area to all groups. (<i>Done Nov. 8</i>)	Wardrop	Nov 2006
27	Review available geotechnical/geological data from open pit study.	T. Jibiki/ C. Rouse	Nov 2006
28	A summary of potential waste management facilities and discussion points is provided in Table 1.	Info	
29	Review and update screening study for the sites A, B, C, E, F and G, and Option 1 (see Table 1)	KCBL	Nov 2006

Table 1 – Summary of Waste Facility Concepts and Discussion

Option	Description	Concept	Advantages	Disadvantages
Site A	North Side-hill	All tailings and waste rock in Site A; dam shells of waste rock.	- Near open pit; - Lower pumping head (60m)	- Height of dam approx. 170 m; - Toe in Booker Lake (stability issues); - Proximity to Morrison Lake; - Environmental/Fish habitat issues.
Site B	North Plateau	All tailings and waste rock in Site B; dam shells of waste rock/borrow materials.	- Good storage efficiency;	- Distance and elevation gain from open pit. (~4 km) - Large terrestrial footprint. - Larger catchment area (1660 ha)
Site C	West Hearne Hill	All tailings and waste rock in Site C; dam shells of waste rock.	- Storage efficiency	- Distance and elevation gain from open pit. - Loss of stream habitat
Site D	East Hearne Hill	All tailings and waste rock in Site D; dam shells of waste rock.		- Distance and elevation gain from open pit. - HADD issue/ loss of lake
Site E	South Shore	All tailings and waste rock in Site E; dam shells of waste rock.	- Good storage efficiency; - Similar elevation to open pit.	- Distance from open pit; - Loss of fish habitat - Large catchment; Creek crossing.
Site A+B	Combination	Tailings Yr 1-3 in Site B; Remaining tailings and all waste rock in Site A.	- W.R. near open pit; - Site B storage efficiency	- Double site preparation, seepage collection, environmental risk, etc.
Site AB1 Site AB2 Site AB3	Combination	Fine tailings and sulphides in Site B; Waste rock and cycloned/desulphurized coarse tailings in Site A.	- Site B storage efficiency.	- Cost of cycloning and desulphurizing coarse tailings. - Storage of PAG Waste Rock “above ground”
Option 1		- Cycloned Sand tailings in dam shells	- Reduce storage needs.	- Cost of cycloning and potential desulphurizing.
Site F	West Shore	- Across Morrison Lake from Pit	- Potential storage efficiency	- Crossing Lake Morrison
Site G	South Side-hill	- Side-hill impoundment South of Pit.	- Near Open Pit	- KCBL to check storage efficiency.

November 20, 2006



Jibiki, Terence

From: Jibiki, Terence
Sent: Thursday, December 07, 2006 9:49 PM
To: Mike Petrina
Cc: Rolf Schmitt; McLeod, Harvey
Subject: Site Alternative Comparison

Attachments: Site Layout-Figure1-061207.doc; SiteSummaryTable1-061207.xls;
ComparisonSummaryTABLE 2-061207.doc

Please see the attached site alternative comparison Tables 1 and 2 for a summary of the site comparison for the Morrison Copper/Gold Waste Management Facility, in preparation for Feasibility level design. The site layouts are shown together on Figure 1. Please review the tables and figure to assist in our discussion arranged for Tuesday December 12.

In consideration of the alternative sites, the following storage criteria were assumed:

- 140 Mt Cu Ore (equal volume of tailings);
- 140 Mt Waste Rock
 - 70% stored in combined waste facility (98 Mt);
 - 30% stored elsewhere (surface or pit backfill) (42 Mt);
- 1.6 t/m³ in-place tailings density;
- 2.0 t/m³ in-place waste rock density; and
- Total storage volume (136 Mm³).

A typical dam section of 2.5H:1V downstream slope, 2H:1V upstream slope, 10 m crest width and 5 m freeboard was assumed for new Sites F to H, similar to design sections for Sites A and B (Knight-Piesold 2004). Sites C and E arrangements have been adopted from previous reports (Knight Piesold 2002), however a revised embankment volume was estimated for Site E to accommodate the larger design storage volume.

Please let me know if any of the tables require clarification.

Regards,
Terence



Site
ut-Figure1-061207.c
SiteSummaryTable1ComparisonSummar
-061207.xls (... yTABLE 2-06120...

Terence Jibiki, M.Eng., E.I.T.
Geotechnical Engineer, Mining Environmental Group
KLOHN CRIPPEN BERGER LTD.

Suite 500 - 2955 Virtual Way, Vancouver, BC, Canada, V5M 4X6
Tel: (604) 251-8544
Fax: (604) 251-8510

"Email correspondence and electronic file attachments must not be relied upon as final design documents. This email is intended for the use of the recipient named above. It may contain information that is privileged, confidential and subject to copyright. Any unauthorized use, copying, review or disclosure is prohibited. If you have received this email in error, please notify the sender immediately by return email or telephone (604-251-8544) and destroy the original message. Thank you for your assistance and cooperation."

TABLE 1 - Summary of Comparable Quantities

Revision 1 (Site E volume and NPV calculation)

February 19, 2007

280 M Tonnes Pit (140 Mt Ore, 140 Mt Waste) (Tailings Density 1.6 t/m3; WR Density 2.0t/m3)								
DESCRIPTION	Units	Site A	Site B	Site C	Site E	Site F	Site G	Site H
1 Watershed Catchment Area	ha	1,907	1,972	1,468	5,243	2,873	1,933	5,243
2 Disturbance Area	ha	270	537	210	422	440	278	425
3 Diverted Catchment Area	ha	1,258	444	34	4,742	1,984	296	1,564
4 Lake Disturbance Area	ha	0	34	11	-	23	-	62
5 Number of Lakes Disturbed / Wetlands Disturbed		0 / 0	3 / 8	4 / 5	0 / 3	1 / 5	0 / 0	2 / 4
6 Are there fish in the lake?	Yes/No	-	No	Yes	No	Yes	-	Yes
7 Total Stream Length Disturbance (Fish Habitat Length)	km	3.8 (1.5)	8.3 (0)	3.3 (1.5)	9.0 (2.7)	15.6 (6.6)	6.1 (0)	10.3 (3.5)
8 Stream Crossings		2	2	0	1	2	3	3
9 Final Crest Elevation	m	910	1007	1300	800	900	895	915
10 Final Embankment Height	m	165	107	160	60	100	160	65
11 Capability for Handling Increased Reserves	(high/med/low)	low	med	low	high	high	low	high
12 Elevation Difference Between Orebody (800m) and Facility Crest	m	110	207	500	0	100	95	115
13 Total Storage Volume	Mm3	92	130	105	145	133	128	134
14 Embankment Volume	Mm3	81	17	31	32	14	116	14
15 Ratio of Storage to Embankment Volume		1.1	7.6	3.4	4.5	9.7	1.1	9.7
16 Length of Diversion Ditches	km	7.1	1.5	2.7	3.8	14.2	6.9	10.6
17 Complexity of Long-Term Surface Water Control Structures	(high/med/low)	high	low	low	high	high	high	high
18 Length of Access Road or Haul Road (one way)	km	2.3	4.5	5.0	4.0	8.4	2.8	7.8
Pumping Power (P = 10 Q H; Q=36k tpd @50% = 0.5655m3/sec) Annual Pumping Cost (@ \$0.04/kW-hr)	kW/hr M\$	622 \$ 0.022	1171 \$ 0.041	2828 \$ 0.099	0 \$ -	566 \$ 0.020	537 \$ 0.019	650 \$ 0.023
BASIC COST COMPARISON								
Pumping Cost - Mine Life (12 years)	M\$	\$ 0.262	\$ 0.492	\$ 1.189	\$ -	\$ 0.238	\$ 0.226	\$ 0.273
Haulage Cost (~\$0.15/t-km; 98 MI)	M\$	\$ 33.810	\$ 66.150	\$ 73.500	\$ 58.800	\$ 124.068	\$ 41.160	\$ 114.219
Dam Construction Cost (Avg-\$1.50/m3)	M\$	\$ 121.500	\$ 25.500	\$ 45.900	\$ 48.000	\$ 20.730	\$ 173.595	\$ 20.700
Water Management	M\$							
~Fish Compensation (Requires Rescan Input)	M\$							
~Environmental Mitigation (Requires Rescan Input)	M\$							
Total Waste Transportation & Fill Placement Cost	M\$	156	92	121	107	145	215	135
Potential Cost Range	M\$	70-270	90-120	90-170	75-154	110-170	90-380	120-180
Net Present Value Calculation								
Starter Dam Volume (for 2 years storage)	Mm3	18	4	-	7	5	-	-
Estimated Capital Cost (\$3/m3)	M\$	54	12	-	21	15	-	-
Estimated Annual Operating Cost (Assuming 12 years)	M\$	8	7	-	7	11	-	-
Net Present Value (Discount Rate 10%)	M\$	112	58	-	70	89	-	-

Measurement Explanations:

- 1 Watershed Catchment Area
- 2 Disturbance Area
- 3 Diverted Catchment Area
- 4 Lake Disturbance Area
- 5 Number of Lakes Disturbed / Wetlands Disturbed
- 6 Are there fish in the lake?
- 7 Total Stream Length Disturbance (Fish Bearing Length)
- 8 Stream Crossings
- 9 Final Crest Elevation
- 10 Final Embankment Height
- 11 Capability for Handling Increased Reserves
- 12 Elevation Difference Between Orebody (800m) and Facility Crest
- 13 Total Storage Volume
- 14 Embankment Volume
- 15 Ratio of Storage to Embankment Volume
- 16 Length of Diversion Ditches
- 17 Complexity of Long-Term Surface Water Control Structures
- 18 Length of Access Road / Haul Road (one way)

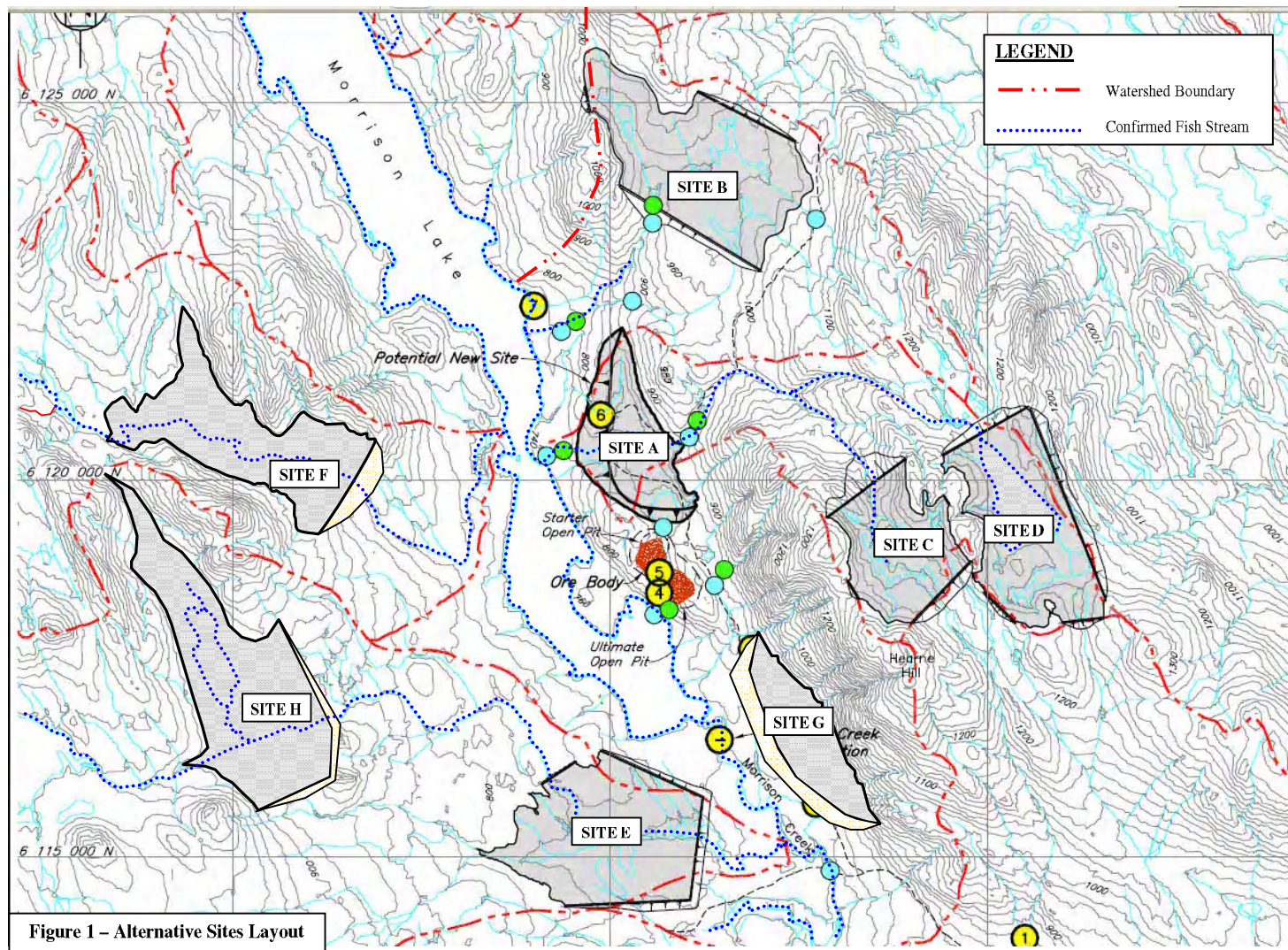
The area of the entire watershed area including the impoundment and dam areas.
The footprint area of the impoundment and dam
The catchment area upstream of the site from which water will possibly discharge into the impoundment.
The total area of the lakes that will be covered or disturbed by the footprint of the dam and impoundment.
The number of individual lakes or wetlands under the Disturbance Area.
Based on fish sampling studies summarized by Rescan.
The total length of the streams that are covered or disturbed by the footprint of the dam and impoundment.
The number of streams that exit downstream of the site but must have originated upstream and ran through the site.
Final elevation of the dam.
The difference between the base of the dam slope with the lowest elevation and the final crest elevation.
The potential to increase the impoundment size in the future, generally by raising the dam(s).
Difference in elevation (has impacts on waste transportation costs).
Calculated storage volume within the impoundment as shown.
Calculated dam embankment volume based on 2H:1V upstream slopes, and 2.5H:1V downstream slopes.
No.13 divided by No.14.
Approximate length of diversion ditches required to divert water around the impoundment.
Overall complexity considering topography, volume of water and fish habitat.

Potential Cost Range

Considers potential for: dam section of all waste rock/ all borrow, bridge over lake, 140 MI WR to facility
Values directly affecting Cost Comparison

TABLE 2 – Comparison Summary

SITE	PRIMARY ADVANTAGES	PRIMARY DISADVANTAGES	RISKS/ OPPORTUNITIES
Site A	- Low pumping head - Short haul distance	- Fish habitat disturbance - Large dam fill quantity - Large diverted catchment - Low potential to expand facility	- Proximity to Morrison Lake may result in costly long term seepage control. - If NAG waste rock is not available, fill borrow volumes may be prohibitive.
Site B	- Morrison Lake seepage control - Storage efficiency - Diversion/water management	- High head - Affects second watershed (Nakinilerak Lake) - Large terrestrial footprint	
Site C		- No significant advantage over Site B	
Site E	- Low pumping cost - Downhill haulage cost - High storage efficiency - Low dam - Potential to expand	- Large catchment area/major diversion - Fish compensation - Creek crossing - Potentially poor foundation conditions	- The location may be prone to soft foundation conditions.
Site F	- High storage efficiency - Potential to expand	- Long over-land haul distance. - Creek crossing.	- Bridge or conveyor over lake could reduce W.R. haul costs, but increase capital cost.
Site G	- Near pit	- No significant advantages over Site A.	
Site H	- Small dam - Potential to expand	- Lake habitat - Water management - Very little advantage over Site E	



Site B - Impervious Central Till Core

ITEM	DESCRIPTION	COMMENTS	UNIT	UNIT PRICE (\$ CAD)	STARTER DAM - 1 yr life El. 974 m		ULTIMATE DAM El. 1011 m		TOTAL	
					Quantity	Cost (\$ CAD)	Quantity	Cost (\$ CAD)	Quantity	Cost (\$ CAD)
1.0 Site Preparation										
	Clear Impoundment	Impoundment Area	m ²	\$0.15	1,425,000	\$213,750	4,448,000	\$667,200	5,873,000	\$880,950
	Clear, grub, strip and stockpile topsoil	Dam footprint	m ²	\$2.50	198,000	\$495,000	675,000	\$1,687,500	873,000	\$2,182,500
	Excavate unsuitable soils	Further excavation of specific areas	LS	\$25,000.00	0.6	\$15,000	0.4	\$10,000	1.0	\$25,000
	Proof Roll Embankment Footprint		m ²	\$0.25	198,000	\$49,500	675,000	\$168,750	873,000	\$218,250
	Borrow Area - Clear/Grub, stockpile topsoil, ditches	Till borrow (avg. 2 m deep)	m ³	\$2.75	141,000	\$387,750	489,000	\$1,344,750	630,000	\$1,732,500
	New Roads on dam abutments		m	\$100.00	2,334	\$233,400	5,236	\$523,600	7,570	\$757,000
	New mine haul road	Haul Road	m	\$400.00	3,750	\$1,500,000	2,700	\$1,080,000	6,450	\$2,580,000
	Site dewatering, sediment control, and drainage		LS	\$100,000.00	0.8	\$80,000	0.2	\$20,000	1.0	\$100,000
					Subtotal	\$2,974,400	Subtotal	\$5,501,800	Subtotal	\$8,476,200
2.0 Dam										
	Excavate and Fill Cutoff Trench	Assume 3 m x 5 m	m ³	\$15.00	34,500	\$517,500	52,400	\$786,000	86,900	\$1,303,500
	General Fill (from borrow source)	Northwest Dam Shells, borrow from <2 km	m ³	\$7.50	0	\$0	649,000	\$4,867,500	649,000	\$4,867,500
	Rock Fill (run of mine)	NAG Waste, 98% of shell (spread, compact)	m ³	\$0.50	1,188,667	\$594,333	11,559,353	\$5,779,676	12,748,019	\$6,374,010
	Rock Fill (rehandled)	2% of shell (road, haul ~500m, place, compact)	m ³	\$4.00	24,259	\$97,034	235,905	\$943,621	260,164	\$1,040,655
	Till Core	Borrow from within impoundment	m ³	\$8.00	614,000	\$4,912,000	1,868,000	\$14,944,000	2,482,000	\$19,856,000
	Granular Filter	Processed rock fill (crush and screen); 4 m-wide	m ³	\$18.00	227,000	\$4,086,000	596,000	\$10,548,000	813,000	\$14,634,000
	Transition (run of mine)	Select rock fill zone, 10 m-wide	m ³	\$0.75	332,000	\$249,000	1,465,000	\$1,098,750	1,797,000	\$1,347,750
	Incremental Haul Cost	Hauling waste rock from south to north dam	t-km	\$0.15	0	\$0	6,604,200	\$990,630	6,604,200	\$990,630
	Waste rock disposal upstream of dam	spread	m ³	\$0.15	3,215,000	\$482,250	47,785,000	\$7,167,750	51,000,000	\$7,650,000
	Allowance for seepage mitigation		LS	\$0.00	0	\$0	0	\$0	0	\$0
					Subtotal	\$10,938,117	Subtotal	\$47,125,927	Subtotal	\$58,064,044
3.0 Geomembrane										
	Sand bedding under HDPE	processed (crushing and screening)	m ³	\$18.00	0	\$0	0	\$0	0	\$0
	HDPE - Supply and Install	80 mil HDPE	m ²	\$12.00	0	\$0	0	\$0	0	\$0
	Anchoring System		LS	\$100,000.00	0.00	\$0	0.00	\$0	0	\$0
					Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
4.0 Water Management										
	Diversion Ditches	Excavate and side-cast	m	\$100.00	0	\$0	0	\$0	0	\$0
	Seepage Collection Ditch	Excavate and side-cast	m	\$20.00	2,000	\$40,000	4,100	\$82,000	6,100	\$122,000
	Seepage Collection Pond		LS	\$200,000.00	1	\$200,000	2	\$400,000	3	\$600,000
	Seepage return pump and barge	(average ~5-10 l/s)	LS	\$250,000.00	1	\$250,000	2	\$500,000	3	\$750,000
	Seepage return pipeline	6-inch Steel	m	\$750.00	700	\$525,000	1,000	\$750,000	1,700	\$1,275,000
	Mill Make-up Water Pump Station & Pipeline	Pump Barge and pipeline (~500 m3/hr)	LS	\$2,000,000.00	1	\$2,000,000	0	\$0	1	\$2,000,000
					Subtotal	\$3,015,000	Subtotal	\$1,732,000	Subtotal	\$4,747,000
5.0 Tailings Delivery										
	Tailings Pump Station	Estimate	LS	\$4,000,000.00	1	\$4,000,000	0	\$0	1	\$4,000,000
	Tailings Delivery Pipeline	X mm Diam. HDPE (0.48 m3/s)	m	\$500.00	3,750	\$1,875,000	0	\$0	3,750	\$1,875,000
	Tailings Booster Pump Station		LS	\$4,000,000.00	2	\$8,000,000	0	\$0	2	\$8,000,000
	Tailings Distribution Pipeline with off-takes	X mm Diam. HDPE (max 0.48 m3/s)	m	\$400.00	2,334	\$933,600	5,236	\$2,094,400	7,570	\$3,028,000
	Water Reclaim Barge and Pump	(average flow 0.35 m3/s)	LS	\$2,000,000.00	1	\$2,000,000	0	\$0	1	\$2,000,000
	Water Reclaim Pipeline	X mm Diam. HDPE pipe (0.35 m3/s)	m	\$300.00	6,900	\$2,070,000	0	\$0	6,900	\$2,070,000
	Pipeline maintenance and upgrades		%/yr	10%	1	\$1,887,860	14	\$1	15	\$31,459,500
					Subtotal	\$20,766,460	Subtotal	\$2,094,401	Subtotal	\$52,432,500
6.0 Closure										
	Topsoil Cover	0.5 m thickness on outer dam slopes	m ³	\$6.00	0	\$0	374,174	\$2,245,041	374,174	\$2,245,041
	Erosion Protection		LS	\$100,000.00	0	\$0	1	\$100,000	1	\$100,000
	Closure Spillway		LS	\$500,000.00	0	\$0	1	\$500,000	1	\$500,000
	Diversion Ditches	Excavate and side-cast	m	\$100.00	0	\$0	2,888	\$288,800	2,888	\$288,800
	Reclamation	Vegetation on dam slopes	m ²	\$0.75	0	\$0	748,347	\$561,260	748,347	\$561,260
	Saturated Rockfill Cover	NAG Rockfill - 200m wide, 1 m thick	m ³	\$6.50	0	\$0	1,074,192	\$6,982,248	1,074,192	\$6,982,248
					Subtotal	\$0	Subtotal	\$10,677,349	Subtotal	\$10,677,349
7.0 Monitoring and Engineering										
	Instrumentation		LS	\$300,000.00	0.3	\$100,000	0.7	\$200,000	1	\$300,000
	Engineering and QA/QC - Initial			7.5%		\$2,827,048				\$2,827,048
	Engineering and QA/QC - On-going			5.0%				\$3,356,574		\$3,356,574
					Subtotal	\$2,927,048	Subtotal	\$3,556,574	Subtotal	\$6,483,622
8.0 Other										
	Mobilization/Demobilization - Starter Dam			7.5%		\$2,827,048				\$2,827,048
	Mobilization/Demobilization - On-going			5.0%				\$3,356,574		\$3,356,574
					Subtotal	\$2,827,048	Subtotal	\$3,356,574	Subtotal	\$6,183,622
					TOTAL	\$43,448,074	TOTAL	\$74,044,625	TOTAL	\$147,064,338
9.0 Contingency										
	Recommended Contingency			25%		\$10,862,018		\$17,672,013		\$35,220,179
					TOTAL + CONTINGENCY	\$54,310,092		\$91,716,638		\$182,284,517

Based on:

- 10 m-wide till core, 4 m-wide filter, 10 m-wide Transition
- 30,000 tpd mill production
- Total Pit - 170 Mt ore, 147 Mt Waste
- 30% of Waste is NAG
- Maximum 20 MmN NAG rockfill available

ITEM	DESCRIPTION	COMMENTS	UNIT	UNIT PRICE (\$ CAD)	STARTER DAM - 1 yr life El. 974 m		ULTIMATE DAM El. 1011 m		TOTAL	
					Quantity	Cost (\$ CAD)	Quantity	Cost (\$ CAD)	Quantity	Cost (\$ CAD)
	Site Preparation									
	Clear Impoundment	Impoundment Area	m²	\$0.15	2,624,000	\$393,600	12,376,000	\$1,856,400	15,000,000	\$2,250,000
	Clear, grub, strip and stockpile topsoil	Dam footprint and borrow areas	m²	\$2.50	316,000	\$790,000	1,366,000	\$3,415,000	1,682,000	\$4,205,000
	Excavate unsuitable soils	Further excavation of specific areas	LS	\$25,000.00	0.6	\$15,000	0.4	\$10,000	1.0	\$25,000
	Proof Roll Embankment Footprint		m²	\$0.25	316,000	\$79,000	1,366,000	\$341,500	1,682,000	\$420,500
	Borrow Area - Clear/Grub, stockpile topsoil, ditches	Till borrow (avg. 2 m deep)	m²	\$2.75	350,000	\$962,500	1,050,000	\$2,887,500	1,400,000	\$3,850,000
	New Roads on dam abutments		m	\$100.00	4,800	\$480,000	2,200	\$220,000	7,000	\$700,000
	New mine haul road	Haul Road from pit to tailings dam	m	\$400.00	3,400	\$1,360,000	0	\$0	3,400	\$1,360,000
	Site dewatering, sediment control, and drainage		LS	\$100,000.00	0.8	\$80,000	0.2	\$20,000	1.0	\$100,000
					Subtotal	\$4,160,100	Subtotal	\$8,750,400	Subtotal	\$12,910,500
	Dam									
	Excavate and Fill Cutoff Trench	Assume 3 m x 5 m	m³	\$15.00	64,500	\$967,500	39,500	\$592,500	104,000	\$1,560,000
	General Fill (from borrow source)	Northwest Dam Shells, borrow from <2 km	m³	\$7.50	0	\$0	200,500	\$1,503,750	200,500	\$1,503,750
	Rock Fill (run of mine)	NAG Waste, 98% of shells (spread, compact)	m³	\$0.50	1,747,318	\$873,659	13,641,486	\$6,820,743	15,388,805	\$7,694,402
	Rock Fill (rehandled)	2% of shells (load, haul ~500m, place, compact)	m³	\$4.00	35,660	\$142,638	282,490	\$1,129,958	318,149	\$1,272,596
	Till Core	borrow from avg. X km.	m³	\$8.00	1,032,000	\$8,256,000	2,743,000	\$21,944,000	3,775,000	\$30,200,000
	Granular Filter	Processed rock fill (crushing and screening); 4 m-thick	m³	\$18.00	391,000	\$7,038,000	844,000	\$15,192,000	1,235,000	\$22,230,000
	Transition	Select rock fill; 10 m-wide zone	m³	\$0.75	947,000	\$710,250	2,110,000	\$1,582,500	3,057,000	\$2,292,750
	Incremental Haul Cost	Hauling waste rock from south to north dam.	tkm	\$0.15	0	\$0	0	\$0	0	\$0
	Waste rock disposal upstream of dam	spread	m³	\$0.15	3,215,000	\$482,250	47,785,000	\$7,167,750	51,000,000	\$7,650,000
	Allowance for seepage mitigation		LS	\$500,000.00	0.8	\$400,000	0.2	\$100,000	1.0	\$500,000
					Subtotal	\$18,670,297	Subtotal	\$56,033,201	Subtotal	\$74,903,499
	Geomembrane									
	Sand bedding under HDPE	processed (crushing and screening)	m³	\$18.00	0	\$0	0	\$0	0	\$0
	HDPE - Supply and Install	80 mil HDPE	m²	\$12.00	0	\$0	0	\$0	0	\$0
	Anchoring System		LS	\$100,000.00	0.00	\$0	0.00	\$0	0	\$0
					Subtotal	\$0	Subtotal	\$0	Subtotal	\$0
	Water Management									
	Diversion Ditches	Excavate and side-cast	m	\$100.00	3,247	\$324,700	0	\$0	3,247	\$324,700
	Seepage Collection Ditch	Excavate and side-cast	m	\$20.00	4,300	\$86,000	2,700	\$54,000	7,000	\$140,000
	Seepage Collection Pond		LS	\$200,000.00	1	\$200,000	0	\$0	1	\$200,000
	Seepage return pump	(average ~5-10 l/s)	LS	\$600,000.00	1	\$600,000	0	\$0	1	\$600,000
	Seepage return pipeline	X mm diam. HDPE	m	\$250.00	670	\$167,500	0	\$0	670	\$167,500
	Mill Make-up Water Pump Station & Pipeline	None Required	LS	\$2,000,000.00	0	\$0	0	\$0	0	\$0
					Subtotal	\$1,378,200	Subtotal	\$54,000	Subtotal	\$1,432,200
	Tailings Delivery									
	Tailings Pump Station	Estimate	LS	\$4,000,000.00	1	\$4,000,000	0	\$0	1	\$4,000,000
	Tailings Delivery Pipeline	X mm Diam. HDPE (0.48 m³/s)	m	\$500.00	3,400	\$1,700,000	0	\$0	3,400	\$1,700,000
	Tailings Booster Pump Station		LS	\$4,000,000.00	0	\$0	0	\$0	0	\$0
	Tailings Distribution Pipeline with off-takes	X mm Diam. HDPE (max 0.48 m³/s)	m	\$400.00	4,800	\$1,920,000	2,200	\$880,000	7,000	\$2,800,000
	Water Reclaim Barge and Pump	(average flow 0.35 m³/s)	LS	\$2,000,000.00	1	\$2,000,000	0	\$0	1	\$2,000,000
	Water Reclaim Pipeline	X mm Diam. HDPE pipe (0.35 m³/s)	m	\$300.00	7,950	\$2,385,000	0	\$0	7,950	\$2,385,000
	Pipeline maintenance and upgrades		%/yr	10%	1	\$1,200,500	14	\$1	15	\$19,327,500
					Subtotal	\$13,205,500	Subtotal	\$880,001	Subtotal	\$32,212,500
	Closure									
	Topsoil Cover	0.5 m thickness on outer dam slopes	m²	\$6.00	0	\$0	855,000	\$5,130,000	855,000	\$5,130,000
	Erosion Protection		LS	\$100,000.00	0	\$0	1	\$100,000	1	\$100,000
	Closure Spillway		LS	\$500,000.00	0	\$0	1	\$500,000	1	\$500,000
	Diversion Ditches	Excavate and side-cast	m	\$100.00	0	\$0	3,637	\$363,700	3,637	\$363,700
	Reclamation	Vegetation on dam slopes	m²	\$0.75	0	\$0	1,710,000	\$1,282,500	1,710,000	\$1,282,500
	Saturated Rockfill Cover	NAG Rockfill - 200m wide, 1 m thick	m³	\$6.50	0	\$0	1,390,000	\$9,035,000	1,390,000	\$9,035,000
					Subtotal	\$0	Subtotal	\$16,411,200	Subtotal	\$16,411,200
	Monitoring and Engineering									
	Instrumentation		LS	\$300,000.00	0.3	\$100,000	0.7	\$200,000	1	\$300,000
	Engineering and QA/QC - Initial			7.5%		\$2,821,057				\$2,821,057
	Engineering and QA/QC - On-going			5.0%				\$4,106,440		\$4,106,440
					Subtotal	\$2,921,057	Subtotal	\$4,306,440	Subtotal	\$7,227,497
	Other									
	Mobilization/Demobilization - Starter Dam			7.5%		\$2,821,057				\$2,821,057
	Mobilization/Demobilization - On-going			5.0%				\$4,106,440		\$4,106,440
					Subtotal	\$2,821,057	Subtotal	\$4,106,440	Subtotal	\$6,927,497
					TOTAL	\$43,356,212	TOTAL	\$90,541,683	TOTAL	\$152,024,894
	Contingency									
	Recommended Contingency			35%		\$15,174,674		\$31,689,589		\$53,208,713
					TOTAL + CONTINGENCY	\$58,530,886		\$122,231,272		\$205,233,606

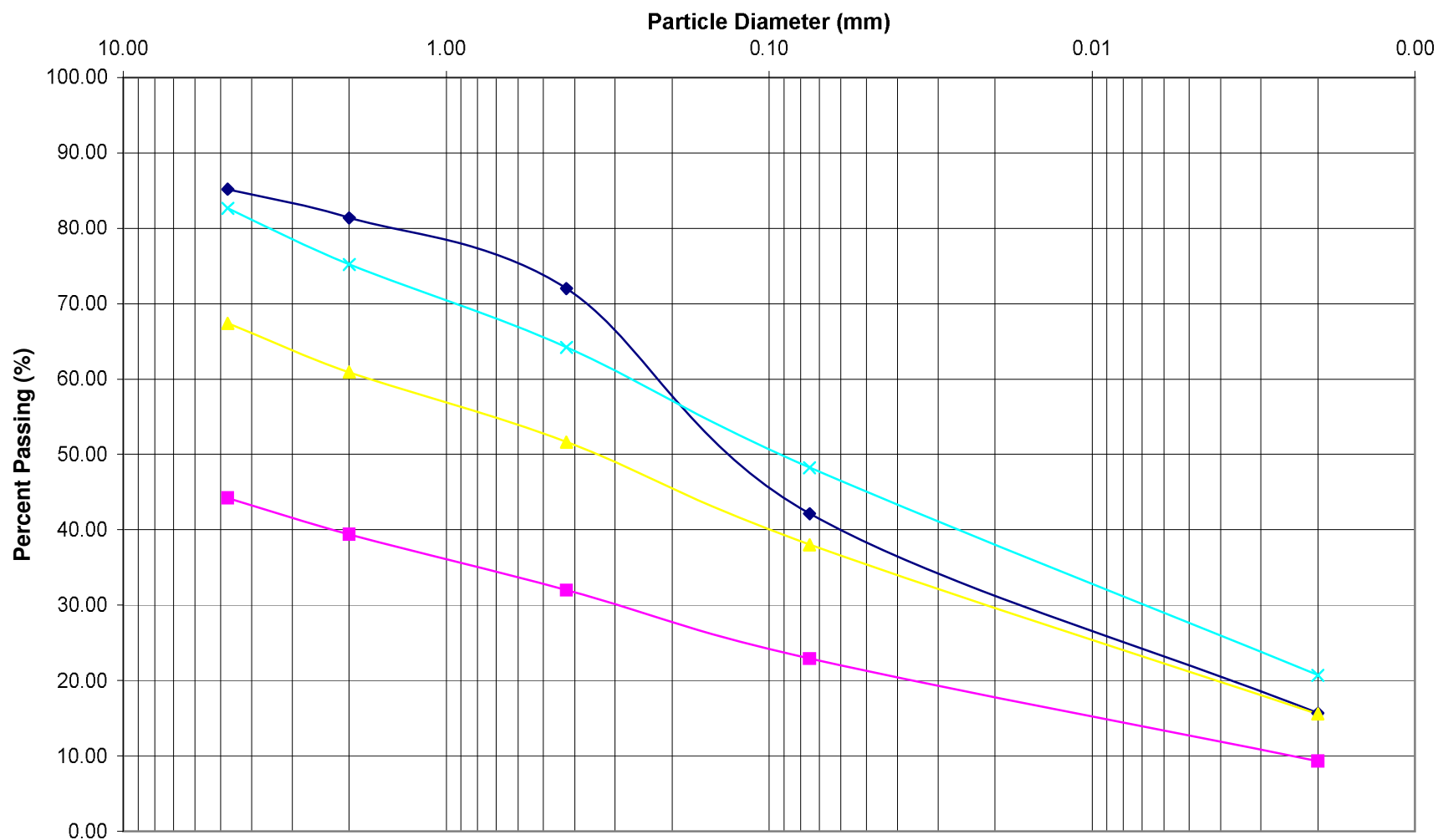
Based on:

- 10 m-wide till core, 4 m-wide filter; 10 m-wide transition
- 30,000 tpd mill production
- Total Pit - 170 Mt ore, 147 Mt Waste
- 30% of Waste is NAG
- Maximum 20 Mm3 NAG rockfill available

APPENDIX II

Knight Piesold Geotechnical Data (2006)

- Grains Size Distributions
- Compaction Tests
- Drill hole Logs
- Bedrock Drilling Graphs
- Field Tests
- Well Completion Details
- Test Pit Logs

**Notes:**

1) Data from Cantest Ltd.

◆ TP06-1-1 ■ TP06-1-2
 ▲ TP06-6-1 ✕ TP06-6-2

PACIFIC BOOKER MINERALS INC.
 MORRISON COPPER GOLD PROJECT
 GEOTECHNICAL SITE INVESTIGATION
 TESTPIT SAMPLES
 PARTICLE SIZE DISTRIBUTIONS - PAGE 1

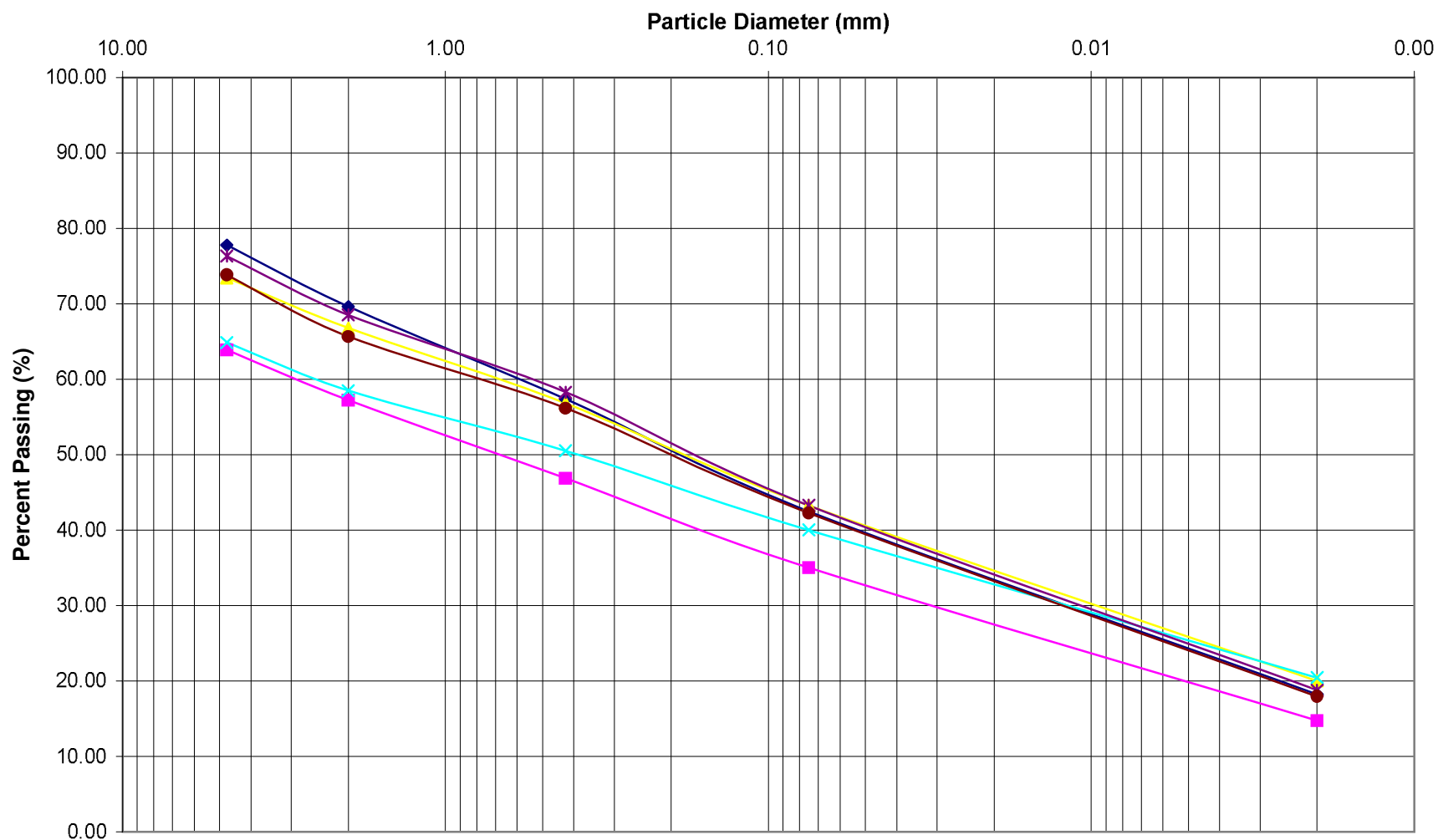
Knight Piésold
 CONSULTING

PROJECT / ASSIGNMENT NO.
 101-00102/7

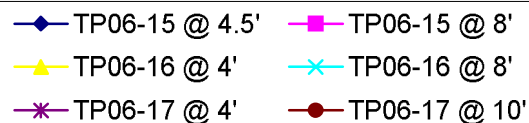
REF NO.
 1

FIGURE 5.1

REV.
 0

**Notes:**

1) Data from Cantest Ltd.



PACIFIC BOOKER MINERALS INC.
MORRISON COPPER GOLD PROJECT
GEOTECHNICAL SITE INVESTIGATION
TESTPIT SAMPLES
PARTICLE SIZE DISTRIBUTIONS - PAGE 2

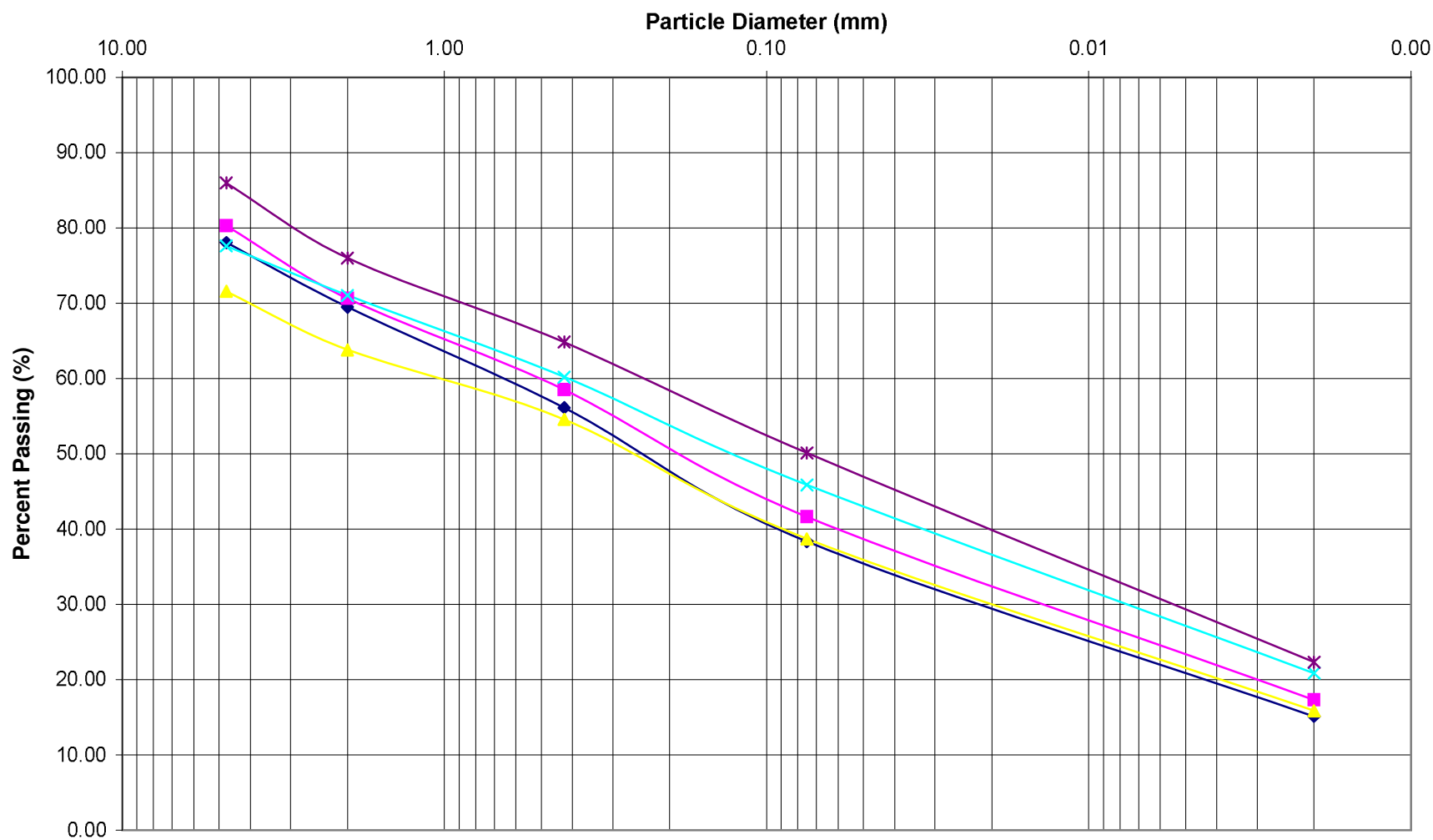
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
101-00102/7

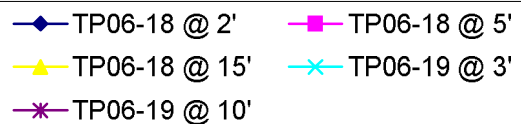
REF NO.
1

FIGURE 5.2

REV.
0

**Notes:**

1) Data from Cantest Ltd.



PACIFIC BOOKER MINERALS INC.
MORRISON COPPER GOLD PROJECT
GEOTECHNICAL SITE INVESTIGATION
TESTPIT SAMPLES
PARTICLE SIZE DISTRIBUTIONS - PAGE 3

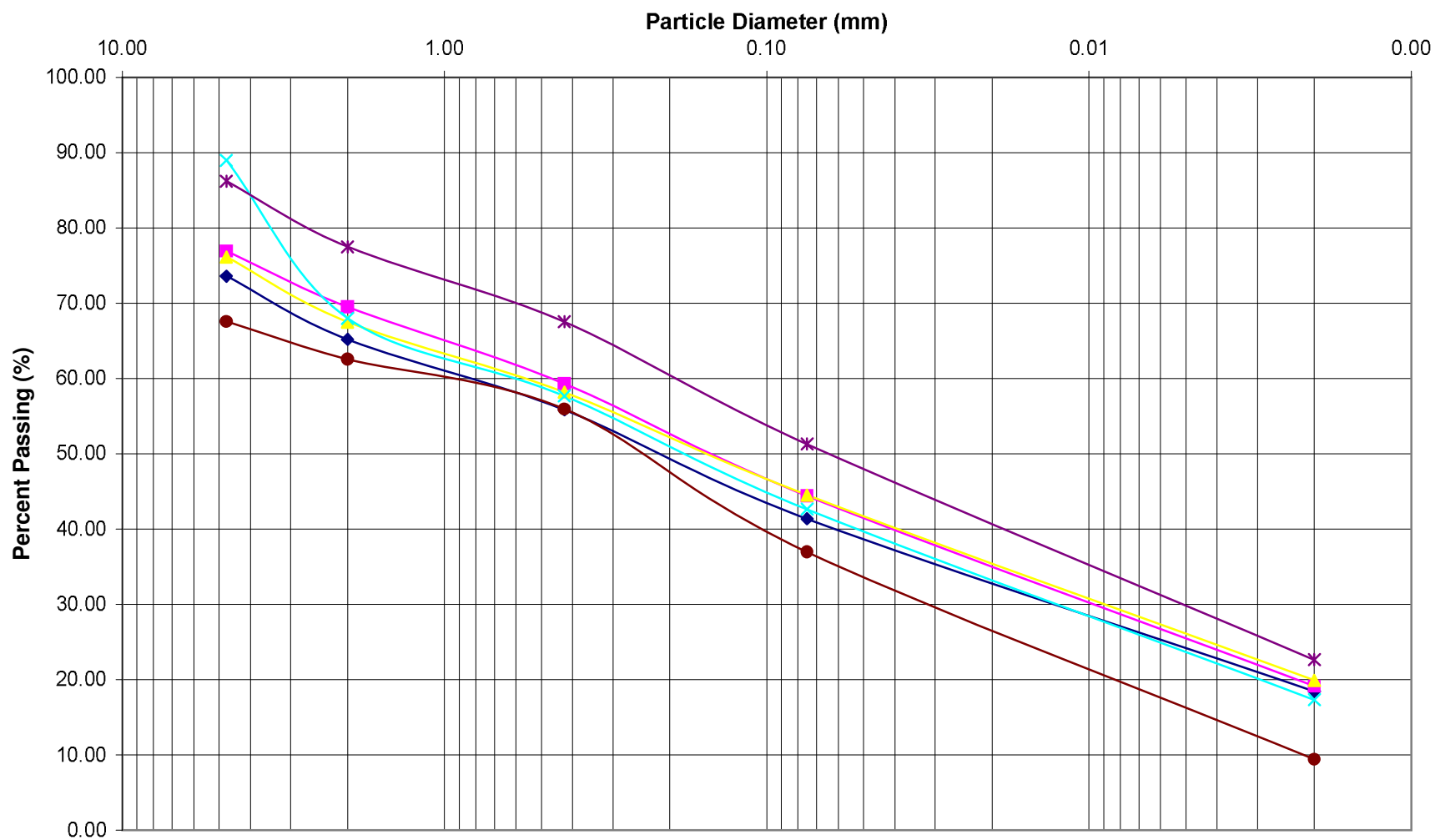
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
101-00102/7

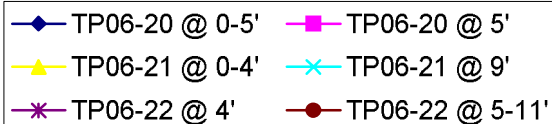
REF NO.
1

FIGURE 5.3

REV.
0

**Notes:**

1) Data from Cantest Ltd.



PACIFIC BOOKER MINERALS INC.
MORRISON COPPER GOLD PROJECT
GEOTECHNICAL SITE INVESTIGATION
TESTPIT SAMPLES
PARTICLE SIZE DISTRIBUTIONS - PAGE 4

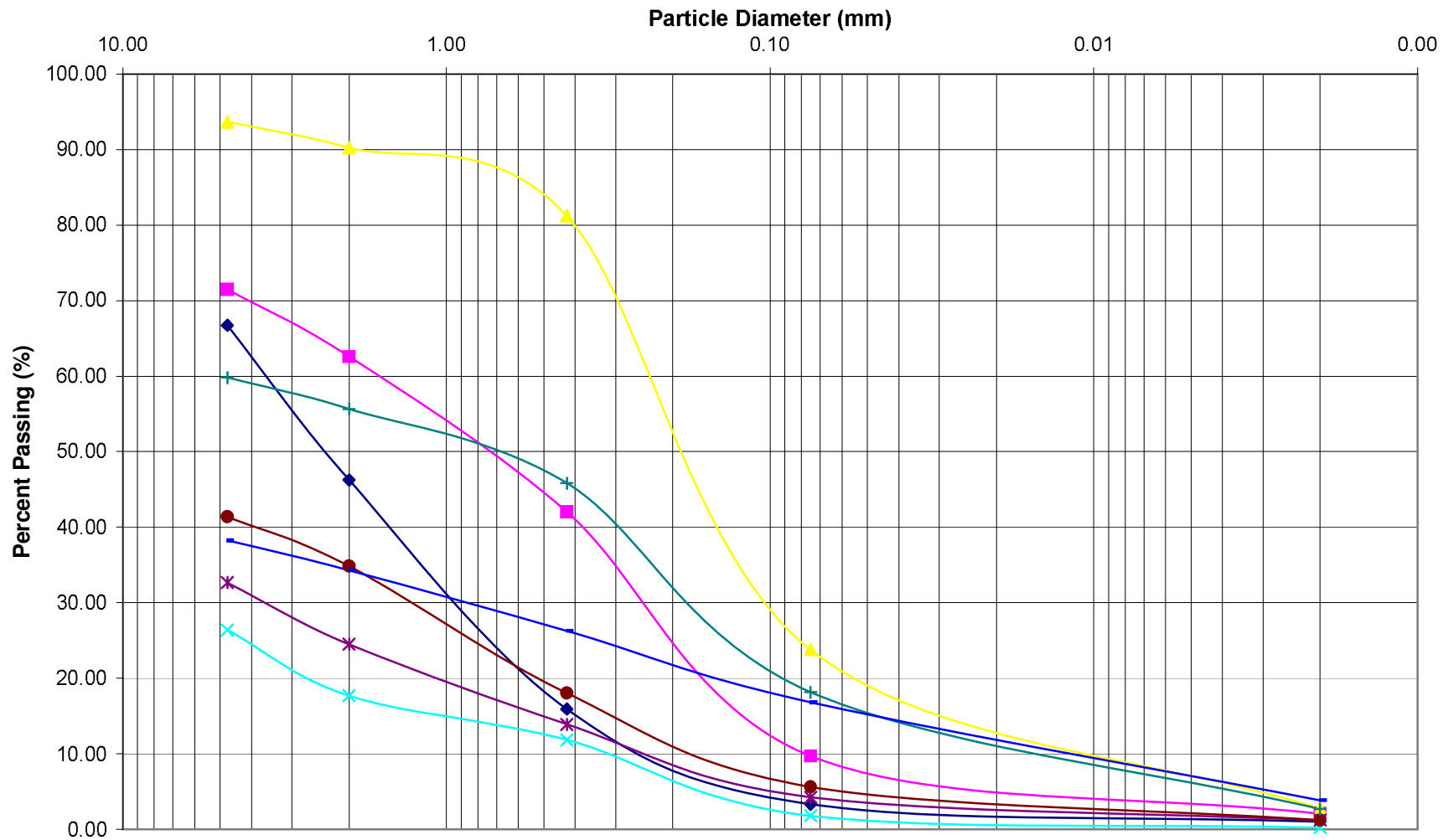
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
101-00102/7

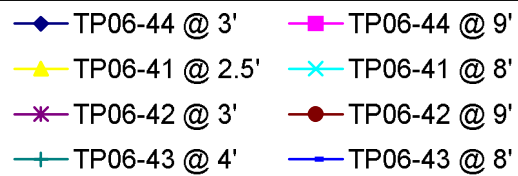
REF NO.
1

FIGURE 5.4

REV.
0

**Notes:**

1) Data from Cantest Ltd.



PACIFIC BOOKER MINERALS INC.
MORRISON COPPER GOLD PROJECT
GEOTECHNICAL SITE INVESTIGATION
TESTPIT SAMPLES
PARTICLE SIZE DISTRIBUTIONS - PAGE 5

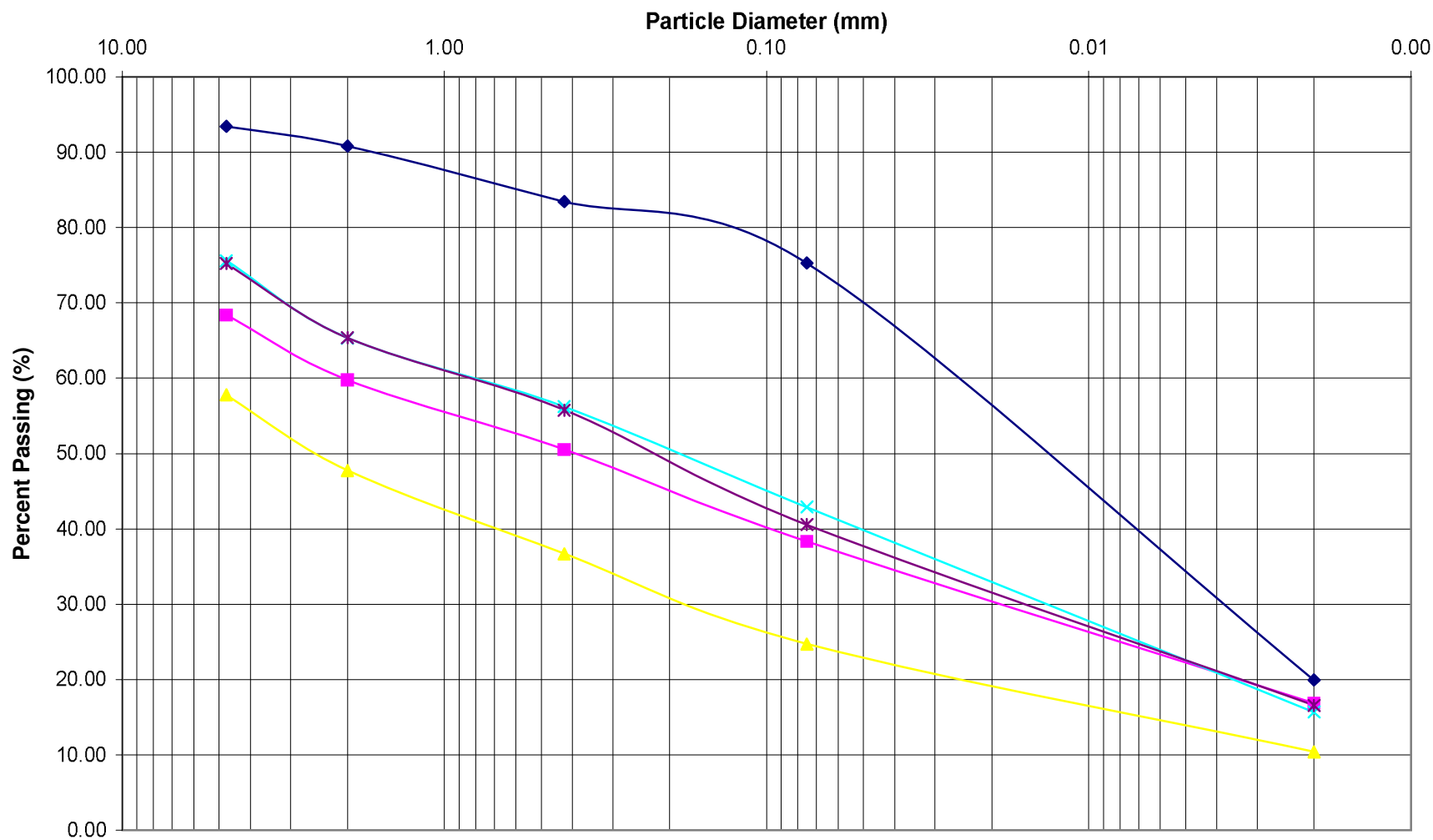
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
101-00102/7

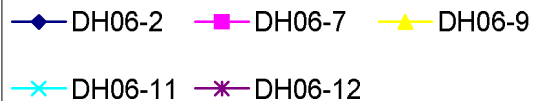
REF NO.
1

FIGURE 5.5

REV.
0

**Notes:**

1) Data from Cantest Ltd.



PACIFIC BOOKER MINERALS INC.
MORRISON COPPER GOLD PROJECT
GEOTECHNICAL SITE INVESTIGATION
TESTPIT SAMPLES
PARTICLE SIZE DISTRIBUTIONS - PAGE 6

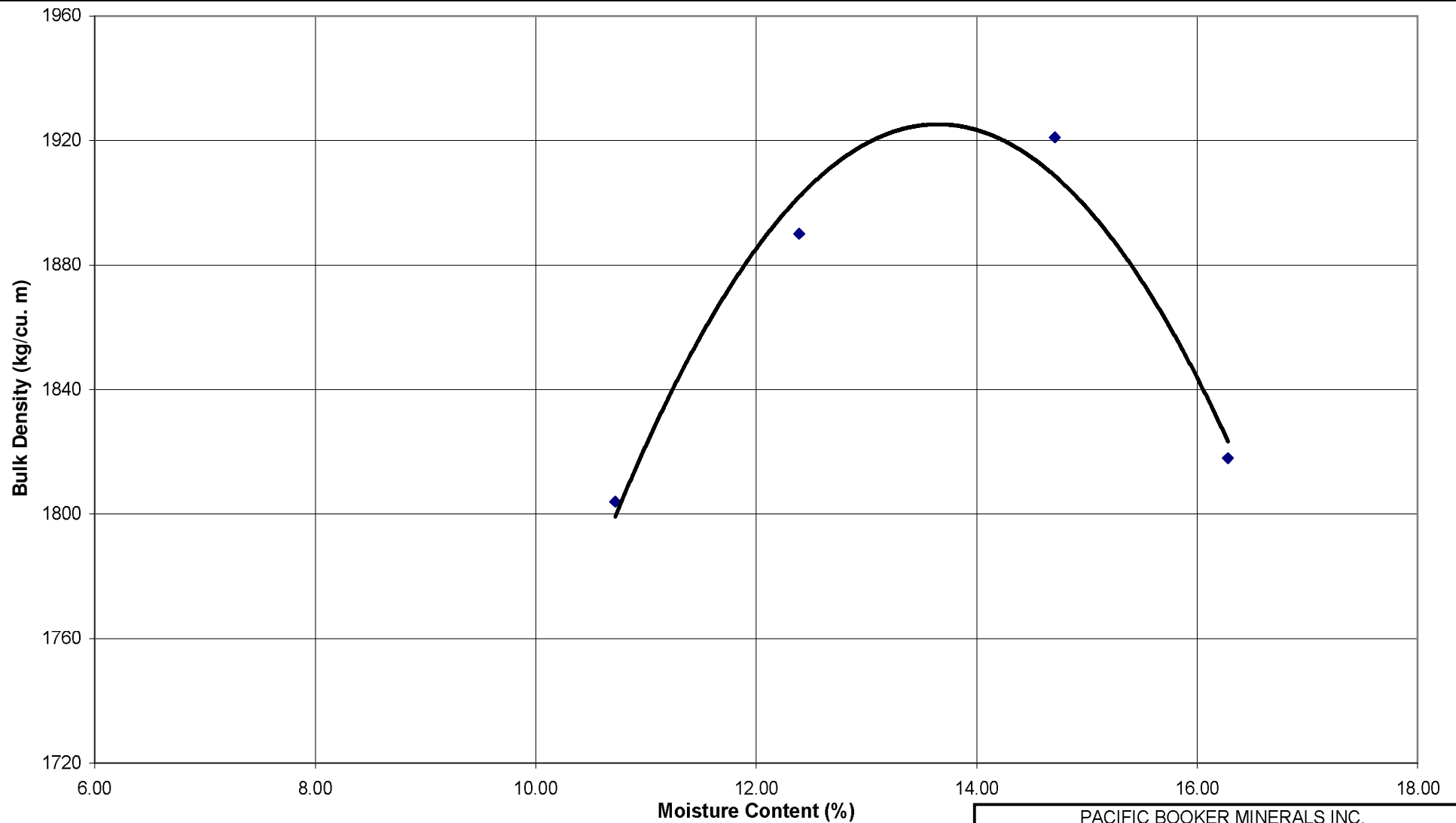
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
101-00102/7

REF NO.
1

FIGURE 5.6

REV.
0

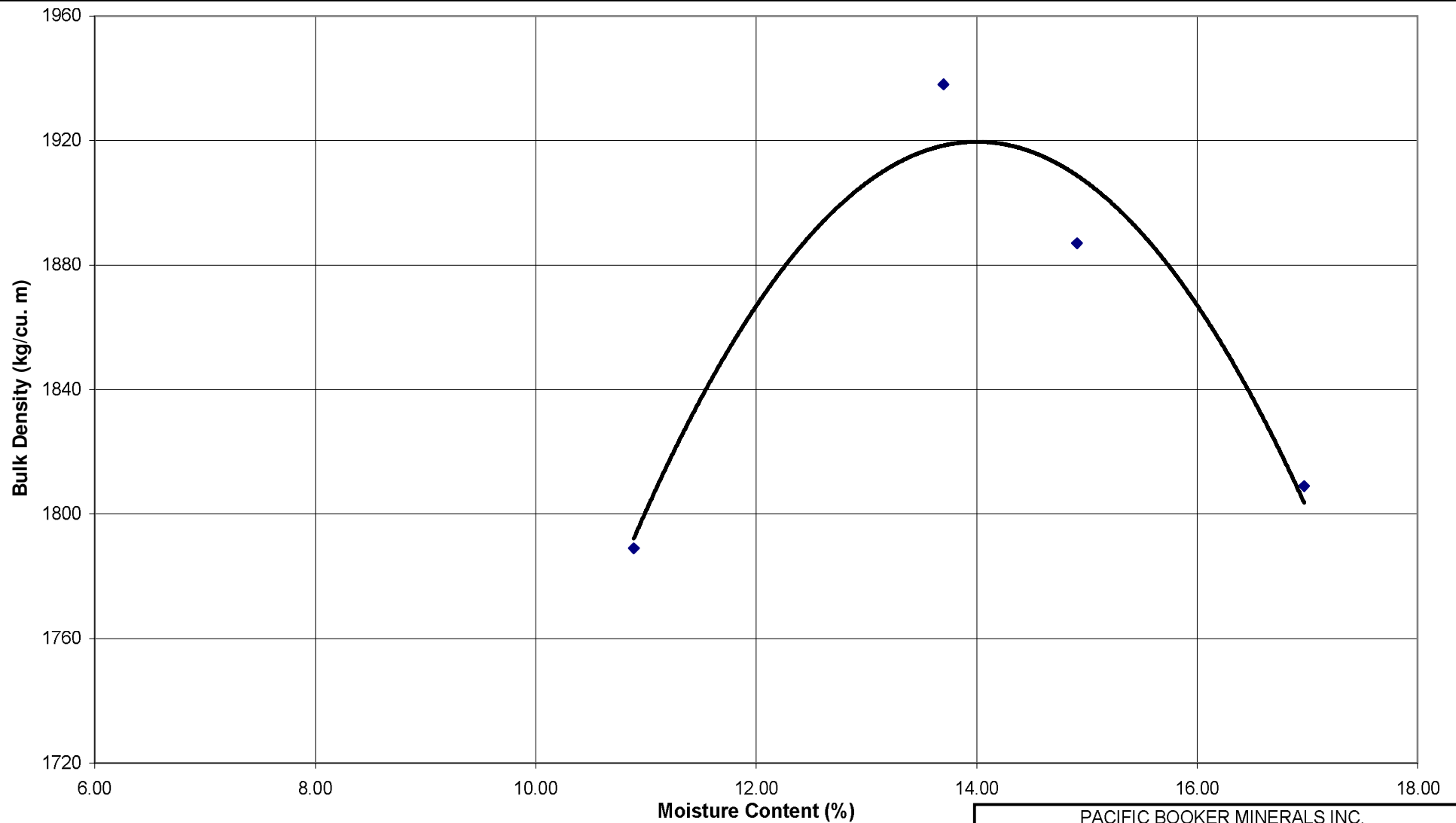
**Notes:**

- 1) Data from Cantest Ltd. - Sample ID 605020390
- 2) Sample is a composite of samples from TP06-15, 16, and 17

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

**GEOTECHNICAL SITE INVESTIGATION
COMPACTION TEST RESULTS
SAMPLE GROUP 1*****Knight Piésold***
CONSULTINGPROJECT / ASSIGNMENT NO.
VA-101-00102/7REF NO.
1**FIGURE 5.7**REV.
0

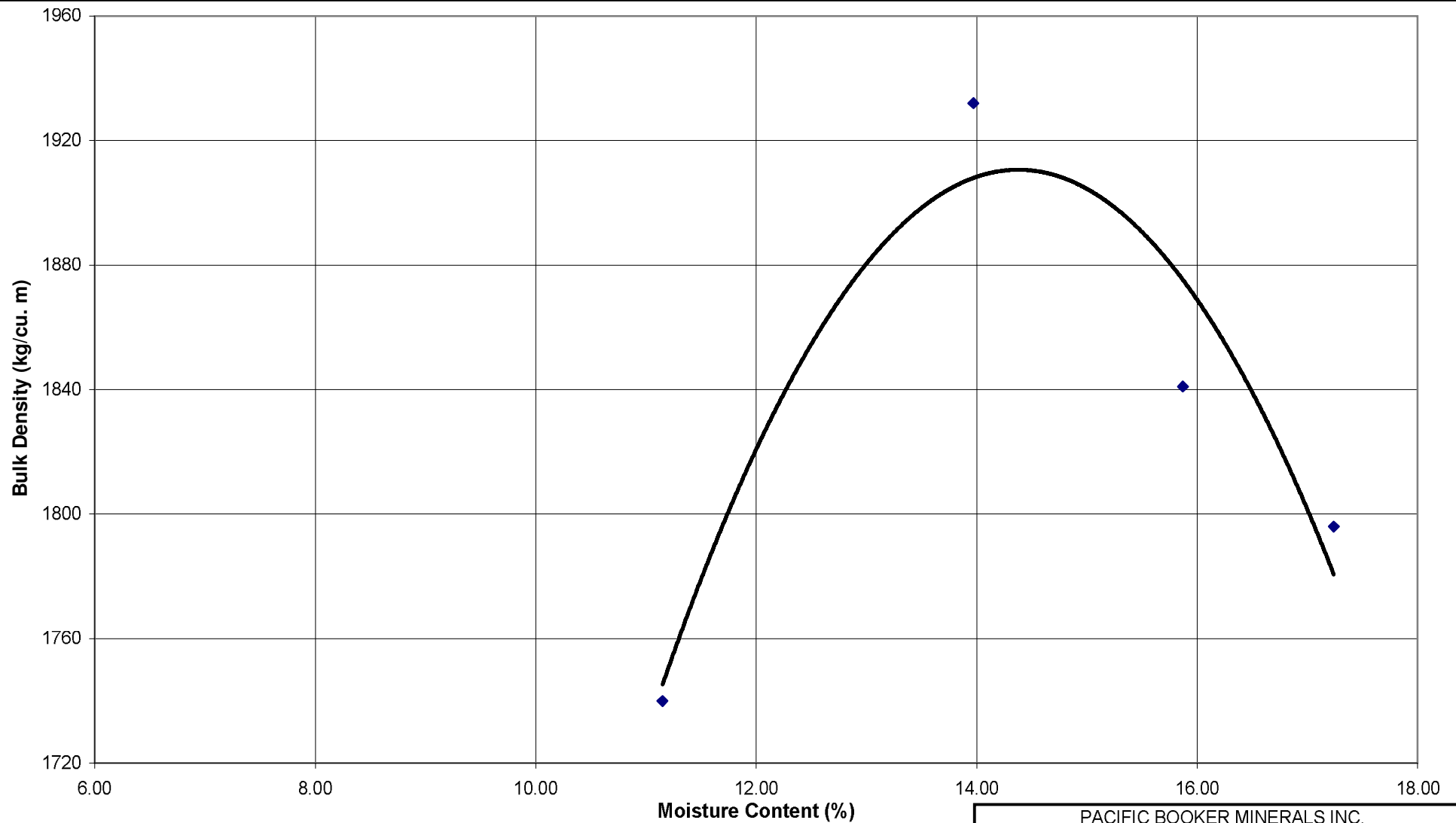
**Notes:**

- 1) Data from Cantest Ltd. - Sample ID 605020391
- 2) Sample is a composite of samples from TP06-18 and 19

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

**GEOTECHNICAL SITE INVESTIGATION
COMPACTION TEST RESULTS
SAMPLE GROUP 2*****Knight Piésold***
CONSULTINGPROJECT / ASSIGNMENT NO.
VA-101-00102/7REF NO.
1**FIGURE 5.8**REV.
0

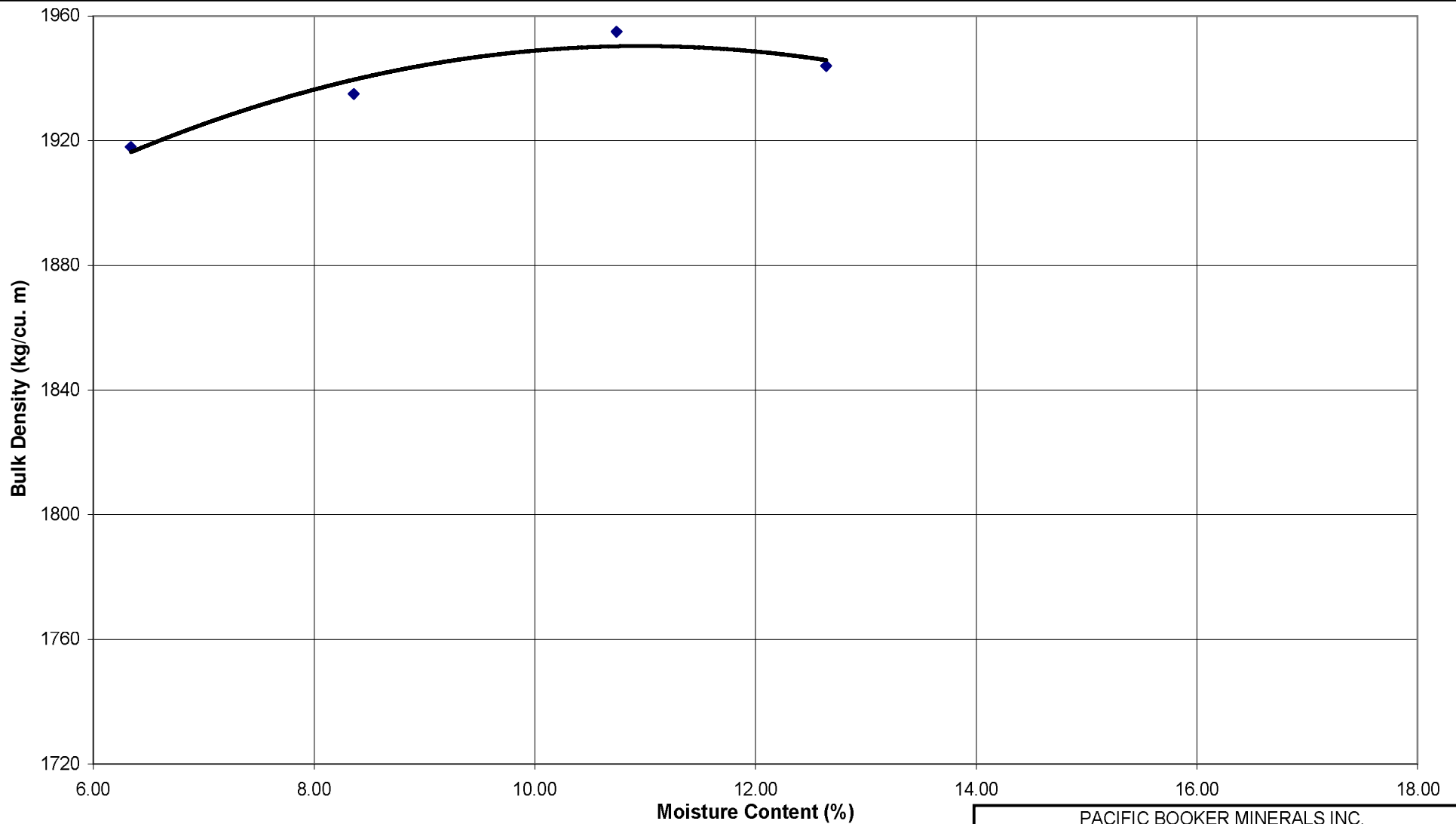
**Notes:**

- 1) Data from Cantest Ltd. - Sample ID 605020392
- 2) Sample is a composite of samples from TP06-20, 21 and 22

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

**GEOTECHNICAL SITE INVESTIGATION
COMPACTION TEST RESULTS
SAMPLE GROUP 3*****Knight Piésold***
CONSULTINGPROJECT / ASSIGNMENT NO.
VA-101-00102/7REF NO.
1**FIGURE 5.9**REV.
0

**Notes:**

- 1) Data from Cantest Ltd. - Sample ID 605020393
- 2) Sample is a composite of samples from TP06-41, 42, 43, and 44

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

**GEOTECHNICAL SITE INVESTIGATION
COMPACTION TEST RESULTS
SAMPLE GROUP 4*****Knight Piésold***
CONSULTINGPROJECT / ASSIGNMENT NO.
VA-101-00102/7REF NO.
1**FIGURE 5.10**REV.
0

APPENDIX A

(Rev 0)

GEOTECHNICAL DRILLHOLE LOGS

APPENDIX A1	OVERBURDEN DRILLING LOGS
APPENDIX A2	BEDROCK DRILLING LOGS
APPENDIX A3	BEDROCK DRILLING GRAPHS

APPENDIX A1

(Rev 0)

OVERBURDEN DRILLING LOGS

- Drillhole DH06-01
- Drillhole DH06-02
- Drillhole DH06-03
- Drillhole DH06-04
- Drillhole DH06-06
- Drillhole DH06-07
- Drillhole DH06-08
- Drillhole DH06-09
- Drillhole DH06-10
- Drillhole DH06-11
- Drillhole DH06-12
- Drillhole DH06-13
- Drillhole DH06-14
- Drillhole DH06-15A

(Pages A1-1 to A1-14)

Project: <u>Morrison Copper Gold Project</u>				Drill Hole No.: <u>DH06-01</u>				Page: <u>1</u> of <u>1</u>			
Drilling Co.: <u>Geotech Drilling Services</u>				In-Situ Sampler: <u>HQ3 Coring</u>				Date Started: <u>25 Mar 06</u>			
Drilling Method: <u>Odex & HQ3 Coring</u>				Elevation: <u>960 m</u>				Date Completed: <u>31 Mar 06</u>			
Location: <u>WMF South Dam</u>				Total Depth: <u>126.3 m</u>				Logged by: <u>JV</u>			
Coordinates: <u>6.123.943 N. 670.676 E</u>				Azimuth, Inclination: <u>300. -60</u>				Reviewed by: <u>GJ</u>			

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
5			Gravelly SILT/CLAY matrix, with trace sand. Moist. Firm. Low to medium plasticity. Brown. TILL.				1	//			Odex drilling to 24.75 m.
10			SILT/CLAY matrix with some gravel. Moist. Medium plasticity. Stiff. Dark brown. TILL.				2	//			
15	5						3	//			
20							4	//			
25							5	//			
30							6	//			
35	10						7	//			
40							8	//			
45											
50	15					9	//				
55											
60											
65	20										
70											
75											
80											
	25		HQ Coring to 126.3 m. See Rock Log for details.								

Pacific Booker Minerals Inc. Morrison Copper Gold Project Overburden Log For DH06-01				
Knight Piésold CONSULTING		Project No. 101-102/7	Ref. No. 1	Rev. 0
Rev. 0 - Issued for Report		DH06-01		

SOILS LOG DRILL.GPJ DRILL.GDT 9 Jun 06

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

AL-1

Project: Morrison Copper Gold Project

Drill Hole No. DH06-02

Page 1 **of** 1

Drilling Co: Geotech Drilling Services

In-Situ Sampler: SPT & HQ3 Coring

Date Started: 4 Mar 06

Drilling Method: Odex & HQ3 Coring

Elevation: 950 m

Date Completed: 6 Mar 06

Location: WMF South Dam

Total Depth: 39.5 m

Logged by: LS

Coordinates: 6.123.723 N. 670.576 E

Inclination: -90

Reviewed by: GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (20 40 60 80)	NOTES
			SILT/CLAY matrix with trace sand and gravel. Moist to wet. Firm. Low to medium plasticity. Subangular to subrounded clasts. TILL.								
1											
5											
2											
10					100		SPT 1	2/3/4	7		
4					133		SPT 2	1/2/1	3		
15											
5					161		SPT 3	1/1/1	2		
20											
6											
7					11		SPT 4	7/8/13	21		
25											
8											
			HQ Coring to 39.5 m. See Rock Log for details.								

SOILS LOG DRILL GPJ DRILL GDT 9 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-02

Knight Piésold
CONSULTING

Project No. 101-102/7	Ref. No. 1	Rev. 0
--------------------------	---------------	-----------

Rev. 0 - Issued for Report

DH06-02

M:\1101\00102\07\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

Project: <u>Morrison Copper Gold Project</u>				Drill Hole No. <u>DH06-03</u>		Page <u>1</u> of <u>1</u>	
Drilling Co: <u>Geotech Drilling Services</u>				In-Situ Sampler: <u>SPT & HQ3 Coring</u>		Date Started: <u>2 Mar 06</u>	
Drilling Method: <u>Odex & HQ3 Coring</u>				Elevation: <u>950 m</u>		Date Completed: <u>4 Mar 06</u>	
Location: <u>WMF South Dam</u>				Total Depth: <u>36.9 m</u>		Logged by: <u>LS</u>	
Coordinates: <u>6.123.781 N. 670.541 E</u>				Inclination: <u>-90</u>		Reviewed by: <u>GJ</u>	

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT N° VALUE	SPT TEST DATA Uncorrected N° values vs. depth (ft) 20 40 60 80	NOTES	
			SILT/CLAY matrix with some gravel and trace sand. Well graded. Soft. Moist. Medium to high plasticity. Subangular clasts up to fine gravel size. Light brown. TILL.									Odex drilling to 5.8 m.
1					39		SPT 1	2/3/3	6			
5			SILT/CLAY matrix with some gravel. Moist. Medium plasticity. Stiff. Frequent cobbles and boulders. Subangular gravel clasts. Light brown. TILL.									
2				89		SPT 2	7/12/38	50				
10												
4												
15												
5												
20			HQ Coring to 37 m. See Rock Log for details.					50/-	-			
6												

Pacific Booker Minerals Inc. Morrison Copper Gold Project Overburden Log For DH06-03				
Knight Piésold CONSULTING		Project No. 101-102/7	Ref. No. 1	Rev. 0
Rev. 0 - Issued for Report		DH06-03		

SOILS LOG DRILL.GPJ DRILL.GDT 9 Jun 06
 M:\101\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

Project: <u>Morrison Copper Gold Project</u>				Drill Hole No. <u>DH06-04</u>		Page <u>1</u> of <u>2</u>	
Drilling Co: <u>Geotech Drilling Services</u>				In-Situ Sampler: <u>SPT & HQ3 Coring</u>		Date Started: <u>7 Mar 06</u>	
Drilling Method: <u>Odex & HQ3 Coring</u>				Elevation: <u>983 m</u>		Date Completed: <u>9 Mar 06</u>	
Location: <u>WMF South Dam</u>				Total Depth: <u>41.5 m</u>		Logged by: <u>LS</u>	
Coordinates: <u>6.123.060m N., 670.997m E</u>				Inclination: <u>-90</u>		Reviewed by: <u>GJ</u>	

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (ft) 20 40 60 80	NOTES
			Gravelly SILT/CLAY matrix with some sand. Moist. Firm. Frequent subangular to subrounded clasts to fine gravel size. Well graded. Low to medium plasticity. TILL.								Odex drilling to 9.1 m.
1					93	X	SPT 1	4/6/9	15		
5			SILT/CLAY matrix with some gravel and trace sand. Low to medium plasticity. Moist. Stiff. Subangular to subrounded clasts up to cobble size. Well graded. Light brown. TILL.								
2											
10					100	X	SPT 2	4/6/10	16		
3											
15					104	X	SPT 3	3/4/5	9		
5											
20					100	X	SPT 4	4/7/11	18		
7											
25					104	X	SPT 5	5/6/9	15		
8											
30			HQ Coring to 41.5 m. See Rock Log for details.		61	X	SPT 6	6/50+/-	-		
9											

Pacific Booker Minerals Inc. Morrison Copper Gold Project Overburden Log For DH06-04				
Knight Piésold CONSULTING		Project No. 101-102/7	Ref. No. 1	Rev. 0
Rev. 0 - Issued for Report		DH06-04		

M:\1\01\00102\07\DATA\GEOTEC-3\GINT\DRILL.GPJ
 SOILS LOG DRILL.GPJ DRILL.GDT 27 Jun 06
 Date Revised: 3 May 06

Project: <u>Morrison Copper Gold Project</u>				Drill Hole No. <u>DH06-07</u>		Page <u>1</u> of <u>1</u>	
Drilling Co: <u>Geotech Drilling Services</u>				In-Situ Sampler: <u>SPT & HQ3 Coring</u>		Date Started: <u>27 Feb 06</u>	
Drilling Method: <u>Odex & HQ3 Coring</u>				Elevation: <u>993 m</u>		Date Completed: <u>1 Mar 06</u>	
Location: <u>WMF South Dam</u>				Total Depth: <u>43.3 m</u>		Logged by: <u>LS</u>	
Coordinates: <u>6.122.667 N. 671.775 E</u>				Inclination: <u>-90</u>		Reviewed by: <u>GJ</u>	

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES	
			Organic topsoil. Black. Moist.									Odex drilling to 10.3 m.
5	2		SILT/CLAY matrix with some gravel and trace sand. Moist. Stiff. Medium to high plasticity. Subangular to angular small clasts up to cobble size. Well graded. Light brown. TILL.	78			SPT 1	8/10/14	24			
10	72					SPT 2	8/9/10	19				
15	83					SPT 3	6/7/11	18				
20	78					SPT 4	4/6/7	13				
25	54					SPT 5	6/10/12	22				
30	65					SPT 6	6/9/10	19				
35	10		HQ Coring to 43 m. See Rock Log for details.									

Pacific Booker Minerals Inc. Morrison Copper Gold Project Overburden Log For DH06-07				
<i>Knight Piésold</i> CONSULTING		Project No. 101-102/7	Ref. No. 1	Rev. 0
Rev. 0 - Issued for Report		DH06-07		

SOILS LOG DRILL.GPJ DRILL.GDT 9 Jun 06

M:\101\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 3 May 06

Project: **Morrison Copper Gold Project**Drill Hole No. **DH06-08**Page **1** of **1**Drilling Co: **Geotech Drilling Services**In-Situ Sampler: **SPT**Date Started: **18 Mar 06**Drilling Method: **Odex**Elevation: **838 m**Date Completed: **20 Mar 06**Location: **Proposed Millsite.**Total Depth: **39.9 m**Logged by: **JV**Coordinates: **6.119.649 N. 671.249 E**Inclination: **-90**Reviewed by: **GJ**

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT N VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
5	1		Sandy SILT/CLAY matrix with some gravel. Very wet. Firm. Brown. TILL.		89		SPT 1	1/4/6	10		Odex drilling to 39.8 m.
10	2		Silty SAND. Very wet. Firm. Brown.		61		SPT 2	17/22/2	43		
15	4		SILT/CLAY matrix with some gravel. Moist. Medium Plasticity. Stiff. Subangular to subrounded clasts. Dark brown. TILL.		100		SPT 3	6/8/10	18		
20	6				78		SPT 4	8/9/13	22		
25	8				93		SPT 5	5/6/11	17		
30	9				83		SPT 6	6/21/16	37		
35	10				65		SPT 7	4/9/10	19		
40	12				89		SPT 8	4/7/10	17		
45	14										
50	15				83		SPT 9	7/15/21	36		
55	17										
60	18				72		SPT 10	10/19/2	40		
65	20										
70	21				72		SPT 11	6/10/19	29		
75	23										
80	24				126		SPT 12	6/11/17	28		
85	26										
90	27				126		SPT 13	4/6/13	19		
95	29										
100	30				104		SPT 14	11/19/19	38		
105	32										
110	33				126		SPT 15	6/11/28	39		
115	35										
120	36				133		SPT 16	4/2/9	11		
125	37		CLAY with some sand. Very wet, high plasticity. Soft. High pressure water bearing region - source of Artesian well.								
130	39		End of Hole @ 39.8 m.								
135	41										
140	42										
	43										

SOILS LOG DRILL GPJ DRILL GDT 9 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-08

Knight Piésold
CONSULTING

Project No. 101-102/7	Ref. No. 1	Rev. 0
--------------------------	---------------	-----------

DH06-08**Rev. 0 - Issued for Report**

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

Project: Morrison Copper Gold Project

Drill Hole No. DH06-09

Page 1 of 1

Drilling Co: Geotech Drilling Services

In-Situ Sampler: SPT

Date Started: 20 Mar 06

Drilling Method: Odex

Elevation: 835 m

Date Completed: 22 Mar 06

Location: Proposed millsite.

Total Depth: 33.2 m

Logged by: JV

Coordinates: 6.119.478 N. 671.152 E

Inclination: -90

Reviewed by: GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT N° VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (20 40 60 80)	NOTES
1	0.3		Organic soil, moist, black.								Odex drilling to 33 m.
5	1.5		CLAY. Moist. Highly plastic. Fine grained. White/grey.								
2	0.6		SILT/CLAY matrix with some gravel and trace sand. Stiff. Moist. Trace amounts of yellowish sand. Subrounded to subangular clasts. Medium to low plasticity. Dark brown. TILL.	28			Shelby 1 SPT 1	12/12/8	20		
10	3.0			48			SPT 2	4/6/8	14		
15	4.5			78			SPT 3	5/9/11	20		
20	6.0			65			SPT 4	8/11/12	23		
25	7.5			11			SPT 5	6/8/10	18		
30	9.0			111			SPT 6	7/8/12	20		
35	10.5			100			SPT 7	6/10/15	35		
40	12.0			54			SPT 8	5/36/53	89		
45	13.5										
50	15.0			65			SPT 9	7/8/11	19		
55	16.5										
60	18.0			54			SPT 10	6/10/12	22		
65	19.5										
70	21.0			126			SPT 11	6/11/14	25		
75	22.5										
80	24.0			100			SPT 12	7/13/14	27		
85	25.5										
90	27.0			133			SPT 13	6/12/15	27		
95	28.5										
100	30.0			17			SPT 14	50+/-	-		
105	31.5										
110	33.0										
115	34.5										
120	36.0										

Drilled into bedrock to 33 m. No core taken.

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-09**

***Knight Piésold*
CONSULTING**

Project No. 101-102/7	Ref. No. 1	Rev. 0
--------------------------	---------------	-----------

DH06-09

Rev. 0 - Issued for Report

M:\1\01\00102\07\A\DATA\GEOTEC-3\GIN\DRILL.GPJ

Date Revised: 1 May 06

Project: **Morrison Copper Gold Project**Drill Hole No. **DH06-10**Page **1** of **2**Drilling Co: **Geotech Drilling Services**In-Situ Sampler: **SPT & HQ3 Coring**Date Started: **17 Feb 06**Drilling Method: **Odex & HQ3 Coring**Elevation: **1001 m**Date Completed: **19 Feb 06**Location: **WMF North Dam**Total Depth: **53.6 m**Logged by: **JV**Coordinates: **6.125.683m N . 671.523m E**Inclination: **-90**Reviewed by: **GJ**

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (20 40 60 80)	NOTES
			TILL/SILT with some gravel. Stiff. Fine gravel. Medium plasticity. Dark brown. Moist.								
			Hit a boulder. Back to till at the bottom of run.								
			TILL/SILT with some gravel. Stiff. Fine gravel. Medium plasticity. Dark brown. Moist.								
5					104	X	SPT 1	7/16/21	37		
10					104	X	SPT 2	8/15/19	34		
15	5				126	X	SPT 3	4/8/7	15		
20					93	X	SPT 4	5/6/10	16		
25					85	X	SPT 5	4/5/9	14		
30					78	X	SPT 6	5/8/13	21		
35	10				33	X	SPT 7	11/8/11	19		
40			Same TILL as above, but with trace amounts of orangey/green sand.		100	X	SPT 8	5/6/10	16		
45											
50	15				65	X	SPT 9	4/8/10	18		
55											
60					100	X	SPT 10	4/13/18	31		
65	20										
70					111	X	SPT 11	4/8/12	20		
75			HQ Coring to 53.6 m. See Rock Log for details.								

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-10

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0
DH06-10		

Rev. 0 - Issued for Report

SOILS LOG DRILL.GPJ DRILL.GDT 27 Jun 06

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 3 Mar 06

Project: Morrison Copper Gold ProjectDrill Hole No. DH06-11Page 1 of 1Drilling Co: Geotech Drilling ServicesIn-Situ Sampler: SPT & HQ3 CoringDate Started: 20 Feb 06Drilling Method: Odex & HQ3 CoringElevation: 965 mDate Completed: 22 Feb 06Location: WMF North DamTotal Depth: 36.9 mLogged by: LSCoordinates: 6.125.568 N. 671.912 EInclination: -90Reviewed by: GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
			Clay/silt and gravel. Trace fine sand. Angular clasts. Low to medium plasticity. Slightly moist. Stiff. TILL.								
	1										
	5		Silt/Clay matrix with some gravel. Moist to very moist. Stiff. Dark brown. TILL.		100		SPT 1	14/15/23	38		
	2										
	10				61		SPT 2	18/20/16	38		
	3										
			HQ Coring to 37 m. See Rock Log for details.								

SOILS LOG DRILL GPJ DRILL GDT 9 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-11**Knight Piésold**
CONSULTINGProject No. 101-102/7
Ref. No. 1
Rev. 0

DH06-11

Rev. 0 - Issued for Report

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

A1-10

Project: Morrison Copper Gold ProjectDrill Hole No. DH06-12Page 1 of 1Drilling Co: Geotech Drilling ServicesIn-Situ Sampler: SPT & HQ3 CoringDate Started: 22 Feb 06Drilling Method: Odex & HQ3 CoringElevation: 996 mDate Completed: 26 Feb 06Location: WMF North DamTotal Depth: 58.3 mLogged by: JV & LSCoordinates: 6.125.182 N. 672.265 EInclination: -90Reviewed by: GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
			Clayey SILT. Light brown, moist. Stiff. Poorly graded. Medium plasticity.								Odex drilling to 9.1 m.
			Silt/Clay matrix with some gravel. Small to medium sized clasts. Medium plasticity. Slightly moist. Stiff. Dark brown. TILL								
	1										
	5										
	2										
	10				72		SPT 1	8/15/28	43		
	3										
	4										
	15				11		SPT 2	11/16/12	28		
	5										
	20				100		SPT 3	6/8/11	19		
	6										
	7										
	25				100		SPT 4	8/10/13	23		
	8		Silt/clay with some gravel and trace sand. Moist. Small to medium sized clasts. Trace amount of orange coloured sand. Medium plasticity. Stiff. Dark brown. TILL.								
	9		HQ Coring to 58 m. See Rock Log for details.								
	30				100		SPT 5	50+/-	-		

SOILS LOG DRILL GPJ DRILL GDT 9 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-12**Knight Piésold**
CONSULTINGProject No. 101-102/7
Ref. No. 1
Rev. 0

DH06-12

Rev. 0 - Issued for Report

M:\1\01\00102\07\DATA\GEOTECH-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

A1-11

Project: Morrison Copper Gold ProjectDrill Hole No. DH06-13Page 1 of 1Drilling Co: Geotech Drilling ServicesIn-Situ Sampler: SPT & HQ3 CoringDate Started: 22 Mar 06Drilling Method: Odex & HQ3 CoringElevation: 808 mDate Completed: 24 Mar 06Location: Open Pit center.Total Depth: 20.3 mLogged by: JVCoordinates: 6.119.111m N. 670.800m EInclination: -90Reviewed by: GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
			Sandy SILT/CLAY with organics. Dry. Firm. Reddish brown. TILL.								Odex drilling to 10.0 m.
1	5		Gravelly SILT/CLAY. Low to medium plasticity. Moist. Subangular to subrounded clasts. Dark brown. TILL.		115	X	SPT 1	10/13/16	29		
2	10				126	X	SPT 2	7/15/16	31		
3	15				104	X	SPT 3	7/10/13	23		
4	20				43	X	SPT 4	10/22/34	56		
5	25				78	X	SPT 5	8/28/55	83		
6	30		Sandy CLAY. Moist. Low plasticity. Sand looks like coarse calcite chunks. Soft. Whitish grey/green. Trace pyrite in sand.		126	X	SPT 6	14/21/22	43		
7	35		HQ Coring to 20 m. See Rock Log for details.		72	X	SPT 7	21/60+/1	-		
8	40										
9	45										
10	50										
11	55										
12	60										
13	65										
14	70										
15	75										
16	80										
17	85										
18	90										
19	95										
20	100										
21	105										
22	110										

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-13**Knight Piésold**
CONSULTINGProject No. 101-102/7 Ref. No. 1 Rev. 0**DH06-13**

Rev. 0 - Issued for Report

SOILS LOG DRILL GPJ DRILL GDT 27 Jun 06

M:\101\00102\07\DATA\GEOTEC-3\GINT\DRILL GPJ

Date Revised: 1 May 06

Project: Morrison Copper Gold Project **Drill Hole No.** DH06-14 Page 1 of 1
Drilling Co: Geotech Drilling Services **In-Situ Sampler:** SPT & HQ3 Coring **Date Started:** 22 Mar 06
Drilling Method: Odex & HQ3 Coring **Elevation:** 840 m **Date Completed:** 23 Mar 06
Location: East of open pit area. **Total Depth:** 29.0 m **Logged by:** JV
Coordinates: 6.119.159m N. 671.396m E **Inclination:** -90 **Reviewed by:** GJ

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth 20 40 60 80	NOTES
5			Gravelly SAND, with some clay. Wet. Loose. Reddish brown.		50	×	SPT 1	6/7/17	24		Odex drilling to 20.2 m.
10					39	×	SPT 2	2/3/3	6		
15											
20			SILT/CLAY matrix with some gravel. Moist. Low-medium plasticity. Stiff. Subangular to angular gravel. Dark brown. TILL.		104	×	SPT 3	3/4/4	8		
25					65	×	SPT 4	7/13/14	27		
30					0	×	SPT 5	20/18/12	30		
35					78	×	SPT 6	5/12/17	29		
40					54	×	SPT 7	10/11/19	30		
45											
50					39	×	SPT 8	15/17/21	38		
55											
60					115	×	SPT 9	12/14/22	36		
65			HQ Coring to 29 m. See Rock Log for details.								
70											
75											

SOILS LOG DRILL GPJ DRILL GDT 27 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Overburden Log For DH06-14		
Knight Piésold CONSULTING	Project No. 101-102/7	Ref. No. 1
Rev. 0 - Issued for Report	Rev. 0	
DH06-14		

M:\101\100102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

Project: Morrison Copper Gold Project**Drill Hole No. DH06-15A**Page **1** of **1**Drilling Co: **Geotech Drilling Services**In-Situ Sampler: **SPT**Date Started: **12 Mar 06**Drilling Method: **Odex**Elevation: **817 m**Date Completed: **17 Mar 06**Location: **Near pond north of open pit.**Total Depth: **33.1 m**Logged by: **JV & LS**Coordinates: **6.120.320 N, 670.693 E**Inclination: **-90**Reviewed by: **GJ**

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION	DRILL RUN RECOVERY (%)	SAMPLE RECOVERY (%)	SAMPLES	SAMPLE NO.	BLOW COUNT	SPT 'N' VALUE	SPT TEST DATA Uncorrected 'N' values vs. depth (#)				NOTES
										20	40	60	80	
1	0.3		Sandy silt/clay matrix with some gravel. Moist. Stiff. Subrounded clasts. Well graded. Dark brown. TILL.		54		SPT 1	4/7/7	14					Odex drilling to 32.9 m.
5	1.5				78		SPT 2	7/7/12	19					
10	3.0				89		SPT 3	6/7/12	19					
15	4.5		Silty SAND. Fine sand. Moist. Firm. Poorly graded. Medium plasticity. Light brown.											
20	6.0		Silt/Clay matrix with some gravel. Moist. Stiff. Poorly graded. Few clasts. Subangular to subrounded. Medium plasticity. Light brown. TILL.		22		SPT 4	50/-	-					
25	7.5				28		SPT 5	5/6/12	18					
30	9.0				100		SPT 6	5/10/10	20					
35	10.5				93		SPT 7	4/7/12	19					
40	12.0				111		SPT 8	3/6/8	14					
45	13.5													
50	15.0				7		SPT 9	9/14/23	37					
55	16.5													
60	18.0				89		SPT 10	4/5/9	14					
65	19.5													
70	21.0				111		SPT 11	5/6/10	16					
75	22.5													
80	24.0				89		SPT 12	7/7/8	15					
85	25.5													
90	27.0				72		SPT 13	6/13/15	28					
95	28.5													
115	36.0													

SOILS LOG DRILL GPJ DRILL.

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Overburden Log For DH06-15A****Rev. 0 - Issued for Report****Knight Piésold
CONSULTING**

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-15a

M:\1101\00102\07\A\DATA\GEOTECH-3\GIN\DRILL.GPJ

Date Revised: 1 May 06

A1-14

APPENDIX A2

(Rev 0)

BEDROCK DRILLING LOGS

- Drillhole DH06-01
- Drillhole DH06-02
- Drillhole DH06-03
- Drillhole DH06-04
- Drillhole DH06-06
- Drillhole DH06-07
- Drillhole DH06-10
- Drillhole DH06-11
- Drillhole DH06-12
- Drillhole DH06-13
- Drillhole DH06-14

(Pages A2-1 to A2-18)

[illegible]

PHIL 13-07-06
Rev'd May'10/06

[illegible]

Sheet 2 of 3

Print: 13-07-06
Rev'n Max'10006

[illegible]

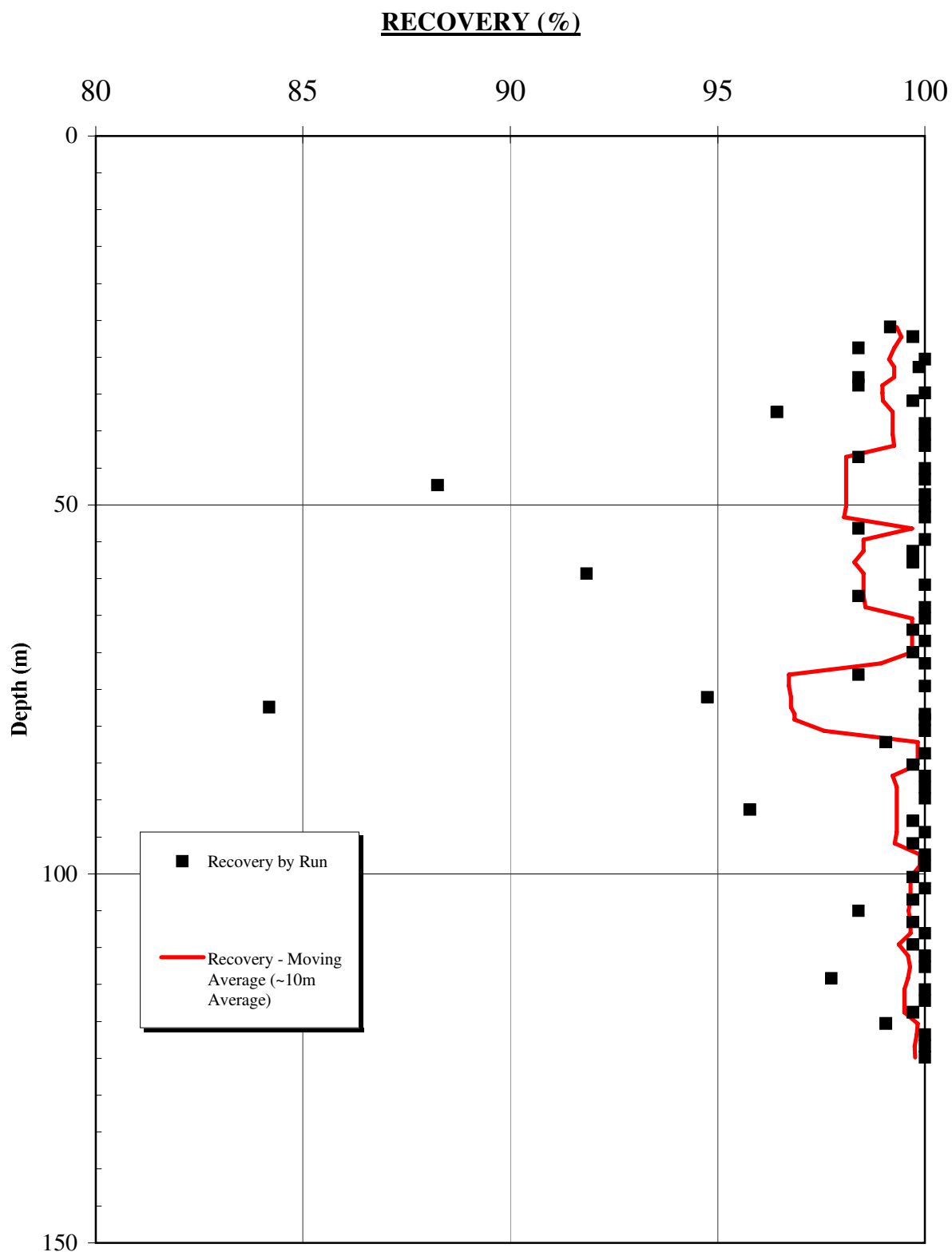
APPENDIX A3

(Rev 0)

BEDROCK DRILLING GRAPHS
RECOVERY, RQD, ESTIMATED UCS, AND RMR VS. DEPTH

- Drillhole DH06-01
- Drillhole DH06-02
- Drillhole DH06-03
- Drillhole DH06-04
- Drillhole DH06-06
- Drillhole DH06-07
- Drillhole DH06-10
- Drillhole DH06-11
- Drillhole DH06-12
- Drillhole DH06-13
- Drillhole DH06-14

(Figures A3-1 to A3-44)



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

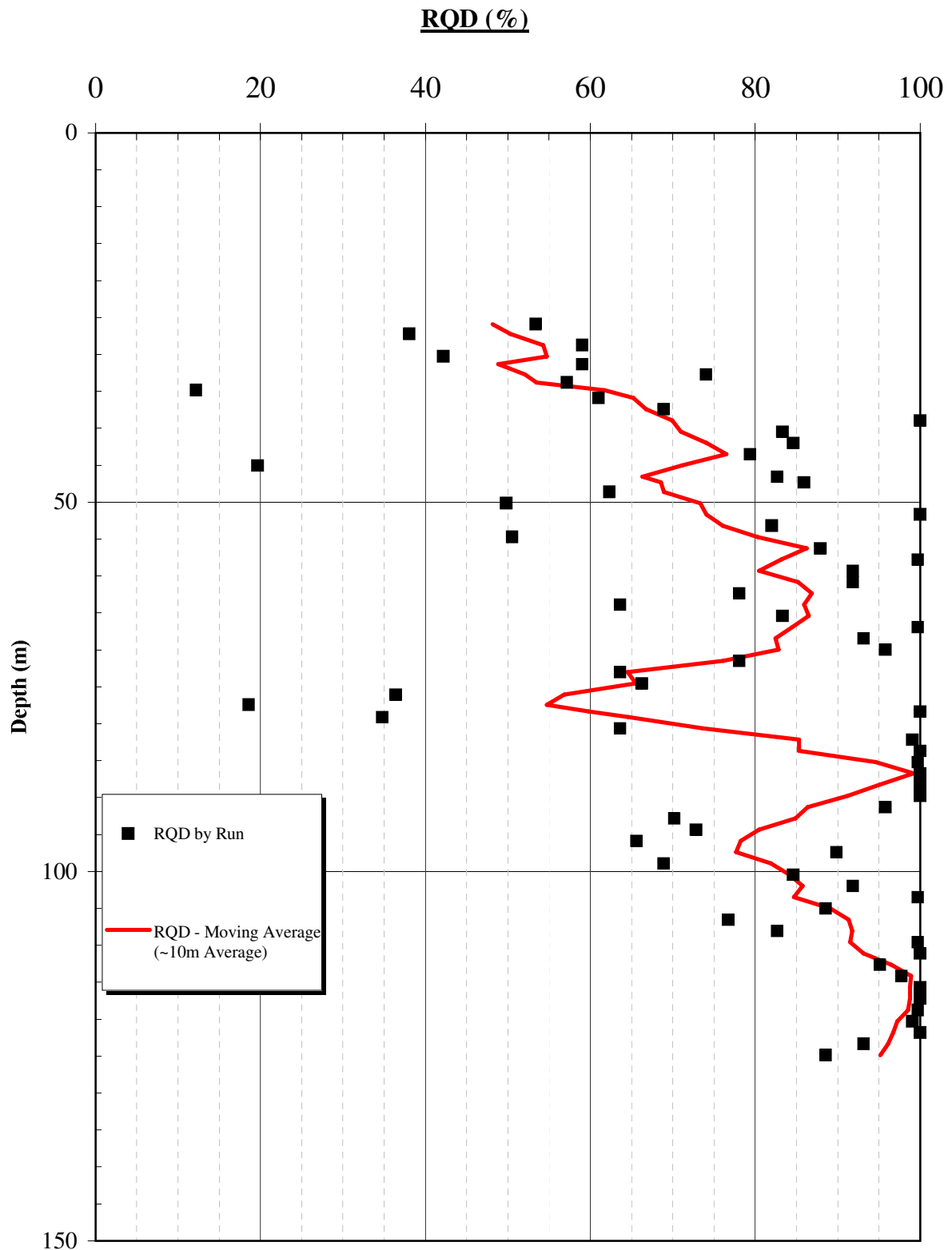
DRILLHOLE DH06-1

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-1

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

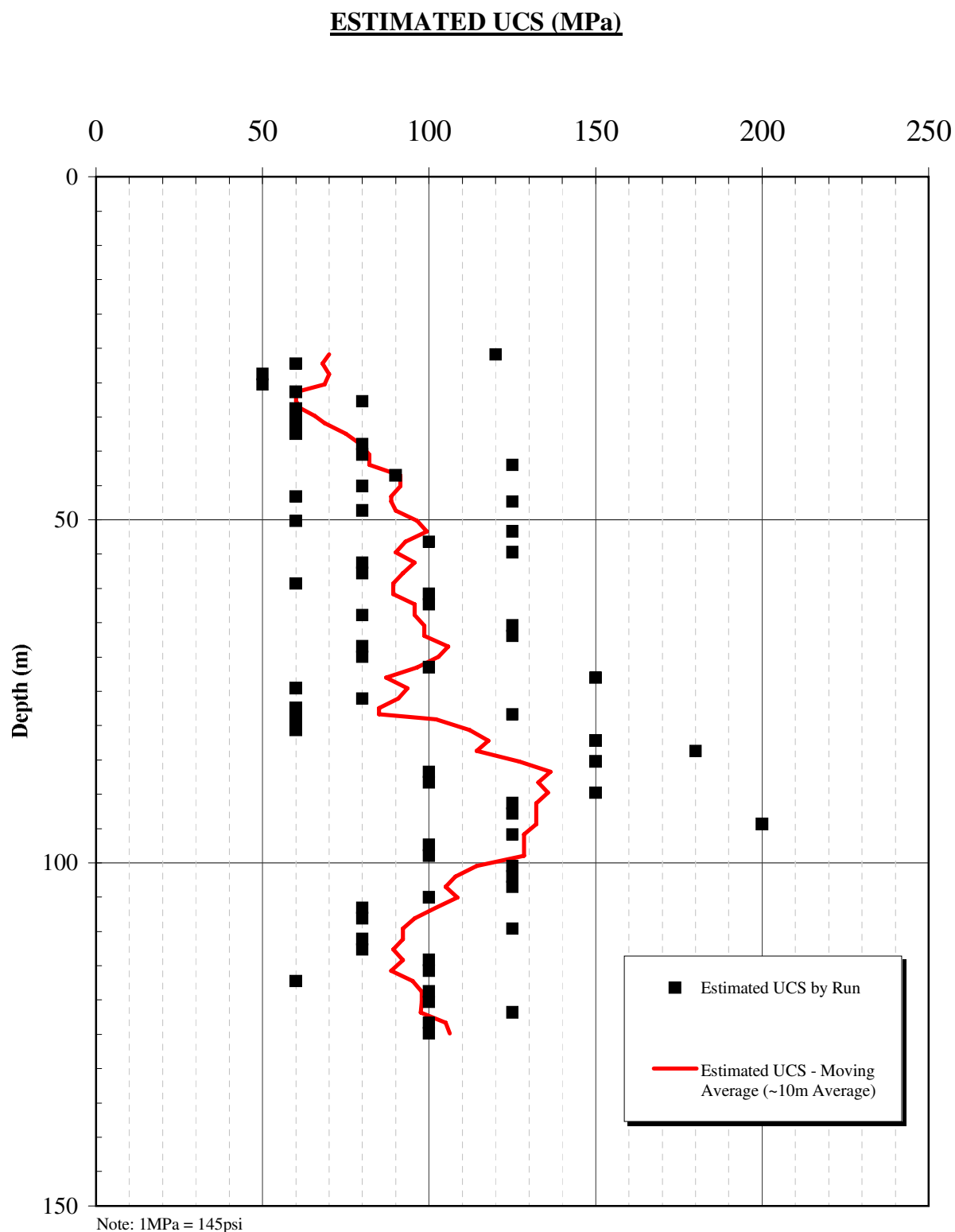
RQD VS. DEPTH

DRILLHOLE DH06-1

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-2**REV.
0

Rev 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

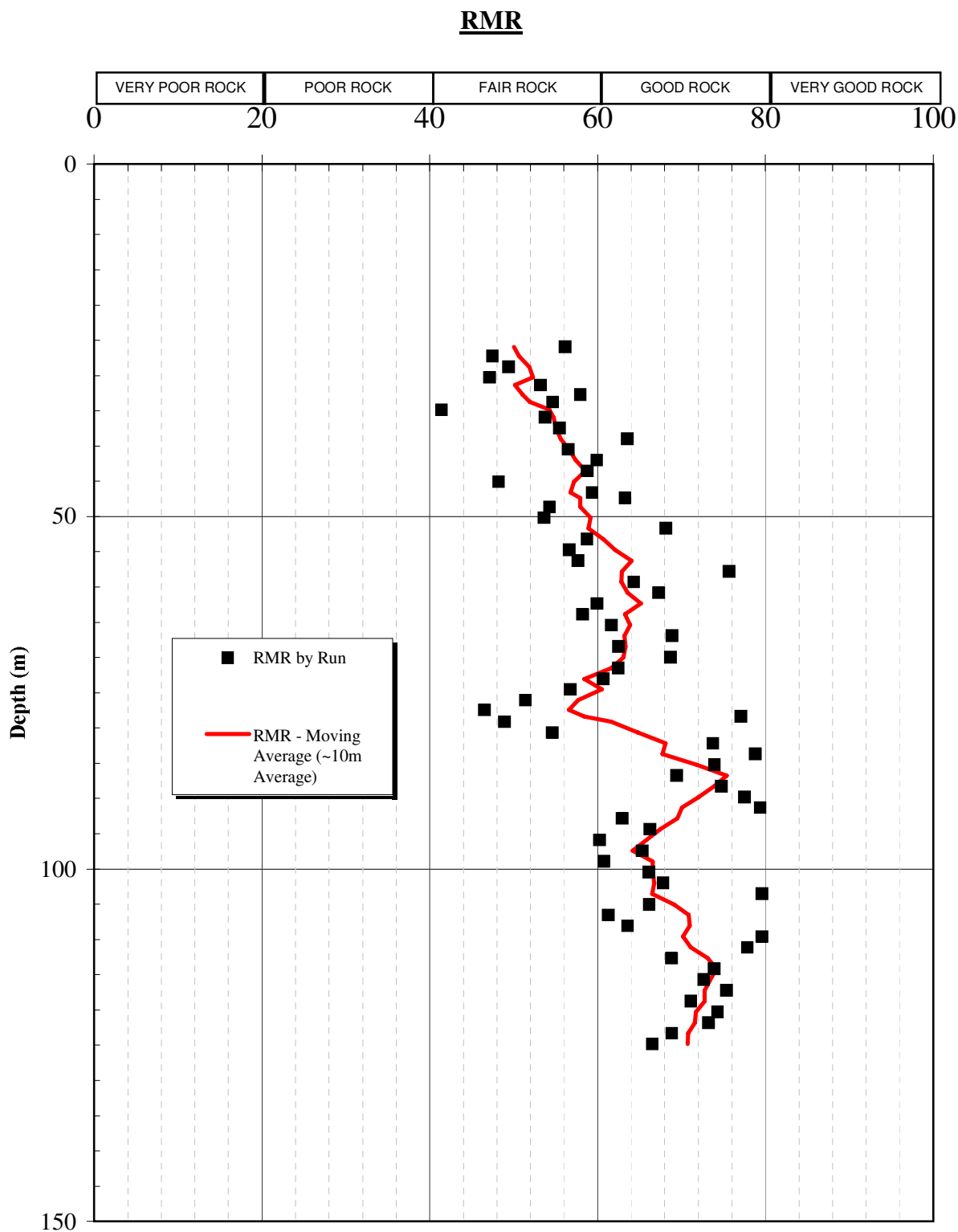
MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION
ESTIMATED UCS VS. DEPTH
DRILLHOLE DH06-1

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-3**REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-1

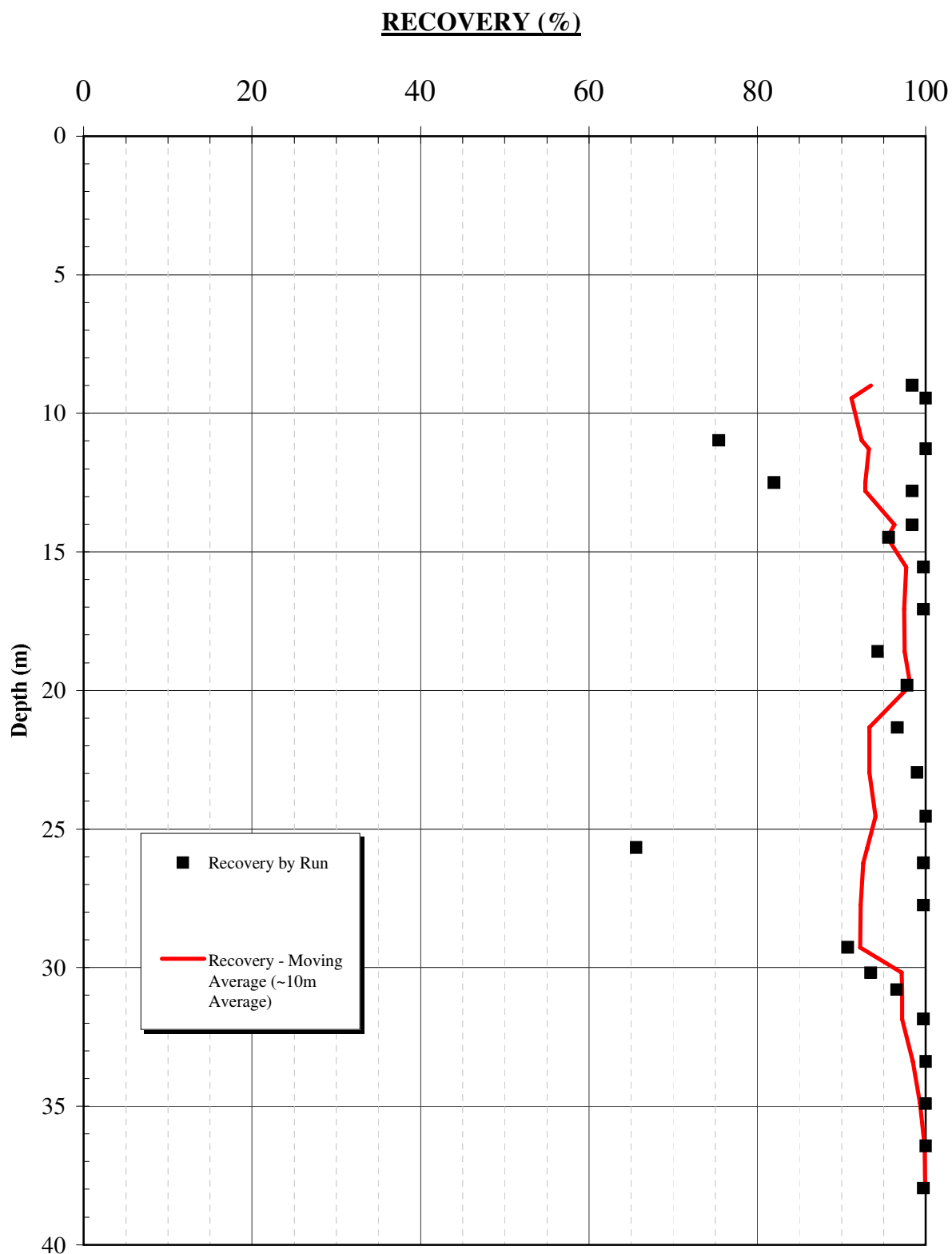
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-4

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

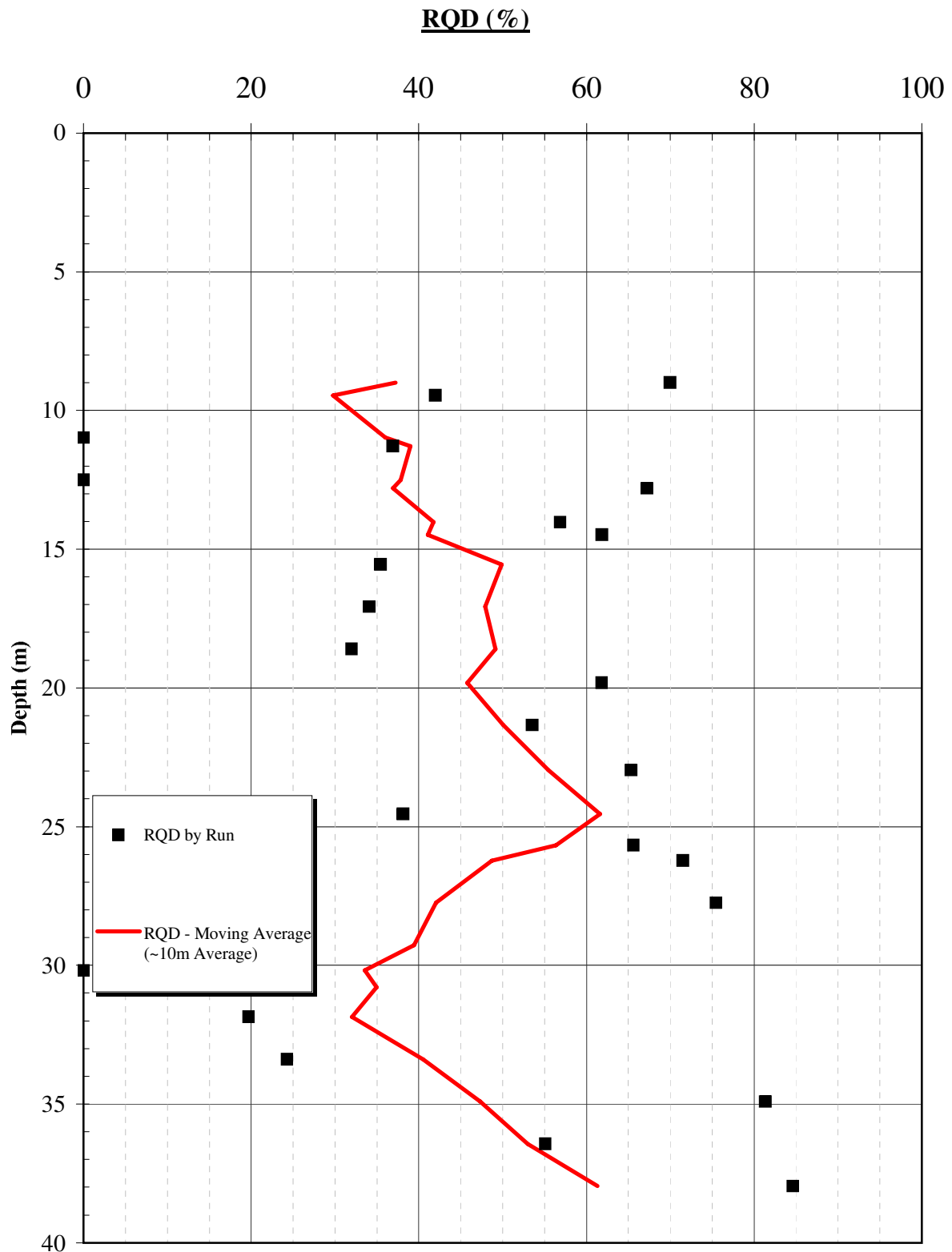
RECOVERY VS. DEPTH

DRILLHOLE DH06-2

Knight Piésold
 CONSULTING
PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-5

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

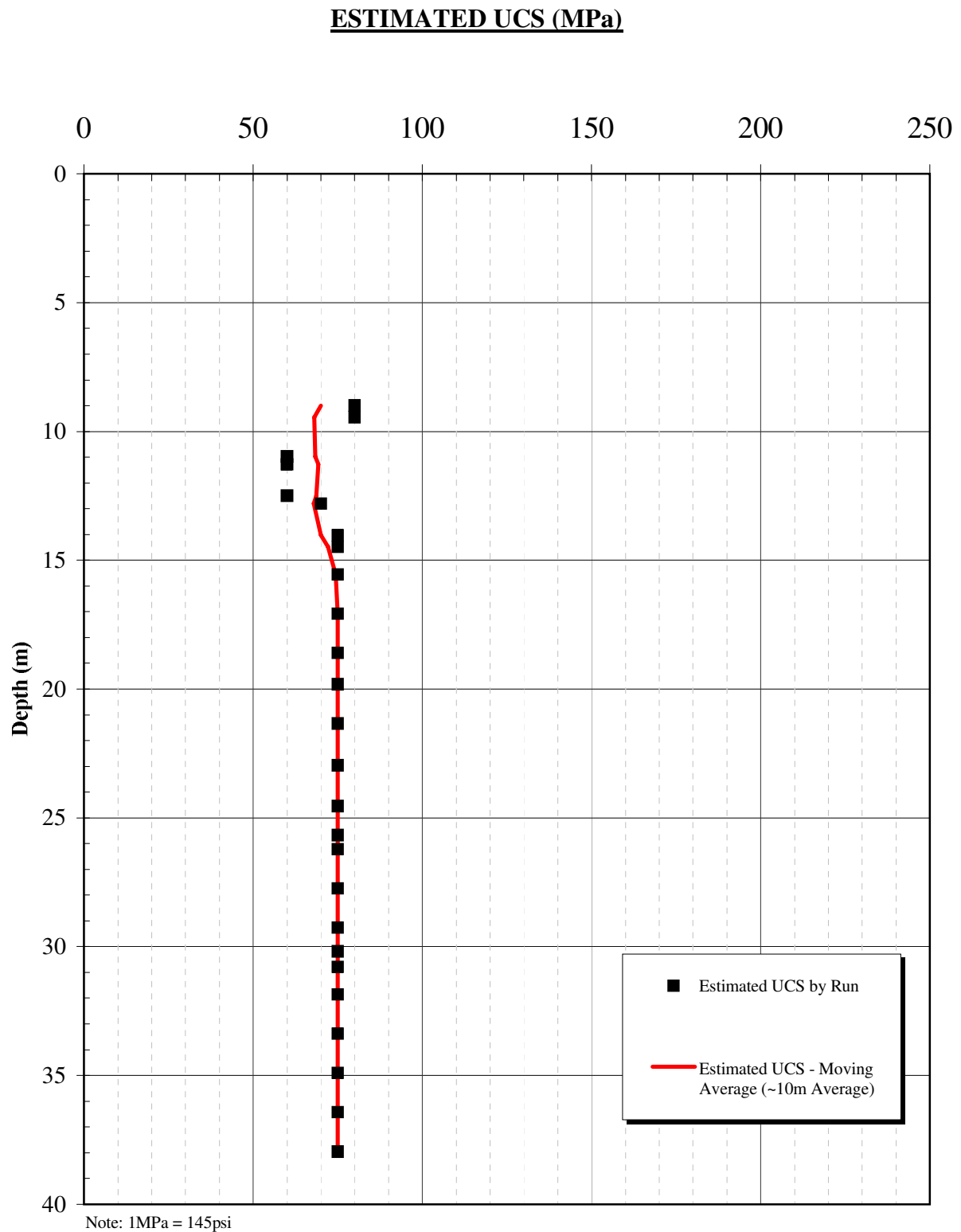
GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-2

Knight Piésold
CONSULTINGPROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-6**REV.
0

Rev 0 - Issued for Report



Rev. 0 - Issued for Report

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

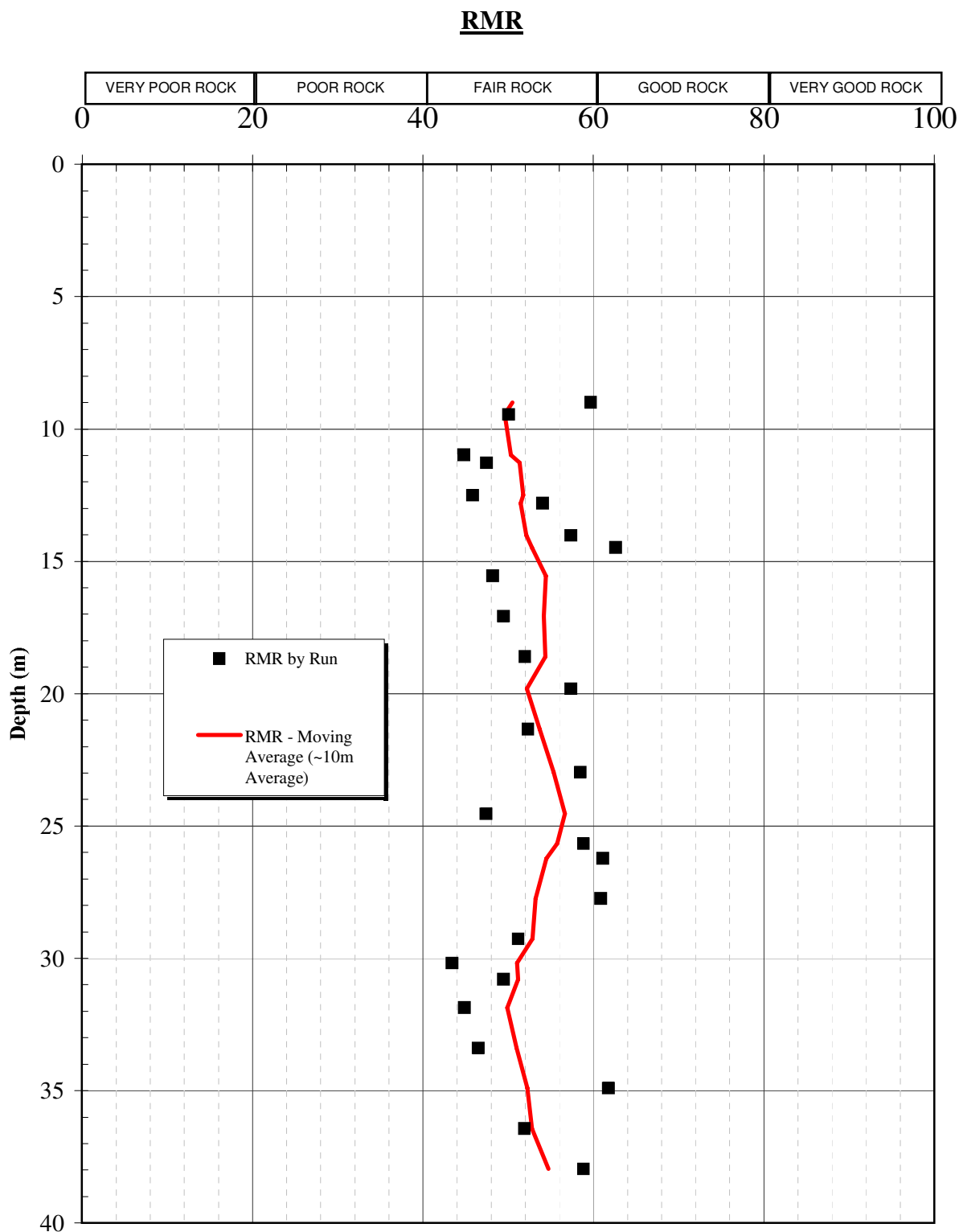
DRILLHOLE DH06-2

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-7

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

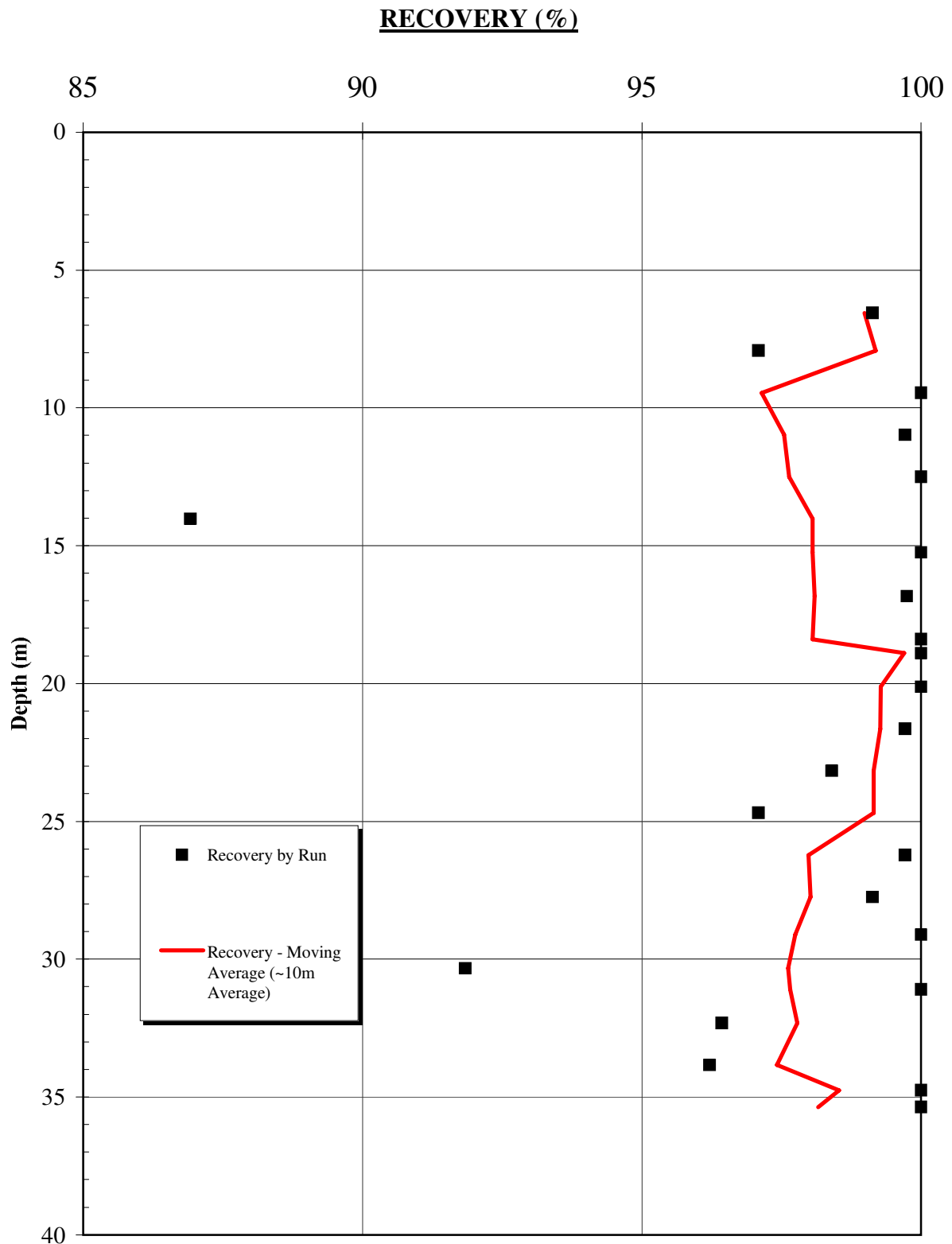
DRILLHOLE DH06-2

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-8

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

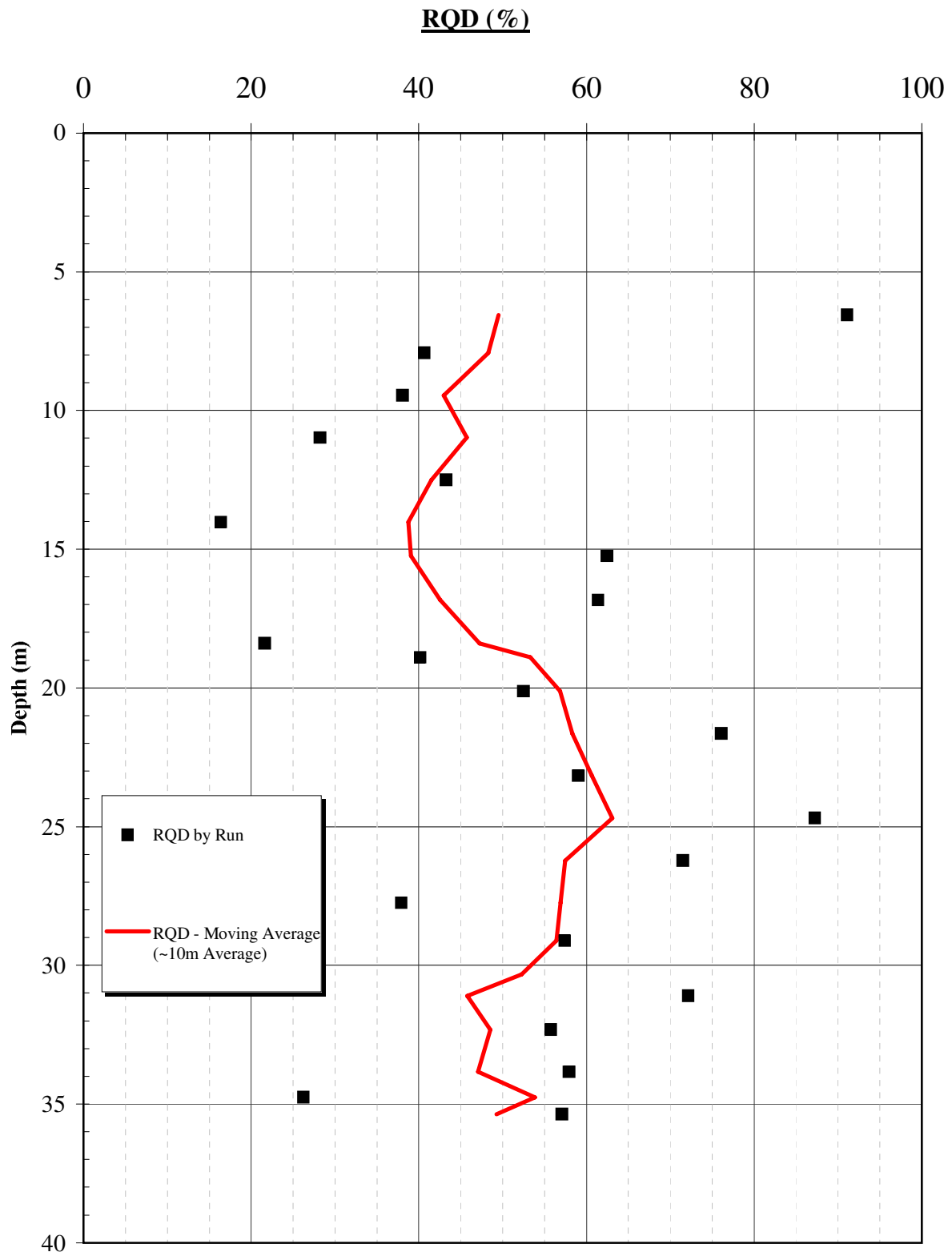
DRILLHOLE DH06-3

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-9

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

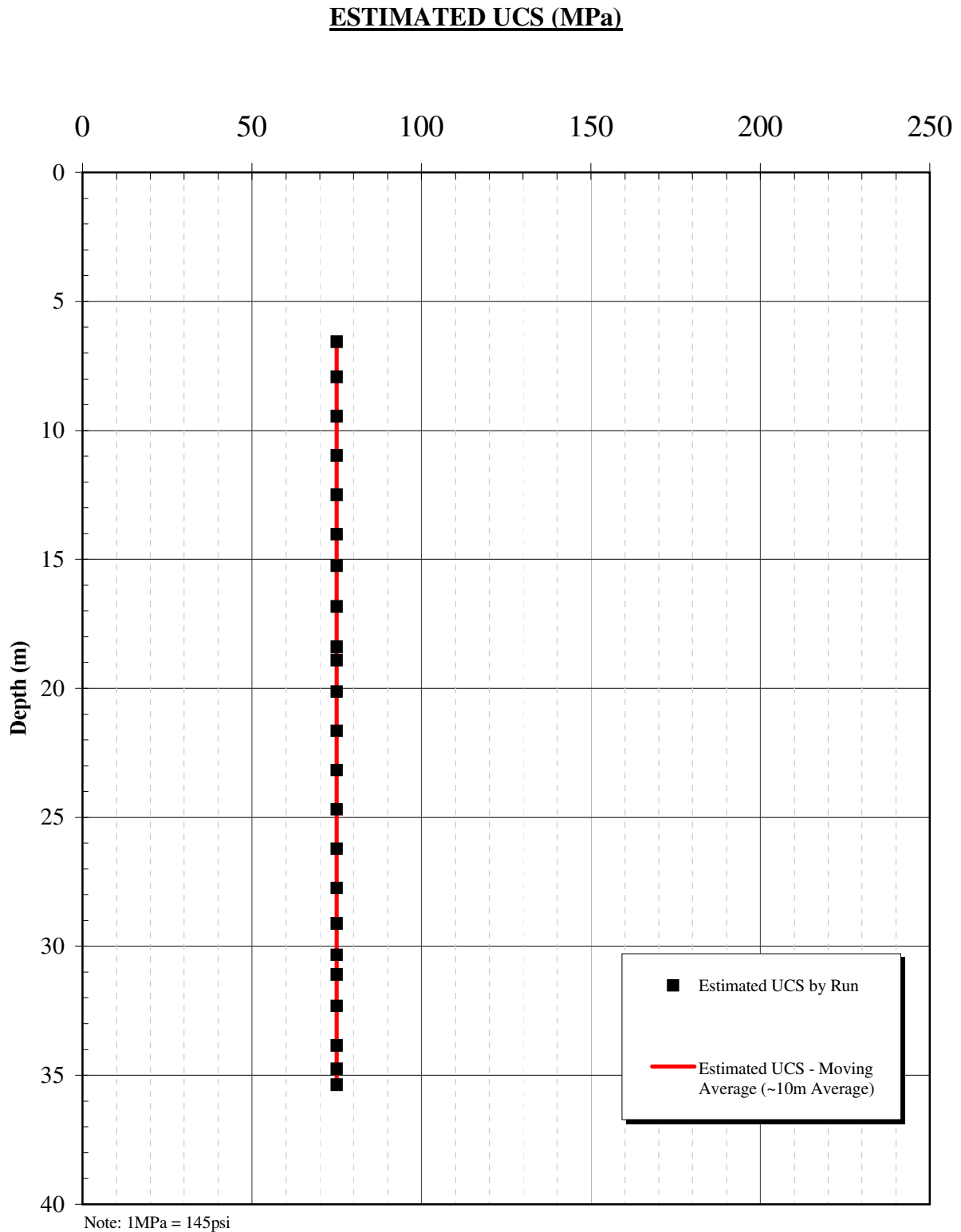
DRILLHOLE DH06-3

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-10

REV.
0



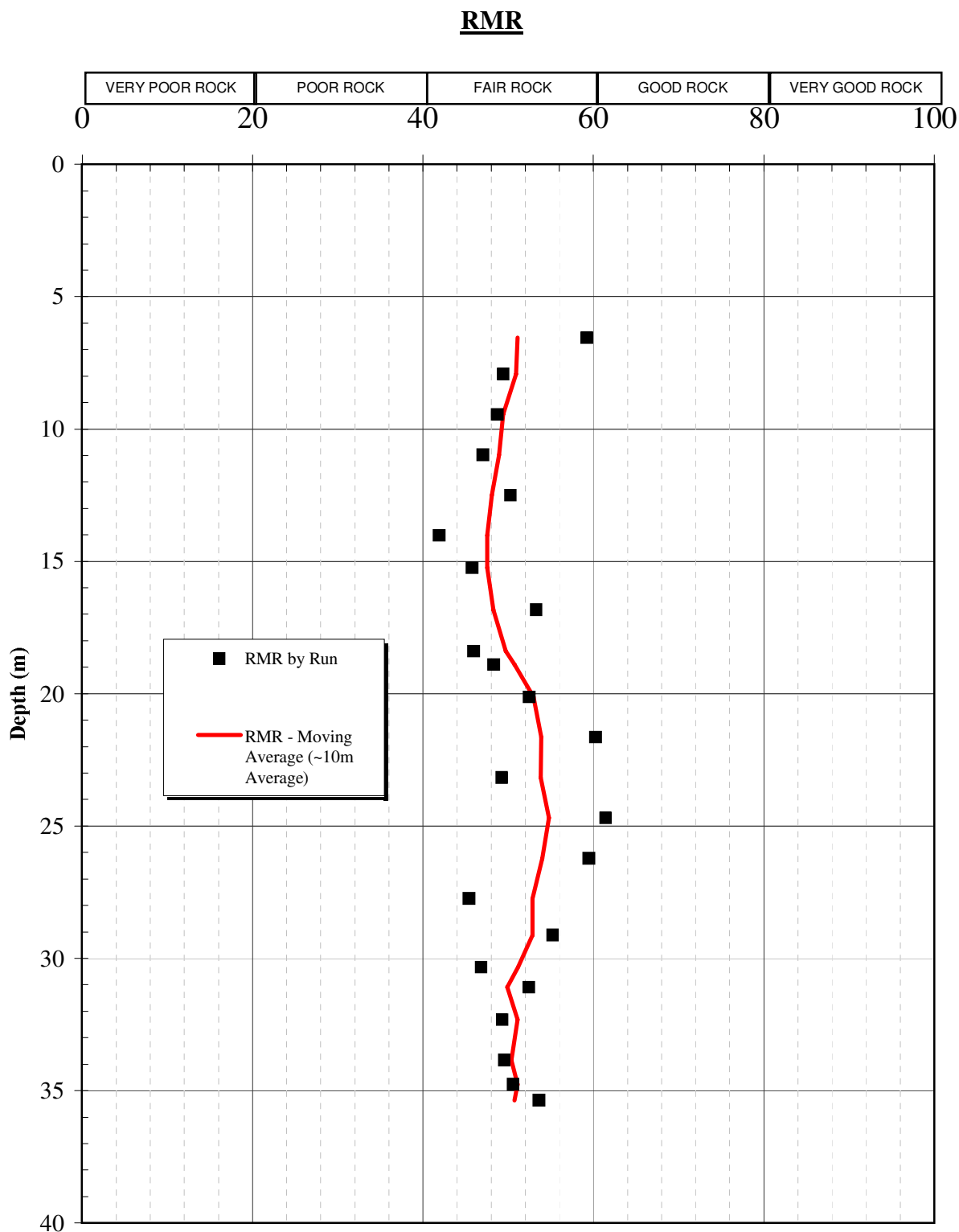
Rev. 0 - Issued for Report

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-11

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-3

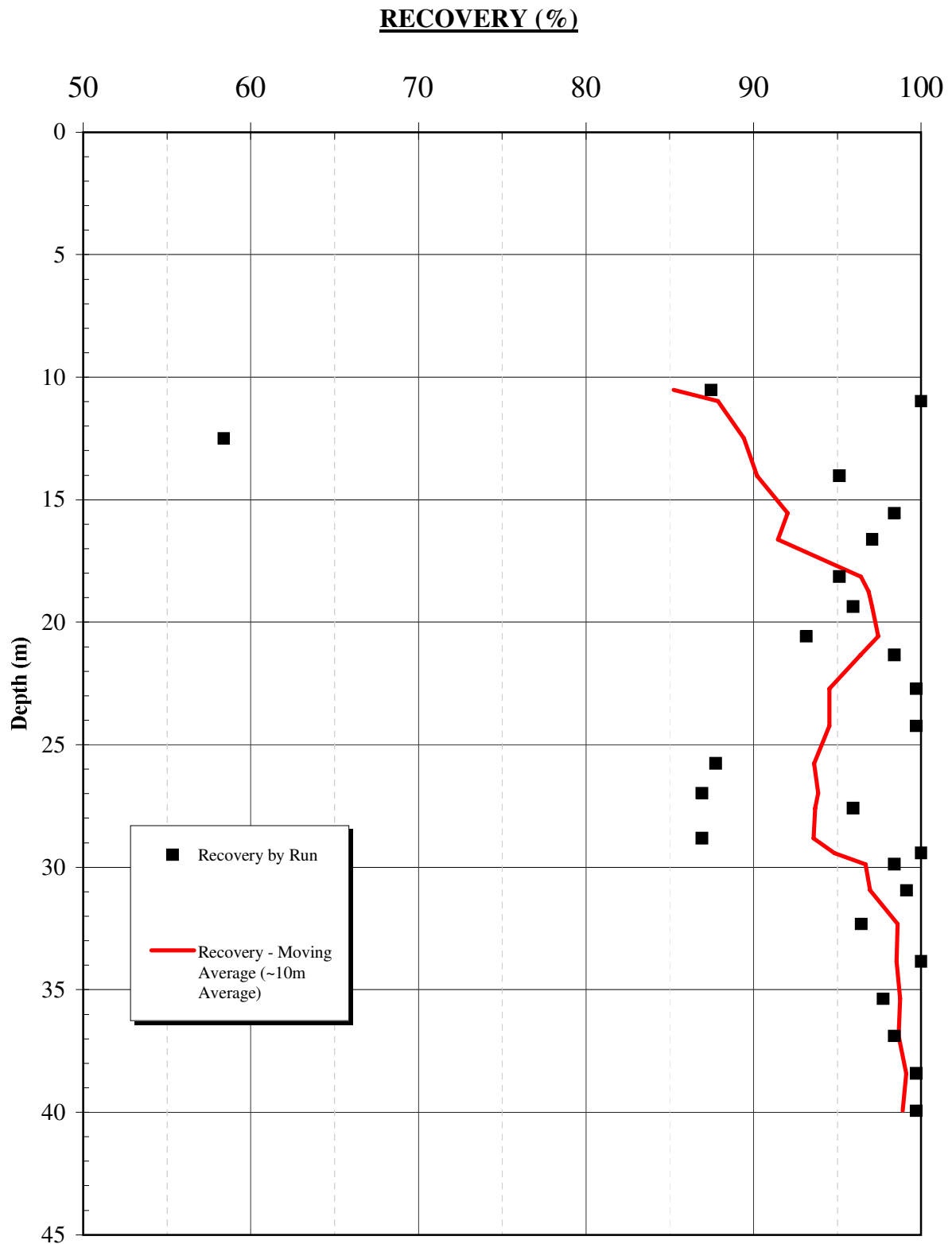
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-12

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

DRILLHOLE DH06-4

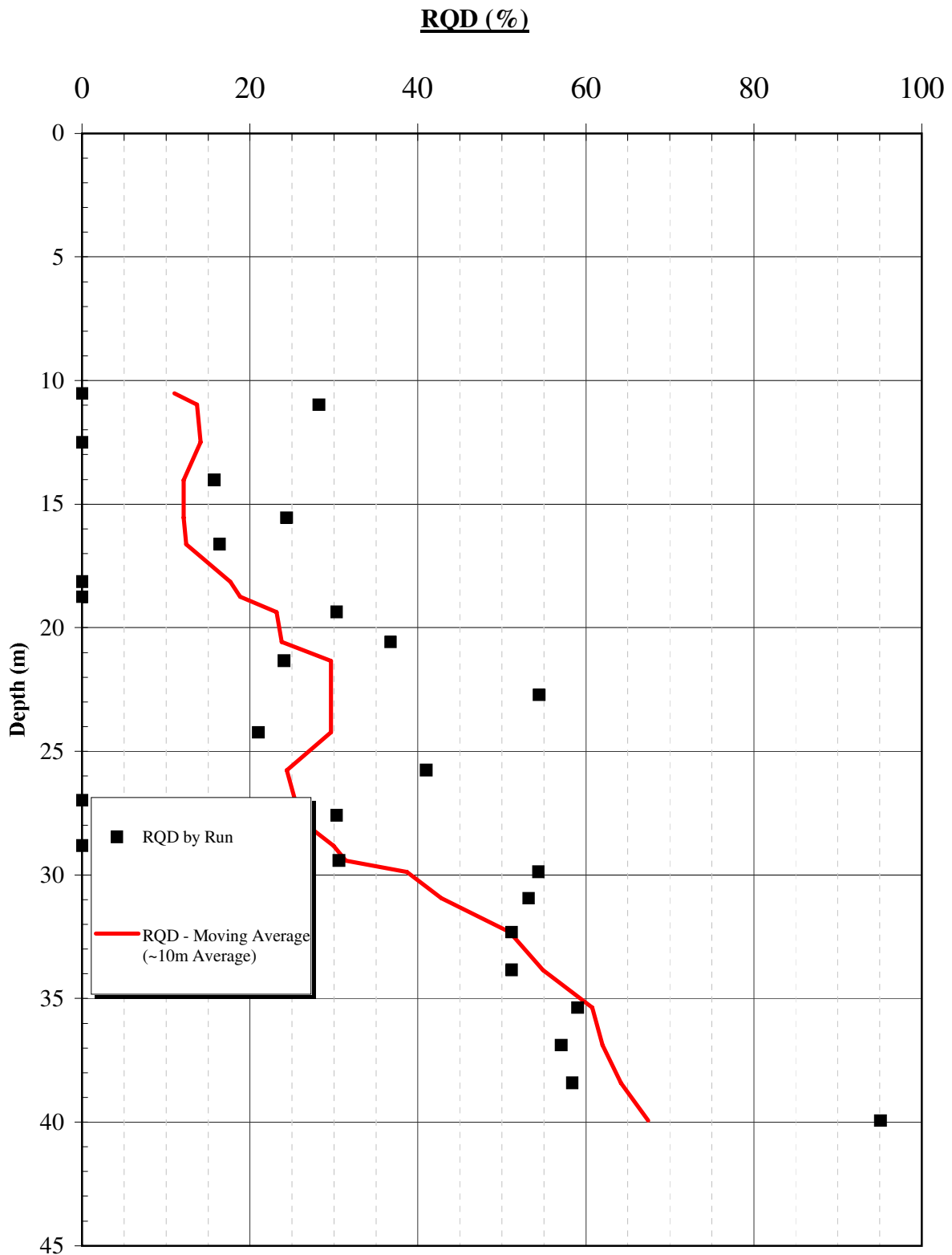
Knight Piésold
CONSULTING

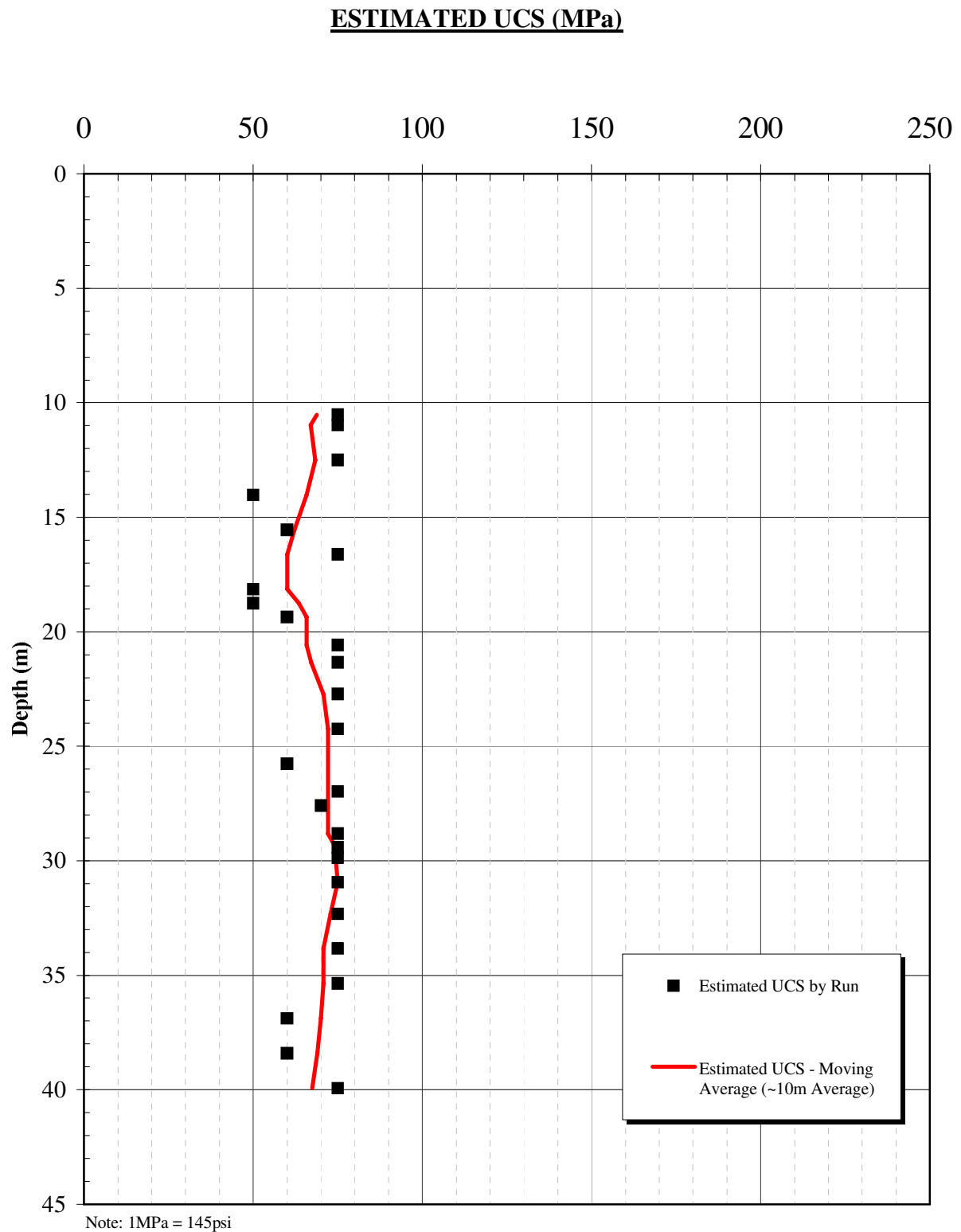
PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-13

REV.
0

Rev 0 - Issued for Report





PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

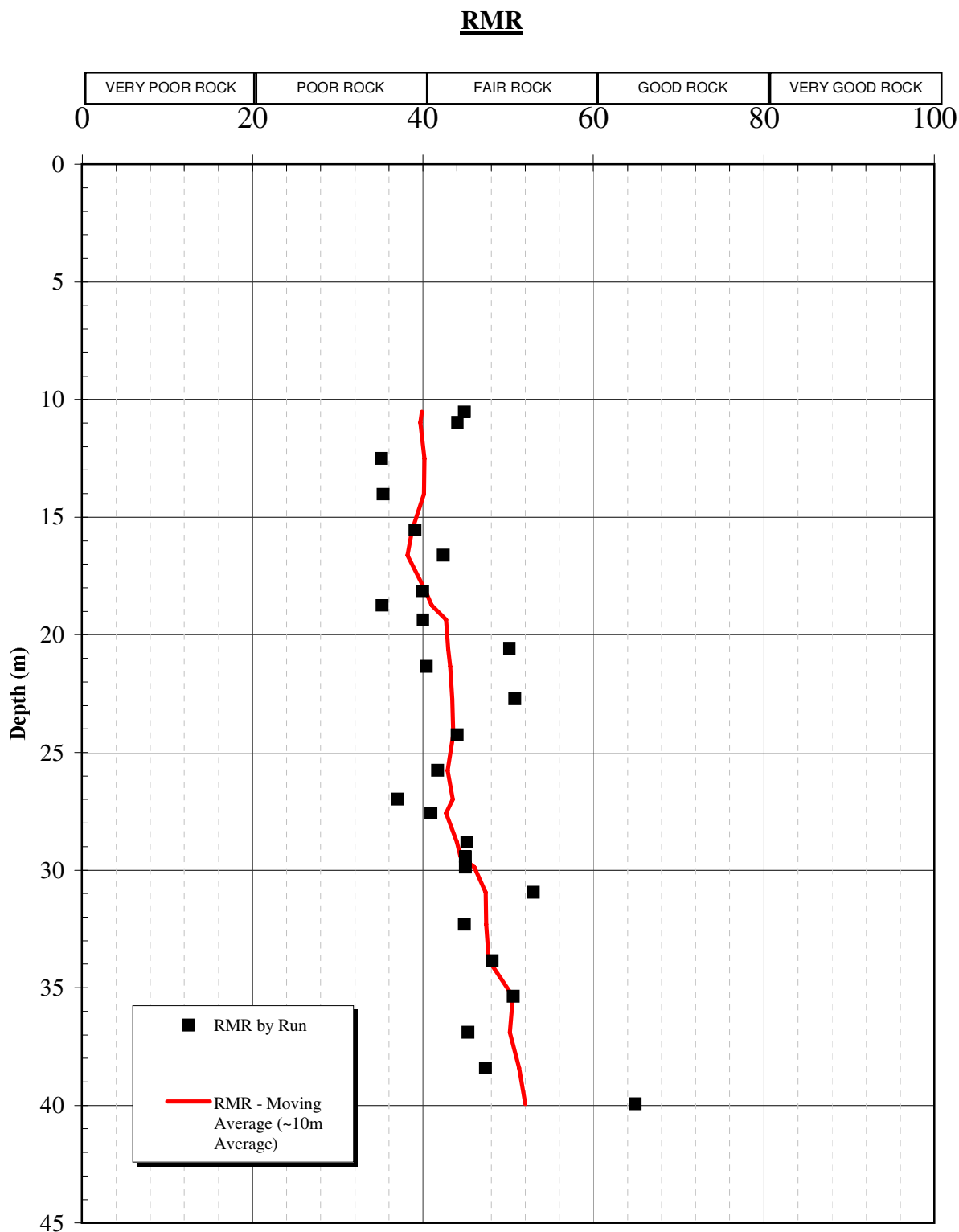
DRILLHOLE DH06-4

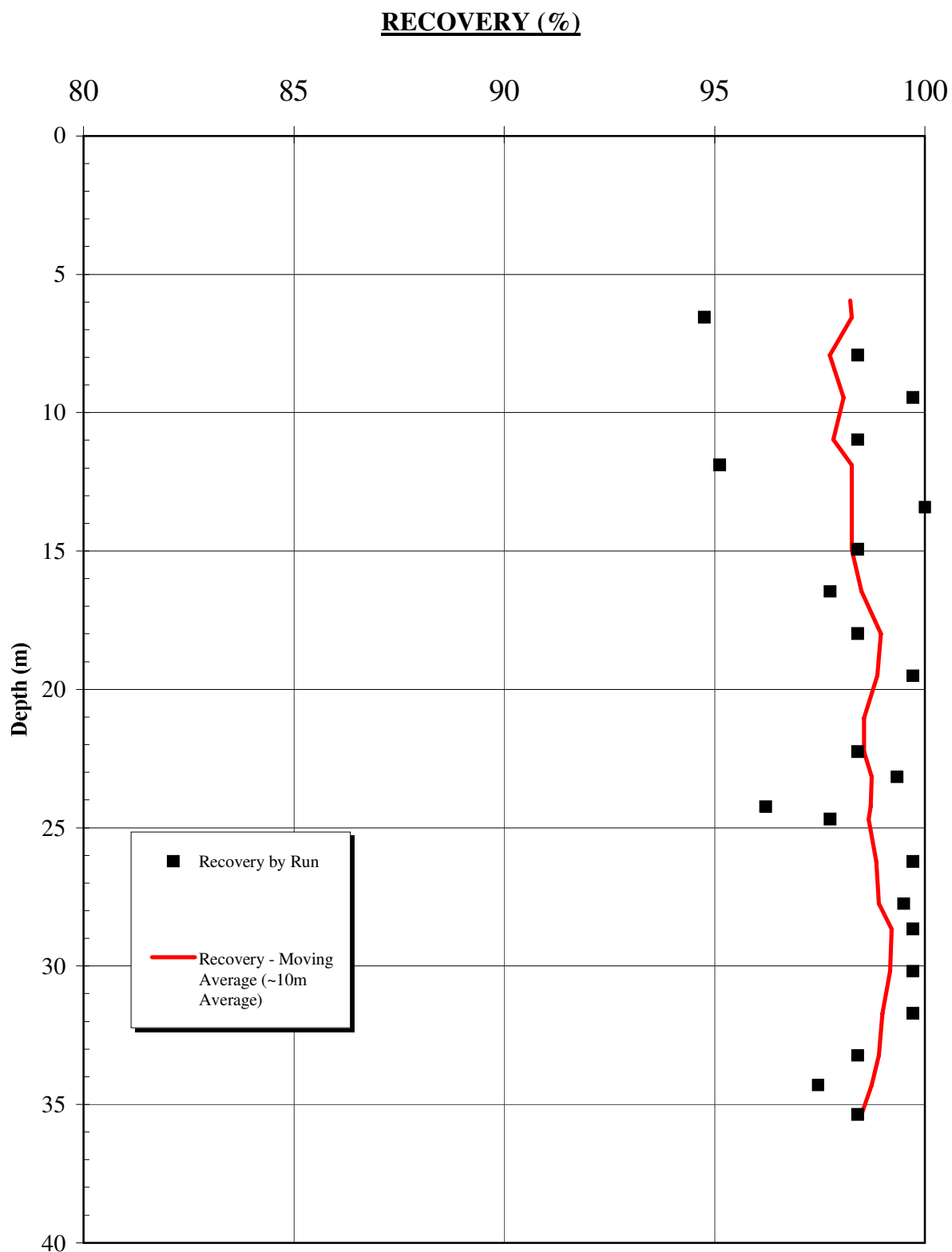
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-15

REV.
0





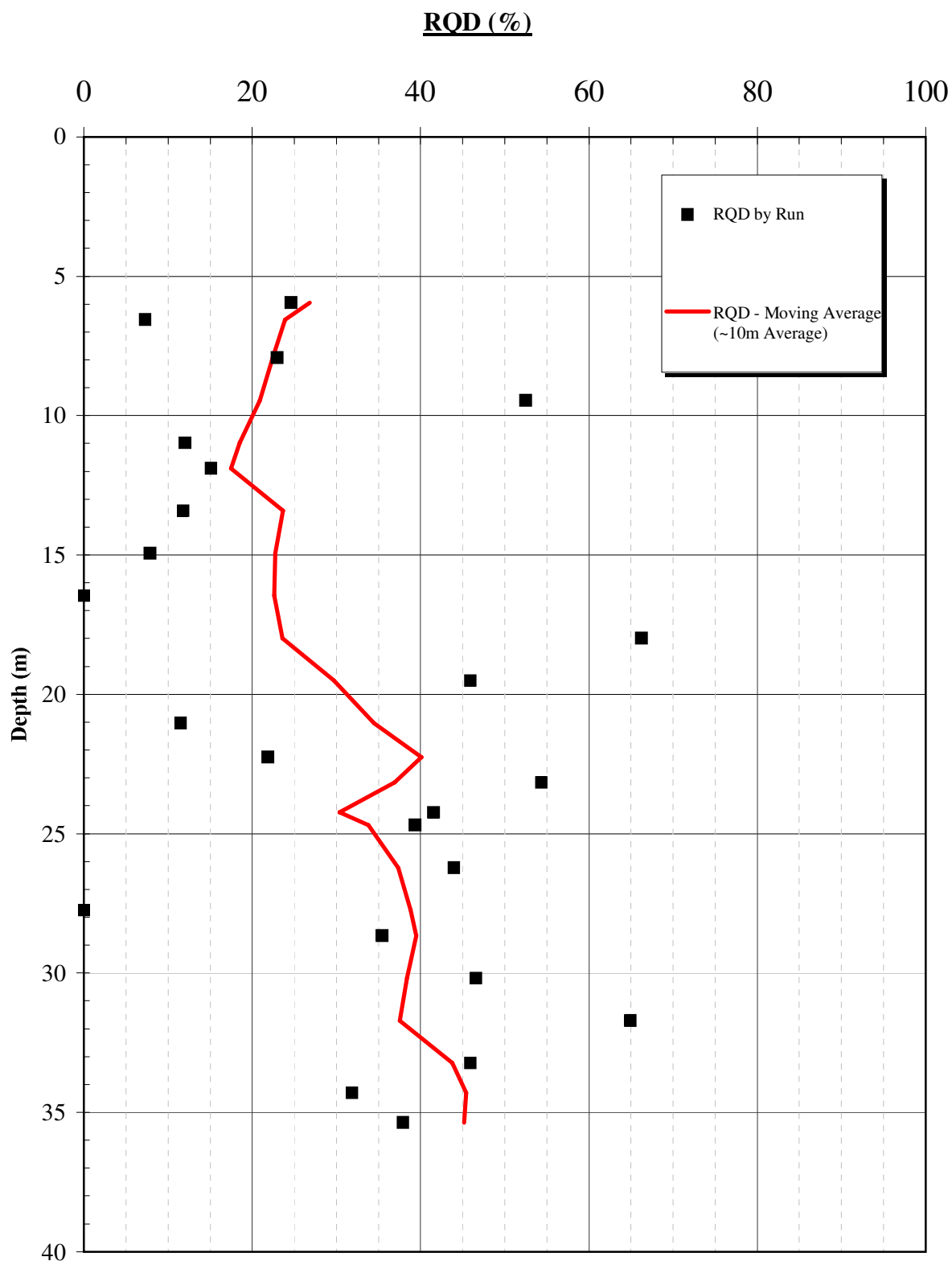
PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION
RECOVERY VS. DEPTH
DRILLHOLE DH06-6

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-17**REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-6

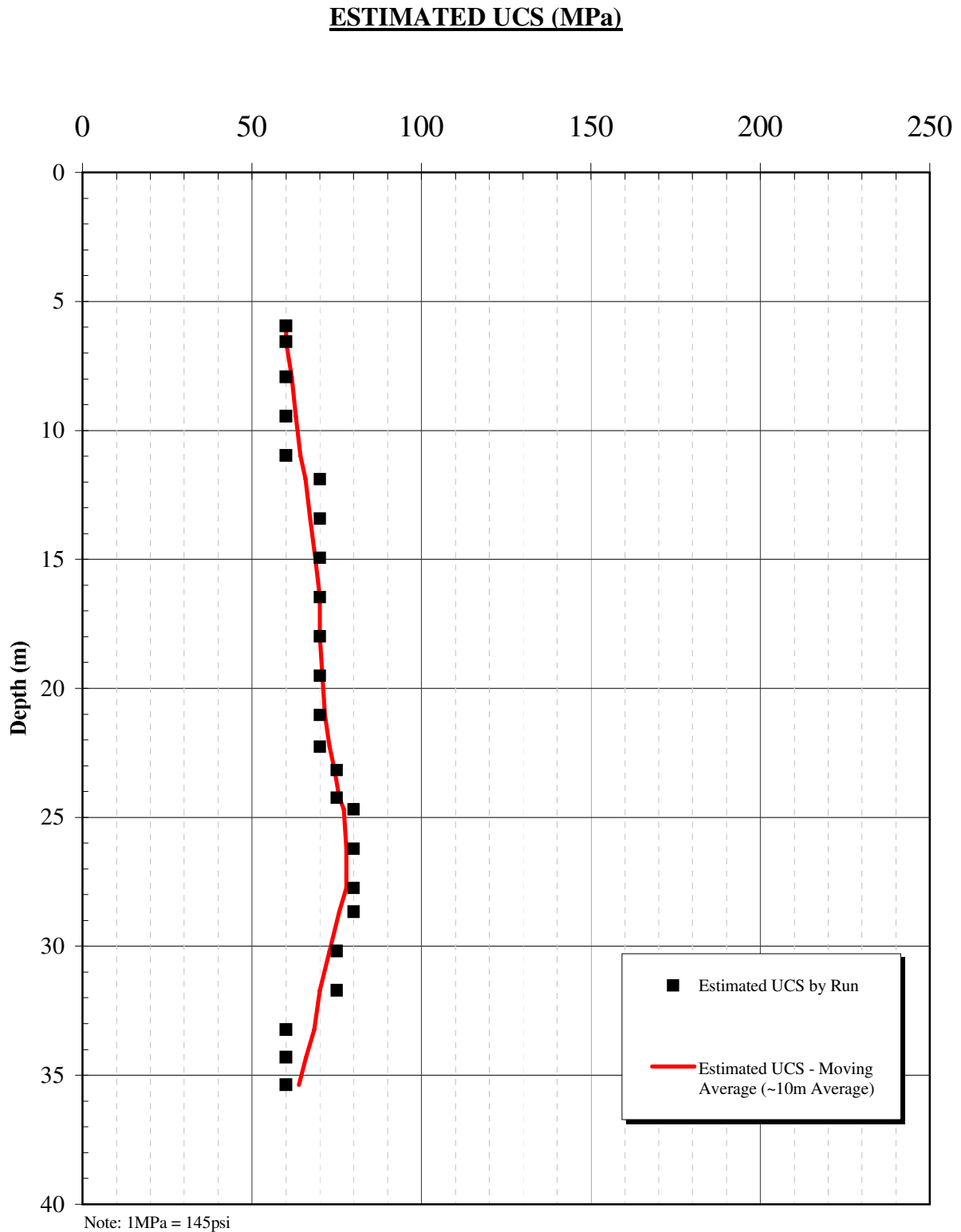
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-18

REV.
0

Rev 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

DRILLHOLE DH06-6

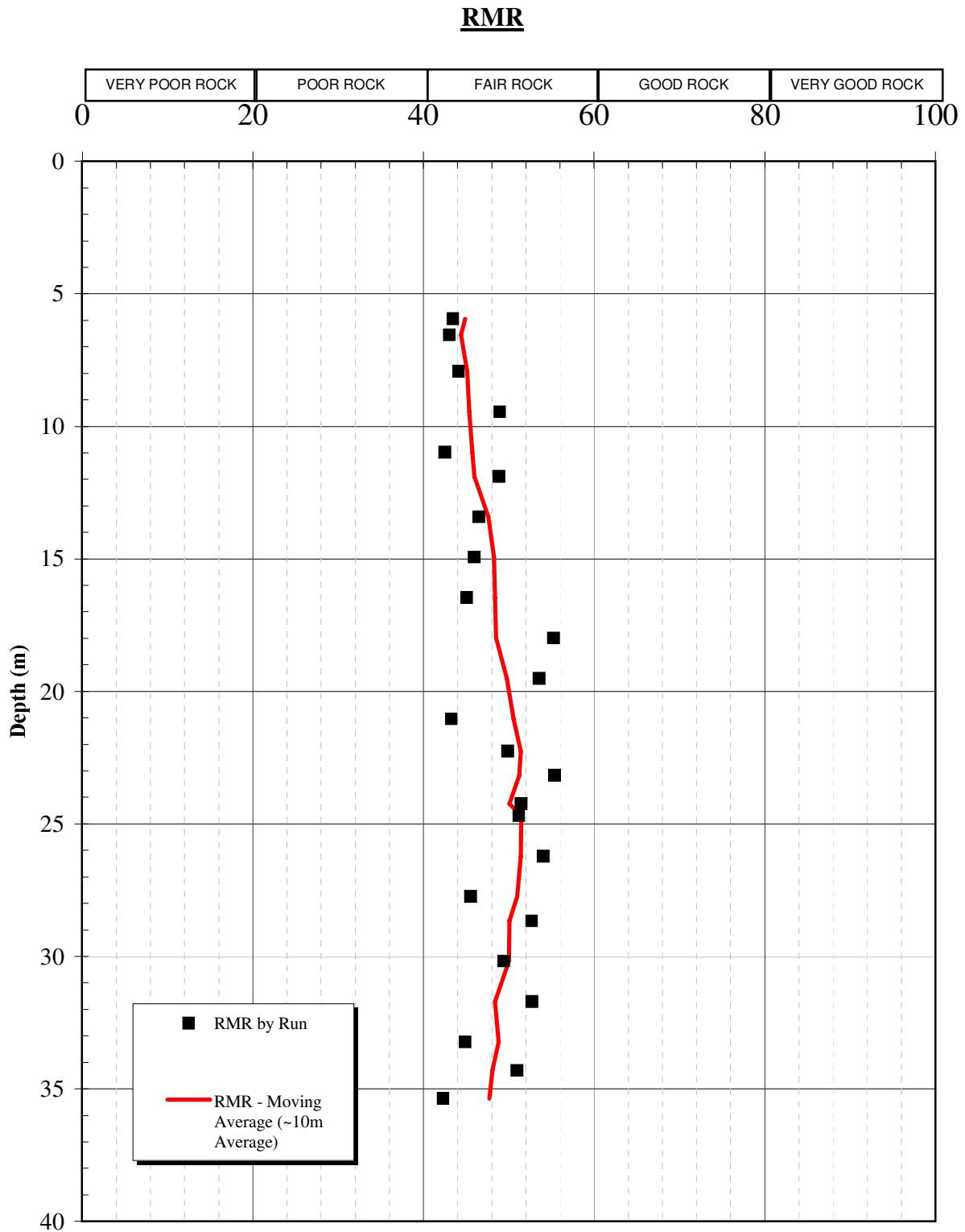
Knight Piésold
CONSULTING

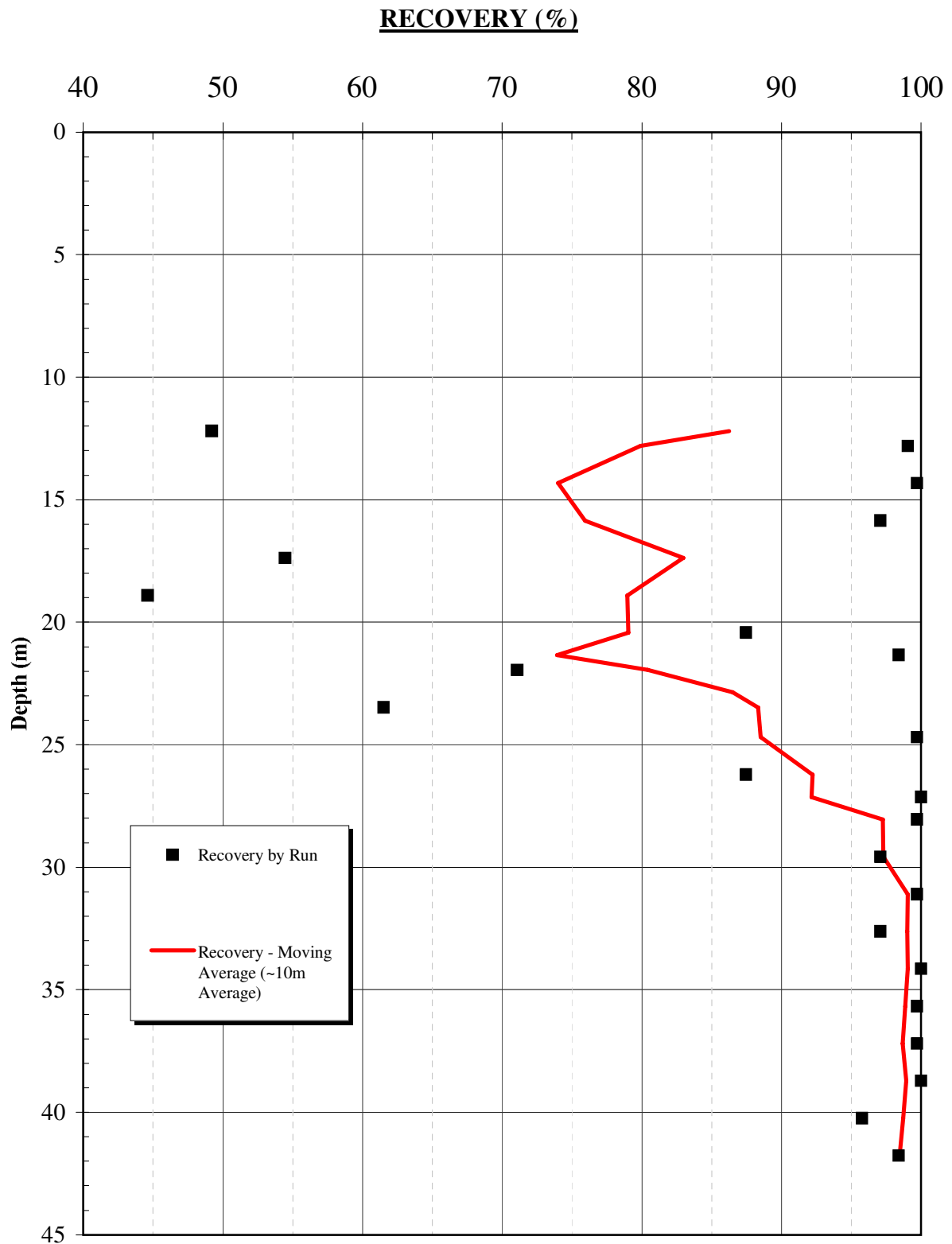
PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-19

REV.
0

Rev. 0 - Issued for Report





PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

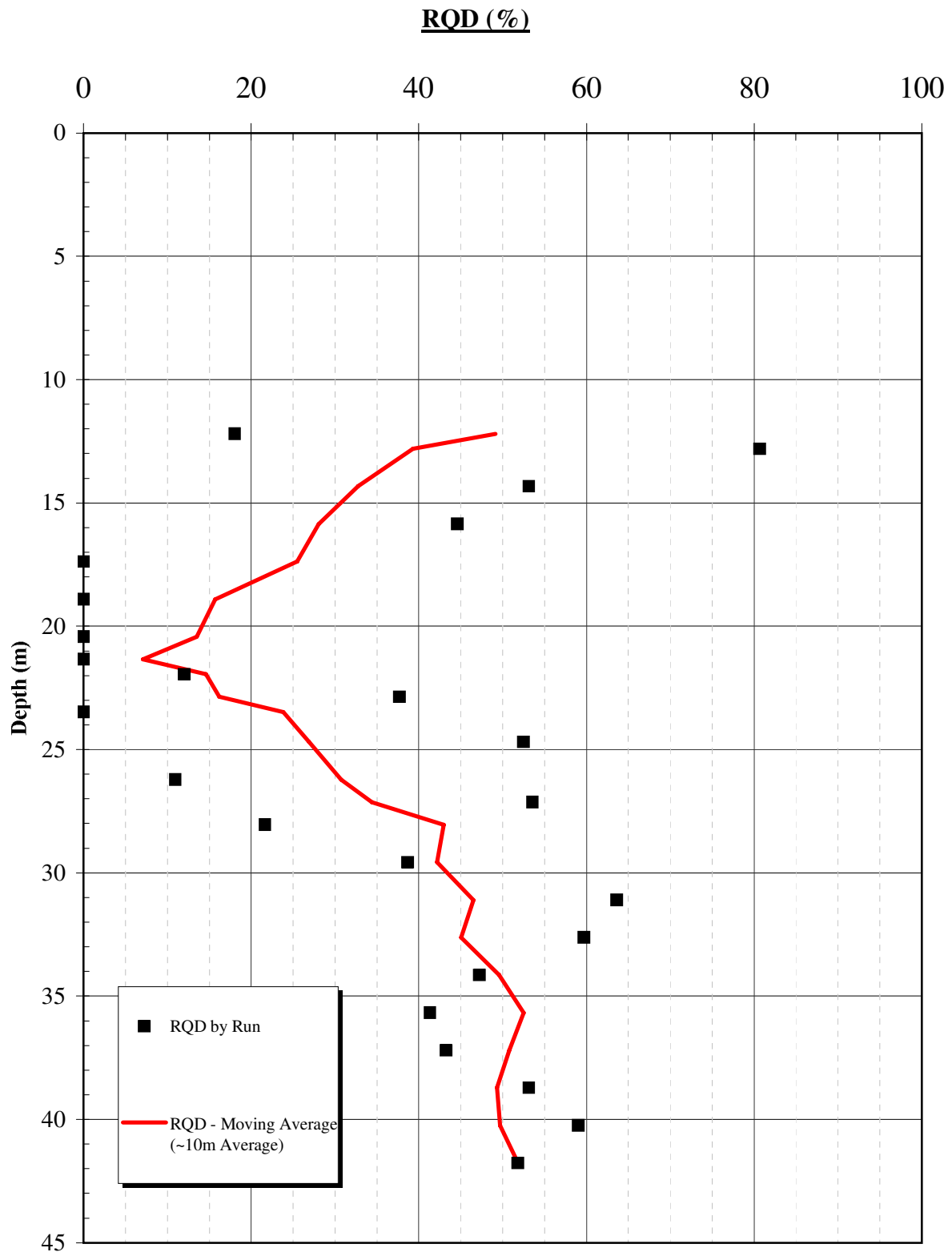
DRILLHOLE DH06-7

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-21

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

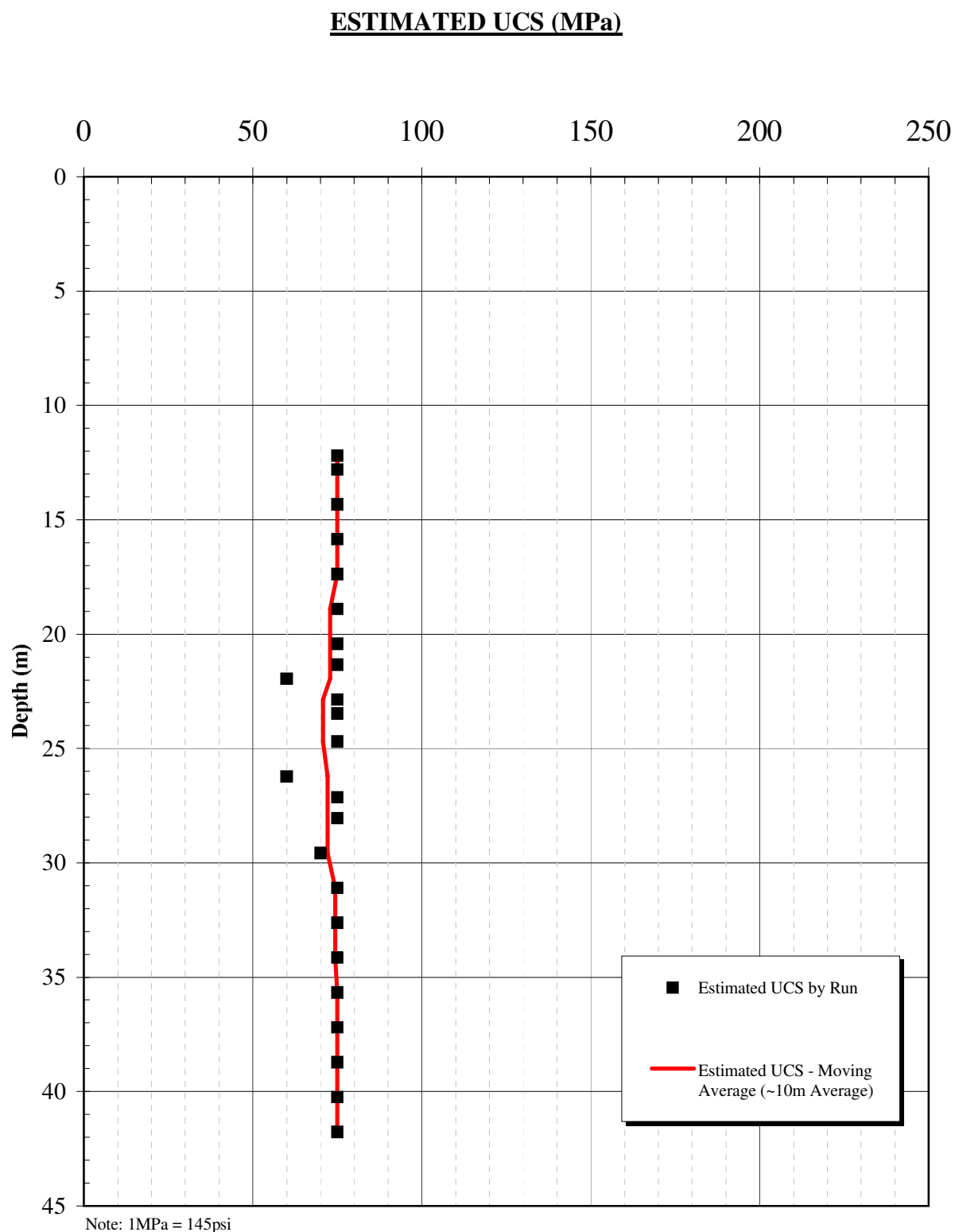
DRILLHOLE DH06-7

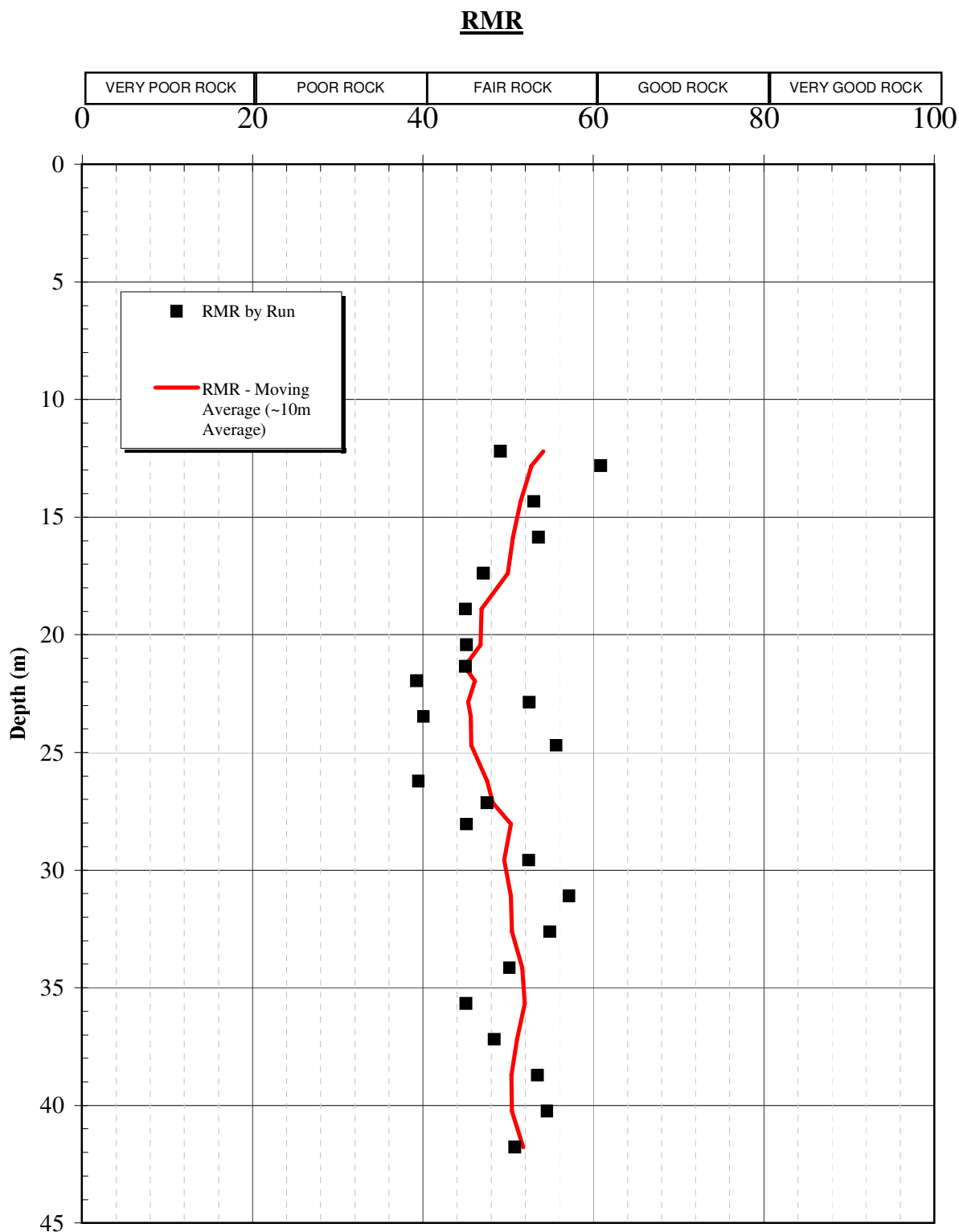
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-22

REV.
0





PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

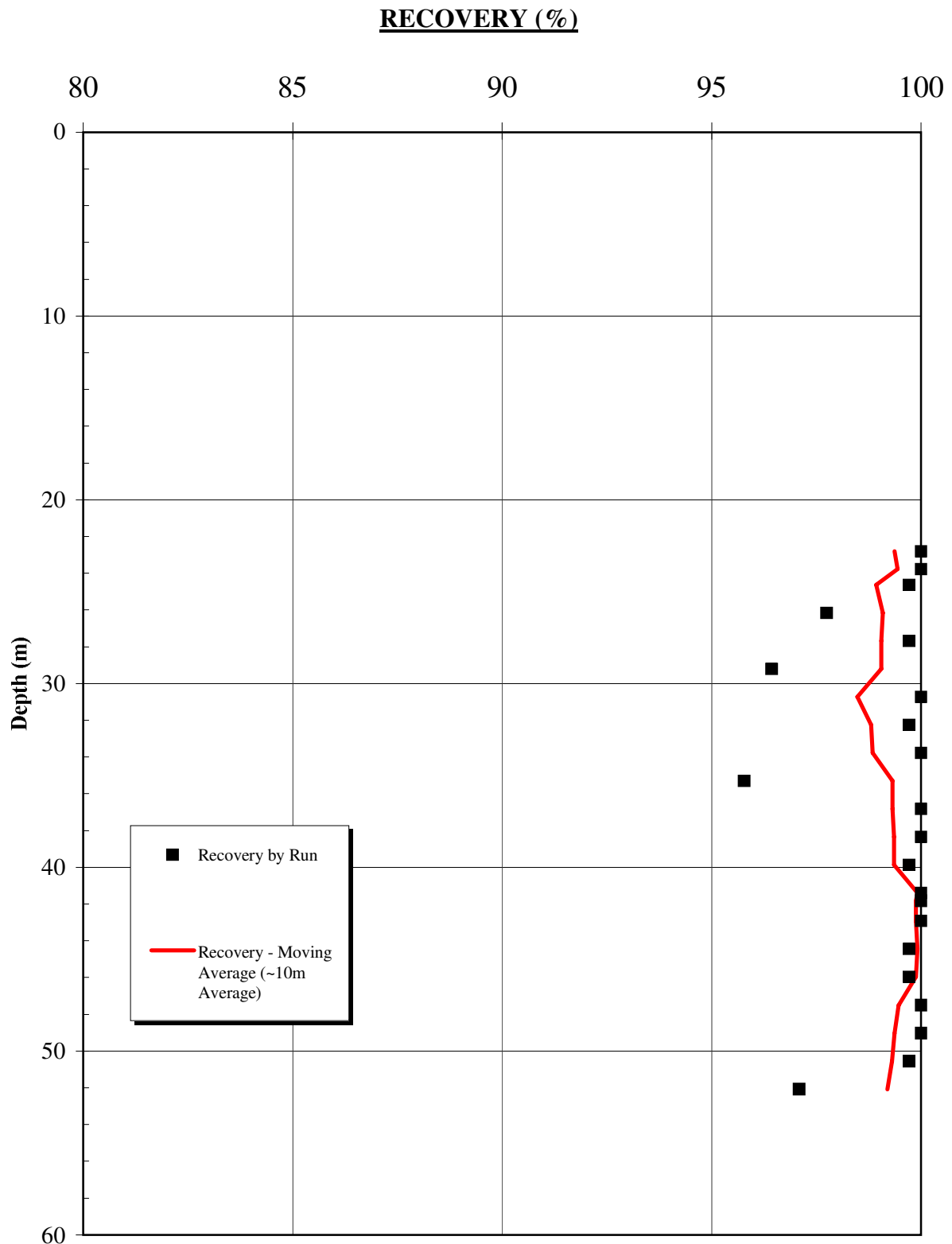
DRILLHOLE DH06-7

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-24

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

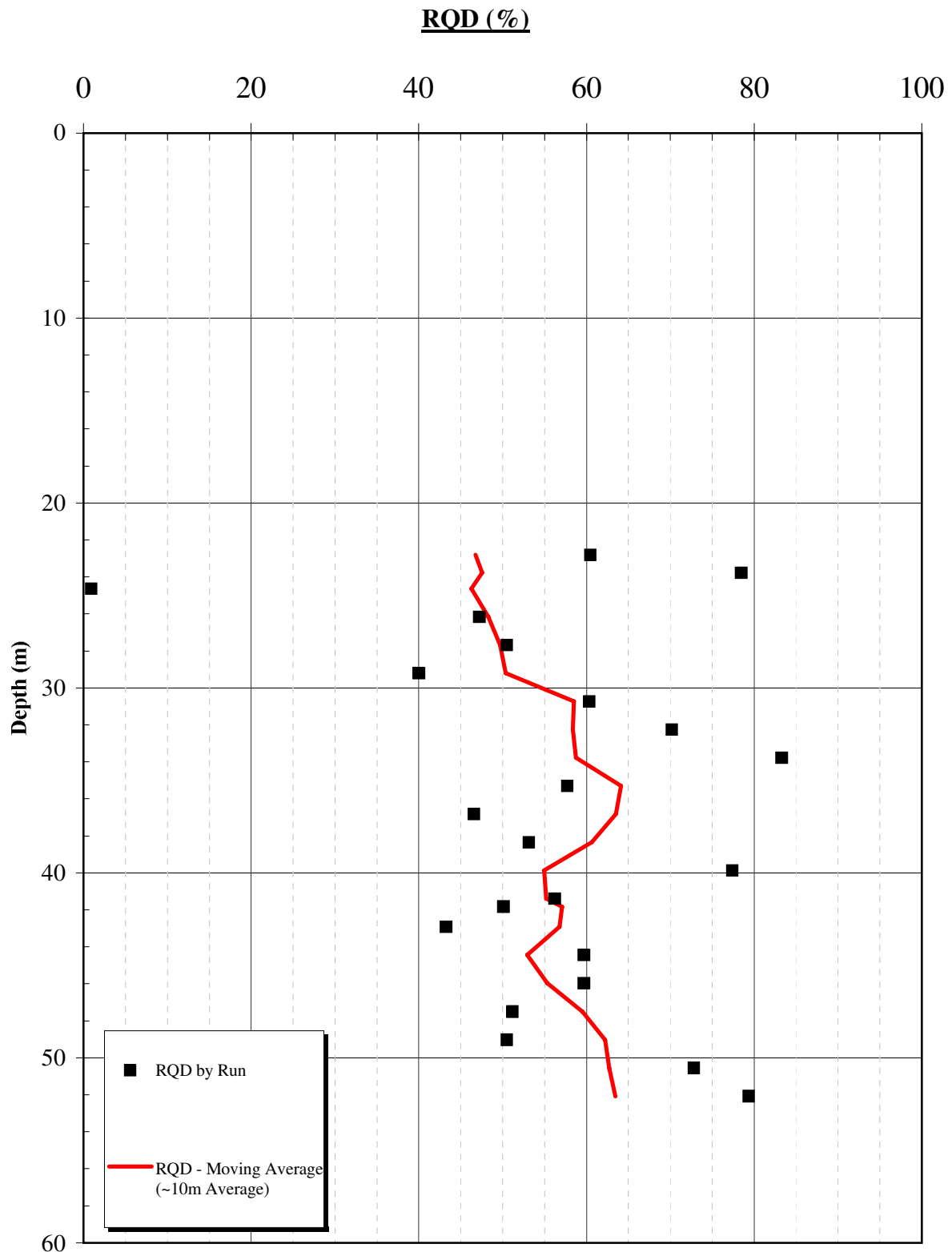
DRILLHOLE DH06-10

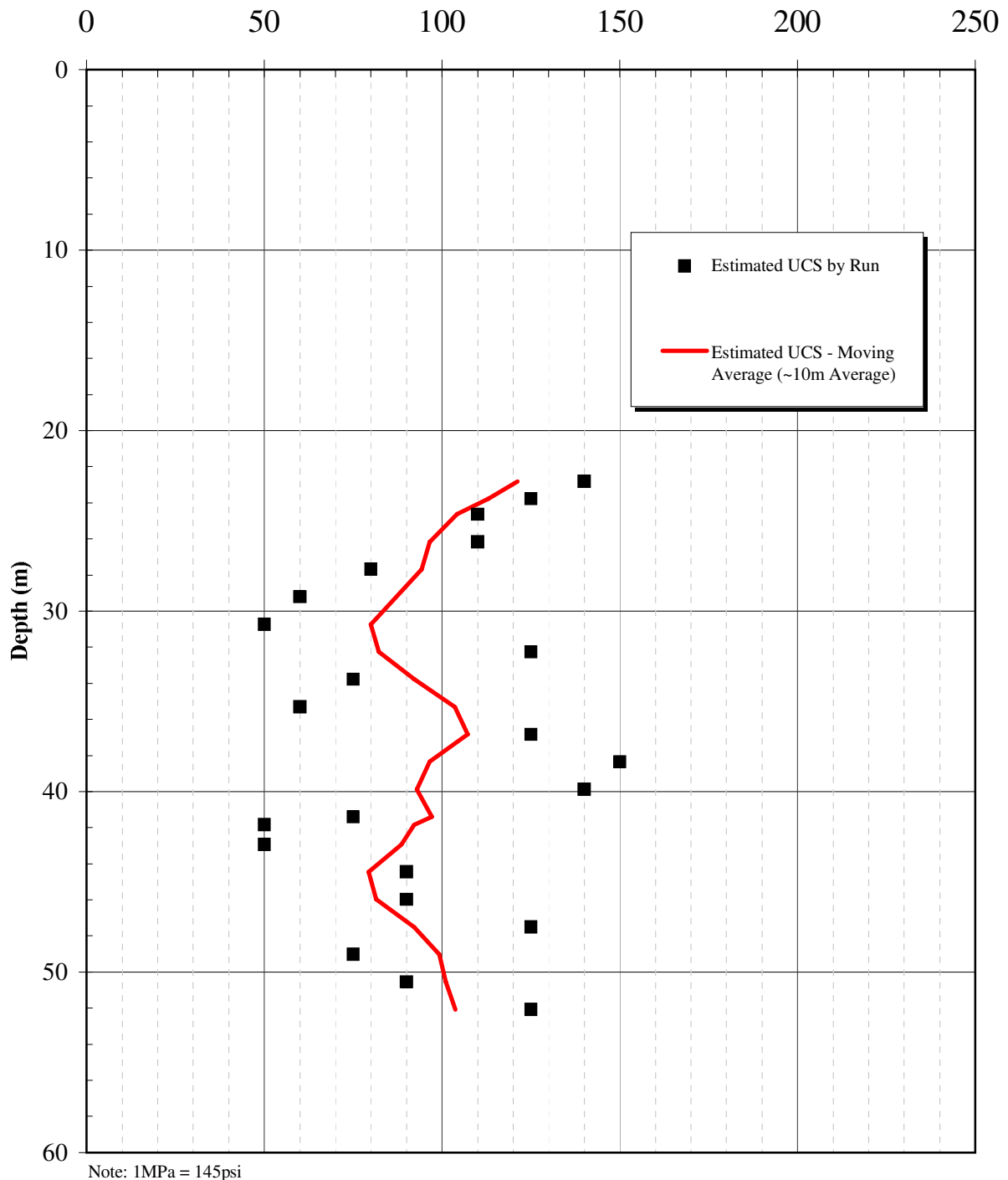
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

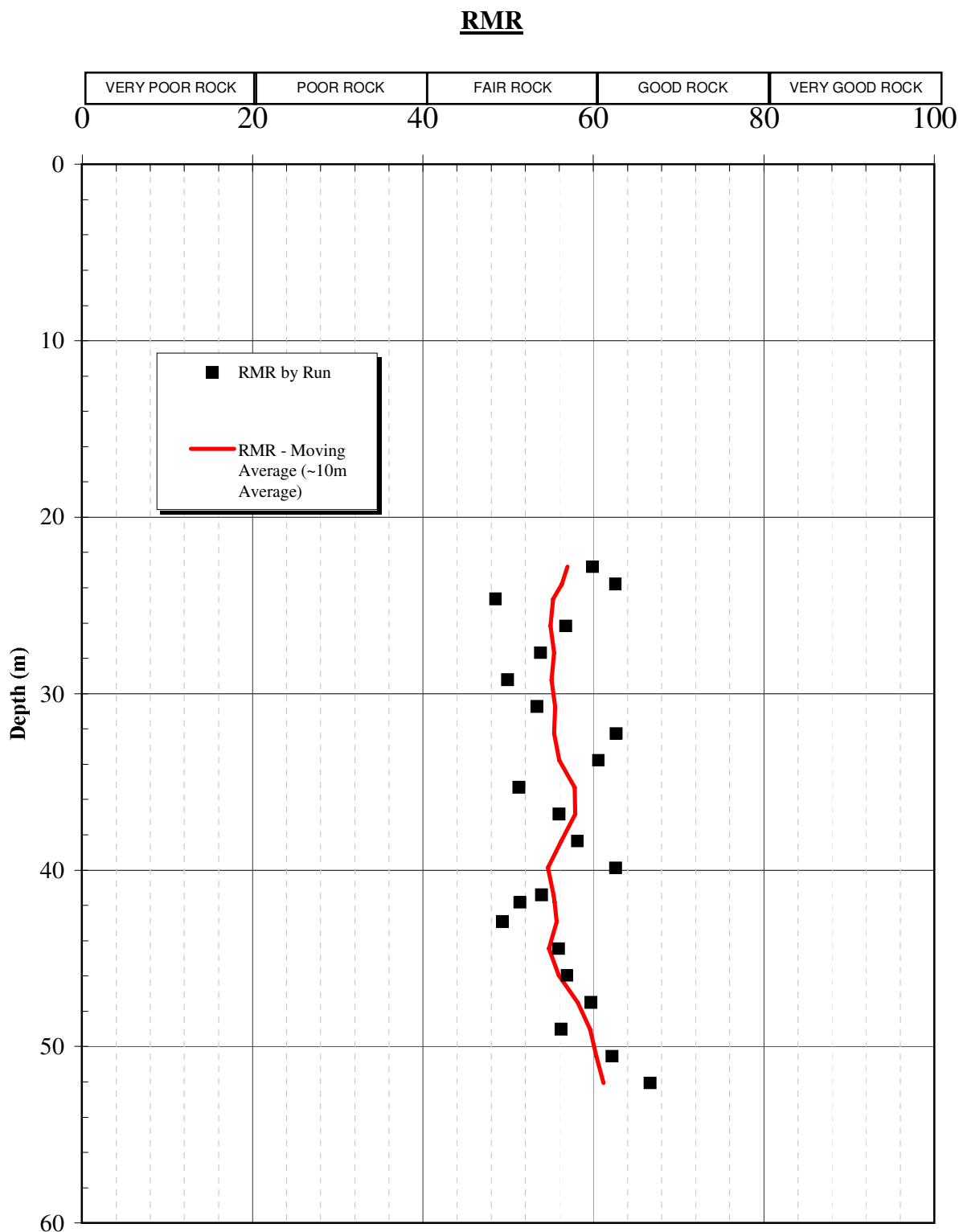
FIGURE A3-25

REV.
0



ESTIMATED UCS (MPa)

PACIFIC BOOKER MINERALS INC.
 MORRISON COPPER GOLD PROJECT
 GEOTECHNICAL SITE INVESTIGATION
 ESTIMATED UCS VS. DEPTH
 DRILLHOLE DH06-10



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-10

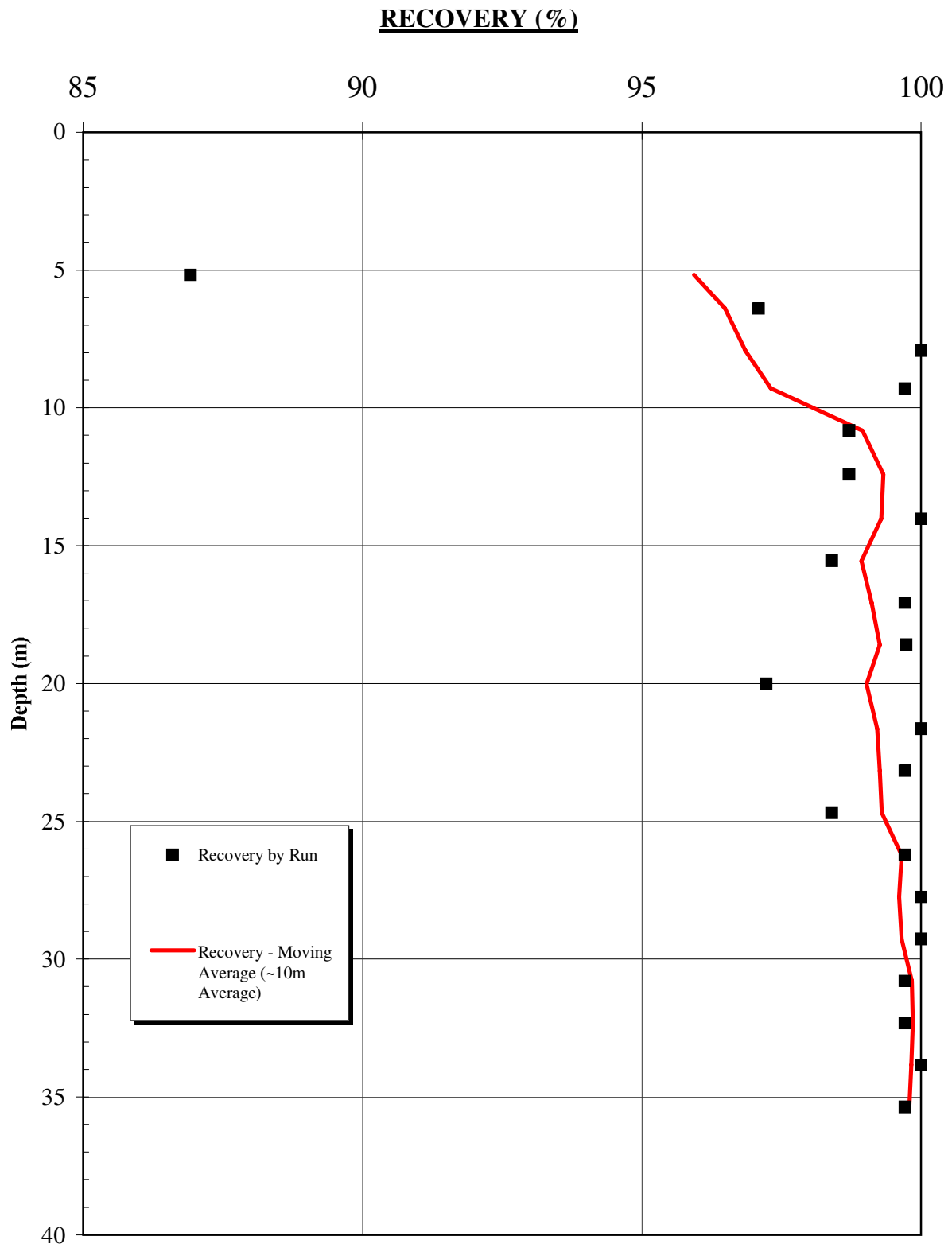
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-28

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

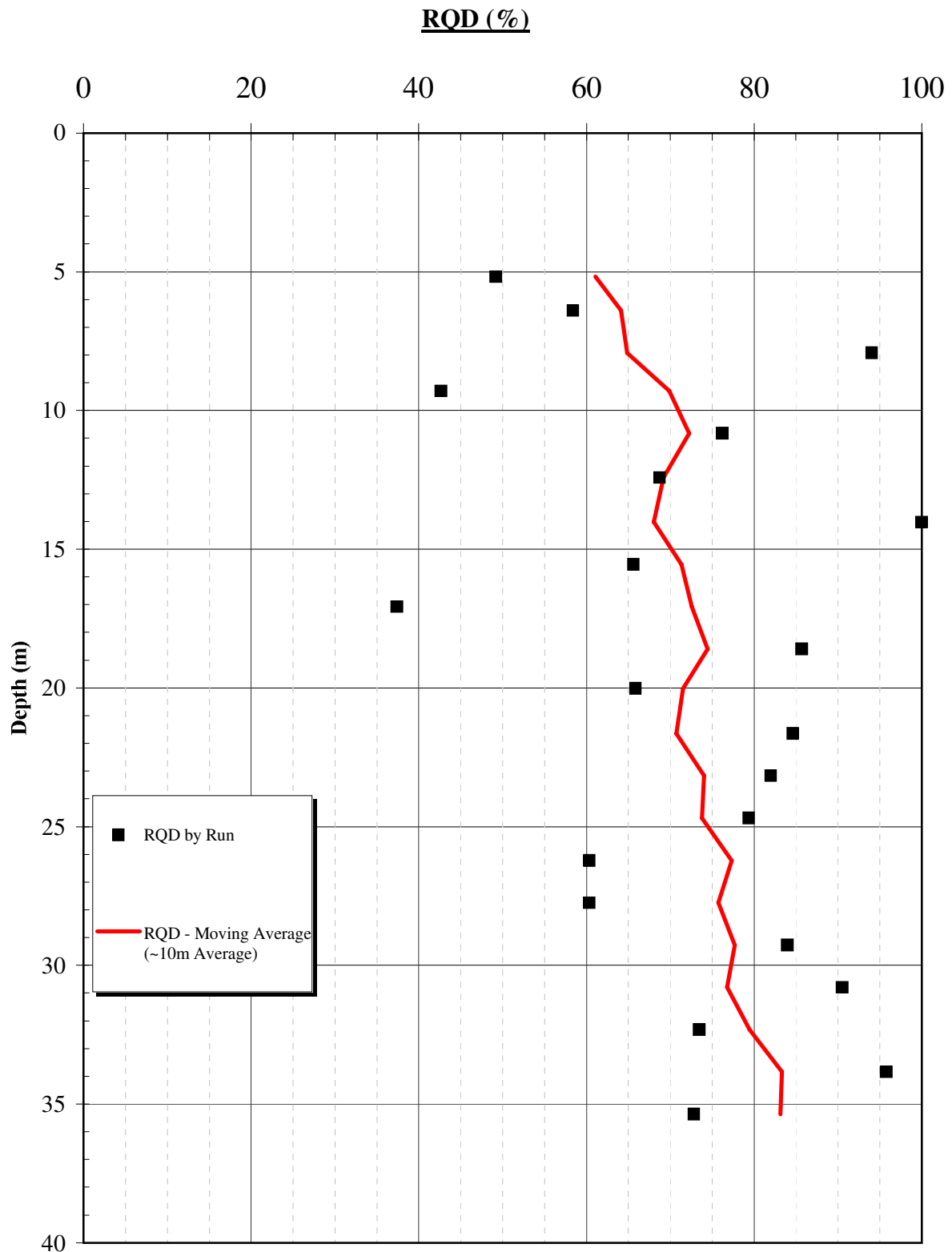
DRILLHOLE DH06-11

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-29

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-11

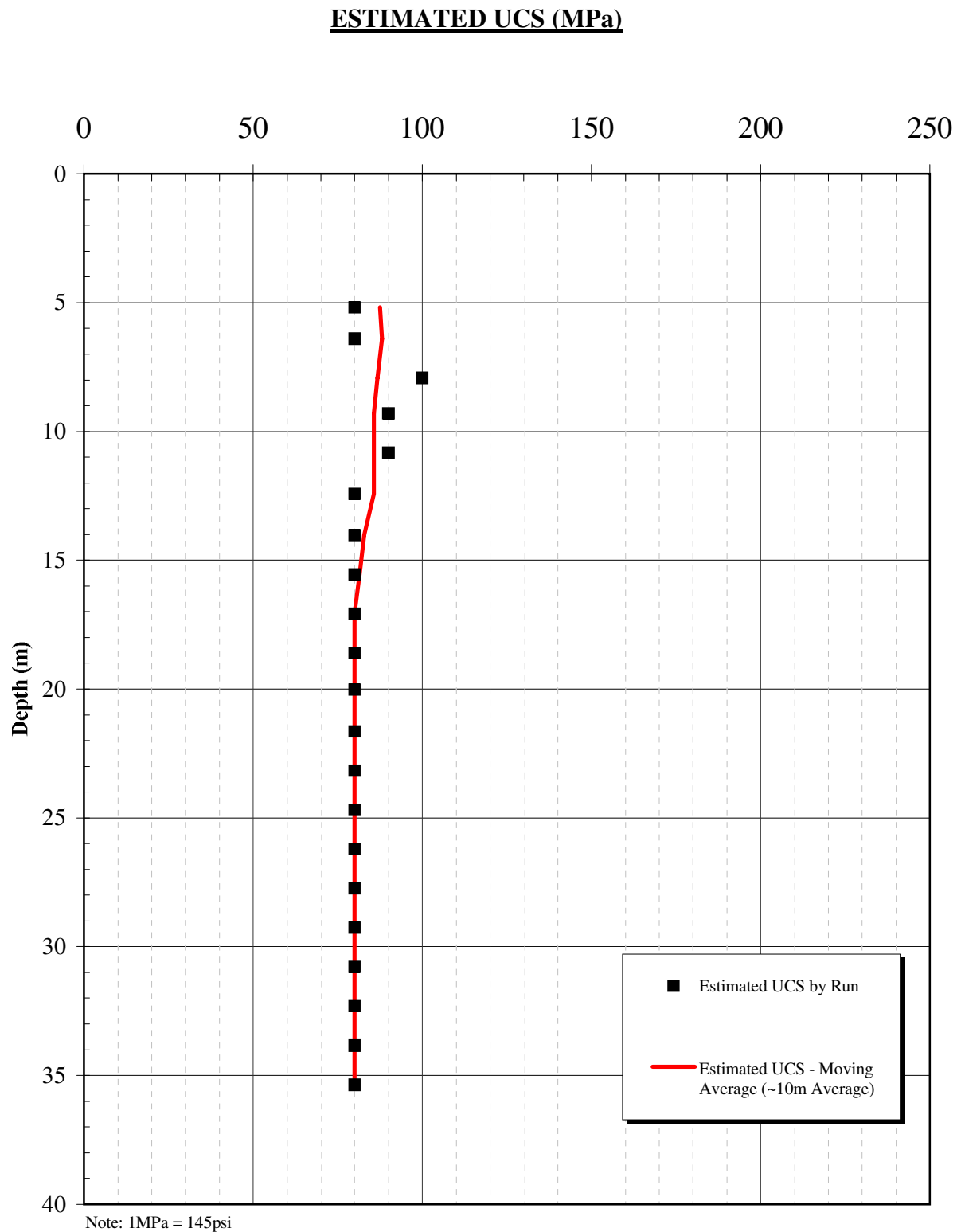
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-30

REV.
0

Rev 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

DRILLHOLE DH06-11

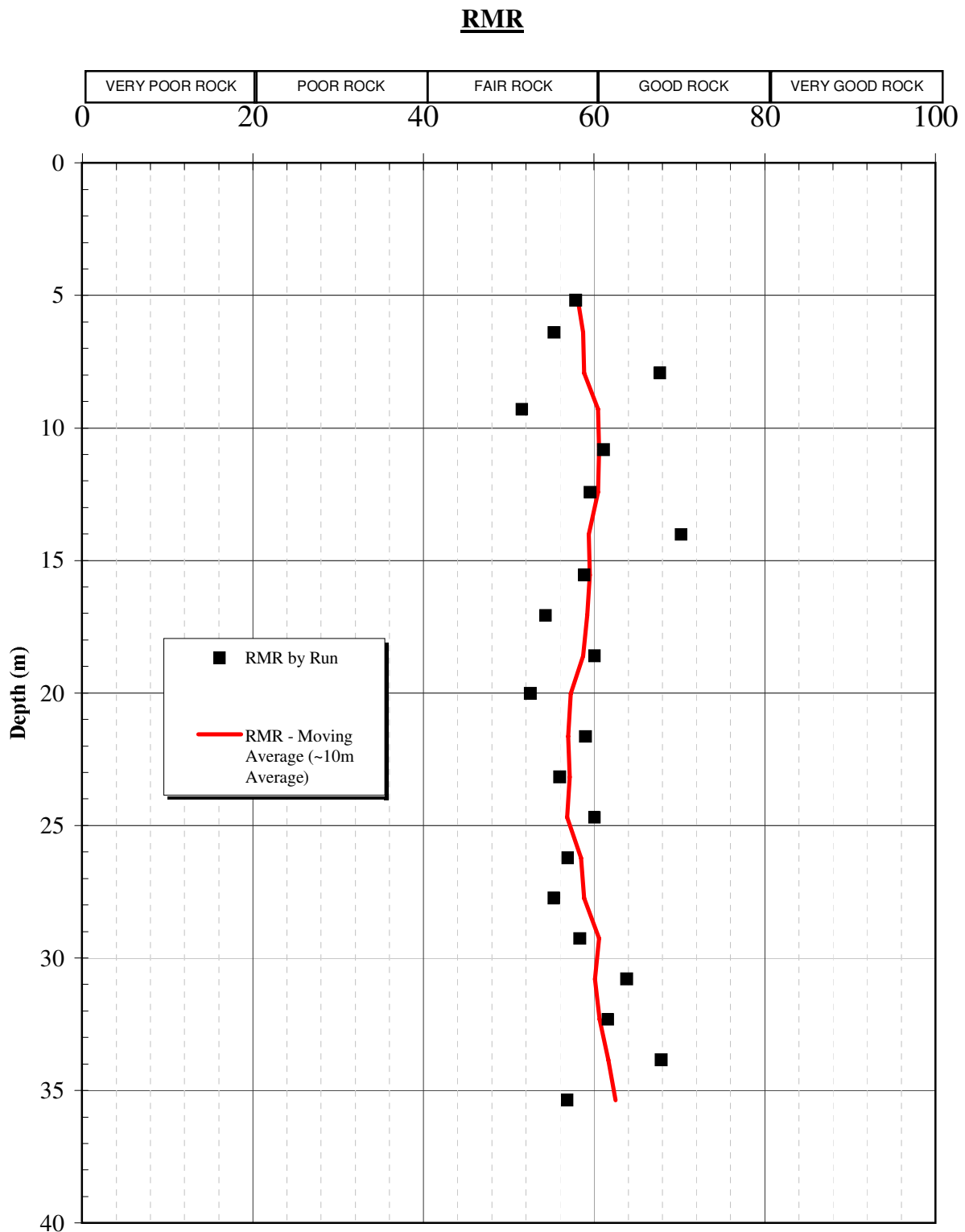
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-31

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-11

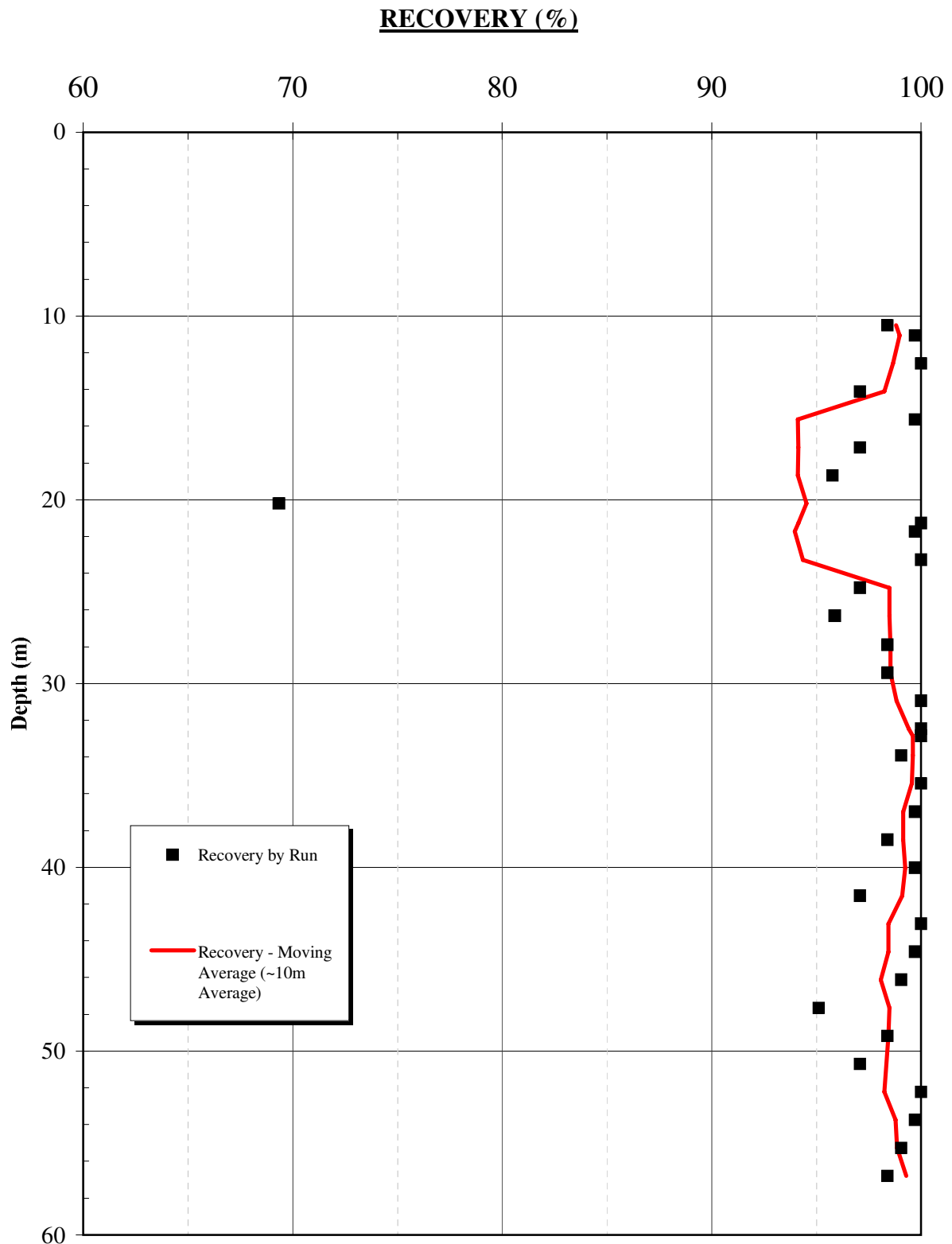
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-32

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RECOVERY VS. DEPTH

DRILLHOLE DH06-12

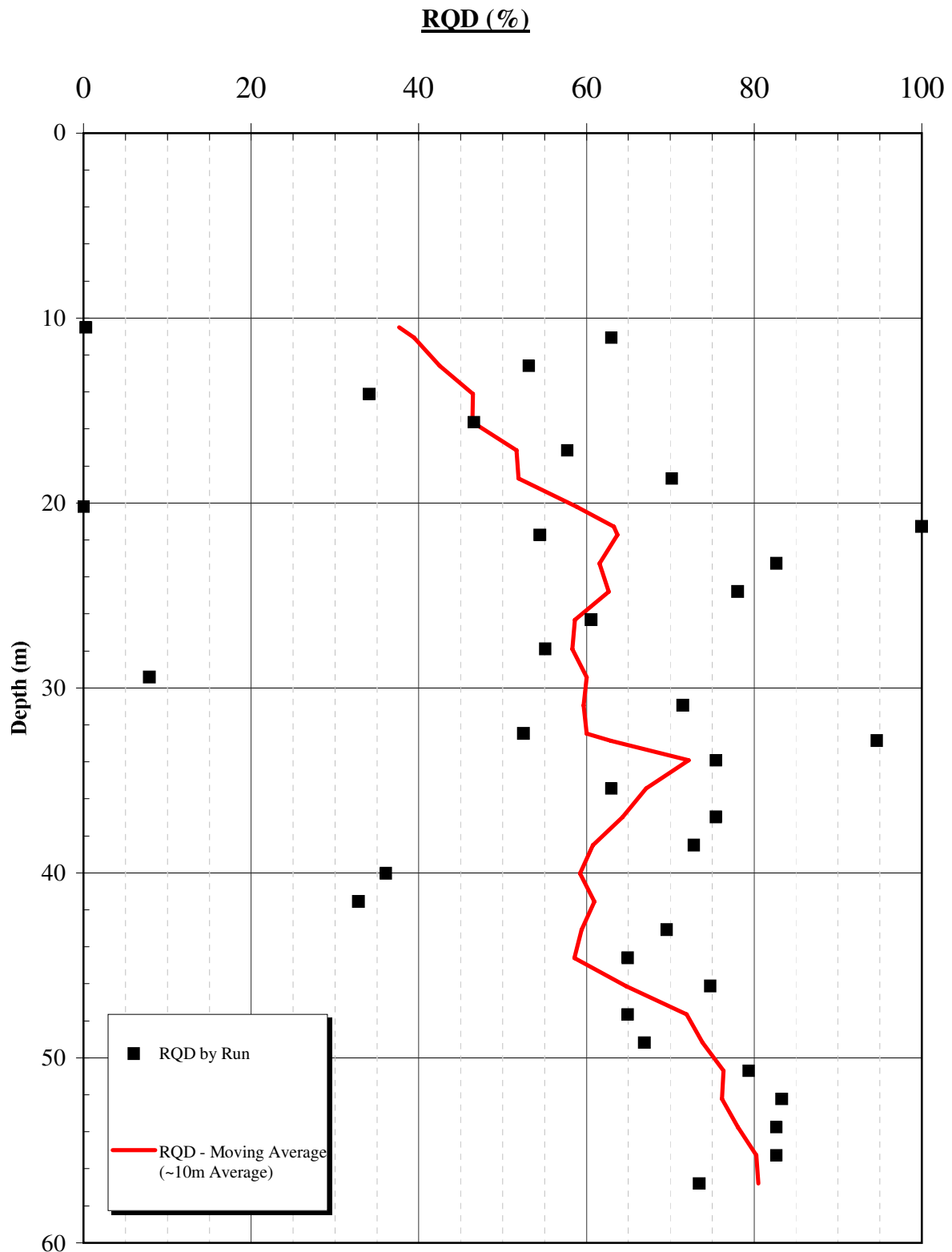
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-33

REV.
0

Rev 0 - Issued for Report



Rev 0 - Issued for Report

PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

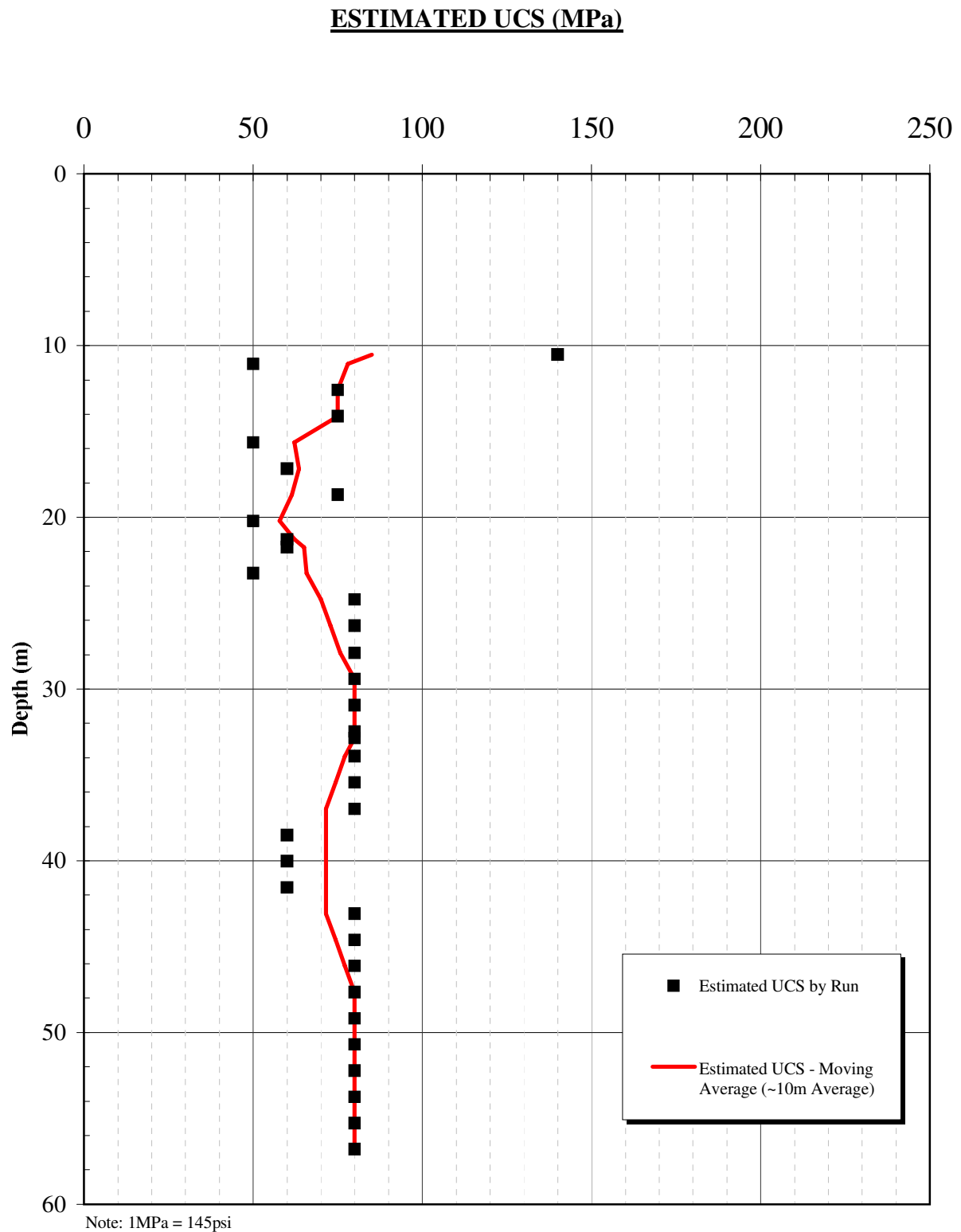
GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-12

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-34**REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

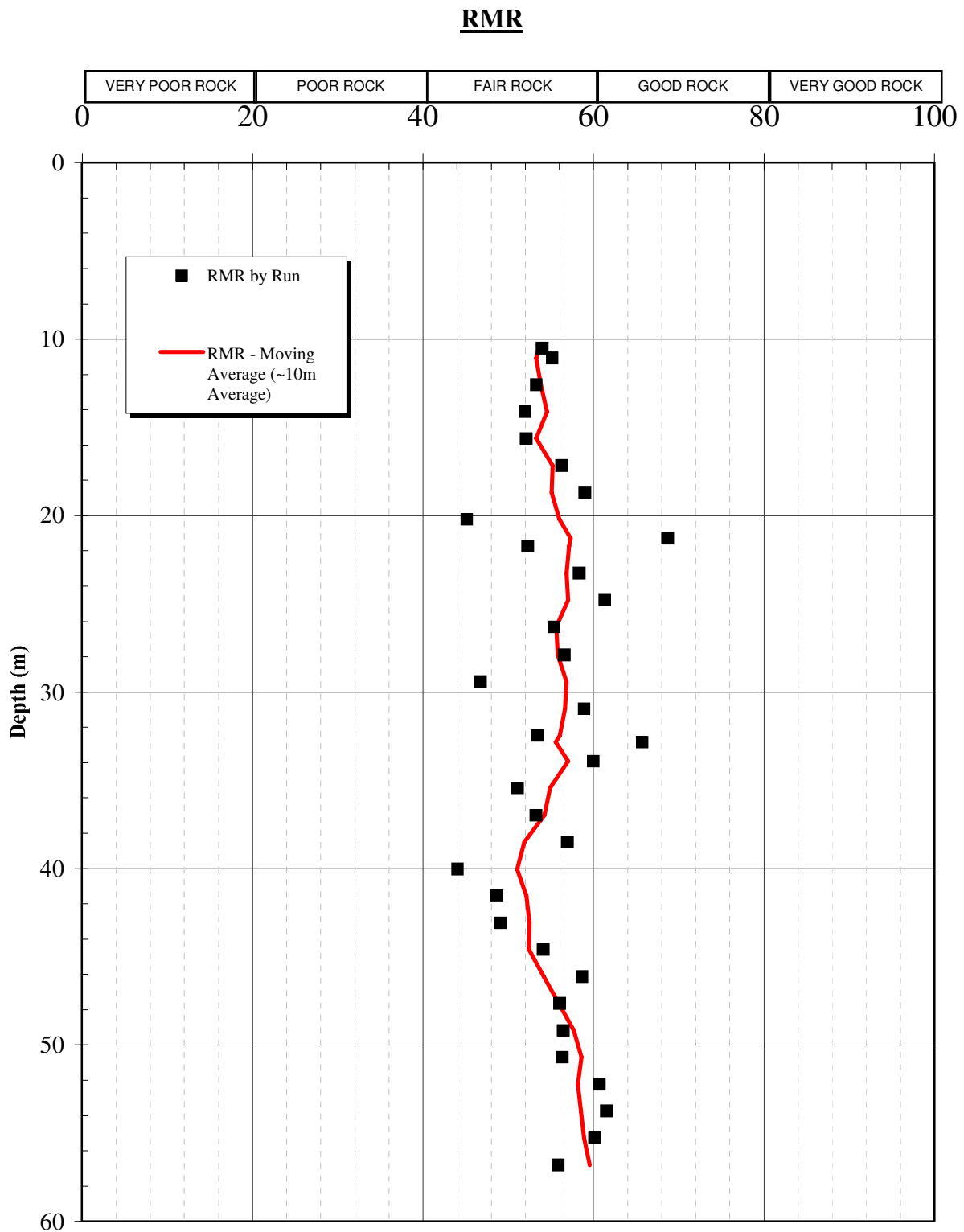
DRILLHOLE DH06-12

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-35

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-12

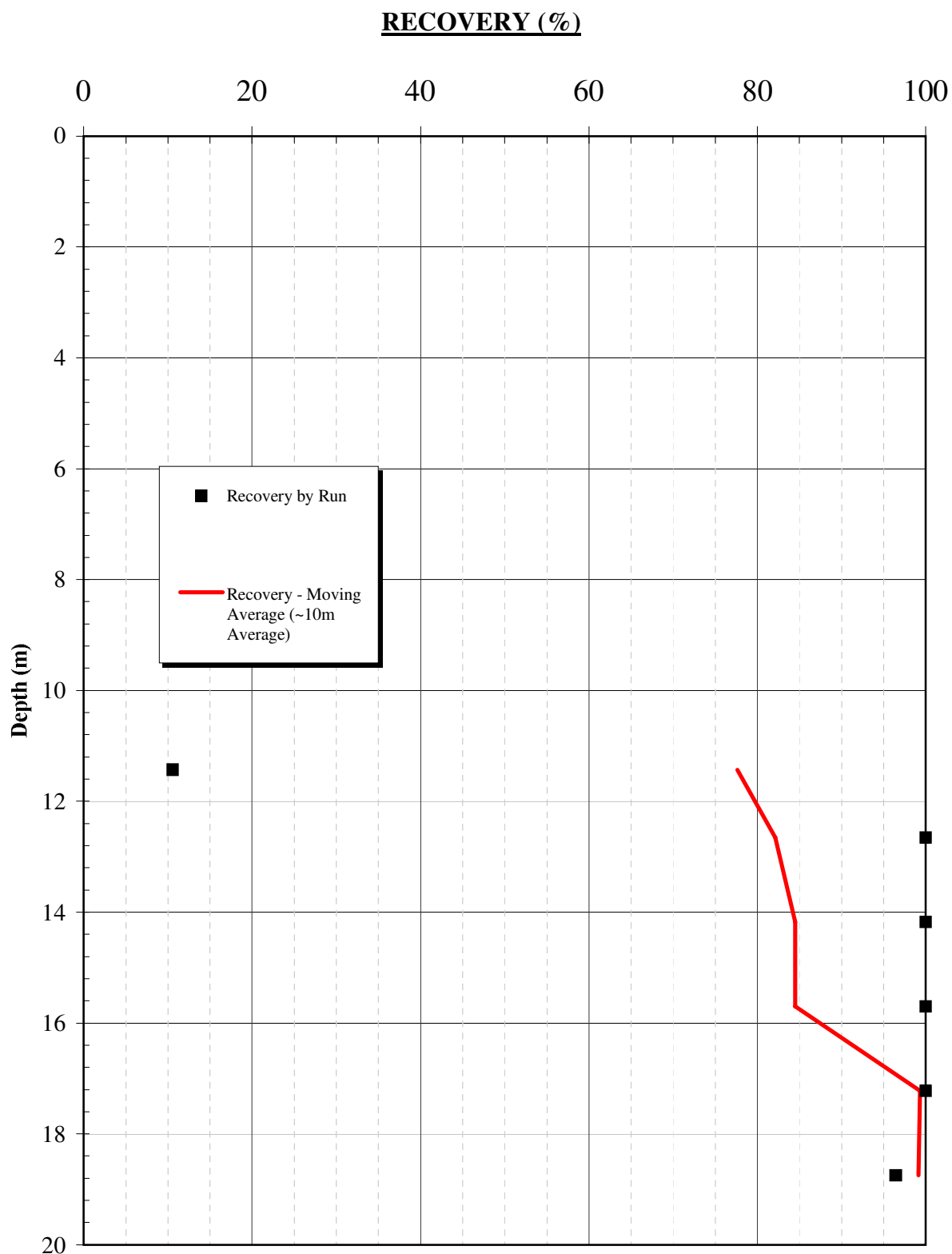
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-36

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION
RECOVERY VS. DEPTH
DRILLHOLE DH06-13

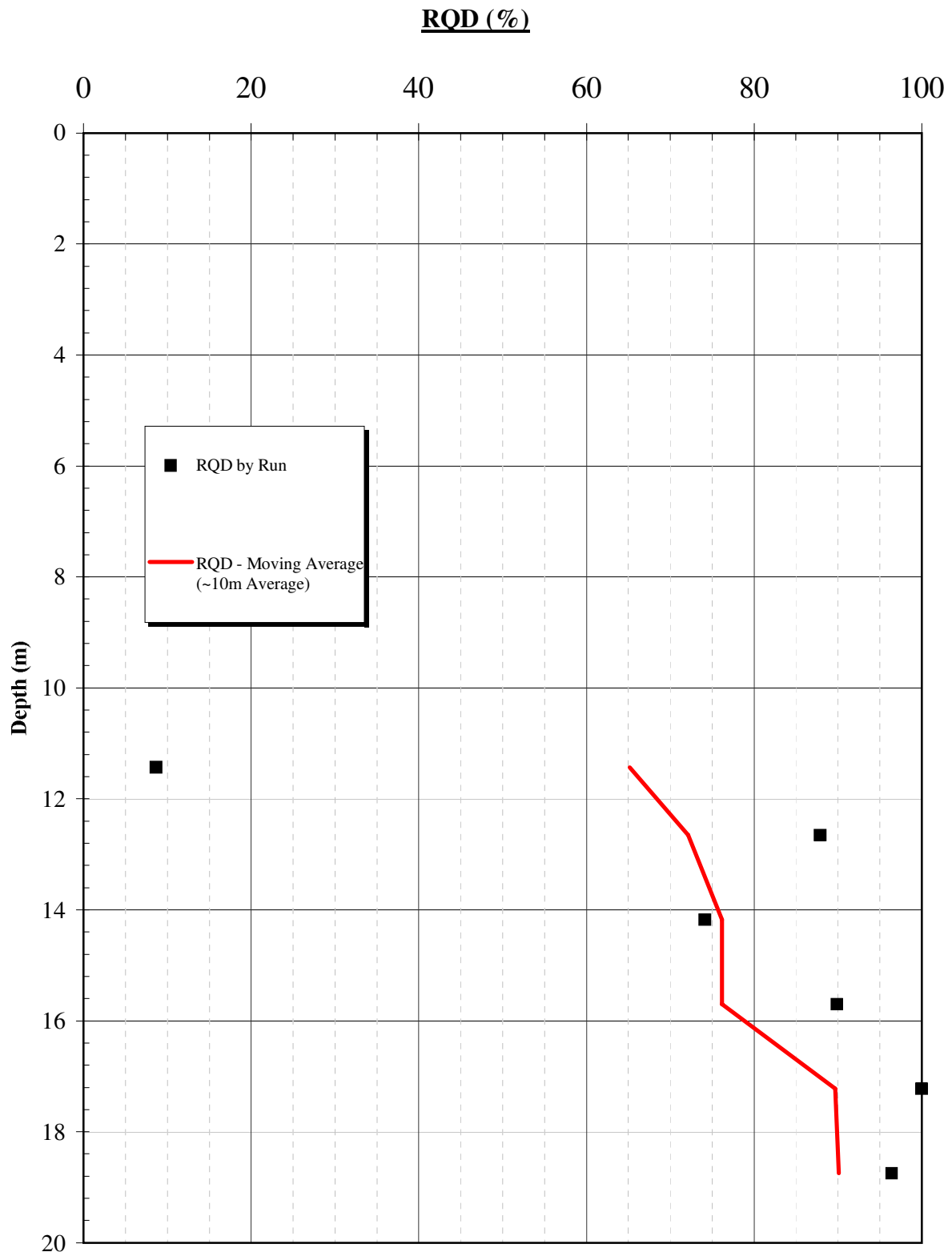
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-A

REF NO.
1

FIGURE A3-37

REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-13

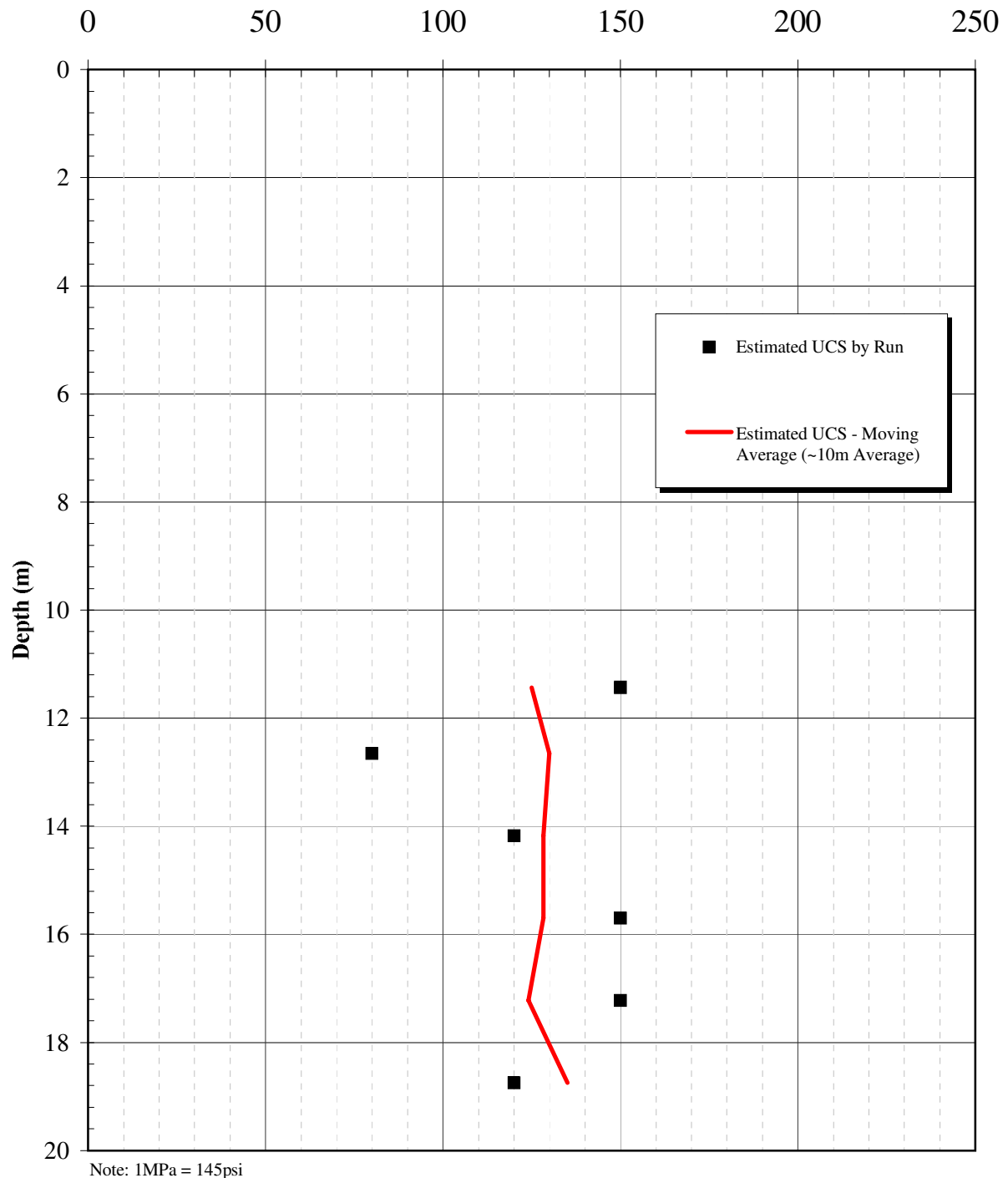
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-38

REV.
0

Rev 0 - Issued for Report

ESTIMATED UCS (MPa)

PACIFIC BOOKER MINERALS INC.

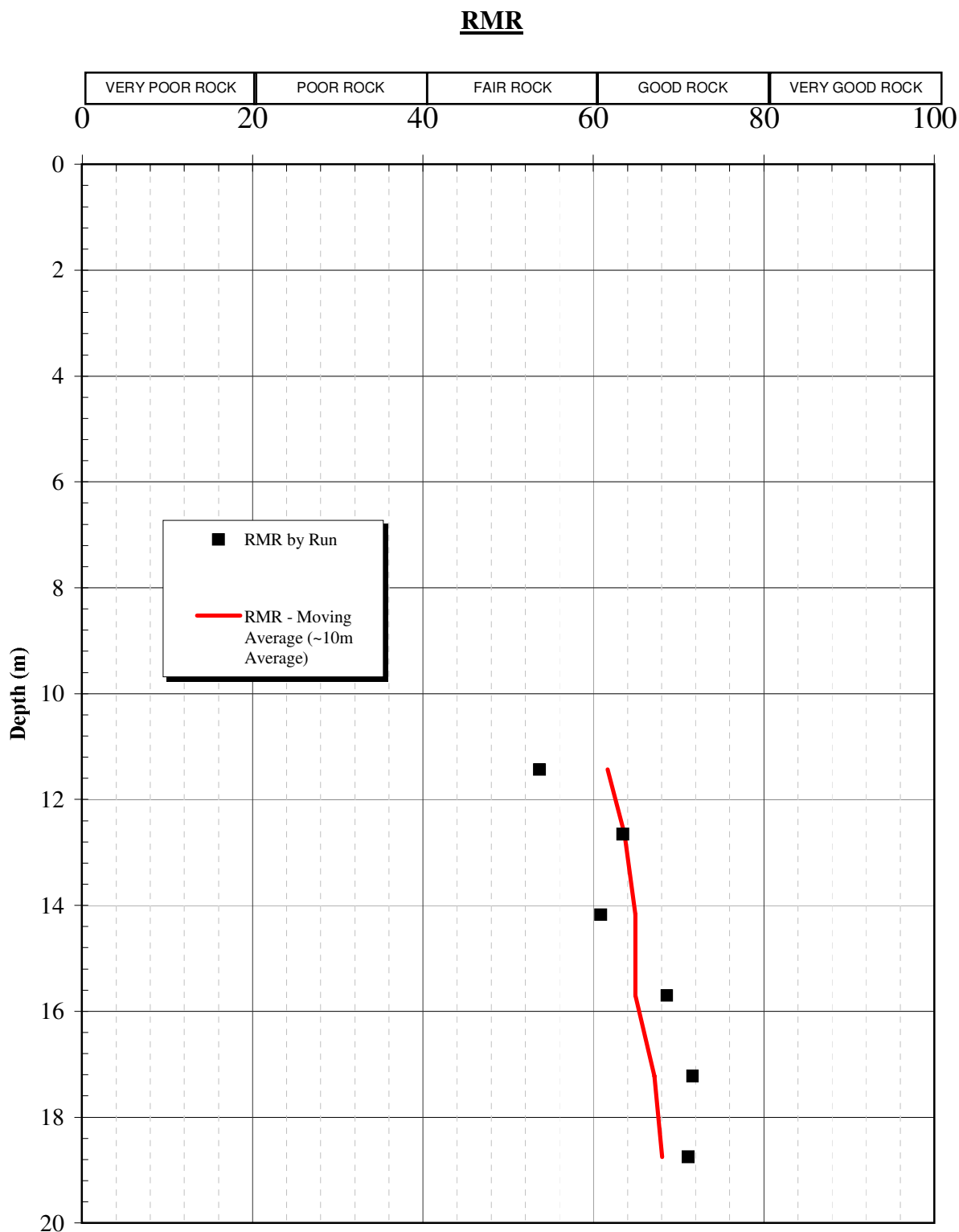
MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

DRILLHOLE DH06-13

Knight Piésold
 CONSULTING
PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-39**REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

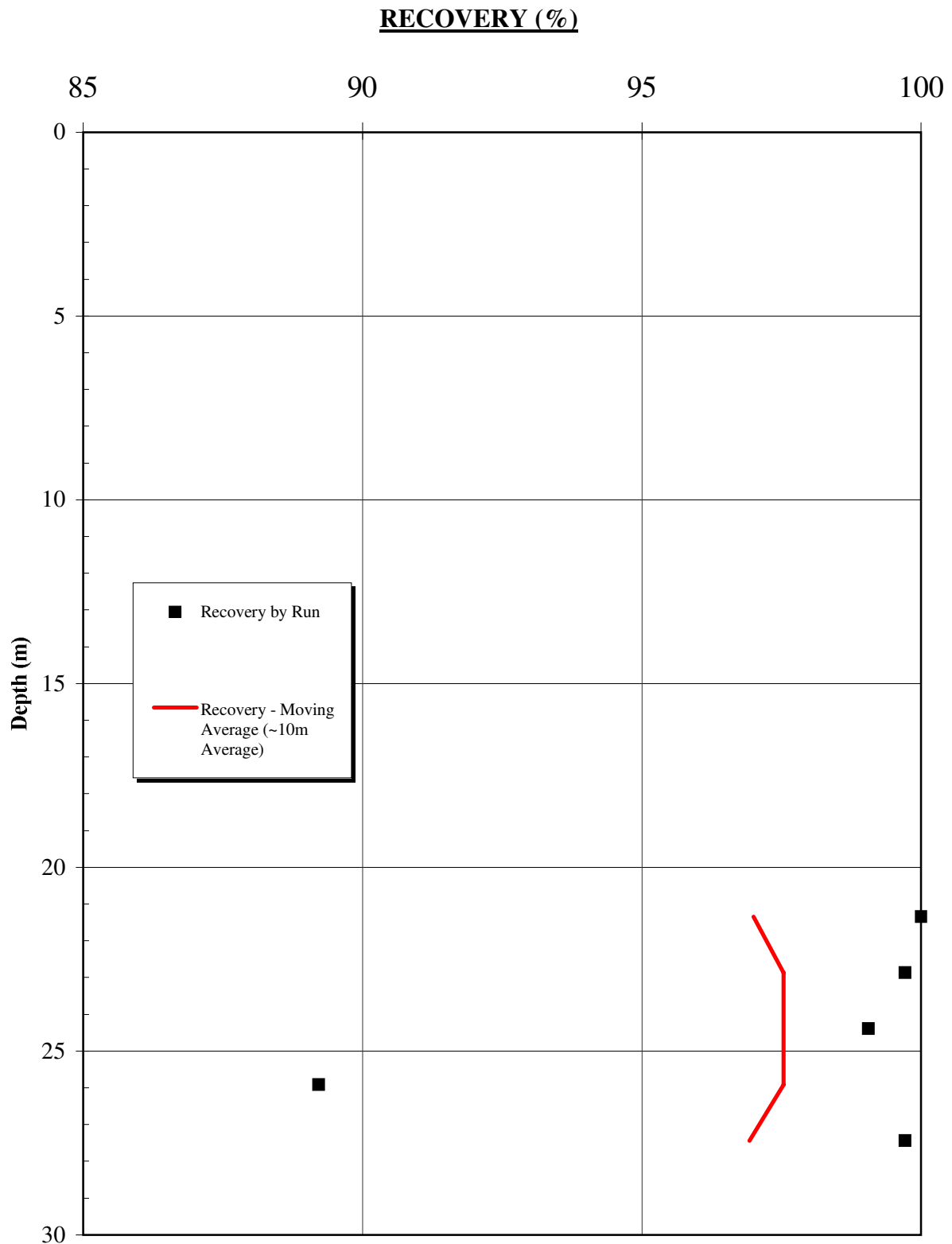
DRILLHOLE DH06-13

Knight Piésold

CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-40**REV.
0

Rev. 0 - Issued for Report



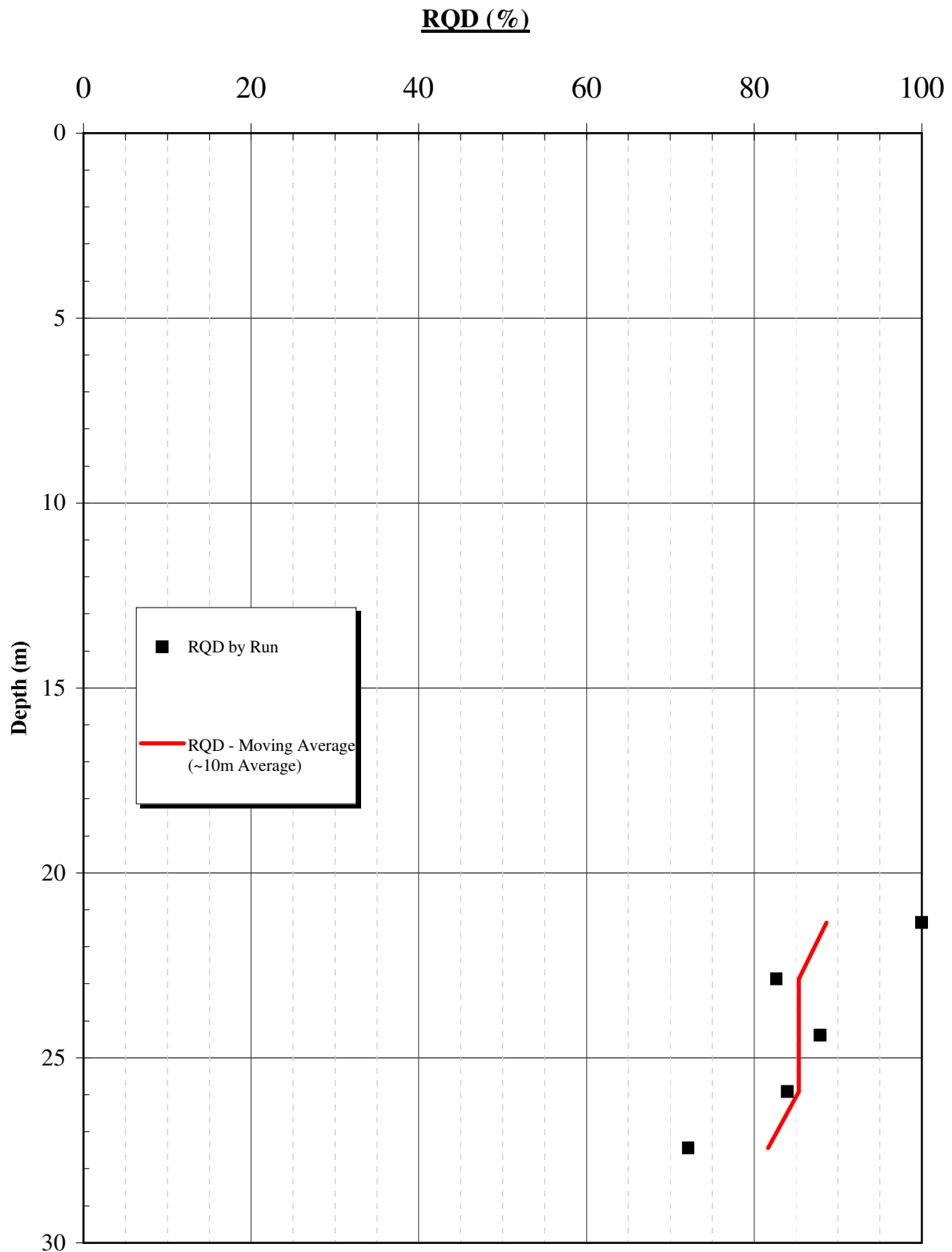
PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION
RECOVERY VS. DEPTH
DRILLHOLE DH06-14

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1**FIGURE A3-41**REV.
0



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RQD VS. DEPTH

DRILLHOLE DH06-14

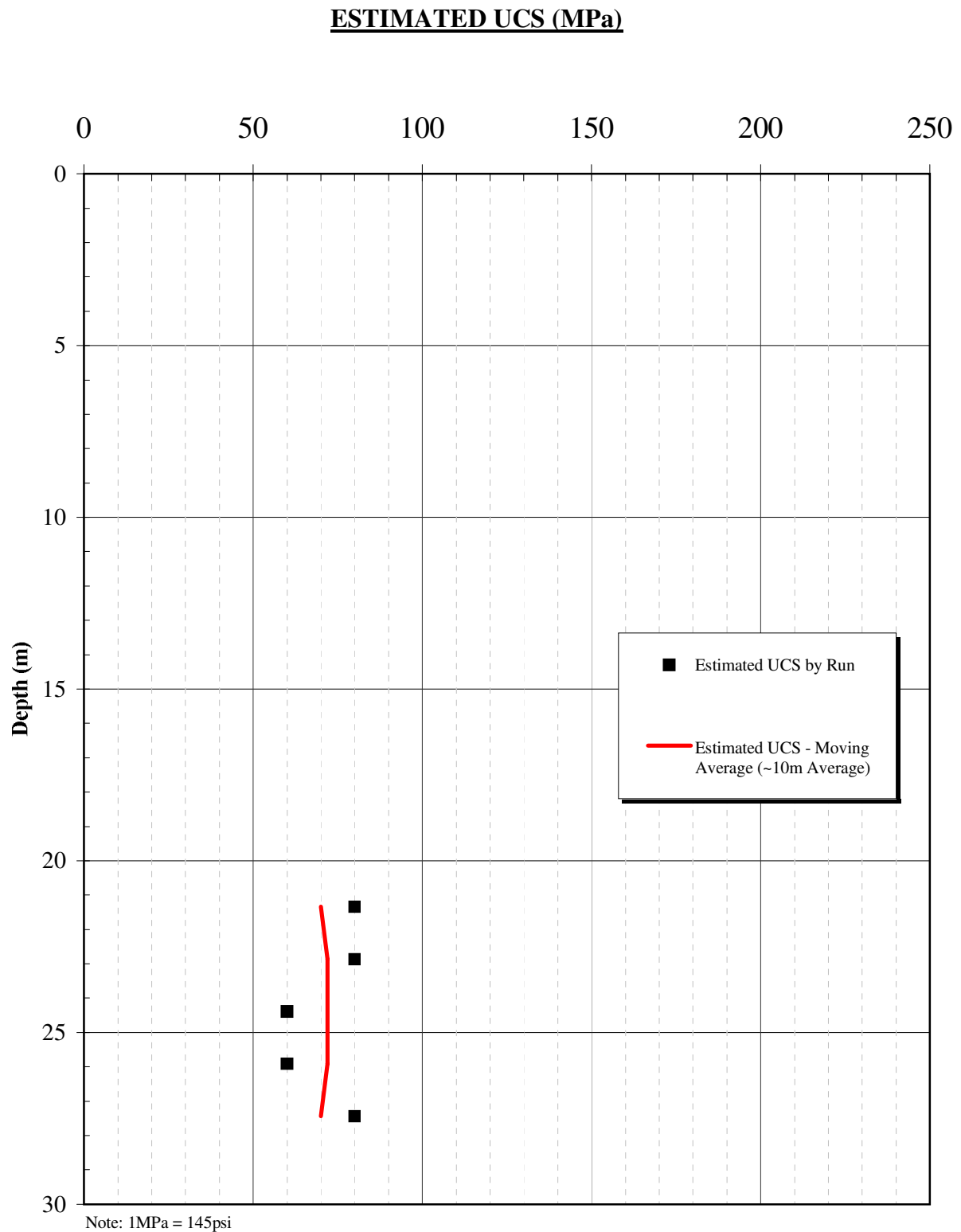
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-42

REV.
0

Rev 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

ESTIMATED UCS VS. DEPTH

DRILLHOLE DH06-14

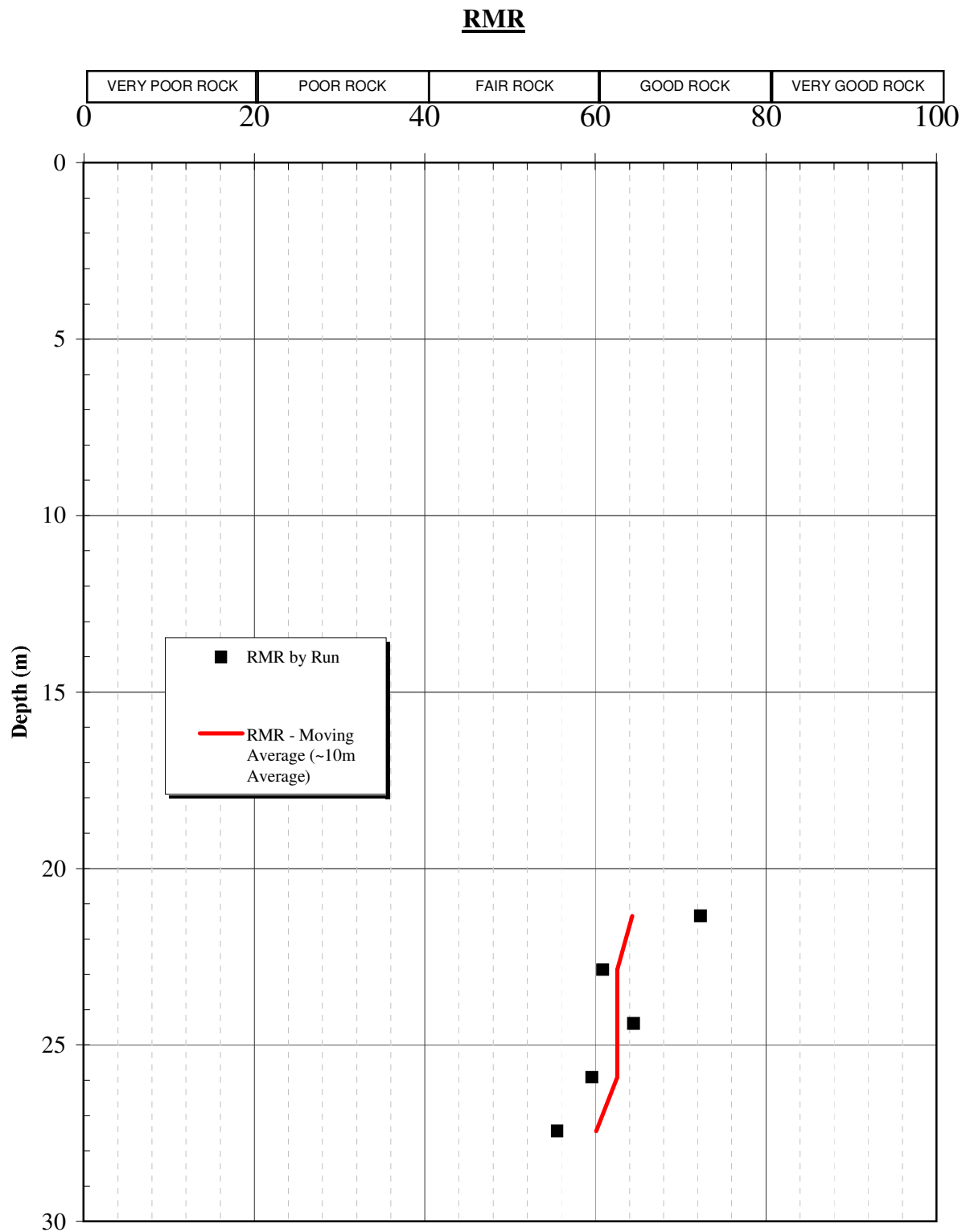
Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-43

REV.
0

Rev. 0 - Issued for Report



PACIFIC BOOKER MINERALS INC.

MORRISON COPPER GOLD PROJECT

GEOTECHNICAL SITE INVESTIGATION

RMR VS. DEPTH

DRILLHOLE DH06-14

Knight Piésold
CONSULTING

PROJECT / ASSIGNMENT NO.
VA101-00102/07-AREF NO.
1

FIGURE A3-44

REV.
0

APPENDIX B

(Rev 0)

FIELD TESTS

APPENDIX B1	PACKER PERMEABILITY TESTING SHEETS
APPENDIX B2	WELL COMPLETION DETAILS
APPENDIX B3	TESTPIT LOGS

APPENDIX B1

(Rev 0)

PACKER PERMEABILITY TESTING SHEETS

- Drillhole DH06-1
- Drillhole DH06-2
- Drillhole DH06-3
- Drillhole DH06-4
- Drillhole DH06-6
- Drillhole DH06-7
- Drillhole DH06-11
- Drillhole DH06-12
- Drillhole DH06-13
- Drillhole DH06-14

(Pages B1-1 to B1-11)

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET										
PROJECT:		Morrison Copper Gold		PROJECT NO:		101-102/7		DRILLHOLE:		DH06-1		
AREA:		Upstream from Millsite and Service Buildings								TEST NO:		1
DIPS:		60° (FROM HORIZONTAL)		DEPTH GROUNDWATER:				TOP OF TEST INTERVAL:		27.4 m (DOWN HOLE)		
DATE:		03-27-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		60.8 m (DOWN HOLE)		

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	5227.00	5246.00	5266.00	5285.00	5303.00	5322.00			
		Take	litres		19.00	20.00	19.00	18.00	19.00			
		Average Take	l/m		19.00	20.00	19.00	18.00	19.00			
13.5	0.93										19.00	18.345
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	5332.00	5359.00	5385.00	5410.00	5435.00	5459.00			
		Take	litres		27.00	26.00	25.00	25.00	24.00			
		Average Take	l/m		27.00	26.00	25.00	25.00	24.00			
27	1.86										25.40	12.797
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	5485.00	5520.00	5560.00	5596.00	5626.00	5660.00			
		Take	litres		35.00	40.00	36.00	30.00	34.00			
		Average Take	l/m		35.00	40.00	36.00	30.00	34.00			
45	3.10										35.00	10.768
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	5678.00	5699.00	5723.00	5745.00	5768.00	5791.00			
		Take	litres		21.00	24.00	22.00	23.00	23.00			
		Average Take	l/m		21.00	24.00	22.00	23.00	23.00			
27	1.86										22.60	11.386
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	5798.00	5813.00	5828.00	5844.00	5860.00	5876.00			
		Take	litres		15.00	15.00	16.00	16.00	16.00			
		Average Take	l/m		15.00	15.00	16.00	16.00	16.00			
13.5	0.93										15.60	15.062

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION:		LUGEONS MAX Lu= 18.345 MIN Lu= 10.768 AVG Lu= 13.671		APPROXIMATE PERMEABILITY, cm/s MAX k= 1.83E-04 MIN k= 1.08E-04 AVG k= 1.4E-04											
INTERPRETATION REFERENCE:		cm/s													
INTERPRETATION TYPE OF FLOW: <table style="display: inline-table; border: 1px solid black; margin-left: 10px;"> <tr><td>LAMINAR</td><td>YES</td></tr> <tr><td>TURBULENT</td><td>NO</td></tr> <tr><td>DILATION</td><td>NO</td></tr> <tr><td>WASH-OUT</td><td>NO</td></tr> <tr><td>VOID FILLING</td><td>NO</td></tr> </table>		LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	Note: Permeability calculation dependent upon flow classification:			
LAMINAR	YES														
TURBULENT	NO														
DILATION	NO														
WASH-OUT	NO														
VOID FILLING	NO														

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET												
PROJECT:		Morrison Copper Gold			PROJECT NO:			101-102/7		DRILLHOLE:			DH06-1	
AREA:		Upstream from Millsite and Service Buildings								TEST NO:		2		
DIPS:		60° (FROM HORIZONTAL)		DEPTH GROUNDWATER:					TOP OF TEST INTERVAL:		59.4 m (DOWN HOLE)			
DATE:		03-29-06		GAUGE HEIGHT ABOVE GROUND:			1.0 m		BOTTOM OF TEST INTERVAL:		89.9 m (DOWN HOLE)			

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	6008.00	6014.00	6019.00	6025.00	6030.00	6035.00			
		Take	litres	6.00	5.00	6.00	5.00	5.00	5.00			
		Average Take	l/m		6.00	5.00	6.00	5.00	5.00			
25	1.72										5.40	2.928
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	6040.00	6048.00	6056.00	6064.00	6072.00	6079.00			
		Take	litres	8.00	8.00	8.00	8.00	8.00	7.00			
		Average Take	l/m		8.00	8.00	8.00	8.00	7.00			
51	3.52										7.80	2.124
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	6085.00	6097.00	6109.00	6120.00	6132.00	6143.00			
		Take	litres		12.00	12.00	11.00	12.00	11.00			
		Average Take	l/m		12.00	12.00	11.00	12.00	11.00			
84	5.79										11.60	1.936
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	6147.00	6154.00	6162.00	6170.00	6178.00	6186.00			
		Take	litres		7.00	8.00	8.00	8.00	8.00			
		Average Take	l/m		7.00	8.00	8.00	8.00	8.00			
51	3.52										7.80	2.124
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	6190.00	6195.00	6201.00	6206.00	6212.00	6217.00			
		Take	litres		5.00	6.00	5.00	6.00	5.00			
		Average Take	l/m		5.00	6.00	5.00	6.00	5.00			
25	1.72										5.40	2.928

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr><td>LAMINAR</td><td>YES</td></tr> <tr><td>TURBULENT</td><td>NO</td></tr> <tr><td>DILATION</td><td>NO</td></tr> <tr><td>WASH-OUT</td><td>NO</td></tr> <tr><td>VOID FILLING</td><td>NO</td></tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 2.928 MIN Lu= 1.936 AVG Lu= 2.408 APPROXIMATE PERMEABILITY, cm/s MAX k= 2.93E-05 MIN k= 1.94E-05 AVG k= 2.4E-05 cm/s
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

Note: Permeability calculation dependent upon flow classification:

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET										
PROJECT:		Morrison Copper Gold		PROJECT NO:		101-102/7		DRILLHOLE:		DH06-2		
AREA:		South Embankment								TEST NO:		1
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		0.0 m		TOP OF TEST INTERVAL:		9.1 m (DOWN HOLE)		
DATE:		03-06-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		39.5 m (DOWN HOLE)		

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2672	2675	2678	2681	2684	2687			
		Take	litres		3	3	3	3	3			
		Average Take	l/m		3	3	3	3	3			
5	0.34									3	6.6	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2694	2700	2704	2709	2714	2718			
		Take	litres		6	4	5	5	4			
		Average Take	l/m		6	4	5	5	4			
10	0.69									5	6.0	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2725	2732	2738	2744	2751	2757			
		Take	litres		7	6	6	7	6			
		Average Take	l/m		7	6	6	7	6			
15	1.03									6	5.5	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2758	2761	2765	2768	2771	2775			
		Take	litres		3	4	3	3	4			
		Average Take	l/m		3	4	3	3	4			
10	0.69									3	4.2	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2776	2777	2779	2780	2782	2783			
		Take	litres		1	2	1	2	1			
		Average Take	l/m		1	2	1	2	1			
5	0.34									1	3.1	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 6.644 MIN Lu= 3.101 AVG Lu= 5.100 APPROXIMATE PERMEABILITY, cm/s MAX k= 6.64E-05 MIN k= 3.10E-05 AVG k= 5.1E-05 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET			
PROJECT: Morrison Copper Gold		PROJECT NO: 101-102/7		DRILLHOLE: DH06-3	
AREA: South Embankment				TEST NO: 1	
DIPS: 90° (FROM HORIZONTAL)		DEPTH GROUNDWATER: 4.5 m		TOP OF TEST INTERVAL: 6.7 m (DOWN HOLE)	
DATE: 03-02-06		GAUGE HEIGHT ABOVE GROUND: 1.0 m		BOTTOM OF TEST INTERVAL: 36.9 m (DOWN HOLE)	

GAUGE P	GAUGE P	Time min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL							litres/min	
		Flowmeter	litres	2547	2552	2555	2559	2562	2565		
		Take	litres		5	3	4	3	3		
		Average Take	l/m		5	3	4	3	3		
5	0.34								4	4.0	
(psi)	(BAR)	Flowmeter	USGAL							litres/min	
		Flowmeter	litres	2573	2581	2586	2591	2595	2600		
		Take	litres		8	5	5	4	5		
		Average Take	l/m		8	5	5	4	5		
10	0.69								5	4.3	
(psi)	(BAR)	Flowmeter	USGAL							litres/min	
		Flowmeter	litres	2611	2619	2627	2635	2641	2648		
		Take	litres		8	8	8	6	7		
		Average Take	l/m		8	8	8	6	7		
13	0.90								7	5.1	
(psi)	(BAR)	Flowmeter	USGAL							litres/min	
		Flowmeter	litres	2648	2650	2652	2655	2659	2660		
		Take	litres		2	2	3	4	1		
		Average Take	l/m		2	2	3	4	1		
10	0.69								2	1.9	
(psi)	(BAR)	Flowmeter	USGAL							litres/min	
		Flowmeter	litres	2652	2653	2654	2656	2656	2657		
		Take	litres		1	1	2	0	1		
		Average Take	l/m		1	1	2	0	1		
5	0.34								1	1.1	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 5.056 MIN Lu= 1.110 AVG Lu= 3.278 cm/s APPROXIMATE PERMEABILITY, cm/s MAX k= 5.06E-05 MIN k= 1.11E-05 AVG k= 3.3E-05
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

Note: Permeability calculation dependent upon flow classification:

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---------------------	----------------------------

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET											
PROJECT:		Morrison Copper Gold			PROJECT NO:			101-102/7		DRILLHOLE:		DH06-4	
AREA:		South Embankment								TEST NO:		1	
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		11.9 m		TOP OF TEST INTERVAL:		11.0 m (DOWN HOLE)			
DATE:		03-09-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		41.5 m (DOWN HOLE)			

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2914	2927	2940	2953	2965	2978			
		Take	litres		13	13	13	12	13			
		Average Take	l/m		13	13	13	12	13			
5	0.34									13	7.8	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2988	3003	3018	3033	3048	3063			
		Take	litres		15	15	15	15	15			
		Average Take	l/m		15	15	15	15	15			
10	0.69									15	7.5	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3077	3095	3114	3131	3149	3167			
		Take	litres		18	19	17	18	18			
		Average Take	l/m		18	19	17	18	18			
15	1.03									18	7.7	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3176	3190	3205	3218	3232	3246			
		Take	litres		14	15	13	14	14			
		Average Take	l/m		14	15	13	14	14			
10	0.69									14	7.0	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3254	3265	3277	3288	3300	3310			
		Take	litres		11	12	11	12	10			
		Average Take	l/m		11	12	11	12	10			
5	0.34									11	6.8	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 7.798 MIN Lu= 6.823 AVG Lu= 7.370 APPROXIMATE PERMEABILITY, cm/s MAX k= 7.80E-05 MIN k= 6.82E-05 AVG k= 7.4E-05 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET											
PROJECT:		Morrison Copper Gold			PROJECT NO:			101-102/7		DRILLHOLE:		DH06-6	
AREA:		South Embankment								TEST NO:		1	
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		0.0 m		TOP OF TEST INTERVAL:		9.6 m (DOWN HOLE)			
DATE:		03-11-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		36.7 m (DOWN HOLE)			

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3471	3480	3491	3501	3510	3517			
		Take	litres		9	11	10	9	7			
		Average Take	l/m		9	11	10	9	7			
5	0.34										9	20.4
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3533	3550	3565	3578	3591	3603			
		Take	litres		17	15	13	13	12			
		Average Take	l/m		17	15	13	13	12			
10	0.69										14	17.4
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3621	3642	3661	3679	3694	3709			
		Take	litres		21	19	18	15	15			
		Average Take	l/m		21	19	18	15	15			
15	1.03										18	15.2
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3712	3717	3723	3729	3735	3742			
		Take	litres		5	6	6	6	7			
		Average Take	l/m		5	6	6	6	7			
10	0.69										6	7.5
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	3742	3745	3748	3752	3755	3758			
		Take	litres		3	3	4	3	3			
		Average Take	l/m		3	3	4	3	3			
5	0.34										3	7.1

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">LAMINAR</td> <td style="width: 50%;">YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 20.375 MIN Lu= 7.087 AVG Lu= 13.522 APPROXIMATE PERMEABILITY, cm/s MAX k= 2.04E-04 MIN k= 7.09E-05 AVG k= 1.4E-04 cm/s
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

Note: Permeability calculation dependent upon flow classification:

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET												
PROJECT:		Morrison Copper Gold			PROJECT NO:			101-102/7		DRILLHOLE:			DH06-7	
AREA:		South Embankment								TEST NO:		1		
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		0.0 m		TOP OF TEST INTERVAL:		12.8 m (DOWN HOLE)				
DATE:		03-02-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		43.3 m (DOWN HOLE)				

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1426	1457	1488	1516	1542	1568			
		Take	litres		31	31	28	26	26			
		Average Take	l/m		31	31	28	26	26			
5	0.34									28	62.9	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1672	1720	1767	1814	1860	1905			
		Take	litres		48	47	47	46	45			
		Average Take	l/m		48	47	47	46	45			
10	0.69									47	58.0	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1945	2000	2054	2107	2158	2210			
		Take	litres		55	54	53	51	52			
		Average Take	l/m		55	54	53	51	52			
13	0.90									53	52.3	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2231	2269	2307	2345	2382	2420			
		Take	litres		38	38	38	37	38			
		Average Take	l/m		38	38	38	37	38			
10	0.69									38	47.1	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	2444	2457	2473	2489	2505	2522			
		Take	litres		13	16	16	16	17			
		Average Take	l/m		13	16	16	16	17			
5	0.34									16	34.5	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 62.897 MIN Lu= 34.549 AVG Lu= 50.963 APPROXIMATE PERMEABILITY, cm/s MAX k= 6.29E-04 MIN k= 3.45E-04 AVG k= 5.1E-04 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET										
PROJECT:		Morrison Copper Gold		PROJECT NO:		101-102/7		DRILLHOLE:		DH06-11		
AREA:		South Embankment								TEST NO:		1
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		1.2 m		TOP OF TEST INTERVAL:		8.8 m (DOWN HOLE)		
DATE:		02-22-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		36.9 m (DOWN HOLE)		

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	10	19	28	35	43	50			
		Take	litres		9	9	7	8	7			
		Average Take	l/m		9	9	7	8	7			
10	0.69									8	8.7	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	60	79	96	114	130	141			
		Take	litres		19	17	18	16	11			
		Average Take	l/m		19	17	18	16	11			
20	1.38									16	10.0	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	175	194	220	241	259	278			
		Take	litres		19	26	21	18	19			
		Average Take	l/m		19	26	21	18	19			
30	2.07									21	8.8	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	280	286	292	300	310	321			
		Take	litres		6	6	8	10	11			
		Average Take	l/m		6	6	8	10	11			
20	1.38									8	5.0	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	321	323	325	330	333	336			
		Take	litres		2	2	5	3	3			
		Average Take	l/m		2	2	5	3	3			
10	0.69									3	3.3	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 9.962 MIN Lu= 3.250 AVG Lu= 7.153 cm/s APPROXIMATE PERMEABILITY, cm/s MAX k= 9.96E-05 MIN k= 3.25E-05 AVG k= 7.2E-05
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

Note: Permeability calculation dependent upon flow classification:

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET											
PROJECT:		Morrison Copper Gold			PROJECT NO:			101-102/7		DRILLHOLE:		DH06-12	
AREA:		South Embankment								TEST NO:		1	
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		3.8 m		TOP OF TEST INTERVAL:		13.1 m (DOWN HOLE)			
DATE:		02-26-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		58.3 m (DOWN HOLE)			

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1058	1061	1064	1067	1070	1074			
		Take	litres		3	3	3	3	4			
		Average Take	l/m		3	3	3	3	4			
10	0.69									3	2.7	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1080	1086	1092	1098	1104	1109			
		Take	litres		6	6	6	6	5			
		Average Take	l/m		6	6	6	6	5			
20	1.38									6	3.1	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1123	1132	1141	1150	1158	1166			
		Take	litres		9	9	9	8	8			
		Average Take	l/m		9	9	9	8	8			
30	2.07									9	3.3	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1180	1185	1191	1197	1202	1207			
		Take	litres		5	6	6	5	5			
		Average Take	l/m		5	6	6	5	5			
20	1.38									5	2.9	
(psi)	(BAR)	Flowmeter	USGAL								litres/min	
		Flowmeter	litres	1210	1213	1215	1217	1220	1223			
		Take	litres		3	2	2	3	3			
		Average Take	l/m		3	2	2	3	3			
10	0.69									3	2.2	

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 3.322 MIN Lu= 2.198 AVG Lu= 2.832 APPROXIMATE PERMEABILITY, cm/s MAX k= 3.32E-05 MIN k= 2.20E-05 AVG k= 2.8E-05 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET										
PROJECT:		Morrison Copper Gold		PROJECT NO:		101-102/7		DRILLHOLE:		DH06-13		
AREA:		Middle of Open Pit								TEST NO:		
DIPS:		90° (FROM HORIZONTAL)		DEPTH GROUNDWATER:		8.7 m		TOP OF TEST INTERVAL:		11.9 m (DOWN HOLE)		
DATE:		03-24-06		GAUGE HEIGHT ABOVE GROUND:		1.0 m		BOTTOM OF TEST INTERVAL:		20.3 m (DOWN HOLE)		

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
6	0.41	Flowmeter	USGAL								litres/min	6.179
		Flowmeter	litres	4225.00	4235.00	4244.00	4253.00	4261.00	4268.00			
		Take	litres	10.00	9.00	9.00	9.00	8.00	7.00			
		Average Take	l/m		10.00	9.00	9.00	8.00	7.00			
12	0.83	Flowmeter	USGAL								litres/min	5.293
		Flowmeter	litres	4276.00	4287.00	4298.00	4307.00	4316.00	4324.00			
		Take	litres		11.00	11.00	9.00	9.00	8.00			
		Average Take	l/m		11.00	11.00	9.00	9.00	8.00			
20	1.38	Flowmeter	USGAL								litres/min	4.798
		Flowmeter	litres	4338.00	4349.00	4362.00	4375.00	4385.00	4395.00			
		Take	litres		11.00	13.00	13.00	10.00	10.00			
		Average Take	l/m		11.00	13.00	13.00	10.00	10.00			
12	0.83	Flowmeter	USGAL								litres/min	3.418
		Flowmeter	litres	4400.00	4407.00	4413.00	4419.00	4424.00	4431.00			
		Take	litres		7.00	6.00	6.00	5.00	7.00			
		Average Take	l/m		7.00	6.00	6.00	5.00	7.00			
6	0.41	Flowmeter	USGAL								litres/min	2.694
		Flowmeter	litres	4433.00	4436.00	4440.00	4444.00	4448.00				
		Take	litres		3.00	4.00	4.00	4.00				
		Average Take	l/m		3.00	4.00	4.00	4.00		3.75		

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr><td>LAMINAR</td><td>YES</td></tr> <tr><td>TURBULENT</td><td>NO</td></tr> <tr><td>DILATION</td><td>NO</td></tr> <tr><td>WASH-OUT</td><td>NO</td></tr> <tr><td>VOID FILLING</td><td>NO</td></tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 6.179 MIN Lu= 2.694 AVG Lu= 4.477 APPROXIMATE PERMEABILITY, cm/s MAX k= 6.18E-05 MIN k= 2.69E-05 AVG k= 4.5E-05 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---	--

SHEET 1 OF 1		LUGEON TEST FIELD DATA SHEET									
PROJECT: Morrison Copper Gold		PROJECT NO: 101-102/7		DRILLHOLE: DH06-14							
AREA: Upstream from Millsite and Service Buildings				TEST NO: 1							
DIPS: 90° (FROM HORIZONTAL)		DEPTH GROUNDWATER: m		TOP OF TEST INTERVAL: 21.9 m (DOWN HOLE)							
DATE: 03-23-06		GAUGE HEIGHT ABOVE GROUND: 1.0 m		BOTTOM OF TEST INTERVAL: 29.3 m (DOWN HOLE)							

GAUGE P	GAUGE P	Time	min	0	1	2	3	4	5		AVERAGE FLOW	LUGEON
11	0.76	Flowmeter	USGAL								litres/min	4.809
		Flowmeter	litres	3788.00	3792.00	3796.00	3800.00	3804.00	3809.00			
		Take	litres	4.00	4.00	4.00	4.00	4.00	5.00			
		Average Take	l/m		4.00	4.00	4.00	4.00	5.00			
22	1.52	Flowmeter	USGAL								litres/min	10.172
		Flowmeter	litres	3817.00	3834.00	3852.00	3868.00	3884.00				
		Take	litres		17.00	18.00	16.00	16.00				
		Average Take	l/m		17.00	18.00	16.00	16.00				
36	2.48	Flowmeter	USGAL								litres/min	8.894
		Flowmeter	litres	3907.00	3935.00	3960.00	3982.00	4003.00	4024.00			
		Take	litres		28.00	25.00	22.00	21.00	21.00			
		Average Take	l/m		28.00	25.00	22.00	21.00	21.00			
22	1.52	Flowmeter	USGAL								litres/min	8.198
		Flowmeter	litres	4036.00	4048.00	4062.00	4076.00	4090.00				
		Take	litres		12.00	14.00	14.00	14.00				
		Average Take	l/m		12.00	14.00	14.00	14.00				
11	0.76	Flowmeter	USGAL								litres/min	10.534
		Flowmeter	litres	4096.00	4104.00	4113.00	4123.00	4132.00	4142.00			
		Take	litres		8.00	9.00	10.00	9.00	10.00			
		Average Take	l/m		8.00	9.00	10.00	9.00	10.00			

FLOW VERSUS PRESSURE PLOT

STAGE PRESSURE VERSUS LUGEON VALUE

STATIC WTR LEVEL DETERMINATION: INTERPRETATION REFERENCE: INTERPRETATION TYPE OF FLOW: <table style="width: 100%;"> <tr> <td>LAMINAR</td> <td>YES</td> </tr> <tr> <td>TURBULENT</td> <td>NO</td> </tr> <tr> <td>DILATION</td> <td>NO</td> </tr> <tr> <td>WASH-OUT</td> <td>NO</td> </tr> <tr> <td>VOID FILLING</td> <td>NO</td> </tr> </table>	LAMINAR	YES	TURBULENT	NO	DILATION	NO	WASH-OUT	NO	VOID FILLING	NO	LUGEONS MAX Lu= 10.534 MIN Lu= 4.809 AVG Lu= 8.521 APPROXIMATE PERMEABILITY, cm/s MAX k= 1.05E-04 MIN k= 4.81E-05 AVG k= 8.5E-05 cm/s Note: Permeability calculation dependent upon flow classification:
LAMINAR	YES										
TURBULENT	NO										
DILATION	NO										
WASH-OUT	NO										
VOID FILLING	NO										

DRILLING / TEST RESULTS COMMENTS:

TEST BY: Josh Vines	REVIEWED BY: Greg Johnston
---------------------	----------------------------

APPENDIX B2

(Rev 0)

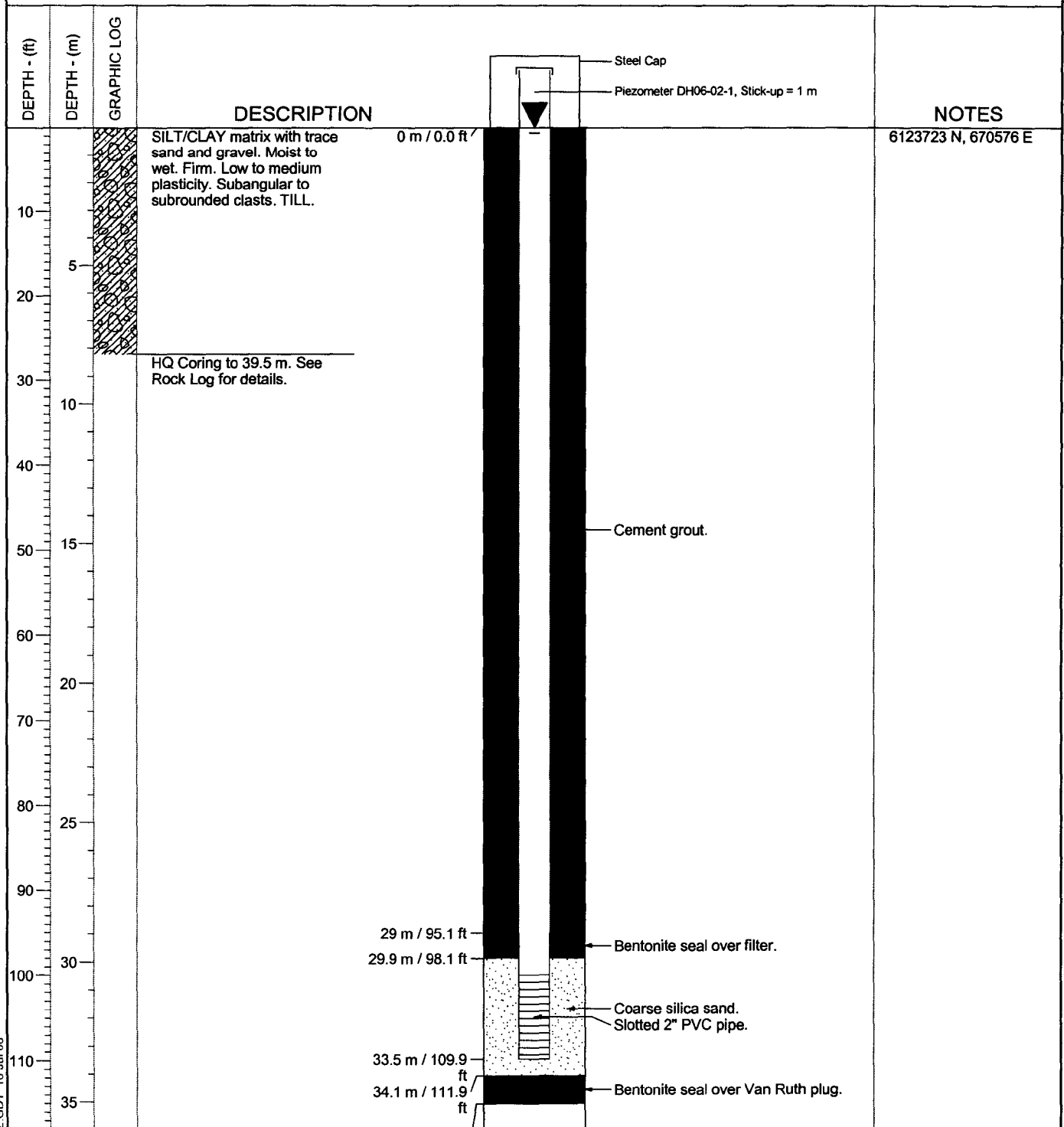
WELL COMPLETION DETAILS

- Drillhole DH06-02
- Drillhole DH06-03
- Drillhole DH06-04
- Drillhole DH06-06
- Drillhole DH06-07
- Drillhole DH06-08
- Drillhole DH06-09
- Drillhole DH06-10
- Drillhole DH06-11
- Drillhole DH06-12
- Drillhole DH06-13
- Drillhole DH06-14
- Drillhole DH06-15a
- Drillhole DH06-15b
- Drillhole DH06-16
- Drillhole DH06-17
- Drillhole GW1

(Pages B2-1 to B2-18)

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-02**Page **1** of **1**Hole Depth: **39.5 m / 129.6 ft** Hole Diameter: **96 mm**Date Started: **4 Mar 06** Date Completed: **6 Mar 06**Collar Elev: **950 m / 3116.8 ft** PVC Pipe I.D.: **50 mm**Logged by: **LS** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 0 / 6 Mar 06**Rev. 0 - Issued for Report****Pacific Booker Minerals Inc.**
Morrison Copper Gold Project
Well Completion Details For DH06-02**Knight Piésold**
CONSULTINGProject No. **101-102/7** Ref. No. **1** Rev. **0****DH06-02**

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

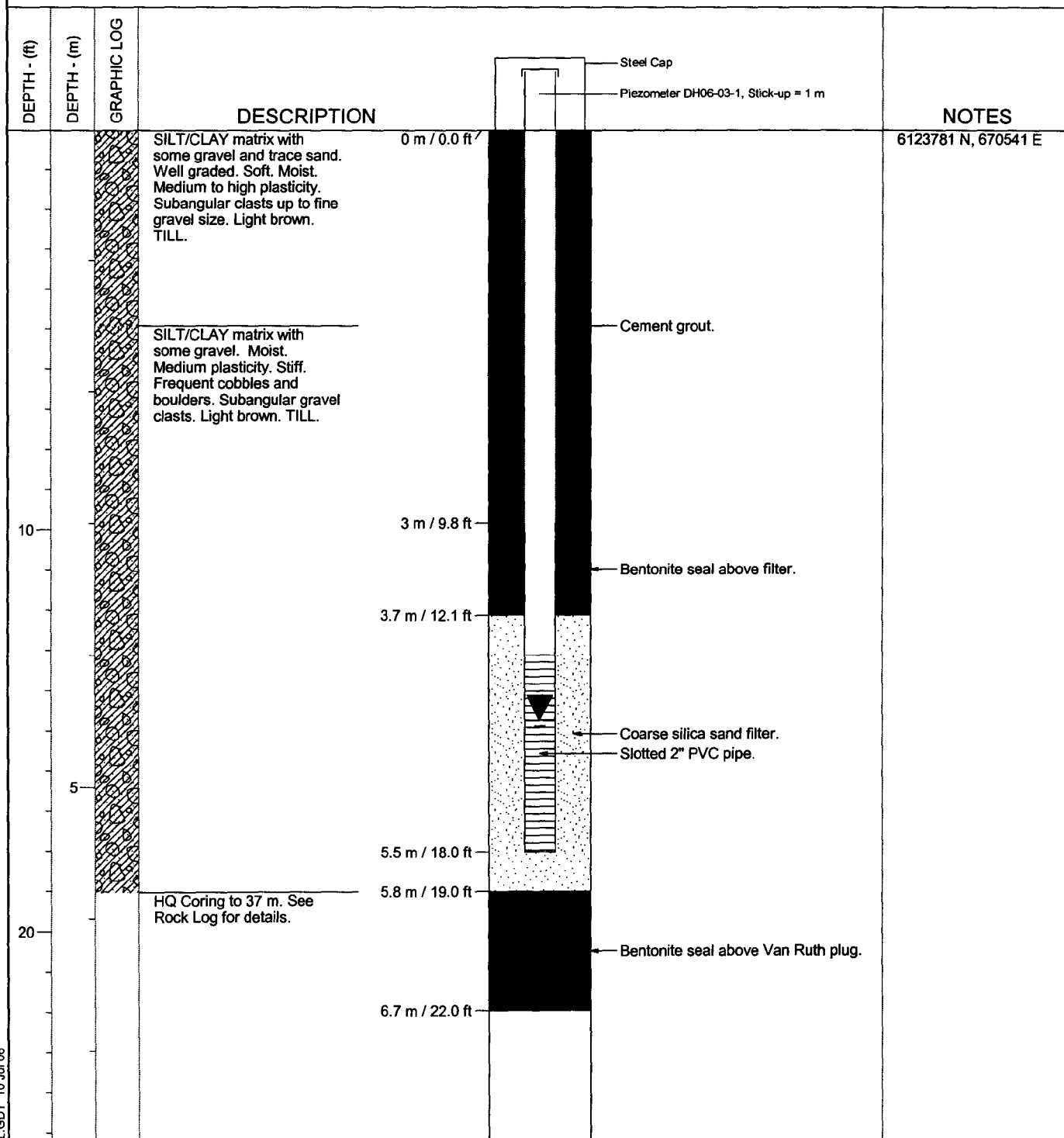
Date Revised: 2 May 06

B2-1

Project: Morrison Copper Gold Project		Drill Hole No.:	DH06-03		Page	1 of 1	
Hole Depth:	36.9 m / 121.1 ft	Hole Diameter:	96 mm		Date Started:	2 Mar 06	
Collar Elev:	950 m / 3116.8 ft	PVC Pipe I.D.:	50 mm		Date Completed:	4 Mar 06	
		Logged by:	LS		Reviewed by:	GJ	

Water Level Readings: Depth to Water / Date Measured

Well 1: 4.5 / 4 Mar 06



WELL DRILL GPJ DRILL GDT 10 Jul 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-03

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0
DH06-03		

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

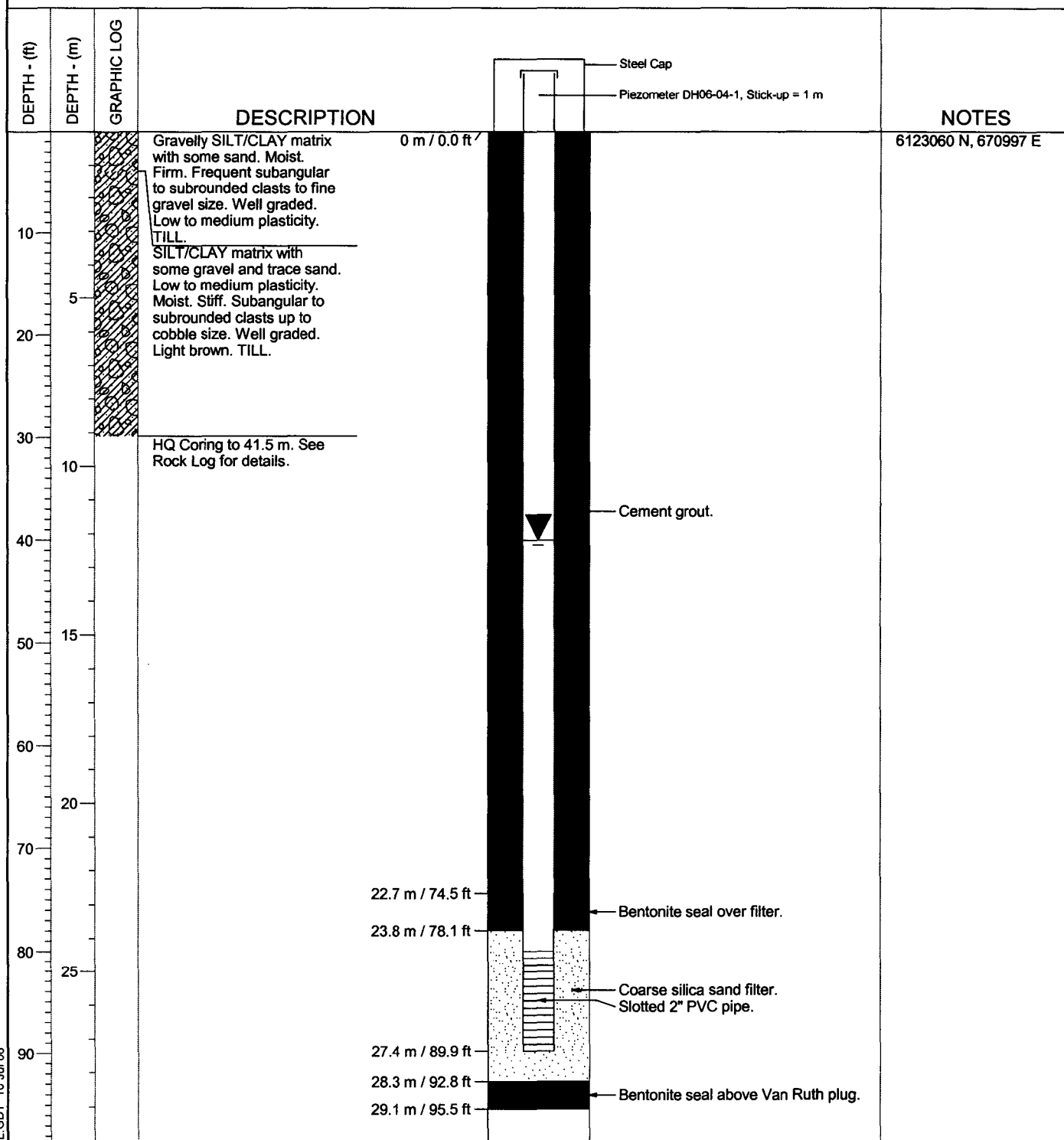
Date Revised: 2 May 06

B2-2

Project: Morrison Copper Gold Project	Drill Hole No.: DH06-04	Page 1 of 1
Hole Depth: 41.5 m / 136.2 ft	Hole Diameter: 96 mm	Date Started: 7 Mar 06 Date Completed: 9 Mar 06
Collar Elev: 983 m / 3225.1 ft	PVC Pipe I.D.: 50 mm	Logged by: LS Reviewed by: GJ

Water Level Readings: Depth to Water / Date Measured

Well 1: 12.2 / 9 Mar 06



Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-04

Knight Piésold
CONSULTING

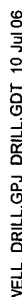
Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-04

Date Revised: 3 May 06

M:\1101\100102\107\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

B2-3

Well 1: 0 / 11 Mar 06

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

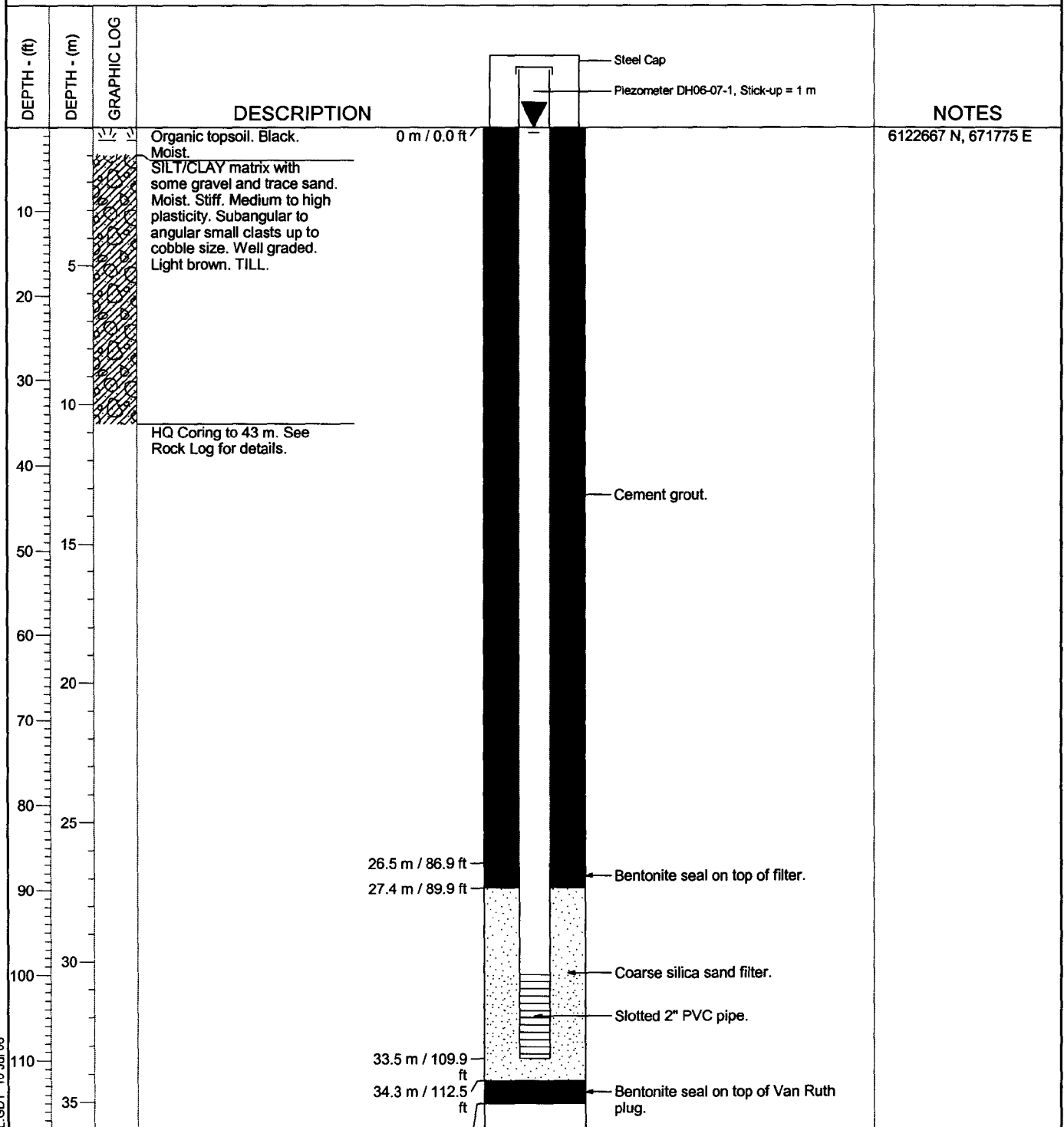
Knight Piésold

Date Revised: 3 May 06

B2-4

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-07**Page **1** of **1**Hole Depth: **43.3 m / 142.1 ft** Hole Diameter: **96 mm**Date Started: **27 Feb 06** Date Completed: **1 Mar 06**Collar Elev: **993 m / 3257.9 ft** PVC Pipe I.D.: **50 mm**Logged by: **LS** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: **0 / 1 Mar 06**

WELL DRILL GPJ DRILL GDT 10 Jul 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-07**Knight Piésold**
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-07

M:\101\00102\07A\DATA\GEO\TEC-3\GINT\DRILL.GPJ

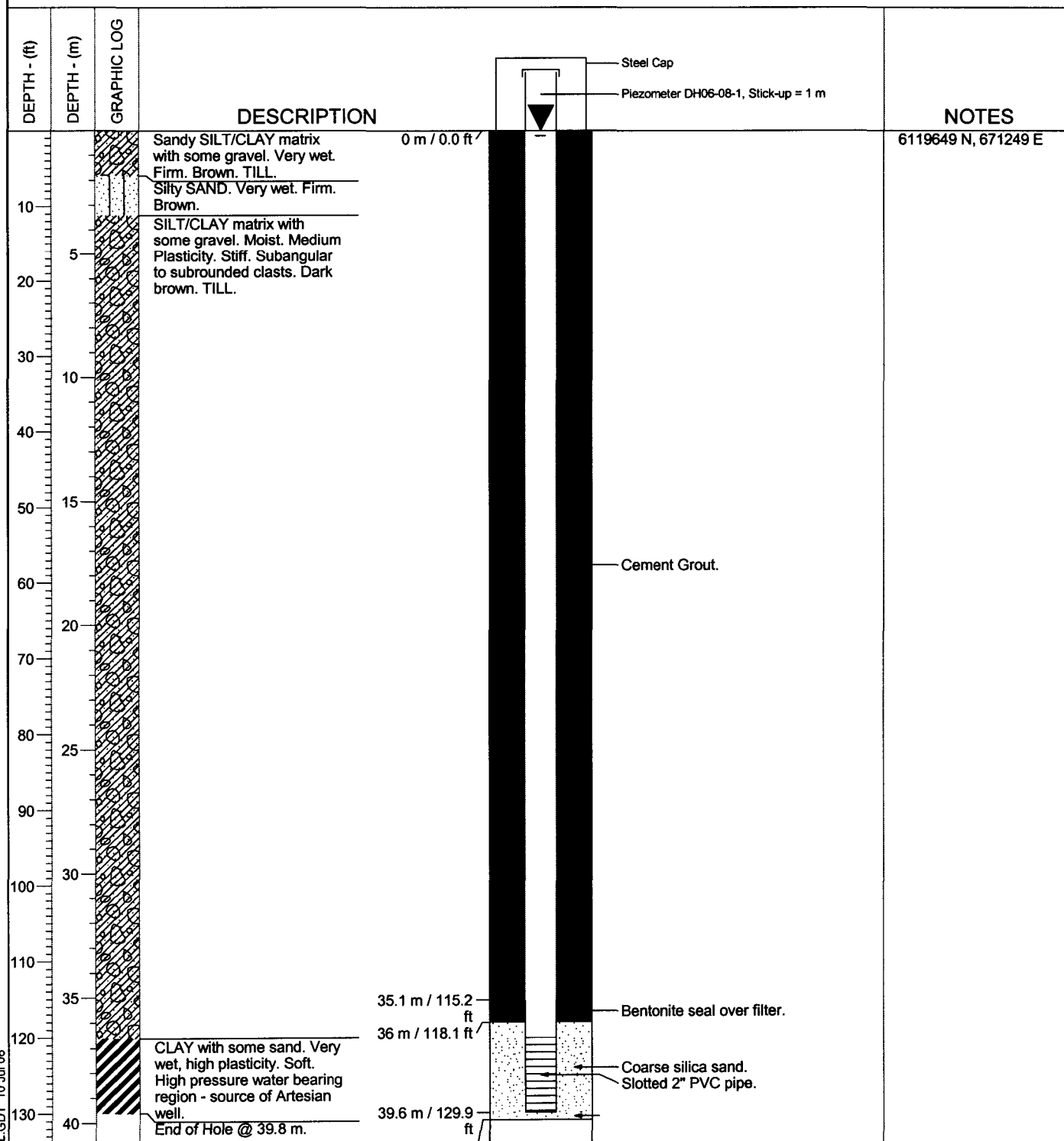
B2-5

Date Revised: 3 May 06

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-08**Page **1** of **1**Hole Depth: **39.9 m / 130.9 ft** Hole Diameter: **96 mm**Date Started: **18 Mar 06** Date Completed: **20 Mar 06**Collar Elev: **838 m / 2749.3 ft** PVC Pipe I.D.: **50 mm**Logged by: **JV** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 0 / 20 Mar 06



WELL DRILL.GPJ DRILL.GDT 10 Jul 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-08

Knight Piésold
CONSULTING

Project No. 101-1027	Ref. No. 1	Rev. 0
-------------------------	---------------	-----------

DH06-08

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

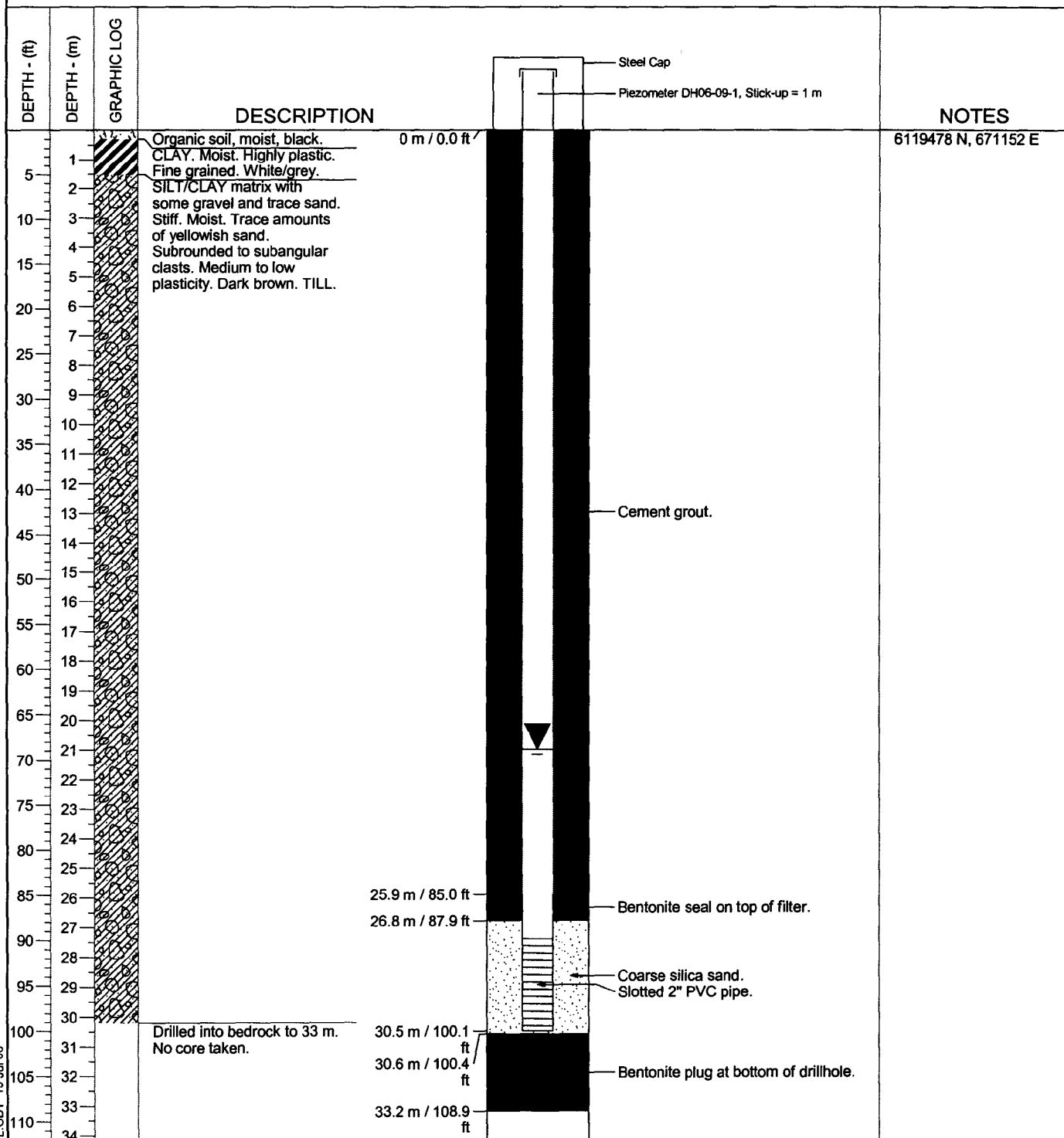
Date Revised: 2 May 06

B2-6

Project: Morrison Copper Gold Project	Drill Hole No.: DH06-09	Page 1 of 1
Hole Depth: 33.2 m / 108.9 ft	Hole Diameter: 96 mm	Date Started: 20 Mar 06
Collar Elev: 835 m / 2739.5 ft	PVC Pipe I.D.: 50 mm	Date Completed: 22 Mar 06
	Logged by: JV	Reviewed by: GJ

Water Level Readings: Depth to Water / Date Measured

Well 1: 21 / 20 Mar 06



Rev. 0 - Issued for Report	Pacific Booker Minerals Inc. Morrison Copper Gold Project Well Completion Details For DH06-09		
	Knight Piésold CONSULTING	Project No. 101-102/7	Ref. No. 1
		Rev. 0	
		DH06-09	

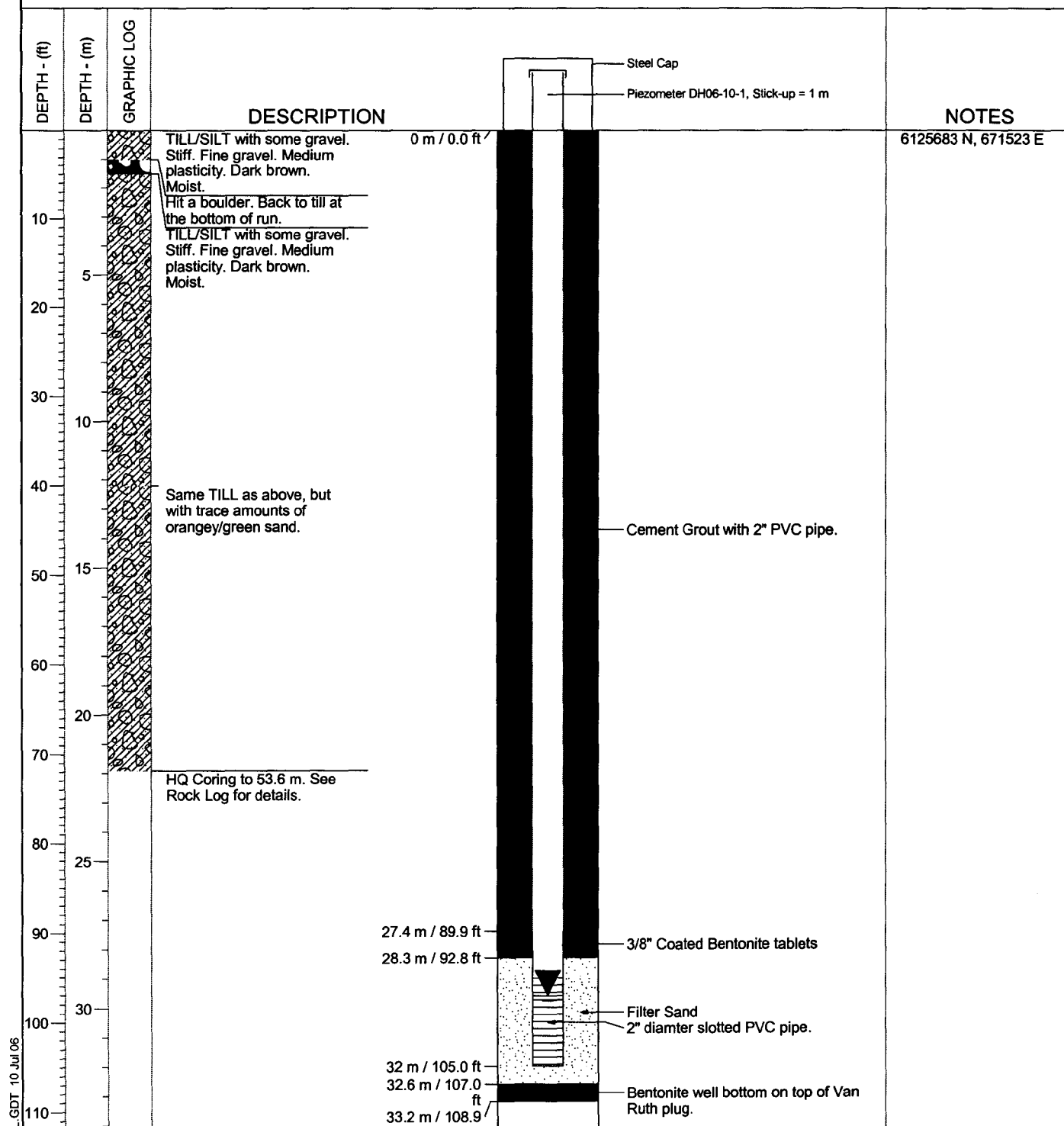
M:\101\00102\07\ADATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

B2-7

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-10**Page **1** of **1**Hole Depth: **53.6 m / 175.9 ft** Hole Diameter: **96 mm**Date Started: **17 Feb 06** Date Completed: **19 Feb 06**Collar Elev: **1001 m / 3284.1 ft** PVC Pipe I.D.: **50 mm**Logged by: **JV** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 29.6 / 20 Feb 06

WELL DRILL GPJ DRILL GDT 10 Jul 06

Rev. 0 - Issued for Report

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-10

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

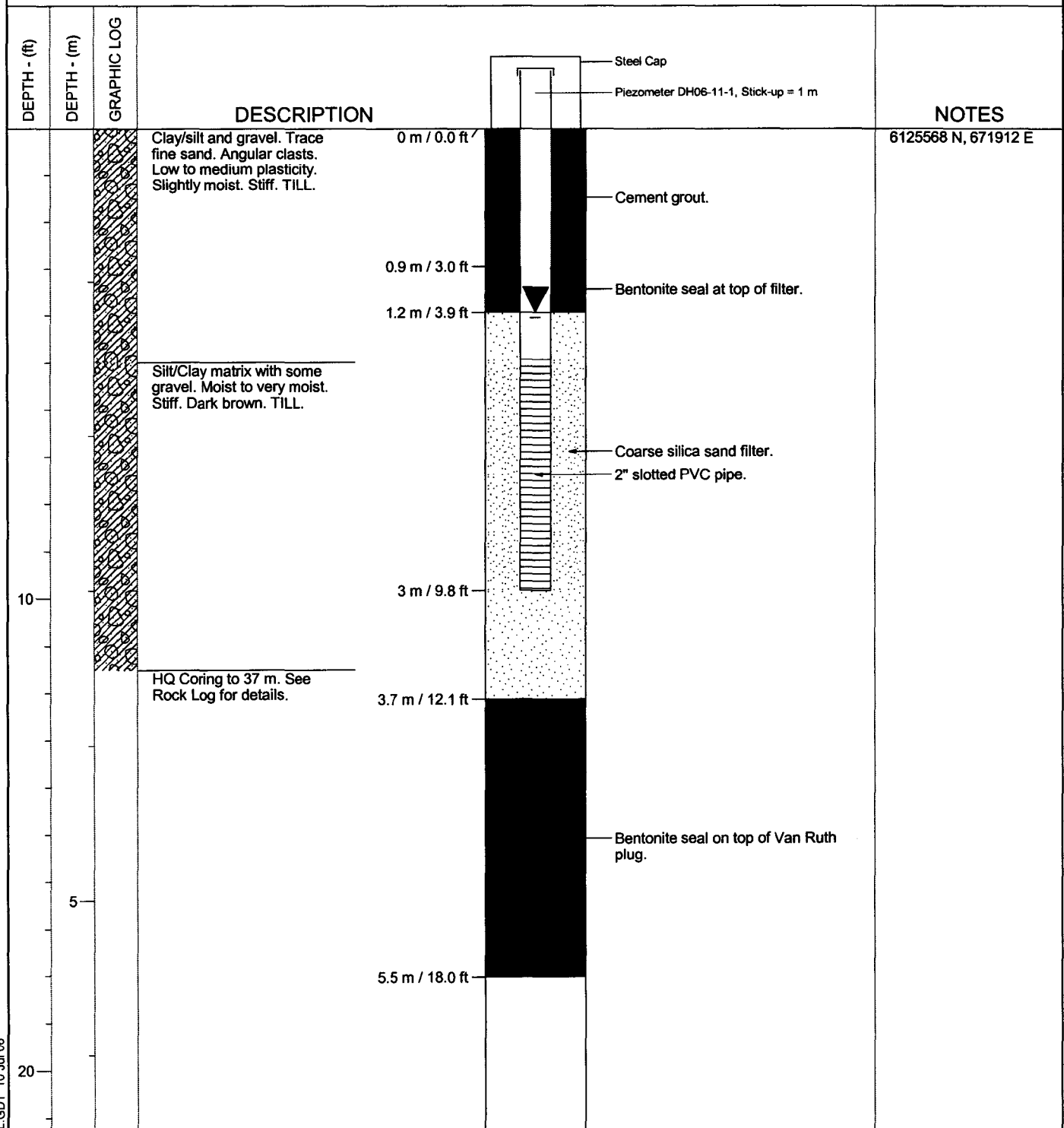
DH06-10

Date Revised: 3 Mar 06

B2-P

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-11**Page **1** of **1**Hole Depth: **36.9 m / 121.1 ft** Hole Diameter: **96 mm**Date Started: **20 Feb 06** Date Completed: **22 Feb 06**Collar Elev: **965 m / 3166.0 ft** PVC Pipe I.D.: **50 mm**Logged by: **LS** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 1.2 / 22 Feb 06

WELL DRILL GPJ DRILL GDT 10 Jul 06

Rev. 0 - Issued for Report

M:\1\01\00102\07\A\DATA\GEOTEC~3\GINT\DRILL.GPJ

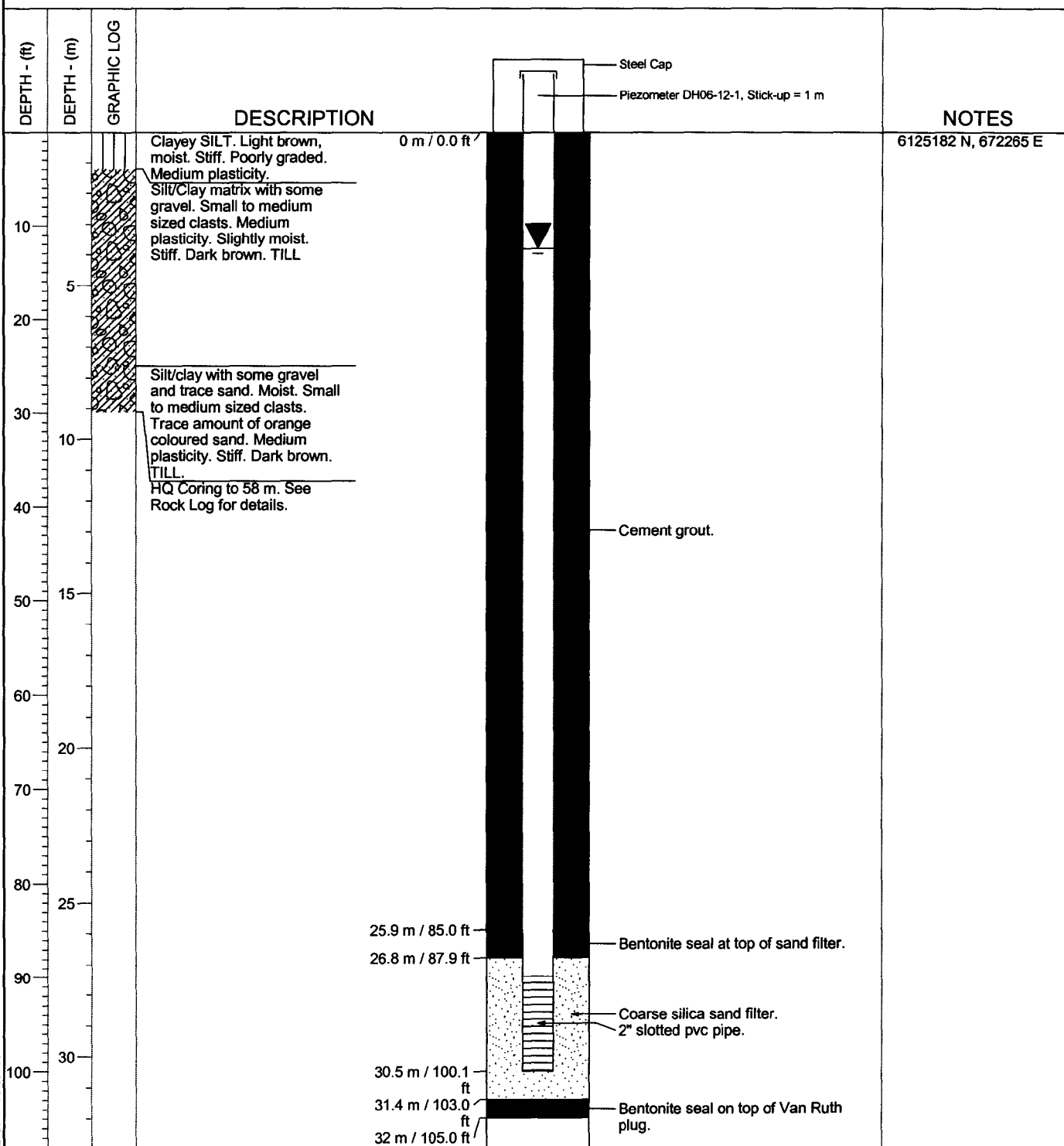
Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-11**Knight Piésold**
CONSULTINGProject No. **101-102/7** Ref. No. **1** Rev. **0****DH06-11**

Date Revised: 1 May 06

32-9

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-12**Page **1** of **1**Hole Depth: **58.3 m / 191.3 ft**Hole Diameter: **96 mm**Date Started: **22 Feb 06**Date Completed: **26 Feb 06**Collar Elev: **996 m / 3267.7 ft**PVC Pipe I.D.: **50 mm**Logged by: **JV & LS**Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 3.8 / 26 Feb 06

WELL DRILL GPJ DRILL GDT 10 Jul 06

Rev. 0 - Issued for Report**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-12****Knight Piésold
CONSULTING**

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-12

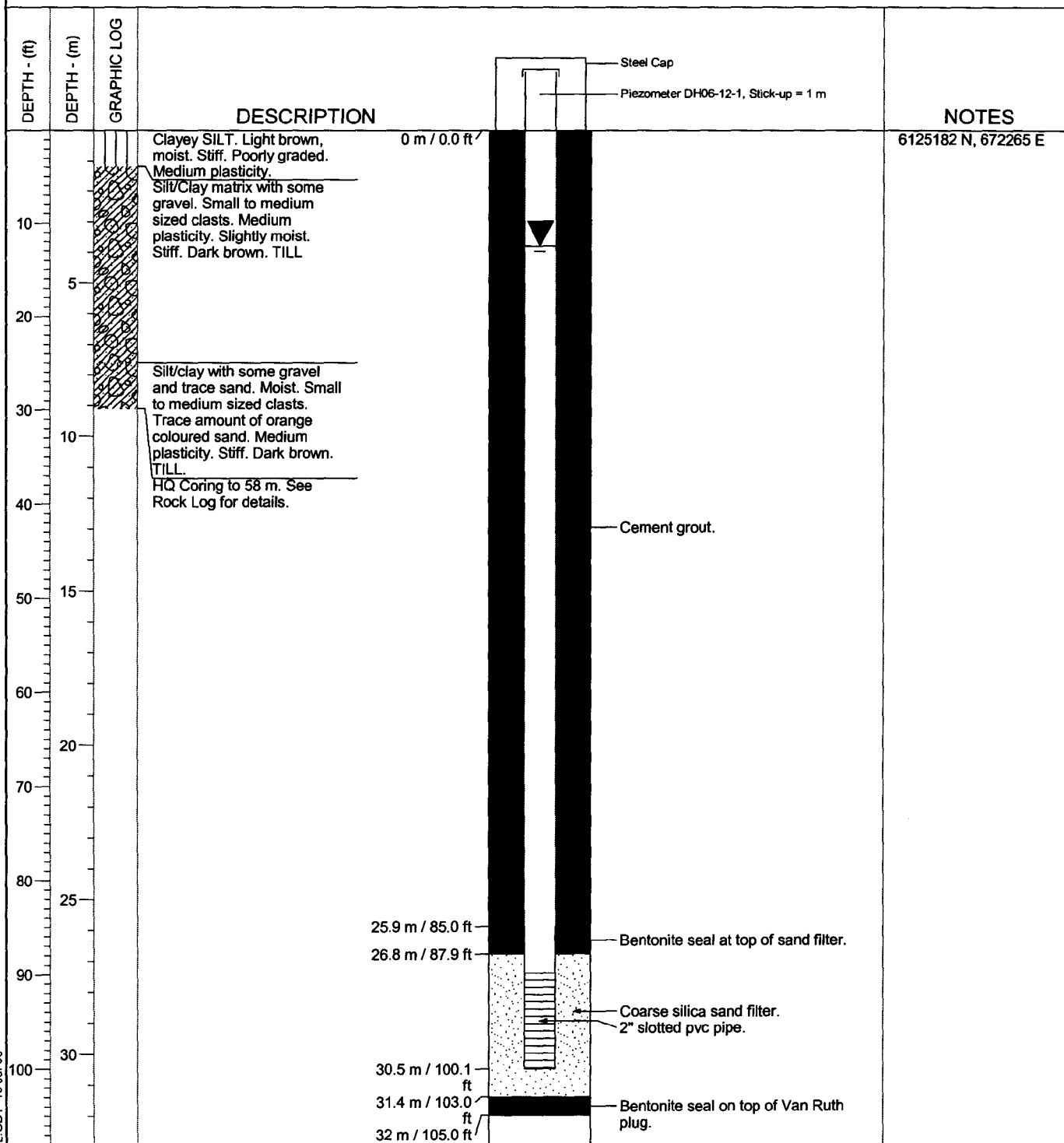
M:\1\01\00102\07A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

B2-10

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-12**Page **1** of **1**Hole Depth: **58.3 m / 191.3 ft** Hole Diameter: **96 mm**Date Started: **22 Feb 06** Date Completed: **26 Feb 06**Collar Elev: **996 m / 3267.7 ft** PVC Pipe I.D.: **50 mm**Logged by: **JV & LS** Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: **3.8 / 26 Feb 06**

WELL DRILL.GPJ DRILL.GDT 10 Jul 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-12

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-12

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

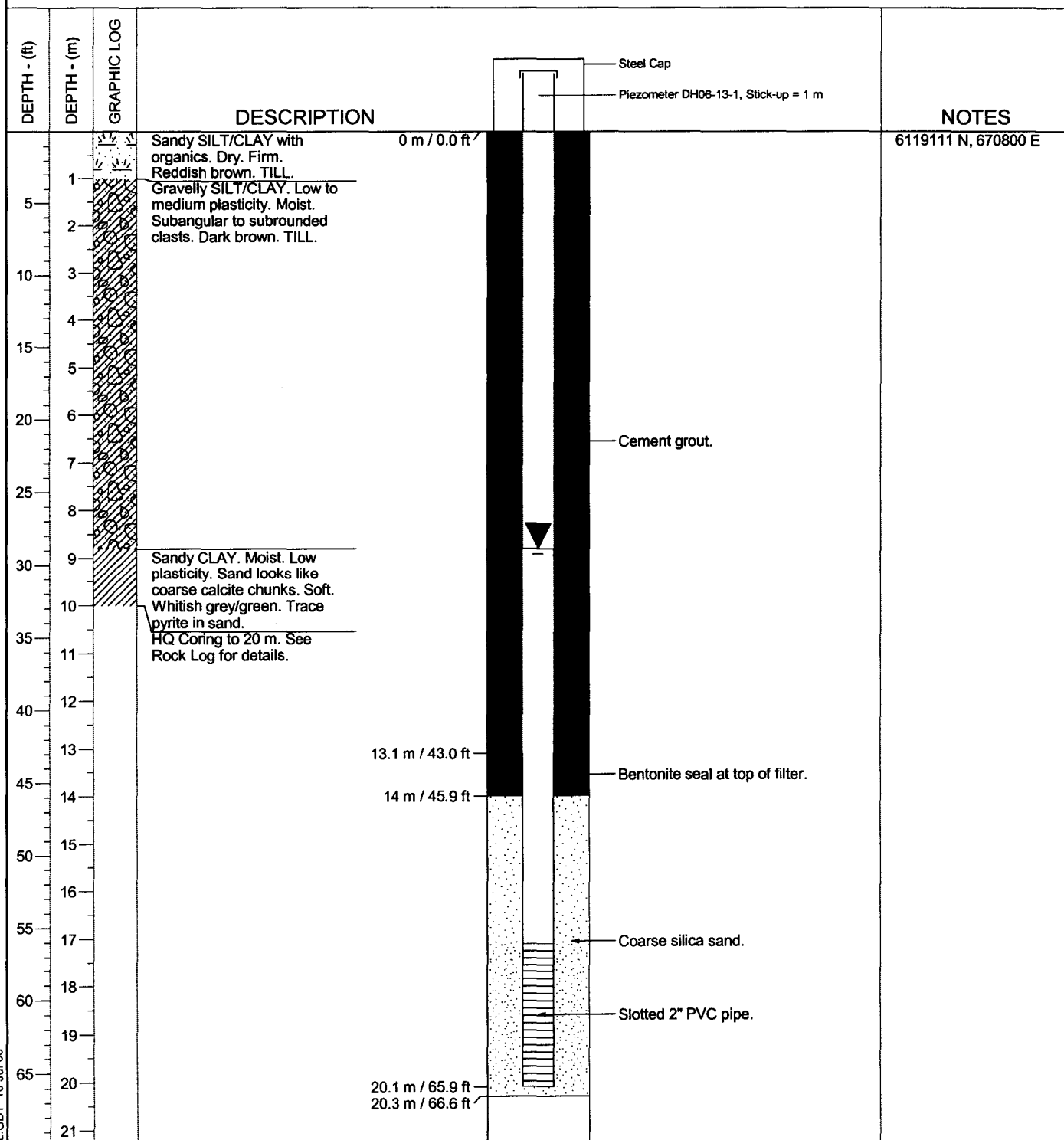
Date Revised: 1 May 06

B2-11

Project: Morrison Copper Gold Project		Drill Hole No.:	DH06-13		Page	1 of 1		
Hole Depth:	20.3 m / 66.6 ft	Hole Diameter:	96 mm		Date Started:	22 Mar 06	Date Completed:	24 Mar 06
Collar Elev:	808 m / 2650.9 ft	PVC Pipe I.D.:	50 mm		Logged by:	JV	Reviewed by:	GJ

Water Level Readings: Depth to Water / Date Measured

Well 1: 8.8 / 23 Mar 06



WELL DRILL.GPJ DRILL.GOT 10 Jul 06

Rev. 0 - Issued for Report

M:\1101100102107\A\DATA\GEOTEC~3\GINT\DRILL.GPJ

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-13

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-1027	1	0

DH06-13

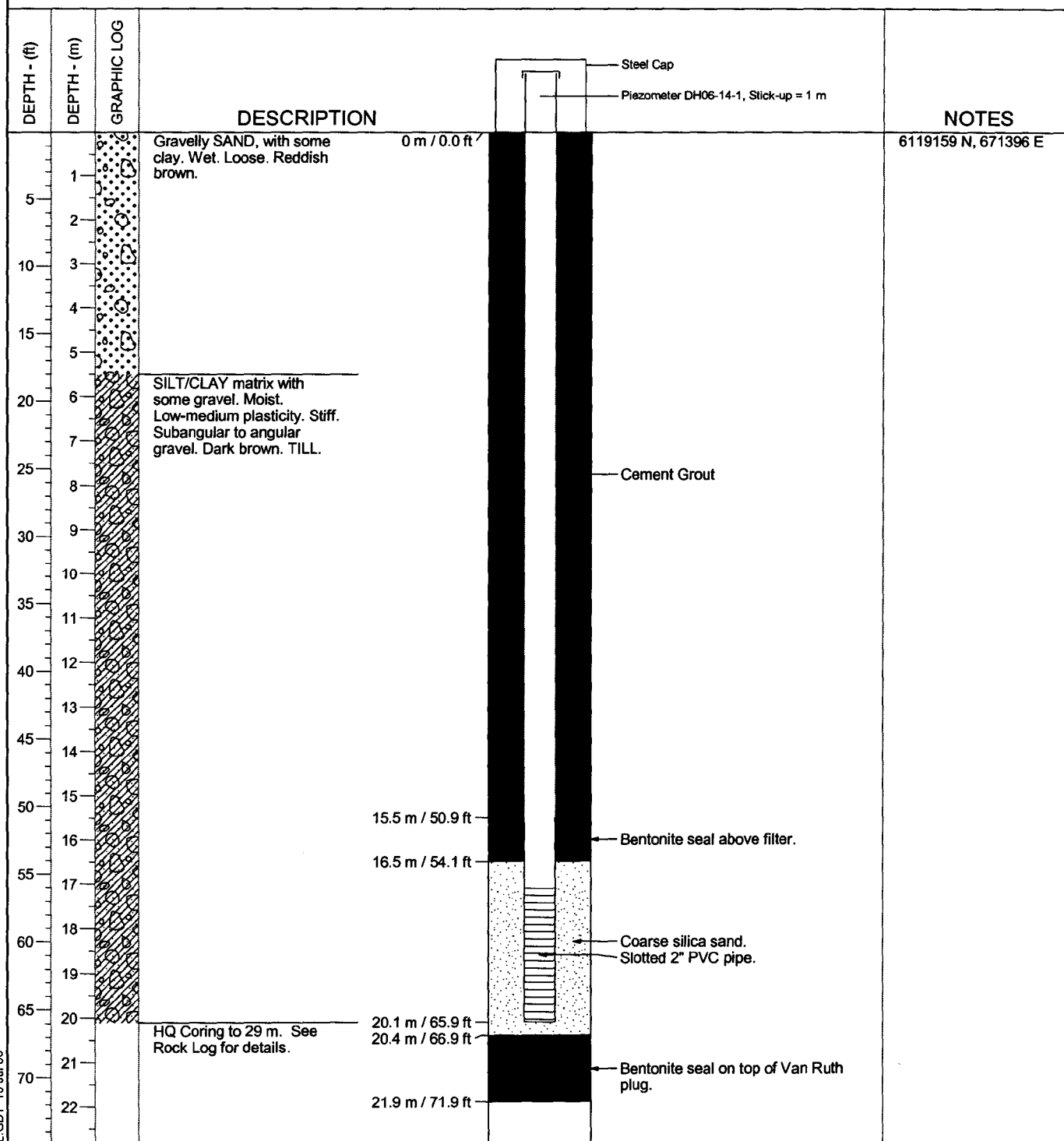
Date Revised: 1 May 06

B2-12

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-14**Page **1** of **1**Hole Depth: **29 m / 95.1 ft**Hole Diameter: **96 mm**Date Started: **22 Mar 06**Date Completed: **23 Mar 06**Collar Elev: **840 m / 2755.9 ft**PVC Pipe I.D.: **50 mm**Logged by: **JV**Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: /



Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-14

Knight Piésold
CONSULTING

Project No. 101-10277	Ref. No. 1	Rev. 0
--------------------------	---------------	-----------

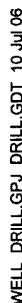
DH06-14

M:\1\001\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 2 May 06

B2-13

Water Level Readings: Depth to Water / Date Measured
Well 1: 0 / 16 Mar 06



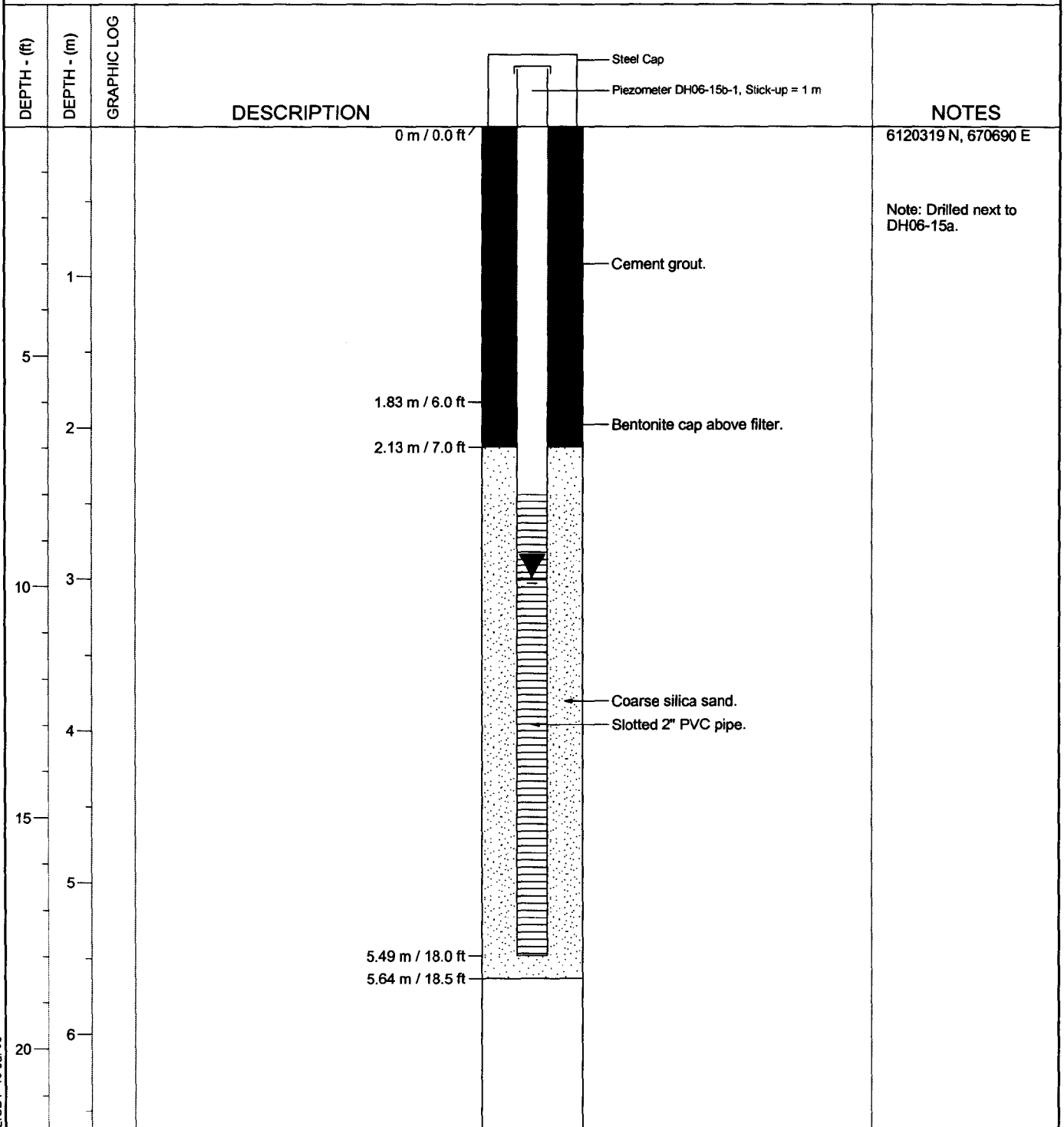
M:\1\01\00102\07A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

B2-14

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-15b**Page **1** of **1**Hole Depth: **5.64 m / 18.5 ft**Hole Diameter: **96 mm**Date Started: **12 Mar 06**Date Completed: **17 Mar 06**Collar Elev: **817 m / 2680.4 ft**PVC Pipe I.D.: **50 mm**Logged by: **JV**Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 3 / 17 Mar 06

WELL DRILL GPJ DRILL GDT 10 Jul 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For DH06-15B

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-15b**Rev. 0 - Issued for Report**

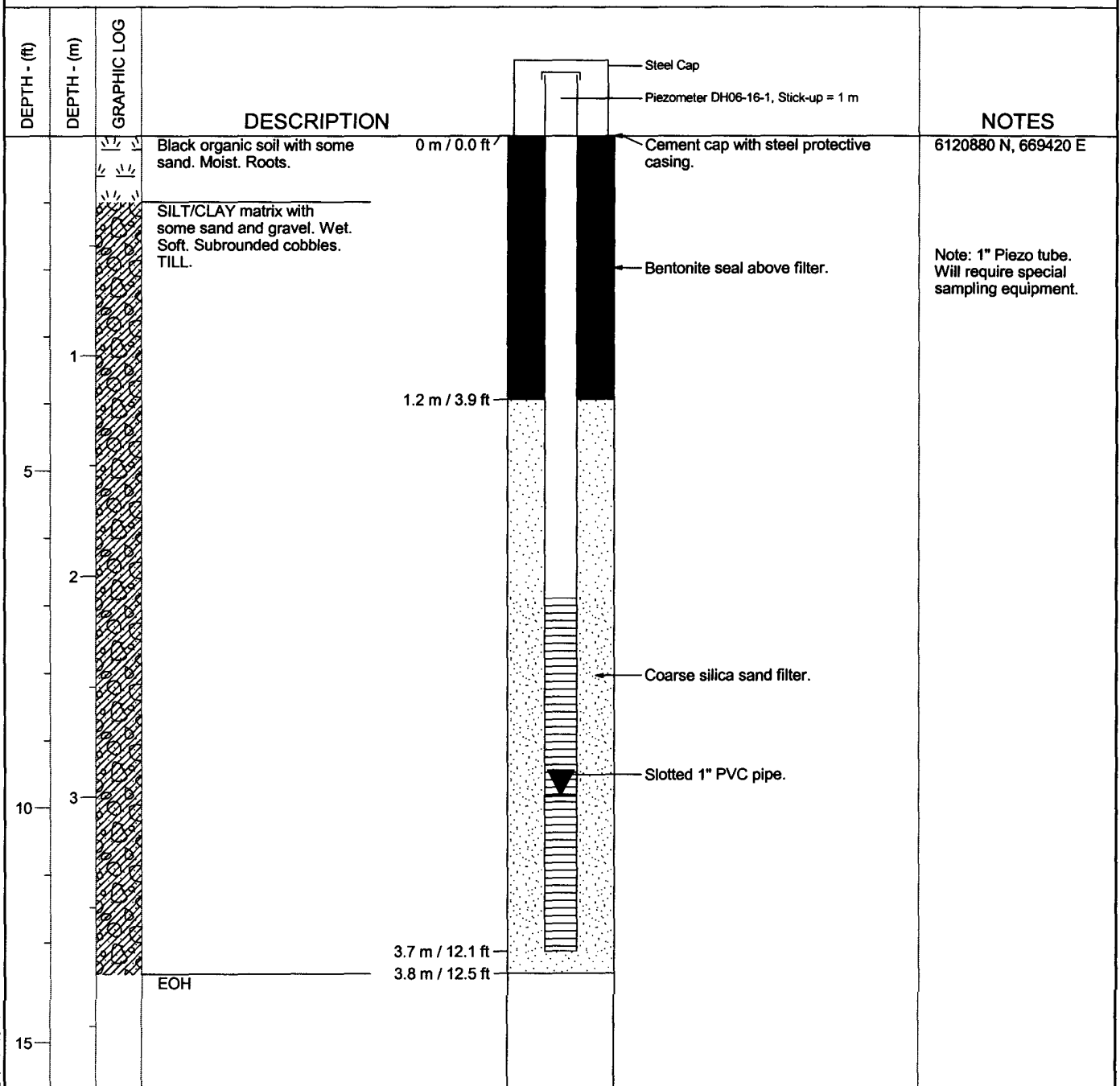
M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 1 May 06

B2-15

Project: Morrison Copper Gold ProjectDrill Hole No.: **DH06-16**Page **1** of **1**Hole Depth: **3.8 m / 12.5 ft**Hole Diameter: **64 mm**Date Started: **2 Apr 06**Date Completed: **2 Apr 06**Collar Elev: **m / ft**PVC Pipe I.D.: **25 mm**Logged by: **JV**Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: **3 / 2 Apr 06**

Note: 1" Piezo tube. Will require special sampling equipment.

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For **DH06-16**

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

DH06-16

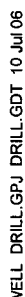
Rev. 0 - Issued for Report

M:\1\01\00102\07A\DATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 4 May 06

B2-16

Water Level Readings: Depth to Water / Date Measured



Project: Morrison Copper Gold Project

Drill Hole No.: **GW1**

Page **1** of **1**

Hole Depth: **4.3 m / 14.1 ft**

Hole Diameter: **96 mm**

Date Started: **4 Apr 06**

Date Completed: **4 Apr 06**

Collar Elev: **795 m / 2608.3 ft**

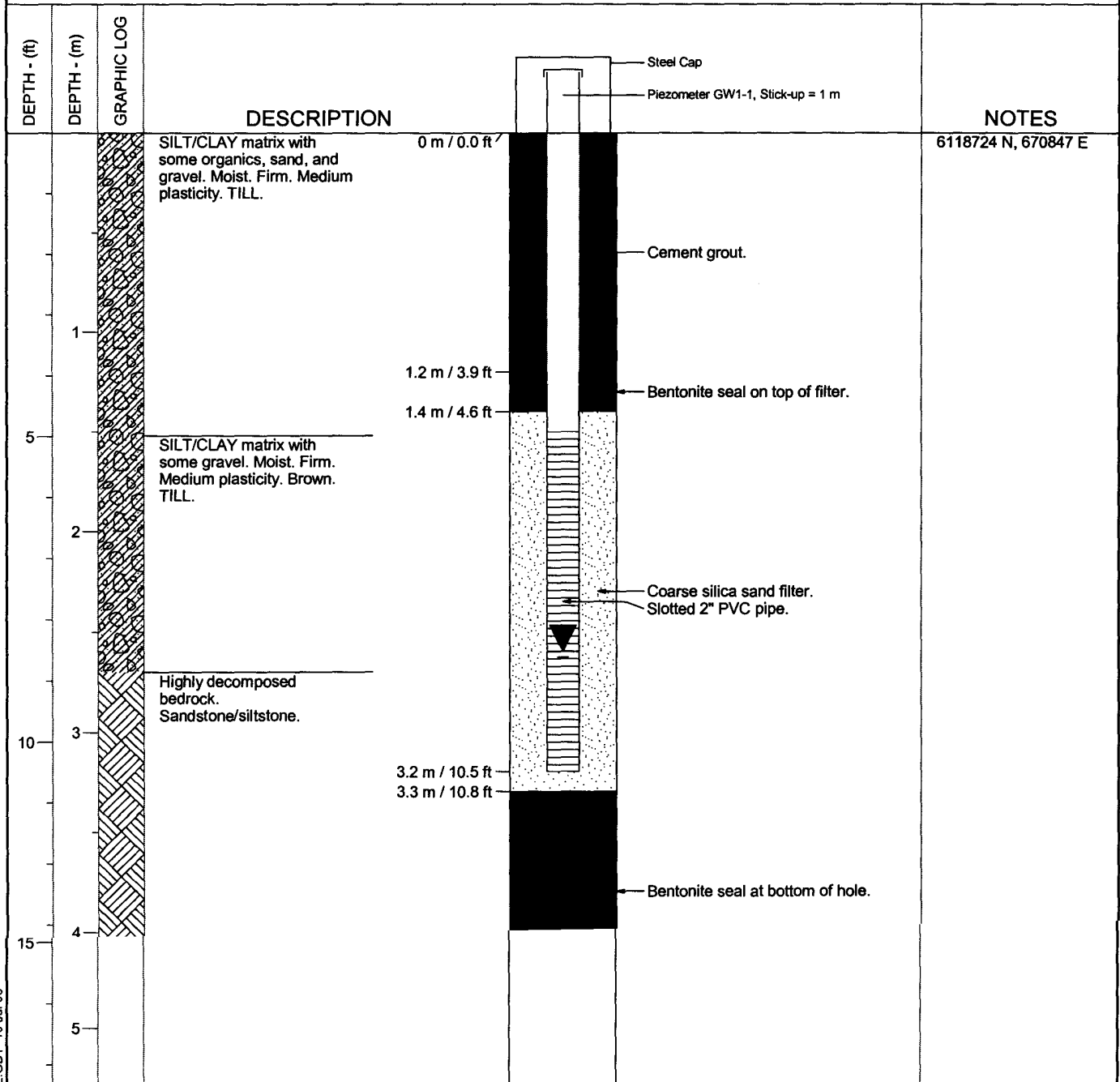
PVC Pipe I.D.: **50 mm**

Logged by: **JV**

Reviewed by: **GJ**

Water Level Readings: Depth to Water / Date Measured

Well 1: 2.6 / 4 Apr 06



WELL DRILL.GPJ DRILL.GDT 10 Jul 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Well Completion Details For GW1

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
101-102/7	1	0

GW1

M:\1\01\00102\07\ADATA\GEOTEC-3\GINT\DRILL.GPJ

Date Revised: 4 May 06

B2-18

APPENDIX B3

(Rev 0)

TESTPIT LOGS

- TP06-1
- TP05-2
- TP06-3
- TP05-4
- TP05-5
- TP06-6
- TP05-7
- TP05-8
- TP05-9
- TP05-10
- TP06-15
- TP06-16
- TP06-17
- TP06-18
- TP06-19
- TP06-20
- TP06-21
- TP06-22
- TP05-23
- TP05-24
- TP05-25
- TP05-26
- TP05-27
- TP05-28
- TP05-33
- TP05-34
- TP05-35
- TP06-37
- TP06-38
- TP06-39
- TP06-40
- TP06-41
- TP06-42
- TP06-43
- TP06-44

(Pages B3-1 to B3-35)

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-1</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>29 Jan 06</u>
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>3.2 m/ 10.5 ft</u>	Date Completed: <u>29 Jan 06</u>
Coordinates: <u>6,121.830 m N. 670.880 m E</u>		Surface Elev.: <u>974 m/3195.5 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
			[Pattern]	Topsoil, organic, brown		
1	0.5		[Pattern]	CLAY, some gravel, trace sand, moderately soft, brown, moist		
2			[Pattern]			
3	1.0	X	[Pattern]			TP06-1-1
4			[Pattern]	CLAY & GRAVEL (Till), some cobbles, very stiff, brown, moist		
5	1.5	X	[Pattern]			TP06-1-2
6			[Pattern]			
7	2.0		[Pattern]			
8			[Pattern]			
9	2.5		[Pattern]			
10	3.0		[Pattern]			
11				End of test pit at 3.2 m/10.5 ft		
12	3.5					
13	4.0					
14						
15	4.5					
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-1			
Rev. 0 - Issued for Report		Project No. <u>VA101-102/7</u>	Ref. No. <u>1</u> Rev. <u>0</u> TP06-1

M:\11\01\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 29 Jan 06

B3-1

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-2</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>24 Nov 05</u>
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>3.1 m/ 10.2 ft</u>	Date Completed: <u>24 Nov 05</u>
Coordinates <u>6,121,943 m N. 671,388 m E</u>		Surface Elev.: <u>966 m/3169.3 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-2-1
1	0.5	X		SAND and GRAVEL, trace clay, loose, reddish brown, moist		
2						
3	1.0					
4				CLAY and GRAVEL (TILL), frequent cobbles (+15"), stiff, medium plasticity, brown, dry		TP05-2-2
5	1.5					
6						
7	2.0	X				
8	2.5					
9						
10	3.0					
				End of test pit at 3.1 m/10.2 ft		
11	3.5					
12						
13	4.0					
14						
15	4.5					
16						

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-2	
Rev. 0 - Issued for Report	 Project No. VA101-102/7 Ref. No. 1 Rev. 0 TP05-2

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1101\00102\07\A\DATA\GEOTEC-3\GIN\TESTPIT.GPJ

Date Revised: 1 Dec 05

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-3</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>29 Jan 06</u>
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>0.8 m/ 2.6 ft</u>	Date Completed: <u>29 Jan 06</u>
Coordinates <u>6.122.100 m N. 671.020 m E</u>		Surface Elev.: <u>982 m/3221.8 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organic, brown		
1	0.5			CLAY & SAND, trace silt, increased rock clasts, firm, brown, dry		
2						
3	1.0			End of test pit at 0.8 m/2.6 ft		
4				Bedrock, Intrusive, trace of chlorite alteration		
5	1.5					
6						
7	2.0					
8	2.5					
9						
10	3.0					
11	3.5					
12						
13	4.0					
14	4.5					
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report		Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-3		
		Knight Piésold CONSULTING	Project No. <u>VA101-102/7</u>	Ref. No. <u>1</u>
		TP06-3		

M:\1101100102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 29 Jan 06

B3-3

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-4</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>24 Nov 05</u>
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>3.6 m/ 11.8 ft</u>	Date Completed: <u>24 Nov 05</u>
Coordinates: <u>6,122,254 m N. 671,469 m E</u>		Surface Elev.: <u>966 m/3169.3 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				organic soil, PEAT, black, wet	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1	0.5			CLAY and GRAVEL (TILL), some rock clasts , stiff, medium plasticity, brown, moist to wet	Excess surface water	
2						
3	1.0					TP05-4-1
4						
5	1.5					
6	2.0			very stiff, high plasticity, brown, damp		
7						
8	2.5					
9						
10	3.0					TP05-4-2
11						
12	3.5			End of test pit at 3.6 m/11.8 ft		
13	4.0					
14						
15	4.5					
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report		Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-4	
		Knight Piésold CONSULTING	Project No. <u>VA101-102/7</u> Ref. No. <u>1</u> Rev. <u>0</u> TP05-4

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

Project: Morrison Copper Gold Project

Test Pit: TP05-5

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 24 Nov 05

Location: CONVEYOR ALIGNMENT

Total Depth: 1.6 m/ 5.2 ft

Date Completed: 24 Nov 05

Coordinates 6,122,581 m N, 671,490 m E

Surface Elev.: 967 m/3172.6 ft

Logged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsail, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1				CLAY and GRAVEL (TILL), soft to firm, some rock clasts, high plasticity, brown, wet		
0.5						
2						
3						
1.0						
4						
1.5						
5				End of test pit at 1.6 m/5.2 ft		
6				BEDROCK		
2.0						
7						
2.5						
8						
3.0						
9						
3.5						
10						
4.0						
11						
4.5						
12						
13						
14						
15						
16						

TP05-5-1

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-5

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-5		

Rev. 0 - Issued for Report

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3-5

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-6</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>29 Jan 06</u>	
Location: <u>SOUTH EMBANKMENT</u>		Total Depth: <u>3.2 m/ 10.5 ft</u>	Date Completed: <u>29 Jan 06</u>	
Coordinates <u>6.122.749 m N. 671.317 m E</u>		Surface Elev.: <u>959 m/3146.3 ft</u>	Logged by: <u>TT</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Topsoil, organic, brown		
2	0.5			Clay & sandy GRAVEL (Till), rounded, stiff, brown, damp		
3	1.0	X				TP06-6-1
4				CLAY & GRAVEL, trace of silt, very stiff, brown, moist		
5	1.5					
6	2.0					
7	2.5	X				TP06-6-2
8						
9						
10	3.0					
11	3.5			End of test pit at 3.2 m/10.5 ft		
12						
13	4.0					
14						
15	4.5					
16						

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-6										
Rev. 0 - Issued for Report	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;"> Knight Piesold CONSULTING </td> <td style="width: 33%;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">Project No.</td> <td style="font-size: small;">Ref. No.</td> <td style="font-size: small;">Rev.</td> </tr> <tr> <td style="text-align: center;">VA101-102/7</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> </table> </td> <td style="width: 33%; text-align: center;"> TP06-6 </td> </tr> </table>	Knight Piesold CONSULTING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">Project No.</td> <td style="font-size: small;">Ref. No.</td> <td style="font-size: small;">Rev.</td> </tr> <tr> <td style="text-align: center;">VA101-102/7</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> </table>	Project No.	Ref. No.	Rev.	VA101-102/7	1	0	TP06-6
Knight Piesold CONSULTING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">Project No.</td> <td style="font-size: small;">Ref. No.</td> <td style="font-size: small;">Rev.</td> </tr> <tr> <td style="text-align: center;">VA101-102/7</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> </table>	Project No.	Ref. No.	Rev.	VA101-102/7	1	0	TP06-6		
Project No.	Ref. No.	Rev.								
VA101-102/7	1	0								

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 29 Jan 06

B3-6

Project: Morrison Copper Gold Project

Test Pit: TP05-7

Page 1 of 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 25 Nov 05

Location: SOUTH EMBANKMENT

Total Depth: 3.2 m/ 10.5 ft

Date Completed: 25 Nov 05

Coordinates 6,122,910 m N, 671,006 m E

Surface Elev.: 959 m/3146.3 ft

Logged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1				CLAY and GRAVEL (TILL), some rock clasts, subangular, firm, medium plasticity, brown, moist		
0.5						
2						
3						TP05-7-1
1.0						
4						
1.5				very stiff, frequent lenses of isolated silt (increasing with depth)		
5						
2.0						
6						
2.5						
7						
2.0						
8						
2.5						
9						TP05-7-2
3.0						
10				End of test pit at 3.2 m/10.5 ft		
3.5						
11						
3.5						
12						
4.0						
13						
4.0						
14						
4.5						
15						
4.5						
16						

Rev. 0 - Issued for Report

Knight Piesold
CONSULTING

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-7

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-7		

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\101\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3-7

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-8</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>26 Nov 05</u>
Location: <u>SOUTH EMBANKMENT</u>		Total Depth: <u>0.6 m/ 2.0 ft</u>	Date Completed: <u>26 Nov 05</u>
Coordinates <u>6.123.151 m N. 670.743 m E</u>		Surface Elev.: <u>956 m/3136.5 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
			[Pattern]	Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1			[Pattern]	Topsoil, CLAY and SAND. soft, brown, damp		
0.5						
2				End of test pit at 0.6 m/2.0 ft		
3				Bedrock		
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-8												
Rev. 0 - Issued for Report	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="text-align: center; vertical-align: middle;"> Knight Piésold CONSULTING </td> <td style="font-size: small;">Project No.</td> <td style="font-size: small;">Ref. No.</td> <td style="font-size: small;">Rev.</td> </tr> <tr> <td style="text-align: center;">VA101-102/7</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> <tr> <td colspan="4" style="text-align: center;">TP05-8</td> </tr> </table>	Knight Piésold CONSULTING	Project No.	Ref. No.	Rev.	VA101-102/7	1	0	TP05-8			
Knight Piésold CONSULTING	Project No.		Ref. No.	Rev.								
	VA101-102/7	1	0									
TP05-8												

M:\11\01\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

Project: Morrison Copper Gold Project

Test Pit: TP05-9

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 26 Nov 05

Location: SOUTH EMBANKMENT

Total Depth: 3.1 m/ 10.2 ft

Date Completed: 26 Nov 05

Coordinates 6,123,264 m N, 670,852 m E

Surface Elev.: 966 m/3169.3 ft

Logged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1				Topsoil CLAY and SAND, soft, brown, damp		
	0.5			CLAY and GRAVEL (TILL), trace of silt, some rock clasts, subangular, firm, brown, moist		
2						
3						
	1.0					TP05-9-1
4						
5				very stiff with increased lean clay percent		
6						
7						
	2.0					
8						
	2.5					TP05-9-2
9						
10						
	3.0			End of test pit at 3.1 m/10.2 ft		
11						
	3.5					
12						
	4.0					
13						
	4.5					
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-9**

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-9		

M:\1101\00102\07\A\DATA\GEOTEC\3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3-9

Project: Morrison Copper Gold ProjectTest Pit: TP05-10Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 28 Nov 05Location: SOUTH EMBANKMENTTotal Depth: 3.4 m/ 11.2 ft Date Completed: 28 Nov 05Coordinates 6.123.451 m N. 670.621 m ESurface Elev.: 946 m/3103.7 ftLogged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1				CLAY and GRAVEL (TILL), trace of sand, frequent boulders, firm, medium plasticity, brown, dry		
0.5						
2						
3						
1.0						
4						TP05-10-1
1.5						
5						
2.0						
6						
7				CLAY and GRAVEL (TILL), stiff, frequent cobbles		
2.5						
8						
9						
3.0						
10						
3.5				End of test pit at 3.4 m/11.2 ft		
11						
4.0						
12						
4.5						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-10

Rev. 0 - Issued for Report

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-10		

M:\1101\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3-10

Project: Morrison Copper Gold Project

Test Pit: TP06-15

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 6 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 3.4 m/ 11.2 ft

Date Completed: 6 Apr 06

Coordinates 6.124.074 m N, 670.801 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Organic soil with decomposing vegetation and roots. Trace sand. Moist/frozen. Spongy. PEAT.		
1	0.5			SILT/CLAY with some gravel. Rounded to subrounded clasts, up to cobble size. Poorly graded. Moist. Stiff. Medium plasticity. Dark brown. TILL.		
2						
3	1.0					
4						
5	1.5	X				TP06-15 @ 4.5'
6						
7	2.0					
8	2.5	X				TP06-15 @ 8'
9						
10	3.0					
11	3.5			End of test pit at 3.4 m/11.2 ft		
12						
13	4.0					
14						
15	4.5					
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-15

Knight Piesold
CONSULTING

Project No. VA101-10277

Ref. No. 1

Rev. 0

TP06-15

M:\1101\00102107\A\DATA\GEOTEC~3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-11

Project: Morrison Copper Gold Project

Test Pit: TP06-16

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 6 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 2.4 m/ 7.9 ft

Date Completed: 6 Apr 06

Coordinates 6.123.975 m N, 671.085 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				SILT/CLAY matrix with some sand and gravel. Slightly moist. Firm. Brown. TILL.		
0.5						
2				SILT/CLAY matrix with some gravel. Moist. Medium plasticity. Stiff. Dark brown. TILL.		
3						
1.0						
4		X				TP06-16 @ 4'
1.5				Gravelly, SILT/CLAY matrix. Moist. Medium plasticity. Stiff. Some cobbles, poorly graded. Dark brown. TILL.		
5						
2.0						
7		X				TP06-16 @ 8'
2.5				End of test pit at 2.4 m/7.9 ft	Hit bedrock at 2.4 m.	
8						
9						
3.0						
10						
3.5						
11						
4.0						
12						
4.5						
13						
14						
15						
16						

Rev. 0 - Issued for Report

Knight Piésold
CONSULTING

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-16

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-16		

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-12

Project: Morrison Copper Gold Project

Test Pit: TP06-17

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 6 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 3.4 m/ 11.2 ft

Date Completed: 6 Apr 06

Coordinates 6.123.668 m N, 671.168 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Organic soil with trace sand. Roots. Moist. Soft. Blackish brown. TOPSOIL.		
0.5				SILT/CLAY matrix with some gravel. Moist. Firm. Medium plasticity. Poorly graded. Brown. TILL.		
2						
3						
1.0						
4		X				TP06-17 @ 4'
5				Gravely SILT/CLAY matrix. Moist. Stiff. Some cobbles, and chunks of hard clay. Brown. TILL.		
6						
2.0						
7						
8						
2.5						
9						
3.0		X				TP06-17 @ 10'
10						
11				End of test pit at 3.4 m/11.2 ft		
3.5						
12						
4.0						
13						
4.5						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-17**

Knight Piésold
CONSULTING

Project No. VA101-102/7

Ref. No. 1

Rev. 0

TP06-17

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-13

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-18</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>5 Apr 06</u>
Location: <u>SOUTH EMBANKMENT</u>		Total Depth: <u>4.6 m/ 15.1 ft</u>	Date Completed: <u>5 Apr 06</u>
Coordinates <u>6.123.527 m N, 671.038 m E</u>		Logged by: <u>JV</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1			[Pattern: Dotted]	Sandy organic soil with trace clay. Moist. Soft. Roots. TOPSOIL.		
2	0.5	X	[Pattern: Diagonal lines]	Gravely SILT/CLAY matrix. Many subrounded cobbles. Poorly graded. Moist. Stiff. TILL.		TP06-18 @ 2'
3	1.0		[Pattern: Diagonal lines]			
4	1.5	X	[Pattern: Diagonal lines]			TP06-18 @ 5'
5	2.0		[Pattern: Diagonal lines]			
6	2.5		[Pattern: Diagonal lines]			
7	3.0		[Pattern: Diagonal lines]			
8	3.5		[Pattern: Diagonal lines]			
9	4.0		[Pattern: Diagonal lines]			
10	4.5	X	[Pattern: Diagonal lines]			TP06-18 @ 15'
11				End of test pit at 4.6 m/15.1 ft		
12						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-18			
Rev. 0 - Issued for Report		Project No. <u>VA101-10277</u>	Ref. No. <u>1</u>
		Rev. <u>0</u>	TP06-18

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-14

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-19</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>6 Apr 06</u>	
Location: <u>SOUTH EMBANKMENT</u>		Total Depth: <u>3.7 m/ 12.1 ft</u>	Date Completed: <u>6 Apr 06</u>	
Coordinates <u>6.123.650 m N, 671.400 m E</u>		Logged by: <u>JV</u>		
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1			[Pattern]	Organic soil with some sand. Roots. Slightly moist. Soft. TOPSOIL.		
2	0.5		[Pattern]	SILT/CLAY matrix with some fine gravel and trace sand. Slightly moist. Low plasticity. Firm. Dark brown. TILL.		
3	1.0	X	[Pattern]			TP06-19 @ 3'
4			[Pattern]	SILT/CLAY matrix with some gravel. Subrounded clasts. Moist. Medium plasticity. Very stiff. TILL.		
5	1.5		[Pattern]			
6	2.0		[Pattern]			
7	2.5		[Pattern]			
8	3.0	X	[Pattern]			TP06-19 @ 10'
9	3.5		[Pattern]			
10	4.0		[Pattern]			
11	4.5		[Pattern]			
12			[Pattern]	End of test pit at 3.7 m/12.1 ft		
13			[Pattern]			
14			[Pattern]			
15			[Pattern]			
16			[Pattern]			

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-19									
Rev. 0 - Issued for Report	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;"> Knight Piésold CONSULTING </td> <td style="width: 20%;"> Project No. <u>VA101-1027</u> </td> <td style="width: 20%;"> Ref. No. <u>1</u> </td> <td style="width: 30%;"> Rev. <u>0</u> </td> </tr> <tr> <td colspan="4" style="text-align: center;"> TP06-19 </td> </tr> </table>	Knight Piésold CONSULTING	Project No. <u>VA101-1027</u>	Ref. No. <u>1</u>	Rev. <u>0</u>	TP06-19			
Knight Piésold CONSULTING	Project No. <u>VA101-1027</u>	Ref. No. <u>1</u>	Rev. <u>0</u>						
TP06-19									

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-15

Project: Morrison Copper Gold Project

Test Pit: TP06-20

Page 1 of 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 5 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 3 m/ 9.8 ft

Date Completed: 5 Apr 06

Coordinates 6.123.321 m N. 671.258 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Sandy organics with trace clay. Compact. Moist. TOPSOIL.		
0.5						
2				SILT/CLAY matrix with some gravel. Stiff. Moist. TILL.		TP06-20 @ 0-5'
3						
1.0						
4						
5						TP06-20 @ 5'
1.5						
6						
2.0						
7						
2.5						
8						
3.0				End of test pit at 3 m/9.8 ft	Hit Bedrock.	
9						
10						
3.5						
11						
4.0						
12						
4.5						
13						
14						
15						
16						

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-20

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-20		

Rev. 0 - Issued for Report

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3 - 16

Project: Morrison Copper Gold Project

Test Pit: TP06-21

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 6 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 3.4 m/ 11.2 ft

Date Completed: 6 Apr 06

Coordinates 6,123,485 m N, 671,487 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Organic soil with decomposing vegetation and roots. Some sand. Moist. Spongy. Black. PEAT.		
0.5				Gravelly, SILT/CLAY matrix. Moist. Medium plasticity. Firm. Subangular to subrounded clasts up to coarse gravel size. Dark brown. TILL.		
2						
3						
1.0						
4		X				TP06-21 @ 4'
5				Gravelly, SILT/CLAY matrix with trace amounts of coal. Very moist. Stiff. Medium plasticity. Rounded coarse gravel and cobble sized clasts. Poorly graded. Dark brown. TILL.		
6						
7						
2.0						
8						
2.5						
9		X				TP06-21 @ 9'
10						
3.0						
11				End of test pit at 3.4 m/11.2 ft		
3.5						
12						
4.0						
13						
4.5						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-21

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-1027	1	0
TP06-21		

Rev. 0 - Issued for Report

M:\1101100102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-17

Project: Morrison Copper Gold Project

Test Pit: TP06-22

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 5 Apr 06

Location: SOUTH EMBANKMENT

Total Depth: 3.4 m/ 11.2 ft

Date Completed: 5 Apr 06

Coordinates 6.123.214 m N. 671.481 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Sandy SILT/CLAY with organics. Moist. Firm. Brown. TILL.		
0.5						
2						
3						
1.0		X				TP06-22 @ 4'
4				Gravelly, SILT/CLAY matrix. Moist. Stiff. Well graded up to cobble size. Dark brown. TILL.		
5						
1.5						
6						
2.0		X				TP06-22 @ 5-11'
7						
2.5						
8						
9						
3.0						
10						
3.5				End of test pit at 3.4 m/11.2 ft		
11						
4.0						
12						
4.5						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-22

Knight Piésold
CONSULTING

Project No.
VA101-1027

Ref. No.
1

Rev.
0

Rev. 0 - Issued for Report

TP06-22

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3-18

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-23</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>25 Nov 05</u>	
Location: <u>SOUTH EMBANKMENT</u>		Total Depth: <u>3.4 m/ 11.2 ft</u>	Date Completed: <u>25 Nov 05</u>	
Coordinates <u>6.123.018 m N, 671.384 m E</u>		Surface Elev.: <u>972 m/3189.0 ft</u>	Logged by: <u>TT</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Vegetation, moss, roots, rotten trees	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1	0.5			CLAY and GRAVEL (TILL), trace of sandy silt, some rock clasts, subangular, soft, medium plasticity, brown, wet		TP05-23-1
2						
3	1.0					
4						
5	1.5			As above. Very stiff, some lenses of isolated silt		
6						
7	2.0					
8						
9	2.5					TP05-23-2
10	3.0					
11	3.5			End of test pit at 3.4 m/11.2 ft		
12						
13	4.0					
14						
15	4.5					
16						

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-23	
Rev. 0 - Issued for Report	 Project No. <u>VA101-102/7</u> Ref. No. <u>1</u> Rev. <u>0</u> TP05-23

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 19

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-24</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>22 Nov 05</u>
Location: <u>PLANT SITE</u>		Total Depth: <u>4 m/ 13.1 ft</u>	Date Completed: <u>22 Nov 05</u>
Coordinates <u>6,119,571 m N, 671,098 m E</u>		Surface Elev.: <u>844 m/2769.0 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin) Excess surface water	TP05-24-1
1				PEAT, black, saturated		
0.5		X				
2				Lacustrine SILT and CLAY, very fine, soft, white to green, saturated		
3						TP05-24-2
1.0		X				
4						
5				SAND, SILT and GRAVEL, well graded, compact, gray greenish, saturated		
6						TP05-24-3
2.0		X				
7						
8						
9						TP05-24-4
3.0				CLAY and GRAVEL, well graded high plasticity, brown, moist		
11						
3.5		X				
12						
4.0				End of test pit at 4 m/13.1 ft		
14						
4.5						
16						

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-24			
Knight Piésold CONSULTING		Project No. VA101-102/7	Ref. No. 1
Rev. 0 - Issued for Report		TP05-24	

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1101100102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 20

Project: Morrison Copper Gold Project

Test Pit: TP05-25

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 22 Nov 05

Location: PLANT SITE

Total Depth: 4 m/ 13.1 ft

Date Completed: 22 Nov 05

Coordinates 6.119.558 m N. 671.196 m E

Surface Elev.: 843 m/2765.7 ft

Logged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin)	
1				SAND and SILT, firm, brown, moist		
0.5						
2				CLAY and GRAVEL (TILL), trace of sand/silt, well graded, frequent cobbles, firm, brown, moist		
3						TP05-25-1
4						
5						
6						
7						
8						
9				very stiff, with increasing lean clay percent		
10						
11						
12						TP05-25-2
13				End of test pit at 4 m/13.1 ft		
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-25**

Knight Piésold
CONSULTING

Project No. <u>VA101-102/7</u>	Ref. No. <u>1</u>	Rev. <u>0</u>
TP05-25		

M:\1101\00102107\A\DATA\GEOTEC~3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 21

Project: Morrison Copper Gold ProjectTest Pit: TP05-26Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 22 Nov 05Location: PLANT SITETotal Depth: 3.5 m/ 11.5 ftDate Completed: 22 Nov 05Coordinates 6.119.573 m N, 671.304 m ESurface Elev.: 843 m/2765.7 ftLogged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1	0.5	X		Topsoil, organics, moss, roots	Elevations and coordinates were obtained by hand held GPS (Garmin) Excess surface water	TP05-26-1
				PEAT organic, black, saturated		
2				Sandy SILT & CLAY, well graded, moderately firm, brown, wet		
4		X				TP05-26-2
5	1.5	X		fine SAND and SILT, compact, grey, wet		
7	2.0	X				TP05-26-3
8	2.5	X				
9				Gravelly CLAY (TILL), stiff, high plasticity, brown, moist		
12	3.5			End of test pit at 3.5 m/11.5 ft		

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-26**Knight Piésold**
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-26		

Rev. 0 - Issued for Report

M:\11\01\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 22

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-27</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>23 Nov 05</u>
Location: <u>PLANT SITE</u>		Total Depth: <u>3 m/ 9.8 ft</u>	Date Completed: <u>23 Nov 05</u>
Coordinates <u>6.119.470 m N. 671.195 m E</u>		Surface Elev.: <u>838 m/2749.3 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1			[Pattern: Dotted]	PEAT, black, saturated	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-27-1
0.5		X	[Pattern: Vertical Lines]	Lacustrine SILT and CLAY, very fine, soft, white, saturated	Excess amount of surface water	
2						
3						
4						
5						
1.5			[Pattern: Dotted]	SILT, GRAVEL and CLAY, well graded, subrounded, very stiff, brown, moist		TP05-27-2
2.0		X	[Pattern: Dotted]			
7						
8						
2.5						
3.0				End of test pit at 3 m/9.8 ft		
10						
11						
12						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-27			
Rev. 0 - Issued for Report	Knight Piésold CONSULTING	Project No. <u>VA101-10277</u>	Ref. No. <u>1</u> Rev. <u>0</u> TP05-27

M:\1101\00102\07A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 23

Project: Morrison Copper Gold ProjectTest Pit: TP05-28Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 23 Nov 05Location: PLANT SITETotal Depth: 3.8 m/ 12.5 ftDate Completed: 23 Nov 05Coordinates 6.119.648 m N. 671.169 m ESurface Elev.: 846 m/2775.6 ftLogged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				PEAT, Black, moist	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-28-1
1				SILT and CLAY some gravel, stiff, high plasticity, brown, moist		
0.5				CLAY and GRAVEL (TILL), some sand, with frequent isolated silt lenses, well graded, firm, brown, moist		
2						
3	1.0					
4						
5	1.5					
6				very stiff, frequent cobbles, well graded, brown, moist		
7	2.0					
8	2.5					TP05-28-2
9						
10	3.0					
11	3.5					
12						
13	4.0			End of test pit at 3.8 m/12.5 ft		
14						
15	4.5					
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-28

Rev. 0 - Issued for Report

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP05-28		

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3 - 24

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-33</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>23 Nov 05</u>	
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>3.8 m/ 12.5 ft</u>	Date Completed: <u>23 Nov 05</u>	
Coordinates <u>6,120,552 m N, 671,071 m E</u>		Surface Elev.: <u>885 m/2903.5 ft</u>	Logged by: <u>TT</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				PEAT, black, moist	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-33-1
1				CLAY and GRAVEL (TILL), trace of silt, firm, medium plasticity, brown, wet		
	0.5	X				
2						
	1.0					
3						
4				increasing lean clay percent, very stiff, brown		
5	1.5					
6						
	2.0					
7						
	2.5					
8						
	3.0					
9						
	3.5					
10						
	4.0					
11						
	4.5					
12		X		End of test pit at 3.8 m/12.5 ft		TP05-33-2
13	4.0					
14						
	4.5					
15						
16	4.5					

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-33							
Knight Piésold CONSULTING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Project No. <u>VA101-102/7</u></td> <td style="width: 33%;">Ref. No. <u>1</u></td> <td style="width: 33%;">Rev. <u>0</u></td> </tr> <tr> <td colspan="3" style="text-align: center;">TP05-33</td> </tr> </table>	Project No. <u>VA101-102/7</u>	Ref. No. <u>1</u>	Rev. <u>0</u>	TP05-33		
Project No. <u>VA101-102/7</u>	Ref. No. <u>1</u>	Rev. <u>0</u>					
TP05-33							
Rev. 0 - Issued for Report							

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP05-34</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>23 Nov 05</u>
Location: <u>CONVEYOR ALIGNMENT</u>		Total Depth: <u>3.4 m/ 11.2 ft</u>	Date Completed: <u>23 Nov 05</u>
Coordinates <u>6,121,500 m N, 671,229 m E</u>		Surface Elev.: <u>924 m/3031.5 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organics, moss, roots		
1	0.5	X		CLAY and GRAVEL (TILL), some sand, well graded, trace of cobbles, brown, moist to wet	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-34-1
2					Perched water encountered @ 0.7m	
3	1.0					
4				some rock clasts, subangular, stiff, brown, moist		
5	1.5					
6	2.0					
7	2.5	X				TP05-34-2
8						
9	3.0					
10						
11	3.5			End of test pit at 3.4 m/11.2 ft		
12						
13	4.0					
14						
15	4.5					
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP05-34			
Rev. 0 - Issued for Report			
	Project No. VA101-102/7	Ref. No. 1	Rev. 0
TP05-34			

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

Project: Morrison Copper Gold ProjectTest Pit: TP05-35Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 23 Nov 05Location: CONVEYOR ALIGNMENTTotal Depth: 3.5 m/ 11.5 ftDate Completed: 23 Nov 05Coordinates 6.119.978 m N, 670.932 m ESurface Elev.: 824 m/2703.4 ftLogged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1		X		fine SAND, trace of clay, poorly graded, loose, reddish brown, dry	Elevations and coordinates were obtained by hand held GPS (Garmin)	TP05-35-1
2	0.5			CLAY and GRAVEL (TILL), trace of sand, frequent isolated silty lenses, firm, brown, moist		
3	1.0	X				TP05-35-2
4		X				
5	1.5			trace of cobbles, very stiff, brown, moist to dry	Perched water encountered @ 1.7m	
6	2.0					
7	2.5					
8		X				TP05-35-3
9	3.0	X				
10						
11	3.5			End of test pit at 3.5 m/11.5 ft		
12						
13	4.0					
14	4.5					
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP05-35**Knight Piésold**
CONSULTINGProject No.
VA101-1027Ref. No.
1Rev.
0

TP05-35

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 1 Dec 05

B3-27

Project: Morrison Copper Gold ProjectTest Pit: TP06-37Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 28 Jan 06Location: PLANT SITETotal Depth: 3.2 m/ 10.5 ftDate Completed: 28 Jan 06Coordinates 6.119.671 m N, 671.073 m ESurface Elev.: 845 m/2772.3 ftLogged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organic, brown		
1				Gravelly SAND, trace silt, moderately dense, brown, moist		
0.5						
2						
3						
1.0		X		Sandy silty CLAY (Till), trace of gravel and cobbles, stiff, brown, dry		TP06-37-1
4						
5				CLAY & GRAVEL (Till), lenses of silt, stiff, brown, dry		
1.5						
6						
2.0		X				TP06-37-2
7						
2.5						
8						
9						
3.0						
10						
3.5				End of test pit at 3.2 m/10.5 ft		
11						
4.0						
12						
4.5						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-37

Rev. 0 - Issued for Report

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-37		

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 28 Jan 06

B3 - 28

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-38</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>28 Jan 06</u>
Location: <u>PLANT SITE</u>		Total Depth: <u>3.2 m/ 10.5 ft</u>	Date Completed: <u>28 Jan 06</u>
Coordinates <u>6.119.671 m N. 671.173 m E</u>		Surface Elev.: <u>845 m/2772.3 ft</u>	Logged by: <u>TT</u>
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoll, organic, brown, moist		
1				sand,CLAY & GRAVEL (Till), subrounded, stiff,brown, moist		
0.5						
2						
3						
1.0		X				TP06-38-1
4						
5				As above (Till), increased gravel, very stiff,brown, moist		
1.5						
6						
2.0						
7						
2.5		X				TP06-38-2
8						
2.5						
9						
3.0						
10						
3.5						
11				End of test pit at 3.2 m/10.5 ft		
3.5						
12						
4.0						
13						
4.5						
14						
4.5						
15						
4.5						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-38			
Rev. 0 - Issued for Report	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><i>Knight Piésold</i></td> <td style="text-align: center;">CONSULTING</td> </tr> </table>	<i>Knight Piésold</i>	CONSULTING
<i>Knight Piésold</i>	CONSULTING		

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 28 Jan 06

B3-29

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-39</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>28 Jan 06</u>	
Location: <u>PLANT SITE</u>		Total Depth: <u>3.2 m/ 10.5 ft</u>	Date Completed: <u>28 Jan 06</u>	
Coordinates <u>6.119.671 m N, 671.273 m E</u>		Surface Elev.: <u>845 m/2772.3 ft</u>	Logged by: <u>TT</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
				Topsoil, organic, brown		
1				CLAY & GRAVEL (Till), subrounded, moderately soft, brown, wet	perched water at 0.8m wall collapsed	TP06-39-1
2	0.5	X				
3	1.0					
4				SAND & GRAVEL, some clay, dense, brown, wet		TP06-39-2
5	1.5	X				
6	2.0			CLAY & GRAVEL (Till), gravels are subrounded, stiff, brown, moist		
7						TP06-39-3
8	2.5					
9	3.0	X				
10				End of test pit at 3.2 m/10.5 ft		
11	3.5					
12						
13	4.0					
14						
15	4.5					
16						

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-39			
Knight Piésold CONSULTING		Project No. <u>VA101-1027</u>	Ref. No. <u>1</u>
Rev. 0 - Issued for Report		TP06-39	

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 28 Jan 06

B3-30

Project: Morrison Copper Gold Project

Test Pit: TP06-40

Page 1 of 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 28 Jan 06

Location: PLANT SITE

Total Depth: 3.2 m/ 10.5 ft

Date Completed: 28 Jan 06

Coordinates 6.119.720 m N. 671.175 m E

Surface Elev.: 846 m/2775.6 ft

Logged by: TT

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Topsoil, organic, brown		
0.5				CLAY & GRAVEL (TILL), some sand, soft, reddish-brown, moist		
2						
3				As above (Till), trace of cobbles +35", stiff, brown, moist		
4						
5						
6						
7						
8						
9						
10						
11				End of test pit at 3.2 m/10.5 ft		
12						
13						
14						
15						
16						

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

**Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-40**

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-40		

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 28 Jan 06

B3-31

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-41</u>	Page <u>1</u> of <u>1</u>
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>7 Apr 06</u>
Location: <u>GRAVEL PIT</u>		Total Depth: <u>3.4 m/ 11.2 ft</u>	Date Completed: <u>7 Apr 06</u>
Coordinates <u>6,118,176 m N, 671,667 m E</u>		Logged by: <u>JV</u>	
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>	

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Gravelly SAND. Slightly moist. Loose. ALLUVIUM?		TP06-41 @ 2.5'
2	0.5			Silty SAND with trace gravel. Slightly moist. Compact. Very poorly graded. Reddish brown. ALLUVIUM?		
3	1.0					
4	1.5					
5	2.0			Gravelly, silty SAND. Moist. Coarse gravel with fine sand. Poorly graded. Dense. ALLUVIUM?		TP06-41 @ 8'
6	2.5					
7	3.0					
8	3.5					
9	4.0			End of test pit at 3.4 m/11.2 ft		
10	4.5					
11	5.0					
12	5.5					
13	6.0					
14	6.5					
15	7.0					
16	7.5					

TEST PIT TESTPIT.GPJ TESTPIT.GDT 27 Jun 06

Pacific Booker Minerals Inc. Morrison Copper Gold Project Test Pit Log For TP06-41							
Rev. 0 - Issued for Report							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Project No. VA101-102/7</td> <td style="width: 33%;">Ref. No. 1</td> <td style="width: 33%;">Rev. 0</td> </tr> <tr> <td colspan="3" style="text-align: center;">TP06-41</td> </tr> </table>		Project No. VA101-102/7	Ref. No. 1	Rev. 0	TP06-41		
Project No. VA101-102/7	Ref. No. 1	Rev. 0					
TP06-41							

M:\1101\00102107\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3 - 32

Project: <u>Morrison Copper Gold Project</u>		Test Pit: <u>TP06-42</u>	Page <u>1</u> of <u>1</u>	
Contractor: <u>BABINE BARGE</u>		Equipment Used: <u>CAT 320LME</u>	Date Started: <u>7 Apr 06</u>	
Location: <u>GRAVEL PIT</u>		Total Depth: <u>3.7 m/ 12.1 ft</u>	Date Completed: <u>7 Apr 06</u>	
Coordinates <u>6.118.189 m N. 671.569 m E</u>		Logged by: <u>JV</u>		
(NAD 83- Zone 10)		Reviewed by: <u>GJ</u>		

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Sandy organic soil. Slightly moist. Loose. Reddish brown. ALLUVIUM?		
0.5				Gravelly SAND with some silt. Moist. Compact. Well graded. Reddish brown. ALLUVIUM?		
2						
3	1.0	X				TP06-42 @ 3'
4				Silty SAND with some gravel and trace clay. Slightly moist. Compact. Reddish brown. ALLUVIUM?		
5	1.5					
6	2.0					
7	2.5					
8						
9	3.0	X				TP06-42 @ 9'
10	3.5					
11	4.0					
12	4.5			End of test pit at 3.7 m/12.1 ft		
13						
14						
15						

Test Pit Log for TP06-42			
<i>Knight Piesold</i> CONSULTING		Project No. VA101-102/7	Ref. No. 1
Rev. 0 - Issued for Report		Rev. 0	TP06-42

TEST PIT TESTPIT.GDT 27 Jun 06

M:\1\01\00102\07\A\DATA\GEOTEC-3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3 - 33

Project: Morrison Copper Gold ProjectTest Pit: TP06-43Page 1 of 1Contractor: BABINE BARGEEquipment Used: CAT 320LMEDate Started: 7 Apr 06Location: GRAVEL PITTotal Depth: 3 m/ 9.8 ftDate Completed: 7 Apr 06Coordinates 6,118,284 m N, 671,695 m ELogged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1	0.5			Sandy GRAVEL with some boulders. Dry. Loose. ALLUVIUM?		
2	1.0			Silty SAND with some gravel. Slightly moist. Compact. Fine sand and coarse gravel. Poorly graded. Reddish brown. ALLUVIUM?		
3	1.5					
4	2.0					TP06-43 @ 4'
5	2.5			Silty SAND with some gravel. Moist. Compact. Reddish brown. ALLUVIUM?		
6	3.0					
7	3.5					
8	4.0					TP06-43 @ 8'
9	4.5					
10	5.0			End of test pit at 3 m/9.8 ft	Hit large boulder or bedrock.	
11	5.5					
12	6.0					
13	6.5					
14	7.0					
15	7.5					
16	8.0					

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

Rev. 0 - Issued for Report

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-43**Knight Piésold**
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-43		

M:\1101\00102107\A\DATA\GEOTEC\3\GINT\TESTPIT.GPJ

Date Revised: 4 May 06

B3 - 34

Project: Morrison Copper Gold Project

Test Pit: TP06-44

Page 1 **of** 1

Contractor: BABINE BARGE

Equipment Used: CAT 320LME

Date Started: 7 Apr 06

Location: GRAVEL PIT

Total Depth: 3.4 m/ 11.2 ft

Date Completed: 7 Apr 06

Coordinates 6,118,074 m N, 671,594 m E

Logged by: JV

(NAD 83- Zone 10)

Reviewed by: GJ

DEPTH - (ft)	DEPTH - (m)	SAMPLES	GRAPHIC LOG	MATERIAL DESCRIPTION	NOTES	SAMPLE ID
1				Silty SAND with some gravel. Slightly moist. Compact to dense. Gravel increasing in size with depth, from fine gravel near surface to coarse gravel/small cobble size near bottom. Reddish brown. ALLUVIUM?		TP06-40 @ 3'
0.5						
2						
1.0						
3						
1.5						
4						
2.0						
5						
2.5						
6						
3.0						
7						
3.5						
8						
4.0						
9						
4.5						
10						
5.0						
11						
5.5						
12						
6.0						
13						
6.5						
14						
7.0						
15						
7.5						
16						
8.0						

End of test pit at 3.4 m/11.2 ft

Pacific Booker Minerals Inc.
Morrison Copper Gold Project
Test Pit Log For TP06-44

Knight Piésold
CONSULTING

Project No.	Ref. No.	Rev.
VA101-102/7	1	0
TP06-44		

Rev. 0 - Issued for Report

TEST PIT TESTPIT.GPJ TESTPIT.GDT 9 Jun 06

M:\1\01\00102\07\A\DATA\GEOTEC\3\GIN\TESTPIT.GPJ

Date Revised: 4 May 06

B3 - 35

APPENDIX IV

KCBL 2008 Geotechnical Site Investigation and Tailings Testing Data

2008 Geotechnical Site Investigation

- 2008 Drill hole and Test Pit Logs
- Index Test Results

Tailings Testing

- 1-D Consolidation Test
- Grain Size Distributions (Hydrometer)
- Compaction Test (“Cycloned” Sand)
- Jar Settling Tests
- Specific Gravity of Solids

2007 Geotechnical Site Investigation

DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD
FIELD
LAB
UC/2
P.PEN/2
★ % FINES
● SPT N

W_p% W% W_L%
x - - - o - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: Sep 12, 2008 FINISHED: Sep 13, 2008
DRILL METHOD: ODEX 90 Air Rotary
GROUND ELEV. (m): 819.00
COORDINATES (m): N 6120064 E 670403

DESCRIPTION OF MATERIALS

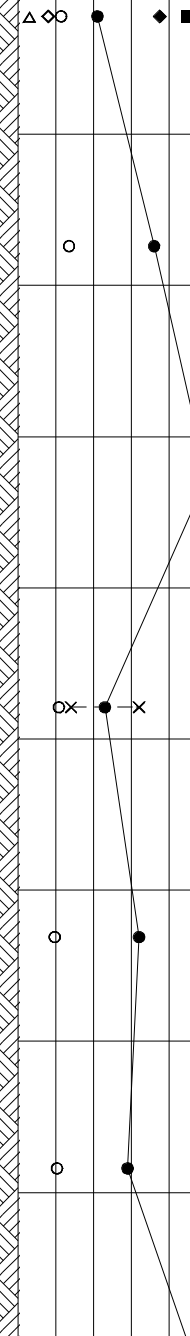
Sandy Lean CLAY (CL), trace gravel to gravelly, very stiff, brown with orange mottles, moist; TILL

Trace fine subangular gravel, maximum size 4.75 mm; intermediate plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; strong reaction with HCL.

Trace gravel, intermediate plasticity, very stiff to hard.

Trace cobbles and boulders, some gravels; very stiff, dark brown; intermediate plasticity, gravel fragments are bluish grey (likely to be cobbles and boulders).

Some fine subrounded gravel, maximum size 19.0 mm; intermediate plasticity, hard, medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCL.



Continued Next Page



PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 3

HOLE NO.: DH08-1A

DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK FIELD LAB
 REMOLD $\diamond$ $\square$ $\triangle$ UC/2
 $\star$ % FINES $\bullet$ SPT N

W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

INSTRUMENT
 DETAILS

STARTED: Sep 12, 2008 **FINISHED:** Sep 13, 2008
DRILL METHOD: ODEX 90 Air Rotary
GROUND ELEV. (m): 819.00
COORDINATES (m): N 6120064 E 670403
DESCRIPTION OF MATERIALS

Trace fine subangular gravel, maximum size 9.5 mm;
 intermediate plasticity, hard, medium toughness,
 slow dilatancy and high dry strength, moist; brown;
 weak to strong reaction with HCL.

14.17
 804.83 Bedrock. Bluish-grey, slightly weathered, strong, fine
 grained sandstone.

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: GA

CHECKED BY:

SHEET 2 OF 3

HOLE NO.: DH08-1A



DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2
 * % FINES SPT N
 Wp% W% WL%
 x - - - - o - - - - x
 20 40 60 80

INSTRUMENT
DETAILS

STARTED: Sep 12, 2008 FINISHED: Sep 13, 2008
 DRILL METHOD: ODEX 90 Air Rotary
 GROUND ELEV. (m): 819.00
 COORDINATES (m): N 6120064 E 670403
 DESCRIPTION OF MATERIALS

20.12
798.88
End of Hole at 20.10 m

21

22

23

24

25

26

27

28

29

30



PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: GA

CHECKED BY:

SHEET 3 OF 3

HOLE NO.: DH08-1A

DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2
 ★ % FINES ● SPT N
 W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

INSTRUMENT
DETAILS

STARTED: Sep 13, 2008 FINISHED: Sep 13, 2008
 DRILL METHOD: ODEX 90 Air Rotary
 GROUND ELEV. (m): 819.00
 COORDINATES (m): N 6120064 E 670403

DESCRIPTION OF MATERIALS

Sandy Lean CLAY, gravelly; stiff; low plasticity; brown with orange mottles, moist, TILL.

Trace gravel; brown, intermediate plasticity.

Trace cobbles and boulders; dark brown; intermediate plasticity, moist, gravel fragments are bluish grey (likely to be cobbles and boulders).

Continued Next Page



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 2

HOLE NO.: DH08-1B

DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - - o - - - - x

20 40 60 80

DEPTH (m)

SPT BLOWS
PER 0.15m

SAMPLE TYPE

SAMPLE No.

SYMBOL

STARTED: Sep 13, 2008 FINISHED: Sep 13, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 819.00

COORDINATES (m): N 6120064 E 670403

DESCRIPTION OF MATERIALS

INSTRUMENT
DETAILS

11

12

13

14

15

16

17

18

19

20

12.80
806.20

End of Hole at 12.80 m

Soil data inferred from adjacent drill hole DH08-1A.

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: GA

CHECKED BY:

SHEET 2 OF 2

HOLE NO.: DH08-1B



DRILL HOLE LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2
 * % FINES SPT N
 W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

STARTED: Sep 13, 2008 FINISHED: Sep 15, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 796.00

COORDINATES (m): N 6120472 E 669743

DESCRIPTION OF MATERIALS

Natural ground was stripped for drilling.

Sandy Lean CLAY (CL), trace gravel, CL, very stiff, brown, TILL

Trace fine subangular gravel, maximum size 9.5 mm; intermediate plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm, strong reaction with HCl.

2.75
793.25 Clayey SAND (SC), some gravel, well graded, very dense, brown to reddish brown, moist, massive, TILL.

Boulder at about 3m in depth,

Compact, grey

Boulder at 5.5 to 5.8m.

6.26
789.74 Coarse to fine subangular gravel, some silt, maximum size 38.2 mm; none to low plasticity, very dense, low toughness, rapid dilatancy and low dry strength, moist; dark grey; weak reaction with HCL.

Note:

1. Pocket penetrometer readings larger than 200 kPa is shown as 200 kPa

BEDROCK. Black, slightly weathered to fresh; very strong strength; very fine grained, coarse particle zone at 7.9 m, 0.75 m long; 1 mm fracture, infilled with calcite / pyrite, chlorite? one joint set, 80~90 degree to the core axis; smooth, planar, few undulating, possibly slickensided, medium spacing (20 cm ~ 50 cm), mineralized, metamorphosed shale?

TCR =100%, SCR = 99%, RQD = 95%

One set shear zone at 9.9 m, 10 degree to the core axis; An undulating joint at 10.67 m, 35 degree to the core axis, no infilling.

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 2

HOLE NO.: DH08-2



DRILL HOLE LOG

DRILL HOLE LOG								Su - kPa					
								20	60	100	140	180	
DEPTH (m)	SPT BLOWS PER 0.15m	SAMPLE TYPE	SAMPLE No.	SYMBOL	STARTED: Sep 13, 2008 FINISHED: Sep 15, 2008		INSTRUMENT DETAILS	VANE		FIELD	LAB	UC/2	
					DRILL METHOD: ODEX 90 Air Rotary			PEAK	◆	■	▲		
					GROUND ELEV. (m): 796.00			REMOLD	◇	□	△ P.PEN/2		
					COORDINATES (m): N 6120472 E 669743			★ % FINES		● SPT N			
					DESCRIPTION OF MATERIALS			W _p %	W%	W _L %			
								x	-----	o	-----	x	
								20	40	60	80		
11					TCR =100%, SCR = 97%, RQD = 62.5%								
					A fracture zone at 12.0 m to 12.3 m (possibly drilling induced) and a joint at 11.6 m about 15 degree to the core axis.								
12					TCR =100%, SCR = 46%, RQD = 31%								
					12.30								
					783.70	End of Hole at 12.30 m							
13													
14													
15													
16													
17													
18													
19													
20													

KCBL_DRILL_HOLE-SI 2008 DRILLING-DH SOIL LOG.GPJ KC_DATA.GDT 12/5/08



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 2 OF 2

HOLE NO.: DH08-2



Rescan Environmental Services Ltd.
Sixth Floor - 1111 West Hastings Street
Vancouver, BC, V6E 2J3
Telephone: (604) 689 9460
Fax: (604) 687 4277

WELL NUMBER DH08-03

PAGE 1 OF 2

CLIENT Pacific Booker

PROJECT NAME Morrison

PROJECT NUMBER 0793-00113

PROJECT LOCATION _____

DATE STARTED 10/5/08 COMPLETED 10/8/08

GROUND ELEVATION 833 m HOLE SIZE OB = 11.43 cm,
BR = 9.6 cm

DRILLING CONTRACTOR GeoTech Drilling Services Ltd.

GROUND WATER LEVELS:

DRILLING METHOD HQ3 Diamond Drilling (Simco Explorer)

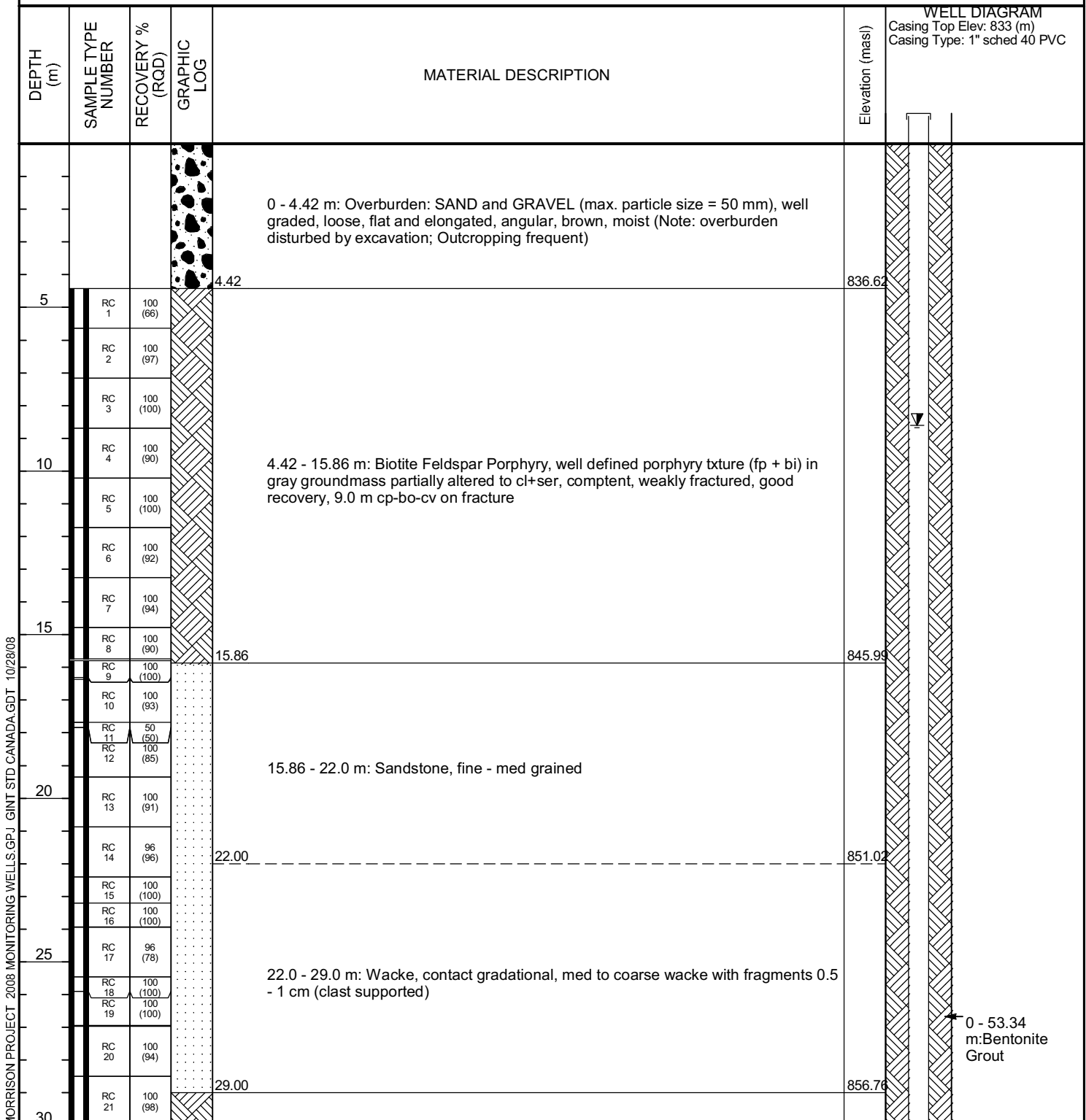
AT TIME OF DRILLING ---

LOGGED BY R.S. (GeoSim Services) CHECKED BY _____

AT END OF DRILLING ---

NOTES _____

▼ AFTER DRILLING 8.60 m / Elev 840.04 m



(Continued Next Page)



Rescan Environmental Services Ltd.
Sixth Floor - 1111 West Hastings Street
Vancouver, BC, V6E 2J3
Telephone: (604) 689 9460
Fax: (604) 687 4277

WELL NUMBER DH08-03

PAGE 2 OF 2

CLIENT Pacific Booker

PROJECT NAME Morrison

PROJECT NUMBER 0793-00113

PROJECT LOCATION _____

DEPTH (m)	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (masl)	WELL DIAGRAM
35	RC 22	100 (96)				
	RC 23	100 (96)				
	RC 24	100 (98)				
	RC 25	90 (84)				
	RC 26	100 (94)				
	RC 27	100 (96)				
40	RC 28	100 (93)				
	RC 29	100 (100)				
	RC 30	100 (100)				
45	RC 31	93 (66)				
	RC 32	100 (92)				
	RC 33	100 (82)				
	RC 34	100 (66)				
50	RC 35	100 (75)				
	RC 36	100 (62)				
	RC 37	100 (81)				
55	RC 38	100 (100)				

29.0 - 55.17 m: Biotite Feldspar Porphyry, greenish-gray groundmass with white fp phenocrysts (0.2 - 0.5 cm), mafics mostly altered to cl with minor epidote.

Note: 33m ca veinlet (1 cm), 37.64 - 39.4 m ca stringer, 39.4 m fault gouge, 39.4 - 43.2 m bleached interval - mafics completely destroyed, 42.41 m ca veinlet with coarse pyroxend or actinolite crystals, 40.6 m ca veinlet (*continued*)

Bottom of hole at 55.17 m.

53.34 - 55.17
m: 8/16
sandpack
54.17 - 55.17
m: 0.10 slotted
PVC

MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - - o - - - - x

20 40 60 80

DEPTH (m)

SPT BLOWS
PER 0.15m

SAMPLE TYPE

SAMPLE No.

SYMBOL

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 839.00

COORDINATES (m): N 6119626 E 671032

DESCRIPTION OF MATERIALS

INSTRUMENT

DETAILS

Clayey SAND (SC), some gravel. Well graded, compact, greyish brown, moist, massive, TILL

Ground stripping depth 0 m at the west entrance to 0.9m at the east end of the site. Assume the stripping depth at drilling location: 0.6m (it's not included in the depth shown below).

Exposed material: Clayey SAND, some gravel, compact, brown, dry to moist, massive, medium dry strength.

Some fine to coarse subangular gravel, maximum size 38.2 mm; intermediate plasticity, compact, medium toughness, slow dilatancy and medium dry strength, moist; brown; weak reaction with HCL.

Max. size gravel in the spoon: 3.5 cm.

Shelby tube sampling failed at 7.0m

Two highly weathered, greenish and white zones.

A 5 cm rock stuck at the bottom of the sampler tip.

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 6

HOLE NO.: MW08-1



MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - - o - - - - x

20 40 60 80

DEPTH (m)

SPT BLOWS
PER 0.15m

SAMPLE TYPE

SAMPLE No.

SYMBOL

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 839.00

COORDINATES (m): N 6119626 E 671032

DESCRIPTION OF MATERIALS

INSTRUMENT
DETAILS

Trace fine subangular gravel, maximum size 19.0 mm;
intermediate plasticity, compact, medium toughness,
slow dilatancy and high dry strength, moist; brown;
weak to strong reaction with HCL.

Max. size gravel in the spoon: 3.5 cm

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 2 OF 6

HOLE NO.: MW08-1



Klohn Crippen Berger

MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB
 ◆ ◆ ◆
 REMOLD ◆ ◆ ◆
 ▲ UC/2
 ▲ P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - - - o - - - - - x
 20 40 60 80

INSTRUMENT
DETAILS

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 839.00

COORDINATES (m): N 6119626 E 671032

DESCRIPTION OF MATERIALS

Coarse to fine sand, trace fine subangular gravel, maximum size 9.5 mm; intermediate plasticity, dense, medium toughness, slow to rapid dilatancy and medium to high dry strength, moist; brown; soft; weak reaction with HCL.

Max. size gravel in the spoon: 4 cm

Max. size gravel in the spoon: 3.5 cm

▽

▽

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 3 OF 6

HOLE NO.: MW08-1



MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - o - - - x

20 40 60 80

INSTRUMENT
DETAILS

DESCRIPTION OF MATERIALS

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 839.00

COORDINATES (m): N 6119626 E 671032

DEPTH (m)

SPT BLOWS
PER 0.15m

SAMPLE TYPE

SAMPLE No.

SYMBOL

Refusal after sampler 46 cm into soil.

Max. size gravel in the spoon: 5 cm, less fine gravels,
but more coarse gravels

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 4 OF 6

HOLE NO.: MW08-1



MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK FIELD LAB UC/2
REMOLD P.PEN/2

★ % FINES ● SPT N

W_p% W% W_L%

x - - - - o - - - - x

20 40 60 80

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008

DRILL METHOD: ODEX 90 Air Rotary

GROUND ELEV. (m): 839.00

COORDINATES (m): N 6119626 E 671032

DESCRIPTION OF MATERIALS

INSTRUMENT
DETAILS

DEPTH (m)

SPT BLOWS
PER 0.15m

SAMPLE TYPE

SAMPLE No.

SYMBOL

Some fine subangular gravel, maximum size 19.1 mm;
intermediate plasticity, very dense, medium
toughness, slow dilatancy and medium to high dry
strength, moist; brown; weak reaction with HCL.

Max. size gravel in the spoon: 4 cm, very dense,
brownish grey

Continued Next Page

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 5 OF 6

HOLE NO.: MW08-1



MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2
 * % FINES SPT N
 W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

STARTED: Sep 15, 2008 FINISHED: Sep 19, 2008
 DRILL METHOD: ODEX 90 Air Rotary
 GROUND ELEV. (m): 839.00
 COORDINATES (m): N 6119626 E 671032
 DESCRIPTION OF MATERIALS

INSTRUMENT
DETAILS

51

52

53

54

55

56

57

58

59

60

55.88

783.12

Bedrock

End of Hole at 55.88 m

See Rescan Rock Log for Details from 55.9 to 86.2m.

Note:

1. Pocket penetrometer readings larger than 200 kPa is shown as 200 kPa
2. A standpipe monitoring well was installed in bedrock at this drill hole. The details of the standpipe monitoring well shown in this log is the one installed in overburden which is just meters away.
3. The LPT blow counts were converted to SPT blow counts.

PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 6 OF 6

HOLE NO.: MW08-1



MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK FIELD LAB
 REMOLD $\diamond$ $\square$ $\triangle$ UC/2
 $\star$ % FINES $\bullet$ SPT N
 W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

STARTED: Sep 21, 2008 FINISHED: Sep 22, 2008
 DRILL METHOD: ODEX 90 Air Rotary
 GROUND ELEV. (m): 784.00
 COORDINATES (m): N 6120820 E 669975

DESCRIPTION OF MATERIALS

INSTRUMENT
 DETAILS

GRAVEL (GW), some sand, trace fines, some cobbles and boulders, max. size: 25 cm, compact, brown, moist to dry.

2.21
 781.79 SAND, grey, moist medium sand layer/ pocket.
 2.50
 781.50

GRAVEL (GW), some sand, trace fines, max. size: 5 cm, compact, brown, moist, TILL

4.00
 780.00 SAND, grey, moist, medium sand.

5.80
 778.20 Sandy Lean CLAY (CL), some gravel (a fine, rusty sand sublayer/ pocket about 1.5 cm thick at the interface of brown clay at top and grey clay at bottom), stiff, brown, m.c.> P.L. (free water at surface), massive, TILL
 Grey
 Shelby tube sampling at 6.4m to 7.0m.

Stiffer soil after 8m.

A boulder at 8.86 m in depth.

Max. size gravel in the spoon: 4 cm, subround, very stiff.

Continued Next Page



PROJECT NO.: M09382A01

PROJECT: Morrison Copper/Gold

LOCATION: Morrison Lake, BC

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 2

HOLE NO.: MW08-3

MONITORING WELL LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2
 ★ % FINES ● SPT N

W_p% W% W_L%
 x - - - - o - - - - x
 20 40 60 80

INSTRUMENT
DETAILS

DESCRIPTION OF MATERIALS

STARTED: Sep 21, 2008 FINISHED: Sep 22, 2008
 DRILL METHOD: ODEX 90 Air Rotary
 GROUND ELEV. (m): 784.00
 COORDINATES (m): N 6120820 E 669975

DEPTH (m)
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20

SPT BLOWS
PER 0.15m
 12, 24
 6, 10, 18, 31

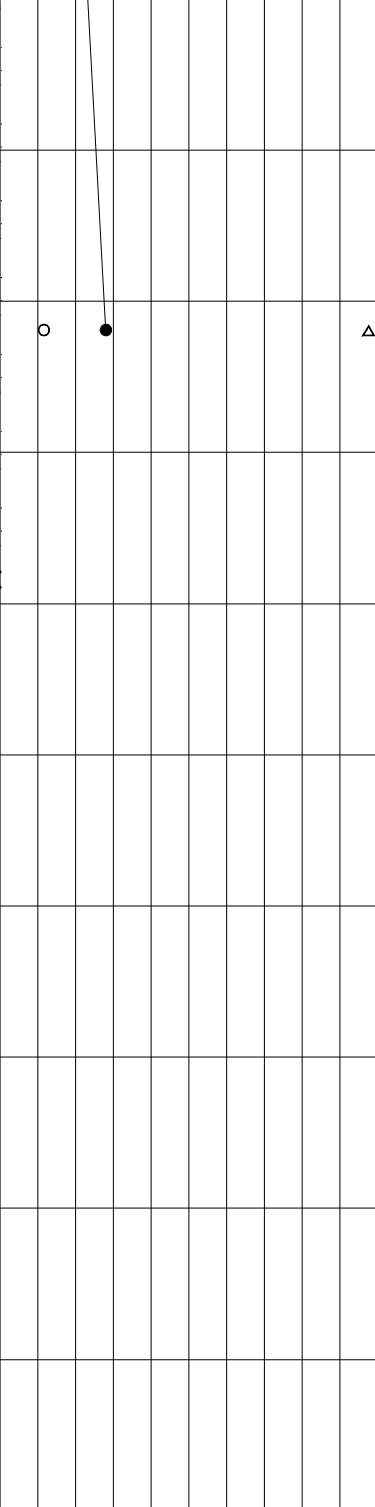
SAMPLE TYPE
 LPT-4

SAMPLE No.
 100%

SYMBOL

Trace fine subangular gravel, maximum size 19.0 mm; intermediate plasticity, very stiff, medium toughness, slow dilatancy and high dry strength, moist; brown; weak reaction with HCL.
 Max. size gravel in the spoon: 5 cm at bottom, broken during hammering, angular, very stiff.
 (More big rocks were encountered and slowed down the drilling at this site than at the MW08-1 site.)

INSTRUMENT
DETAILS



14.80
 769.20 Bedrock End of Hole at 14.80 m
 Note: See Rescan Rock Log for Details deeper than 14.8m.
 Note:
 1. Pocket penetrometer readings larger than 200 kPa is shown as 200 kPa.
 2. A standpipe monitoring well was installed in bedrock at this drill hole. The details of the standpipe monitoring well shown in this log is the one installed in overburden which is just meters away.
 3. The LPT blow counts were converted to SPT blow counts.



PROJECT NO.: M09382A01
 PROJECT: Morrison Copper/Gold
 LOCATION: Morrison Lake, BC
 LOGGED BY: WD CHECKED BY:
 SHEET 2 OF 2 HOLE NO.: MW08-3

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 FINISHED: 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 833.0
COORDINATES (m): N 6118979 E 671357

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. SILT, some sand. soft to firm, brownish black, moist.
832.9 Sandy Lean CLAY with Gravel, trace cobbles and boulders, low plasticity, firm to stiff, brown, moist, organics, TILL.

Some cobbles and boulders, sub-rounded to sub-angular fine grained wacke.

2.80
830.2 End of Hole at 2.80 m

Ground water not encountered.
Pit walls stable.

Grab

1

Grab

2



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-A

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 5/9/2008 **FINISHED:** 5/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 740.0
COORDINATES (m): N 6118943 E 670003
DESCRIPTION OF MATERIALS

DEPTH (m)	SAMPLE TYPE	SAMPLE No.	SYMBOL	DESCRIPTION OF MATERIALS
0.5	Grab	1	~ ~ ~ ~ ~	ORGANICS; SILT, clayey with some sand. low plasticity, very soft, brownish black, saturated.
1.0	Grab	2	~ ~ ~ ~ ~	0.60 739.4 Sandy Lean CLAY (CL), firm, low plasticity, medium toughness, slow dilatancy and high dry strength, moist; dark grey with orange mottles; no reaction with HCl.
1.5				
2.0	Grab	3	~ ~ ~ ~ ~	@2.1m Granite boulder.
2.5				
3.0	Grab	4	~ ~ ~ ~ ~	2.70 737.3 @2.6m Seepage observed. Clayey GRAVEL (GC) with Sand, maximum size 19.0 mm, some sub-rounded to sub-angular cobbles and boulders, compact, low toughness, rapid dilatancy and low dry strength, moist; dark grey; weak reaction with HCl.
3.5				
4.0	Grab		~ ~ ~ ~ ~	Cobbly. OUTWASH GRAVELS?
4.5				4.50 735.5 End of Hole at 4.50 m
5.0				Walls show minor spalling and seepage.



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-B

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 **FINISHED:** 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 822.0
COORDINATES (m): N 6120181 E 670918

DESCRIPTION OF MATERIALS

TOPSOIL. SILT, some sand. Brownish black.

0.20
821.8 Sandy Lean CLAY, trace cobbles and boulders, trace fine subangular gravel, maximum size 9.5 mm. Low plasticity, stiff, medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCl.

1.20
820.8 Clayey GRAVEL(GC) with Sand, trace cobbles and boulders. Low plasticity, very stiff, brown, moist. Boulders up to 0.5m diameter, sub-rounded.
At 1.2m - 1.3m Sand horizon, wet.
At 1.5m, harder to excavate.

1.90
820.1 End of Hole at 1.90 m

Refusal. Possible bedrock. Greyish blue, fresh/sw wacke with qtz veins. Strong.

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

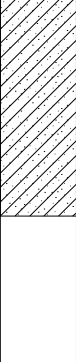
CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-C



TEST PIT LOG

TEST PIT LOG						Su - kPa									
						20	60	100	140	180					
DEPTH (m)	SAMPLE TYPE	SAMPLE No.	SYMBOL	STARTED: 6/9/08		FINISHED: 6/9/08		INSTRUMENT	DETAILS	VANE		FIELD		LAB	
				EXCAVATOR TYPE: CAT 325 Excavator		PEAK				◆		■			
				GROUND ELEV. (m): 742.0		REMOLD				◇		□			
				COORDINATES (m): N 6119105 E 669765											
				DESCRIPTION OF MATERIALS											
						★ % FINES									
						W _p %	W%		W _L %						
						x	o		x						
						20	40		60		80				
0.5	Grab	1		0.10 ORGANICS; SILT, clayey with some sand. Brownish black, very soft, saturated, low plasticity.											
				741.9 Clayey SAND (SC) with Gravel, trace boulders. Loose to compact, brown; moist; cobbles and boulders sub-rounded to sub-angular granite; often weathered; up to 0.7m diameter.											
1.0															
1.5															
2.0	Grab	2													
2.5															
3.0	Grab	3		Some fine subangular gravel, maximum size 19.0 mm; low toughness, rapid dilatancy and low dry strength, moist; brown; strong reaction with HCl.											
				3.10 At 3.0m, more clay.											
				738.9 End of Hole at 3.10 m											
3.5															
4.0															
4.5															
5.0															

KCBL_TEST_PIT-SI 080929 - 2008 TEST PIT LOGS.GPJ KC DATA.GDT 12/5/08



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

CHECKED BY:

HOLE NO.: TP08-D

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 9/9/2008 **FINISHED:** 9/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 806.0
COORDINATES (m): N 6120584 E 670128

DESCRIPTION OF MATERIALS

TOPSOIL. SILT, some sand, brownish black, moist, soft to firm, rootlets.

0.20
805.8 Sandy Lean CLAY with some gravel, trace cobbles and boulders. Low plasticity, firm, brown; moist. TILL

At 1.5m, abrupt strength increase; very stiff.

1.80
804.2 Clayey Gravel (GC) with Sand, some cobbles and boulders. Compact, reddish brown; moist. Boulders up to 0.5m diameter, subangular to subrounded. TILL

At 2.2m, greyish blue clay "lumps".

Trace fine to coarse subangular gravel, maximum size 19.0 mm; medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCl.

4.50
801.5

End of Hole at 4.50 m

Refusal. Till too dense. Bedrock not encountered.

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-E



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\blacklozenge$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 10/9/2008 **FINISHED:** 10/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 796.0
COORDINATES (m): N 6120526 E 669865

DESCRIPTION OF MATERIALS

TOPSOIL. SILT, some sand, brownish black, moist, soft to firm, rootlets.

0.30
795.7
0.50
795.5
SILT with some fine sand, gravel, trace cobbles and boulders. Compact; non-plastic, dry to moist. Cobbles and boulders subangular to subrounded.

Sandy Lean CLAY, with some cobbles, trace boulders (up to 0.5m diameter) and trace fine subangular gravel, maximum size 9.5 mm. Low plasticity; very stiff, medium toughness, slow dilatancy and high dry strength, moist; brown, occasionally deep red; weak to strong reaction with HCl. TILL

Maximum size gravel 4.75 mm, medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak reaction with HCl.

3.60
792.4
End of Hole at 3.60 m

Grab

1

Grab

2

Grab

3

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-F



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%

x - - - - o - - - - x

20 40 60 80

INSTRUMENT
DETAILS

STARTED: 5/9/2008 **FINISHED:** 5/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 797.0
COORDINATES (m): N 6121659 E 670147

DESCRIPTION OF MATERIALS

ORGANICS. Silt and CLAY. Blackish brown; very soft; wet; non-plastic.

Slow seepage from organic layers.

0.75
796.3 Sandy Lean CLAY, trace to some fine subangular gravel, maximum size 9.5 mm, some angular to sub-rounded cobbles and boulders. medium plasticity, stiff, medium toughness, slow to rapid dilatancy and medium dry strength, moist; dark brown; no reaction with HCl.

At 1.70 m, light brown and soft to firm

Trace boulders. Dense to very dense; moist; cobbles and boulders sub-angular to sub-rounded. TILL

At 3.1 m, harder to excavate.

3.50
793.5 End of Hole at 3.50 m

Refusal in till. Too dense.

DEPTH (m)

SAMPLE TYPE

SAMPLE No.

SYMBOL

Grab

1

Grab

2

Grab

3

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-H



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\blacklozenge$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 5/9/2008 **FINISHED:** 5/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 808.0
COORDINATES (m): N 6121770 E 669960

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. SILT and clay. Brownish-black, organics.
807.9 Clayey SAND (SC) with Gravel, some cobbles and boulders, sub-angular to sub-rounded; up to 0.5m diameter, compact, contains rootlets, medium toughness, slow dilatancy and medium dry strength, moist; brown; no reaction with HCl.

At 1.5m, moist to wet; dense.

At 2.5 m harder to excavate

2.90
805.1 End of Hole at 2.90 m

Water table not encountered.
Pit walls stable.

Grab

1

Grab

2

Grab

3



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-I

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

DEPTH (m)

SAMPLE TYPE

SAMPLE No.

SYMBOL

STARTED: 9/9/2008 **FINISHED:** 9/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 817.0
COORDINATES (m): N 6118497 E 671645

INSTRUMENT
DETAILS

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. SILT and clay. Brownish-black, organics.
816.9 Clayey SAND with Gravel, trace subangular to subrounded cobbles and boulders. Brown, dry, , contains rootlets. TILL?

At 0.7 m, dense (strength varies locally).

Some cobbles and boulders. Brown occasionally blue-grey; moist; stiff; slightly plastic, TILL.

At 1.8 m, harder to excavate.

2.80
814.2 End of Hole at 2.80 m

Refusal due to possible bedrock contact.
Pit walls stable.
Groundwater not encountered.

Grab

1

Grab

2

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-J



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 9/9/2008 **FINISHED:** 9/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 819.0
COORDINATES (m): N 6118700 E 671485

DESCRIPTION OF MATERIALS

DEPTH (m)	SAMPLE TYPE	SAMPLE No.	SYMBOL	DESCRIPTION	INSTRUMENT DETAILS
0.10				TOPSOIL. SILT and clay. Brownish-black, organics.	
0.5				818.9 Sandy Lean CLAY with Gravel, trace cobbles and boulders. Low plasticity, firm, brown, moist, rootlets (possible fill from road construction / TILL)	
1.0	Grab	1		0.95 818.1 Clayey SAND with Gravel, trace cobbles & boulders. Brown, moist, slightly plastic, rootlets, firm. (Possible fill from road construction up to 0.95m /TILL)	
1.5				More clay, wet, loose to compact, easy digging.	
2.0	Grab	2			
2.5				Slow seep	
3.0	Grab	3			
3.5				Very difficult Digging	
3.50				815.5 End of Hole at 3.50 m	
4.0				Refusal due to inferred bedrock,	
4.5					
5.0					



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-K

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK REMOLD $\diamond$ $\square$ $\blacktriangle$ UC/2
 $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 6/9/08 **FINISHED:** 6/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 836.0
COORDINATES (m): N 6120054 E 670234

DESCRIPTION OF MATERIALS

0.05
836.0 TOPSOIL. SILT and clay. Brownish-black, organics.
SILT, some clay, trace sand. Brown, moist, loose. Contains organics.

0.40
835.6 Clayey GRAVEL (GC) with Sand, trace angular to subangular cobbles and boulders. Compact to dense, brown, moist, quartz sandstone.

1.25
834.8 Clayey SAND with Gravel, some cobbles & boulders, non-plastic, dense. TILL ?/Completely weathered bedrock.

At 2.5 m, hard to excavate. Possibly highly weathered blocky bedrock.

3.20
832.8 End of Hole at 3.20 m

Refusal due to inferred bedrock.

Grab

1

Grab

2



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-L

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\blacksquare$
REMOLD $\diamond$ $\square$ $\blacktriangle$ UC/2
 $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 6/9/08 **FINISHED:** 6/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 819.0
COORDINATES (m): N 6120172 E 669766

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. SILT and clay. Brownish-black, organics.
818.9 Sandy Lean CLAY, trace angular to subangular cobbles and boulders. Low plasticity, stiff to very stiff, brown, moist, some Fe staining. Completely weathered bedrock?
0.50
818.5 Clayey SAND with Gravel, some cobbles, trace boulders. Low plasticity, compact to dense, brown, moist. completely weathered bedrock.
1.90
817.1

End of Hole at 1.90 m

Refusal in bedrock; greyish-blue, slightly weathered, strong, wacke/ fine quartzo-feldspathic sandstone.

Grab

1

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-M



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 6/9/08 FINISHED: 6/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 825.0
COORDINATES (m): N 6119673 E 669954

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. SILT and clay. Brownish-black, organics.
824.9 SILT, trace sand, cobbles & gravel. Orangish brown, dry, firm, rootlets.
0.30
824.7 Clay SAND with Gravel, some cobbles and boulders. Non-plasticity, dense, brown, moist. Completely weathered bedrock?

At 2.0m, harder to excavate. Highly weathered bedrock.

2.30
822.7 End of Hole at 2.30 m

Grab

1



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-N

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB $\blacktriangle$ UC/2 $\blacktriangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 18/9/08 FINISHED: 18/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 906.0
COORDINATES (m): N 6121293 E 671037

DESCRIPTION OF MATERIALS

Topsoil

0.30

905.7

Sandy Lean CLAY (CL), some gravel (fine to coarse), 5~10% cobbles and boulders (max. size: 40 cm), CL, firm to very stiff, medium brown, m.c. <P.L., massive, TILL

0.85

905.2

Bedrock

1.10

904.9

No seepage

End of Hole at 1.10 m

End of hole by refusal of bedrock

Grab

1

DEPTH (m)

SAMPLE TYPE

SAMPLE No.

SYMBOL

0.5

1.0

1.5

2.0

2.5

3.0

3.5

4.0

4.5

5.0



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-O

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 17/9/08 FINISHED: 17/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 905.0
COORDINATES (m): N 6121210 E 670848

DESCRIPTION OF MATERIALS

Topsoil

0.20
904.8 Sandy Lean CLAY (CL) with gravel, trace cobbles (max. size 17 cm), CL, very stiff to hard, brown, m.c. < P.L., massive, TILL
Pocket penetrometer reading: 200 kPa at 0.8 m, 1.0 m and 1.5 m.

Gravelly, trace sand, trace cobbles and boulders (max. size 40 cm), hard.

Pocket penetrometer reading: >225 kPa

No seepage

Grab

1

Grab

2

4.90
900.1

Continued Next Page



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 2

HOLE NO.: TP08-P

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\blacklozenge$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

DEPTH (m)

SAMPLE TYPE

SAMPLE No.

SYMBOL

STARTED: 17/9/08

FINISHED: 17/9/08

EXCAVATOR TYPE: CAT 325 Excavator

GROUND ELEV. (m): 905.0

COORDINATES (m): N 6121210 E 670848

DESCRIPTION OF MATERIALS

INSTRUMENT
DETAILS

End of Hole at 5.00 m

End of hole by maximal reach of the machone

5.5

6.0

6.5

7.0

7.5

8.0

8.5

9.0

9.5

10.0

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD

CHECKED BY:

SHEET 2 OF 2

HOLE NO.: TP08-P



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK ☒ ☒
REMOLD ☒ ☒ ☒
▲ UC/2
△ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 18/9/08 FINISHED: 18/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 866.0
COORDINATES (m): N 6121029 E 670810

DESCRIPTION OF MATERIALS

Topsoil, black, moist, roots, wood, organics

0.20
865.8 Sandy Lean CLAY, some gravel (fine to coarse, subangular to subround), trace cobbles and boulders, CL, stiff to very stiff, moisture content higher than plasticity limits (m.c. >P.L.), brown, massive, TILL

Pocket penetrometer reading: 112.5 kPa at 0.8 m

Pocket penetrometer reading: 150 kPa at 1.2 m

3.50
862.5

Pocket penetrometer reading: 200 kPa at 4.5 m.

Continued Next Page



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 2

HOLE NO.: TP08-Q

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

Wp% W% WL%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 18/9/08 FINISHED: 18/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 866.0
COORDINATES (m): N 6121029 E 670810
DESCRIPTION OF MATERIALS

5.5

Pocket penetrometer reading: 212.5 kPa at 5.5 m

Grab

1

Trace fine subangular and subrounded gravel, clayey, maximum size 9.5 mm; medium plasticity, medium toughness, slow dilatancy and medium dry strength, moist; brown; weak to strong reaction with HCl

No seepage
End of hole by max. reach of the machine

6.0

6.5

7.0

7.5

8.0

8.5

9.0

9.5

10.0

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD CHECKED BY:

SHEET 2 OF 2 HOLE NO.: TP08-Q



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE PEAK REMOLD FIELD LAB UC/2 P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - - o - - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 18/9/08 **FINISHED:** 18/9/08
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 824.0
COORDINATES (m): N 6121121 E 670474
DESCRIPTION OF MATERIALS

DEPTH (m)

SAMPLE TYPE

SAMPLE No.

SYMBOL

TOPSOIL

0.30
823.7 FILL, clay, some sand, trace gravel, CL, soft to firm, greenish grey (sand pocket) to brown (Clay).

Grab

1

1.50
822.5 Sandy Lean CLAY (CL), trace gravel, CL, firm to stiff, brown, massive, m.c. >P.L., TILL

Pocket penetrometer reading: 37.5 kPa at 2.1 m.

Pocket penetrometer reading: 50 kPa at 2.5 m

Some gravel to gravelly (max. size: 33 cm, subround to round), very stiff, brown, m.c.=P.L., massive, till

Light seepage at 2.8m

Pocket penetrometer reading: 150 kPa at 4.0 m

Grab

2

4.40
819.6 Pocket penetrometer reading: 125 kPa at 4.4 m
End of Hole at 4.40 m

End of hole by max. reach of the machine

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: WD

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TP08-R



TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK ☒ ☒
REMOLD ☒ ☒ ☒
▲ UC/2
△ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 **FINISHED:** 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 836.0
COORDINATES (m): N 6119463 E 670856

DESCRIPTION OF MATERIALS

TOPSOIL. Black, organic sandy SILT. Moist to wet. Loose.

0.20
835.8 Sandy Lean CLAY (CL) with trace of cobbles and boulders. Low plasticity; stiff to very stiff, orangish-brown. Pocket pen reading = 200 - 2.25 kPa.

1.70
834.3 End of Hole at 1.70 m

Refusal due to inferred bedrock.
Groundwater not encountered.
Pit walls stable.

Grab

1



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-1

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK ☒ ☒
REMOLD ☐ ☐ ☐ UC/2
P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 7/9/2008 FINISHED: 7/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 804.0
COORDINATES (m): N 6119463 E 670656

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. Black, organic sandy silt. Moist to wet. Loose.
803.9 Clayey GRAVEL with Sand, some cobbles, trace boulders.
Loose to compact; non-plastic, orangish brown, moist,
Cobbles and boulders sub-angular to sub-rounded.

At 1.5m, less clay.

2.10
801.9 End of Hole at 2.10 m

Refusal - bedrock.

Grab

1

Grab

2



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-2

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK ☒ ☒ ☒
REMOLD ☐ ☐ ☐ ☐ ☐ ☐
▲ UC/2
△ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 **FINISHED:** 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 797.0
COORDINATES (m): N 6118960 E 670639

DESCRIPTION OF MATERIALS

0.05
797.0 TOPSOIL. Black, organic sandy silt. Moist to wet. Loose.
Sandy Lean CLAY with Gravel, some cobbles, trace boulders.
Moderate plasticity, stiff, moist, brown, possible fill / TILL.

Very Stiff Brown with orange mottles; angular to sub angular
cobbles and boulders; moist, completely weathered rock.

Pocket pen reading greater than 225 kPa.

3.00
794.0 End of Hole at 3.00 m

Refusal due to inferred bedrock.
Groundwater not encountered.
Pit walls stable.

Grab

1

Grab

2

Grab

3



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-3

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK ☒ ☒ ☒
REMOLD ☒ ☒ ☒ ☒
▲ UC/2
△ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 **FINISHED:** 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 821.0
COORDINATES (m): N 6119645 E 670839

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. Organic sandy silt. Brownish black; moist to wet.
820.9 Loose.
Sandy Lean CLAY (CL) with Gravel, some cobbles and boulders. Moderate plasticity, firm, brown; moist; cobbles and boulders subangular to sub rounded.
Pocket pen reading: 50~100 kPa.

2.10 Clayey SAND (SC) with Gravel, some cobbles, trace boulders.
818.9 Low plasticity, dense, moist to wet.

At 2.5m, harder to excavate. Slow seep.
Wet. Completely weathered rock?

3.50
817.5 End of Hole at 3.50 m

Grab

1

Grab

2

Grab

3



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-4

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 8/9/2008 **FINISHED:** 8/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 868.0
COORDINATES (m): N 6118965 E 671078

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. Organic sandy silt. Brownish black; moist to wet.
867.9 Loose.
Clayey SAND (SC), some gravel and cobbles, trace boulders.
Non-plastic, dense, brown, orange mottles.; moist.

0.50
867.5 Clayey GRAVEL (GC), some cobbles and boulders. Non-plastic,
dense, orangish brown, moist, completely weathered bedrock
- highly fractured and blocky.

2.70 At 2.6 m, slow seepage, water in base of pit.
865.3 End of Hole at 2.70 m

REFUSAL. Fresh/slightly weathered bedrock.
Bluish grey with mineralised veins. Strong/v. strong.
Granodiorite?

Grab

1

Grab

2

Rock

3



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-5

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\blacksquare$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 7/9/2008 **FINISHED:** 7/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 814.0
COORDINATES (m): N 6119219 E 670391

DESCRIPTION OF MATERIALS

DEPTH (m)	SAMPLE TYPE	SAMPLE No.	SYMBOL	DESCRIPTION	INSTRUMENT DETAILS	20	40	60	80
0.10				0.10 TOPSOIL. Organic sandy silt. Brownish black; moist to wet. Loose.					
0.10				0.10 Clayey GRAVEL (GC) with Sand, trace cobbles & boulders. Non-plastic, dense; moist. Cobbles and boulders angular to sub-angular, up to 1 m diameter.					
0.5									
1.0	Grab	1							
1.5				At 1.5 m, some cobbles and boulders.					
2.0	Grab	2							
2.5									
2.70				2.70 End of Hole at 2.70 m					
2.70									
3.0				REFUSAL. Inferred Bedrock. Bluish grey. Very strong. Volcanics? Wacke?					
3.5									
4.0									
4.5									
5.0									



Klohn Crippen Berger

PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-6

TEST PIT LOG

Su - kPa

20 60 100 140 180

VANE FIELD LAB
PEAK $\diamond$ $\square$ $\blacktriangle$ UC/2
REMOLD $\diamond$ $\square$ $\triangle$ P.PEN/2

★ % FINES

W_p% W% W_L%
x - - - - o - - - - x
20 40 60 80

INSTRUMENT
DETAILS

STARTED: 7/9/2008 **FINISHED:** 7/9/2008
EXCAVATOR TYPE: CAT 325 Excavator
GROUND ELEV. (m): 835.0
COORDINATES (m): N 6119510 E 670282

DESCRIPTION OF MATERIALS

0.10 TOPSOIL. Organic sandy silt. Brownish black; moist to wet.
834.9 Loose.
Clayey SAND (SC), some angular to sub angular cobbles and boulders. Low plasticity, compact, moist; rootlets; Completely weathered bedrock?

At 1.5 m, highly weathered bedrock; medium strong (approx 20-50 MPa). Orangish brown; high clay content; low plastic; fractured and broken. Harder to excavate.

2.30 End of Hole at 2.30 m
832.7

Refusal. Bedrock too waethered to excavate.
Pit walls stable.
Ground water not encountered.

Grab

1

Grab

2



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold Mine

LOCATION: Lake Morrison, B.C.

LOGGED BY: GA

CHECKED BY:

SHEET 1 OF 1

HOLE NO.: TPRS-7

CORRECTION OF STANDARD PENETRATION TEST RESULTS

DH08-1

DH08-2

Generalized Stratigraphy

	Soil Type	Bottom Depth (m)	Total Unit Weight (kN/m ³)	Effective Unit Weight (kN/m ³)
DH08-1	Glacial Till	14.78	20.00	10.00
DH08-2		6.26	20.00	10.00

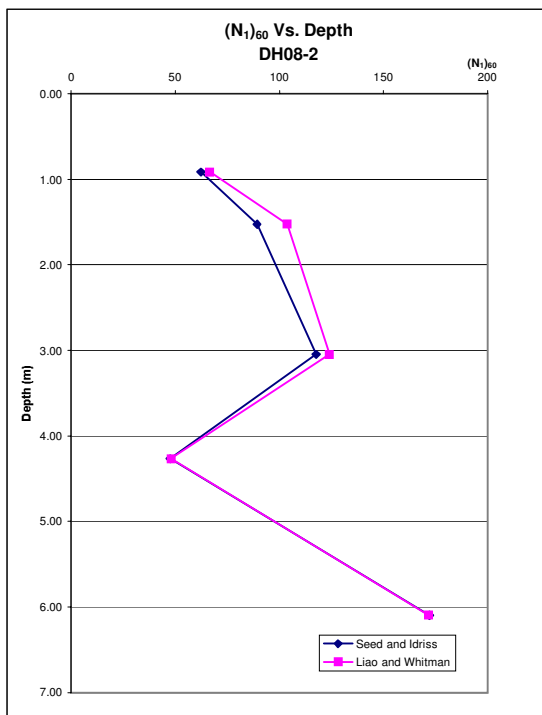
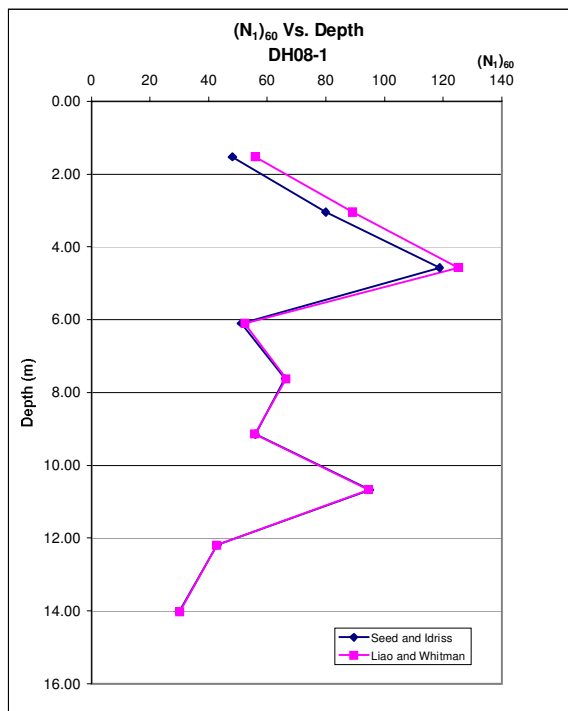
Water Table 1.5 m
Efficiency (%) 104 (Assumed for Safety Hammer)

Seed and Idriss Liao and Whitman Seed and Idriss Liao and Whitman

DRILL HOLE	TEST NAME	MIDDLE DEPTH (ft)	MIDDLE DEPTH (m)	FIELD N	N ₆₀	SAMPLER CORRECTION	ROD LENGTH CORRECTION	TOTAL STRESS (kPa)	EFFECTIVE STRESS (kPa)	EFFECTIVE STRESS (tsf)	C _N	C _N	(N ₁) ₆₀	(N ₁) ₆₀
DH08-1	SPT-1	5	1.52	21	37	1.2	0.75	30.48	30.24	0.32	1.464	1.700	48	56
	SPT-2	10	3.05	36	63	1.2	0.80	60.96	45.48	0.47	1.329	1.483	80	89
	SPT-3	15	4.57	55	96	1.2	0.85	91.44	60.72	0.63	1.217	1.283	119	125
	SPT-4	20	6.10	23	40	1.2	0.95	121.92	75.96	0.79	1.123	1.147	51	52
	SPT-5	25	7.62	32	56	1.2	0.95	152.40	91.20	0.95	1.042	1.047	66	66
	SPT-6	30	9.14	29	50	1.2	0.95	182.88	106.44	1.11	0.972	0.969	56	56
	SPT-7	35	10.67	50	87	1.2	1.00	213.36	121.68	1.27	0.910	0.907	95	95
	SPT-8	40	12.19	24	42	1.2	1.00	243.84	136.92	1.43	0.856	0.855	43	43
	SPT-9	46	14.02	18	31	1.2	1.00	280.42	155.21	1.62	0.799	0.803	30	30

Water Table 4.7 m

DRILL HOLE	TEST NAME	MIDDLE DEPTH (ft)	MIDDLE DEPTH (m)	FIELD N	N ₆₀	SAMPLER CORRECTION	ROD LENGTH CORRECTION	TOTAL STRESS (kPa)	EFFECTIVE STRESS (kPa)	EFFECTIVE STRESS (tsf)	C _N	C _N	(N ₁) ₆₀	(N ₁) ₆₀
DH08-2	SPT-1	3	0.91	25	43	1.2	0.75	18.29	18.29	0.19	1.591	1.700	62	67
	SPT-2	5	1.52	39	68	1.2	0.75	30.48	30.48	0.32	1.462	1.700	89	104
	SPT-3	10	3.05	58	101	1.2	0.80	60.96	60.96	0.64	1.216	1.281	118	124
	SPT-4	14	4.27	25	43	1.2	0.85	85.34	85.34	0.89	1.071	1.082	48	48
	SPT-5	20	6.10	90	157	1.2	0.95	121.92	108.06	1.13	0.965	0.962	172	172



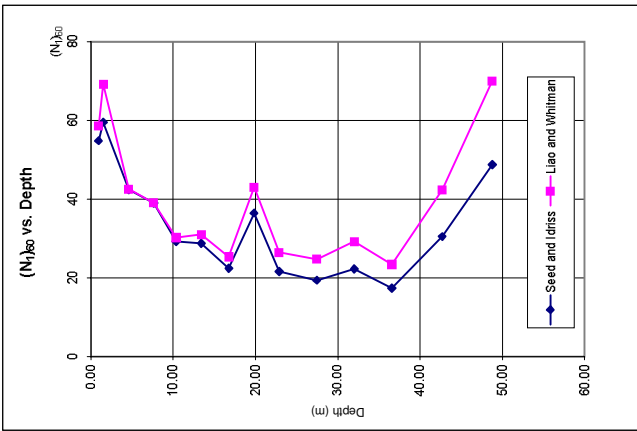
CORRECTION OF STANDARD PENETRATION TEST RESULTS
MW08-1

Generalized Stratigraphy

Soil Type	Bottom Depth (m)	Total Unit Weight (kN/m ³)	Effective Unit Weight (kN/m ³)
Glacial Till	55.80	20.00	10.00

Water Table Efficiency (%) 24.9 104 m (Assumed for Safety Hammer)

DRILL HOLE	TEST NAME	MIDDLE DEPTH (ft)	MIDDLE DEPTH (m)	FIELD N	N ₆₀	SAMPLER CORRECTION	ROD LENGTH CORRECTION	TOTAL STRESS (kPa)	EFFECTIVE STRESS (kPa)	EFFECTIVE STRESS (tsf)	C _N	C _N	Seed and Idriiss	Liao and Whitman	Seed and Idriiss	Liao and Whitman	(N ₁) ₆₀
MW08-1	SPT-1	3	0.91	22	38	1.2	0.75	18.29	18.29	0.19	1.591	1.700	55	59	55	59	59
	SPT-2	5	1.52	26	45	1.2	0.76	30.48	30.48	0.32	1.482	1.700	60	69	60	69	69
	LPT-3	15	4.57	23	40	1.2	0.86	91.44	91.44	0.95	1.040	1.046	42	43	42	43	43
	LPT-4	25	7.62	24	42	1.2	0.96	152.40	152.40	1.59	0.808	0.810	39	39	39	39	39
	LPT-5	34	10.36	21	36	1.2	1.00	207.26	207.26	2.16	0.672	0.695	29	30	29	30	30
	LPT-6	44	13.41	24	42	1.2	1.00	268.22	268.22	2.80	0.667	0.811	29	31	29	31	31
	LPT-7	55	16.76	22	39	1.2	1.00	335.28	335.28	3.50	0.483	0.546	22	25	22	25	25
	LPT-8	65	19.81	41	71	1.2	1.00	396.24	396.24	4.14	0.426	0.502	36	43	36	43	43
	LPT-9	75	22.86	27	47	1.2	1.00	457.20	457.20	4.77	0.381	0.468	22	26	22	26	26
	LPT-10	90	27.43	27	47	1.2	1.00	548.64	523.32	5.46	0.342	0.437	19	25	19	25	25
	LPT-11	105	32.00	33	58	1.2	1.00	640.08	569.04	5.94	0.319	0.419	22	29	22	29	29
	LPT-12	120	36.58	28	48	1.2	1.00	731.52	614.76	6.42	0.299	0.403	17	23	17	23	23
	LPT-13	140	42.67	53	92	1.2	1.00	853.44	675.72	7.06	0.276	0.385	30	42	30	42	42
	LPT-14	160	48.77	91	158	1.2	1.00	973.36	736.68	7.69	0.257	0.368	49	70	49	70	70



CORRECTION OF STANDARD PENETRATION TEST RESULTS

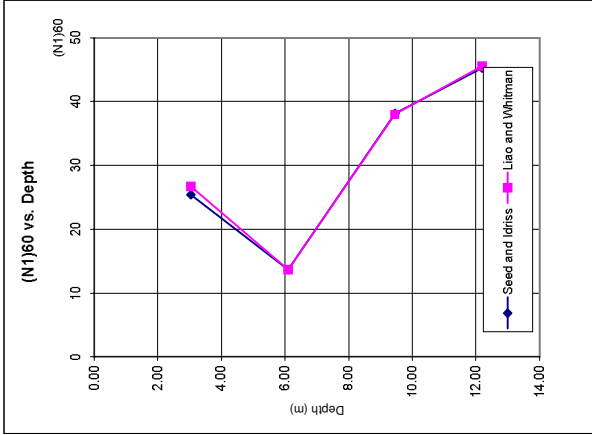
MW08-3

Generalized Stratigraphy

Soil Type	Bottom Depth (m)	Total Unit Weight (kN/m ³)	Total Unit Effective Unit Weight (kN/m ³)
Glacial Till	14.78	20.00	10.00

Water Table Efficiency (%) 4.0 104 (Assumed for Safety Hammer)

DRILL HOLE	TEST NAME	MIDDLE DEPTH (m)	MIDDLE DEPTH (m)	FIELD N	N ₆₀	SAMPLER CORRECTION	ROD LENGTH CORRECTION	TOTAL STRESS (kPa)	EFFECTIVE STRESS (kPa)	EFFECTIVE STRESS (tsf)	C _N	C _N	Seed and Idriss	Liao and Whitman	Seed and Idriss	Liao and Whitman	(N ₁) ₆₀	(N ₁) ₆₀
MW08-3	LPT-1	10	3.05	13	22	1.2	0.80	60.96	60.96	0.64	1.216	1.281	1.216	1.281	25	27	27	27
	LPT-2	20	6.10	7	12	1.2	0.86	121.92	100.96	1.05	0.896	0.996	0.896	0.996	14	14	14	14
	LPT-3	31	9.45	22	39	1.2	0.95	188.98	134.49	1.40	0.864	0.862	0.864	0.862	38	38	38	38
	LPT-4	40	12.19	28	48	1.2	1.00	243.84	161.92	1.69	0.780	0.786	0.780	0.786	45	46	46	46



VISUAL SOIL DESCRIPTION

USCS (Modified)

Test Hole	Sample No.	Depth (m)	Group Symbol	Group Name	Soil Classification
TP08-A	-	1	SM	Silty sand	Coarse to fine; trace fine subangular gravel, maximum size 9.5 mm; and low plasticity silt with low toughness, rapid dilatancy and medium dry strength, moist; brown; no reaction with HCl.
TP08-B	-	1	CL	Low-plasticity Clay	Trace fine sand; low plasticity, medium toughness, slow dilatancy and high dry strength, moist; dark grey; no reaction with HCl.
TP08-B	-	2	ML	Low-plasticity Silt	Trace fine to medium sand; low plasticity, low toughness, rapid dilatancy and low dry strength, moist; dark grey; no reaction with HCl.
TP08-B	-	3	GP	Poorly-graded Gravel	Fine gravel; subrounded, maximum size 19.0 mm; and coarse to fine sand; some silt with low toughness, rapid dilatancy and low dry strength, moist; dark grey; weak reaction with HCl.
TP08-B	-	3.2	CL	Low-plasticity Clay	Trace fine subangular gravel, maximum size 9.5 mm, some coarse to fine sand; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak reaction with HCl.
TP08-C	-	1	CL	Low-plasticity Clay	Trace fine subangular gravel, maximum size 9.5 mm, some coarse to fine sand; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCl.
TP08-D	-	3	SM	Silty sand	Coarse to fine sand; fine gravel; and subangular, maximum size 19.0 mm; some silt, low plasticity, low toughness, rapid dilatancy and low dry strength, moist; brown; strong reaction with HCl.
TP08-E	-	1	CL	Low-plasticity Clay	Trace fine subangular gravel, maximum size 9.5 mm, sandy; medium plasticity, medium toughness, slow dilatancy and low dry strength, moist; brown; no reaction with HCl.
TP08-E	-	4	CL	Low-plasticity Clay	Trace fine to coarse subangular gravel, some coarse to fine sand, maximum size 19.0 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCl.
TP08-F	-	1	CL	Low-plasticity Clay	Trace fine subangular gravel, maximum size 9.5 mm, sandy; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak to strong reaction with HCl.
TP08-F	-	3	CL	Low-plasticity Clay	Sandy, maximum size 4.75 mm, medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; weak reaction with HCl.
TP08-H	-	1	SC	Clayey Sand	Trace fine subangular gravel, clayey, maximum size 9.5 mm; medium plasticity, medium toughness, slow to rapid dilatancy and medium dry strength, moist; dark brown; no reaction with HCl.
TP08-I	-	1	SC	Clayey Sand	Some coarse to fine subangular gravel, clayey, maximum size 38.2 mm; medium plasticity, medium toughness, slow dilatancy and medium dry strength, moist; brown; no reaction with HCl.
TP08-K	-	1	GM	Silty gravel	Coarse to fine gravel, sandy, trace silt; subrounded, maximum size 38.2 mm; no plasticity, low toughness, rapid dilatancy and low dry strength, moist; dark brown; no reaction with HCl.

 Klohn Crippen Berger	JOB NO.:	M0382A01 01 03
	PROJECT:	Morrison Copper/Gold Project
	LOCATION:	Morrison Lake, Smithers, BC
	DATE:	30-Oct-08
	TESTED BY:	BY
	CHECKED BY:	JG

VISUAL SOIL DESCRIPTION

USCS (Modified)

[illegible]

 Klohn Crippen Berger	JOB NO.:	M0382A01 01 03	
	PROJECT:	Morrison Copper/Gold Project	
	LOCATION:	Smithers, BC	
	DATE:	30-Oct-08	
	TESTED BY:	RY	CHECKED BY: JG

VISUAL SOIL DESCRIPTION
USCS (Modified)

Test Hole	Sample No.	Depth (m)	Group Symbol	Group Name	Soil Classification
DH08-1	SPT 2	2.7	CI	Medium-plasticity Clay	Trace fine subangular gravel, trace sand, maximum size 4.75 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; strong reaction with HCl.
DH08-1	SPT 5	7.3	CI	Medium-plasticity Clay	Some fine subrounded gravel, some sand, maximum size 19.0 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm, weak to strong reaction with HCl.
DH08-1	SPT 7	10.4	CI	Medium-plasticity Clay	Trace fine subangular gravel, some sand, maximum size 9.5 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm, weak to strong reaction with HCl.
DH08-2	SPT-2	1.2	CI	Medium-plasticity Clay	Trace fine subangular gravel, some sand, maximum size 9.5 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm, strong reaction with HCl.
DH08-2	SPT-5	5.8	GM	Silty Gravel	Coarse to fine subangular gravel, some sand, some silt, maximum size 38.2 mm; none to low plasticity, low toughness, rapid dilatancy and low dry strength, moist; dark grey; weak reaction with HCl.
MW08-1	SPT-2	1.2	SC	Clayey Sand	Coarse to fine sand, clayey, some fine to coarse subangular gravel, maximum size 38.2 mm; medium plasticity, medium toughness, slow dilatancy and medium dry strength, moist; brown; firm, weak reaction with HCl.
MW08-1	LPT-5	10.1	SC	Clayey Sand	Coarse to fine sand, clayey, trace fine subangular gravel, maximum size 19.0 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm, weak to strong reaction with HCl.
MW08-1	LPT-8	19.5	SC	Clayey Sand	Coarse to fine sand, clayey, trace fine subangular gravel, maximum size 9.5 mm; medium plasticity, medium toughness, slow to rapid dilatancy and medium to high dry strength, moist; brown; soft; weak reaction with HCl.
MW08-1	LPT-13	42.4	SC	Clayey Sand	Coarse to fine sand, clayey, some fine subangular gravel, maximum size 19.1 mm; medium plasticity, medium toughness, slow dilatancy and medium to high dry strength, moist; brown; soft; weak reaction with HCl.
MW08-3	LPT-1	2.7	GM	Silty Gravel	Fine subangular gravel, some sand, trace silt, maximum size 19.0 mm; none to low plasticity, low toughness, rapid dilatancy and low dry strength, moist; dark brown; no reaction with HCl.
MW08-3	LPT-4	11.9	CL	Low-plasticity Clay	Trace fine subangular gravel, some sand, maximum size 19.0 mm; medium plasticity, medium toughness, slow dilatancy and high dry strength, moist; brown; firm; weak reaction with HCl.

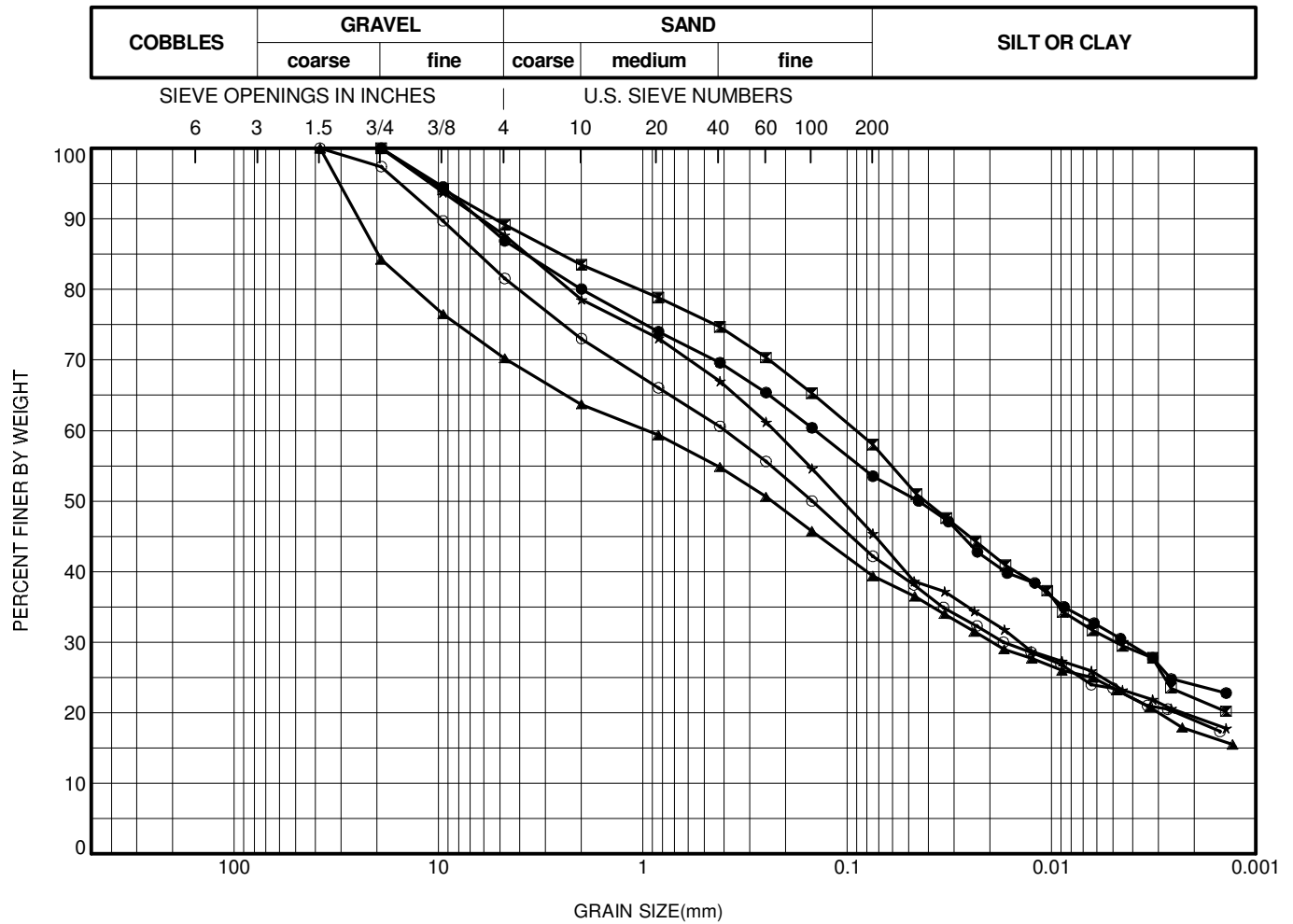
	JOB NO.:	M0382A01 01 03
	PROJECT:	Morrison Copper/Gold Project
	LOCATION:	Smithers, BC
	DATE:	30-Oct-08
	TESTED BY:	BY
	CHECKED BY:	JG

WATER CONTENT OF SOIL
(ASTM D2216)

Hole Number	Sample Number	Depth (m)	ID Number	Wet Weight + Tare (g)	Dry Weight + Tare (g)	Tare (g)	Water Weight (g)	Total Dry Weight (g)	Water Content (%)
DH08-1	SPT 1	1.2		289.89	271.86	113.95	18.03	157.91	11.4
DH08-1	SPT 2	2.7		219.77	207.1	113.4	12.67	93.7	13.5
DH08-1	SPT 4	5.7		215.52	205.35	111.5	10.17	93.85	10.8
DH08-1	SPT 5	7.3		202.66	193.83	102.39	8.83	91.44	9.7
DH08-1	SPT 6	8.8		225.8	217.26	134.32	8.54	82.94	10.3
DH08-1	SPT 7	10.4		215.13	204.74	114.51	10.39	90.23	11.5
DH08-1	SPT 8	11.9		193.66	184.32	92.24	9.34	92.08	10.1
DH08-1	SPT 9	13.4		215.47	202.66	111.4	12.81	91.26	14.0
DH08-2	SPT- 1	0.6		123.56	116.42	28.48	7.14	87.94	8.1
DH08-2	SPT- 2	1.2		114.9	106.42	29.22	8.48	77.2	11.0
DH08-2	SPT- 3	2.7		128.22	118.06	29.09	10.16	88.97	11.4
DH08-2	SPT- 4	4		133.63	123.66	29.5	9.97	94.16	10.6
DH08-2	SPT- 5	5.8		166.86	159.93	24.83	6.93	135.1	5.1
MW08-1	SPT-1	0.6		233.5	222.97	115.64	10.53	107.33	9.8
MW08-1	SPT-2	1.2		128.62	119.94	24.86	8.68	95.08	9.1
MW08-1	LPT-3	4.3		109.78	101.91	29.66	7.87	72.25	10.9
MW08-1	LPT-4	7.3		118.32	108.6	18.32	9.72	90.28	10.8
MW08-1	LPT-5	10.1		122.68	112.08	17.55	10.6	94.53	11.2
MW08-1	LPT-6	13.1		232.05	220.3	116.62	11.75	103.68	11.3
MW08-1	LPT-7	16.5		158.35	143.59	24.55	14.76	119.04	12.4
MW08-1	LPT-8	19.5		94.44	85.64	9.55	8.8	76.09	11.6
MW08-1	LPT-9	22.6		112.16	100.85	9	11.31	91.85	12.3
MW08-1	LPT-10	27.1		113.9	102.5	16.13	11.4	86.37	13.2
MW08-1	LPT-11	31.7		112.12	100.37	12.75	11.75	87.62	13.4
MW08-1	LPT-12	36.3		119.39	107.41	8.997	11.98	98.413	12.2
MW08-1	LPT-13	42.4		112.63	101.34	9.33	11.29	92.01	12.3
MW08-1	LPT-14	48.5		113.15	87.4	9.33	25.75	78.07	33.0
MW08-3	LPT-1	2.7		145.06	134.96	29.4	10.1	105.56	9.6
MW08-3	LPT-2	5.8		219.22	200.56	116.87	18.66	83.69	22.3
MW08-3	LPT-3	9.1		204.65	192.87	88.77	11.78	104.1	11.3
MW08-3	LPT-4	11.9		218.54	206.73	105.25	11.81	101.48	11.6
TP08-A		1		223.12	210.29	120.5	12.83	89.79	14.3
TP08-A		2		216.92	207.17	107.39	9.75	99.78	9.8
TP08-B		1		222.08	202.49	118.13	19.59	84.36	23.2
TP08-B		2		324.33	280.03	110.27	44.3	169.76	26.1
TP08-B		3		355.12	338.76	130.56	16.36	208.2	7.9
TP08-B		3.2		274.97	255.63	123.7	19.34	131.93	14.7
TP08-C		1		280.51	265.41	129.92	15.1	135.49	11.1
TP08-C		2		255.55	238.95	122.05	16.6	116.9	14.2
TP08-D		1		281.67	262.44	120.24	19.23	142.2	13.5
TP08-D		2		261.04	252.44	117.34	8.6	135.1	6.4
TP08-D		3		274.18	266.23	121.58	7.95	144.65	5.5
TP08-E		1		236.68	217.35	105.7	19.33	111.65	17.3
TP08-E		2		225.13	210.05	103.65	15.08	106.4	14.2
TP08-E		2.6		234.68	220.11	100.9	14.57	119.21	12.2
TP08-E		4		247.47	234.98	95.24	12.49	139.74	8.9
TP08-F		1		217.26	201.47	95.98	15.79	105.49	15.0
TP08-F		2		320.4	288.63	95.96	31.77	192.67	16.5
TP08-F		3		231.1	212.02	97.08	19.08	114.94	16.6
TP08-H		1		242.9	225.95	118.15	16.95	107.8	15.7
TP08-H		2		200.04	189.7	113.02	10.34	76.68	13.5
TP08-H		3		262.58	240.77	107.4	21.81	133.37	16.4
TP08-I		1		269.3	252.28	109.23	17.02	143.05	11.9
TP08-I		1.5		959.58	879.4	107.03	80.18	772.37	10.4
TP08-I		2		341.4	309.36	102.72	32.04	206.64	15.5
TP08-I		2.5		305.46	286.71	109.3	18.75	177.41	10.6
TP08-J		1		293.74	273.34	97.75	20.4	175.59	11.6
TP08-J		2		267.07	250.1	129.25	16.97	120.85	14.0
TP08-K		1		762.1	722.4	90.75	39.7	631.65	6.3
TP08-K		2		252.57	234.8	99.75	17.77	135.05	13.2
TP08-K		3		302.14	281.49	103.45	20.65	178.04	11.6
TP08-L		1		232.27	222.34	107.23	9.93	115.11	8.6
TP08-M		1		224.67	210.49	105.68	14.18	104.81	13.5
TP08-N		1		189.96	180.7	82.07	9.26	98.63	9.4
TPA1		2		222.63	204.64	80.6	17.99	124.04	14.5
TPA1		4.8		234.88	217	103.64	17.88	113.36	15.8
TPA2		0.5		370.79	332.48	116.88	38.31	215.6	17.8
TPA3		5.8		185.64	176.15	103.05	9.49	73.1	13.0
TPA4		1		244.83	214.29	97.42	30.54	116.87	26.1
TPA4		4.3		267.97	252.05	118.16	15.92	133.89	11.9

 Klohn Crippen Berger	JOB NO.: M09382A01 01 03	
	PROJECT: Morrison Copper/Gold Project	
	LOCATION: Smithers, BC	
	DATE: Oct 27, 2008	
	TESTED BY: CG/MC	CHECKED BY: BY

GRAIN SIZE DISTRIBUTION



	HOLE	DEPTH (m)	D85	D60	D50	D15	D10	CU	%GRAVEL	%SAND	%FINES
●	DH08-1	5.70	3.742	0.143					13.1	33.3	53.5
⊠	DH08-1	13.40	2.515	0.090					10.9	31.1	58.0
▲	DH08-2	4.00	19.761	0.952	0.234				29.8	30.9	39.4
★	MW08-1	24.10	3.686	0.228	0.106				12.3	42.3	45.4
⊙	MW08-1	31.70	6.372	0.395	0.149				18.4	39.4	42.2

	HOLE	SAMPLE	DEPTH (m)	W%	W _L	W _P	PI	REMARKS / SAMPLE DESCRIPTION
●	DH08-1	SPT 4	5.70		32	14	18	
⊠	DH08-1	SPT 9	13.40		31	14	17	
▲	DH08-2	SPT- 4	4.00		29	13	15	
★	MW08-1	Shelby-1	24.10		28	13	15	
⊙	MW08-1	LPT-11	31.70		26	13	13	

CU = COEFFICIENT OF UNIFORMITY = D60/D10

PARTICLE SIZES, e.g. D85, in mm

Tested by Wet Sieving Method (ASTM D1140 & D422)



PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

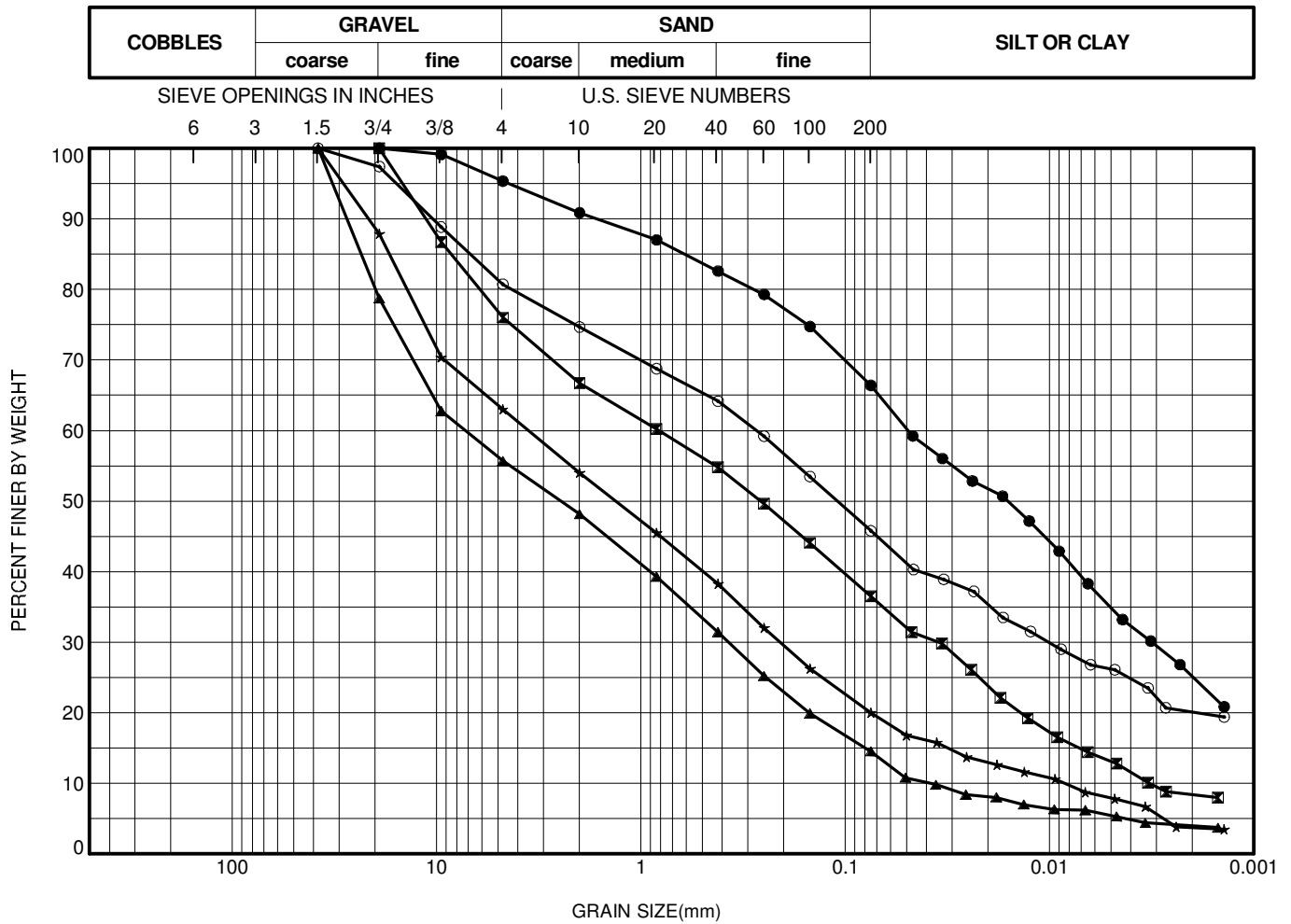
LOCATION: Smithers, BC

FIGURE:

DRAWN BY: CG

CHECKED BY: JG

GRAIN SIZE DISTRIBUTION



	HOLE	DEPTH (m)	D85	D60	D50	D15	D10	CU	%GRAVEL	%SAND	%FINES
●	MW08-3	5.80	0.612						4.6	29.0	66.4
⊠	TP08-A	2.00	8.528	0.817	0.260				24.0	39.5	36.5
▲	TP08-B	3.00	23.414	7.258	2.470	0.080			44.3	41.2	14.5
★	TP08-D	2.00	17.025	3.556	1.329				37.0	43.0	20.0
⊙	TP08-E	2.60	6.843	0.272	0.109				19.3	34.9	45.8

	HOLE	SAMPLE	DEPTH (m)	W%	W _L	W _P	PI	REMARKS / SAMPLE DESCRIPTION
●	MW08-3	LPT-2	5.80		25	14	11	
⊠	TP08-A		2.00		24	16	8	
▲	TP08-B		3.00					
★	TP08-D		2.00					
⊙	TP08-E		2.60		29	15	14	

CU = COEFFICIENT OF UNIFORMITY = D60/D10

PARTICLE SIZES, e.g. D85, in mm

Tested by Wet Sieving Method (ASTM D1140 & D422)



PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

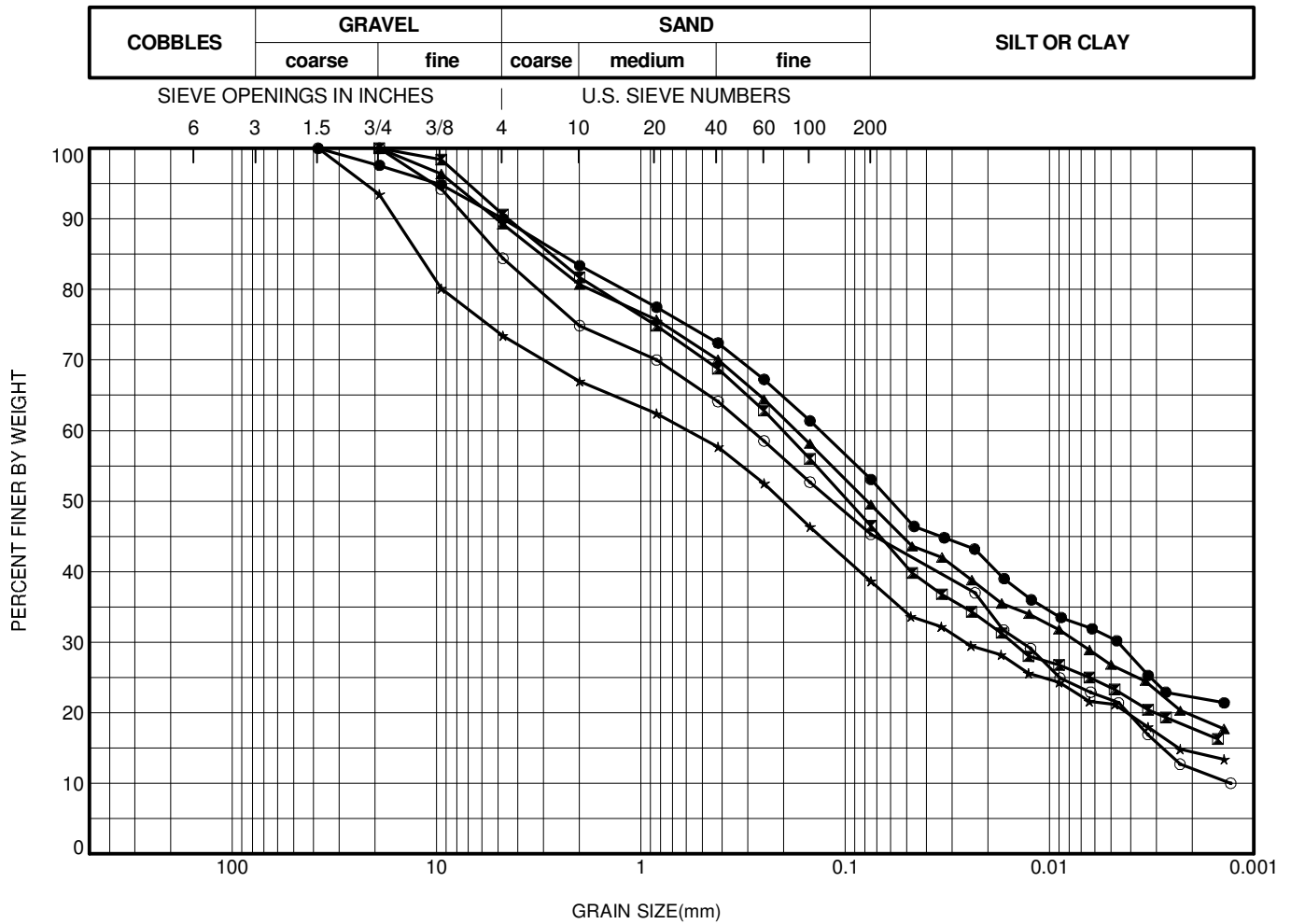
LOCATION: Smithers, BC

FIGURE:

DRAWN BY: CG

CHECKED BY: JG

GRAIN SIZE DISTRIBUTION



	HOLE	DEPTH (m)	D85	D60	D50	D15	D10	CU	%GRAVEL	%SAND	%FINES
●	TP08-F	2.00	2.470	0.133					10.0	36.9	53.1
⊠	TP08-H	2.00	2.754	0.202	0.097				9.4	44.1	46.5
▲	TP08-H	3.00	3.089	0.174	0.078				10.8	39.8	49.5
★	TP08-I	2.00	12.278	0.592	0.203				26.5	34.8	38.6
⊙	TP08-J	1.00	4.952	0.287	0.116				15.6	39.1	45.3

	HOLE	SAMPLE	DEPTH (m)	W%	W _L	W _P	PI	REMARKS / SAMPLE DESCRIPTION
●	TP08-F		2.00		29	14	15	
⊠	TP08-H		2.00		23	12	10	
▲	TP08-H		3.00					
★	TP08-I		2.00					
⊙	TP08-J		1.00		27	20	8	

CU = COEFFICIENT OF UNIFORMITY = D60/D10

PARTICLE SIZES, e.g. D85, in mm

Tested by Wet Sieving Method (ASTM D1140 & D422)



PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

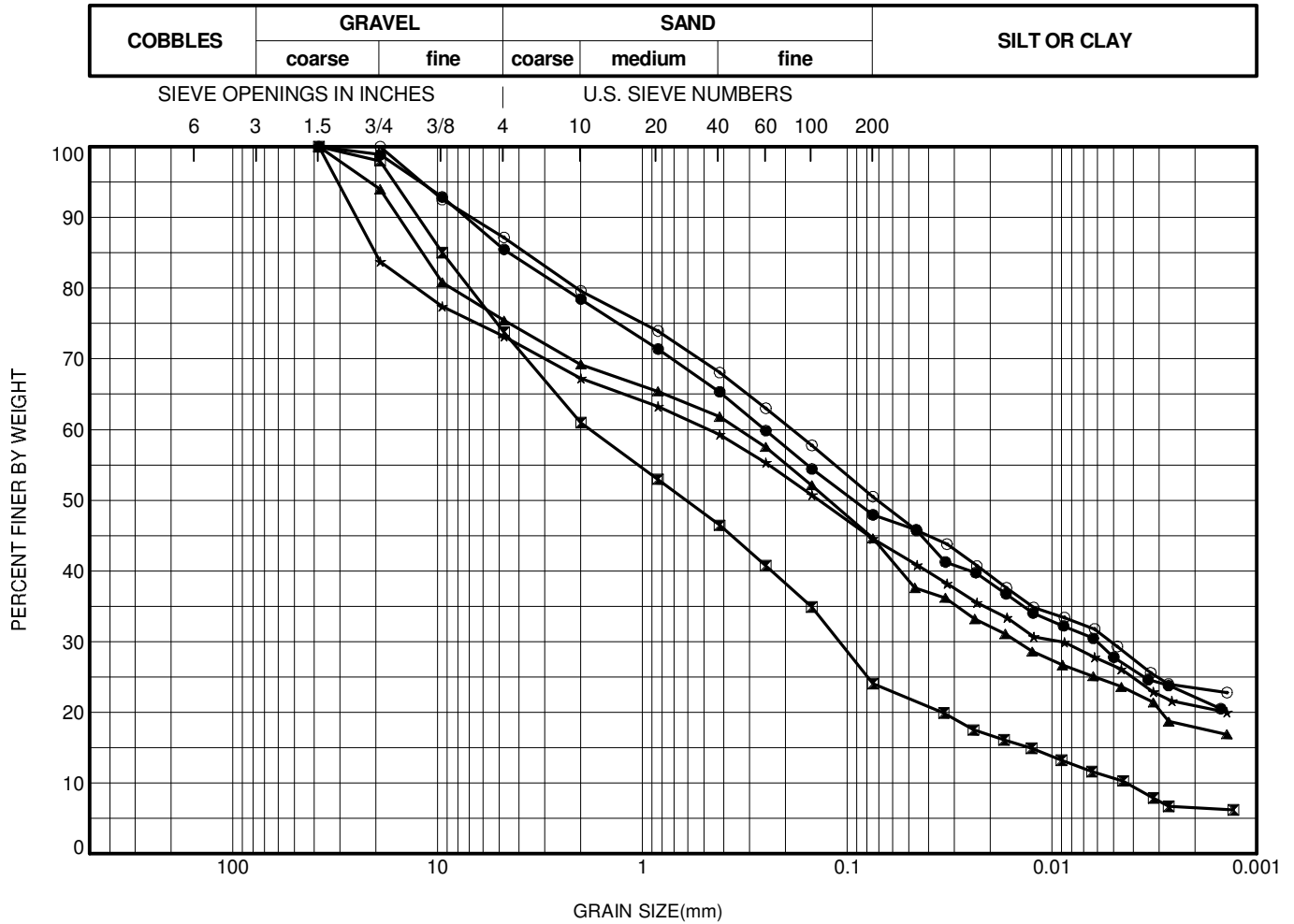
LOCATION: Smithers, BC

FIGURE:

DRAWN BY: CG

CHECKED BY: JG

GRAIN SIZE DISTRIBUTION



	HOLE	DEPTH (m)	D85	D60	D50	D15	D10	CU	%GRAVEL	%SAND	%FINES
●	TP08-J	2.00	4.482	0.254	0.093				14.5	37.5	47.9
⊠	TP08-K	2.00	9.491	1.804	0.612				26.2	49.7	24.1
▲	TP08-L	1.00	11.876	0.337	0.123				24.6	30.8	44.6
★	TP08-M	1.00	20.131	0.474	0.137				26.8	28.6	44.6
⊙	TP08-N	1.00	3.708	0.186					12.8	36.7	50.5

	HOLE	SAMPLE	DEPTH (m)	W%	W _L	W _P	PI	REMARKS / SAMPLE DESCRIPTION
●	TP08-J		2.00		40	21	19	
⊠	TP08-K		2.00		22	15	7	
▲	TP08-L		1.00		30	16	14	
★	TP08-M		1.00		32	16	16	
⊙	TP08-N		1.00		32	16	16	

CU = COEFFICIENT OF UNIFORMITY = D60/D10

PARTICLE SIZES, e.g. D85, in mm

Tested by Wet Sieving Method (ASTM D1140 & D422)



PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

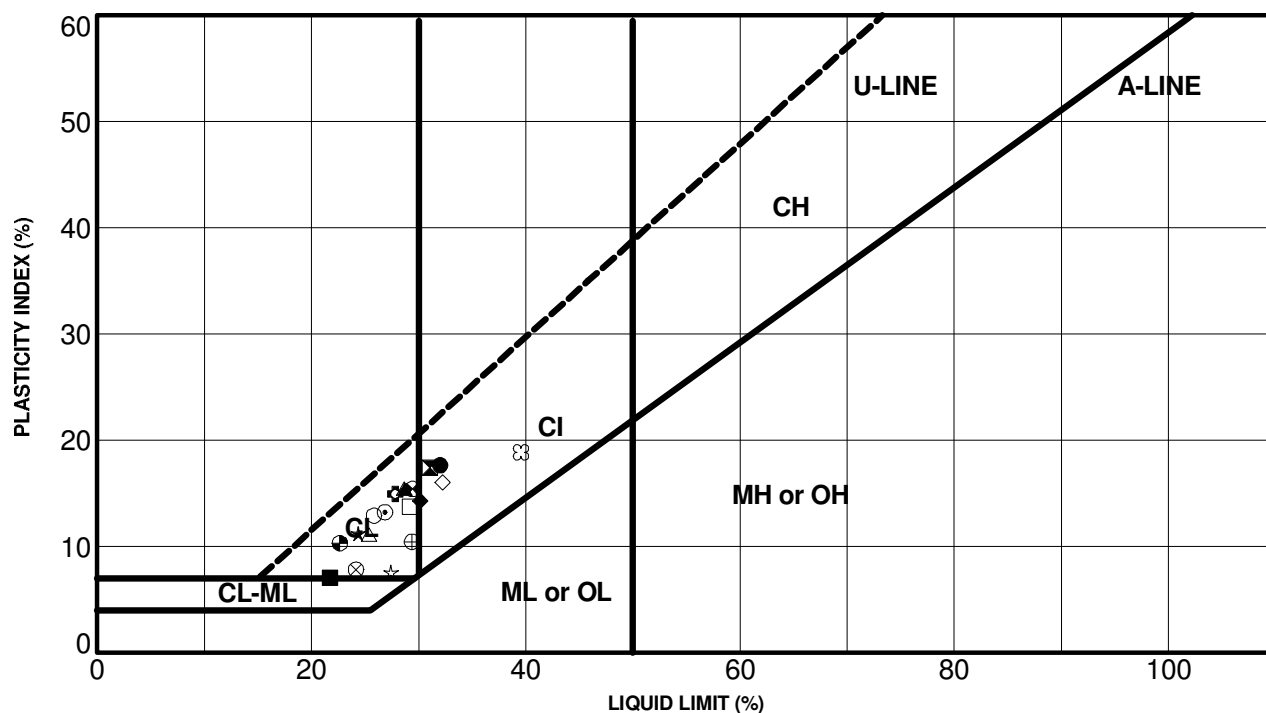
LOCATION: Smithers, BC

FIGURE:

DRAWN BY: CG

CHECKED BY: JG

PLASTICITY CHART



	HOLE	SAMPLE	DEPTH (ft)	W _L	W _p	PI	% FINES	REMARKS/SAMPLE DESCRIPTION
●	DH08-1	SPT 4	5.7	32	14	18		
⊠	DH08-1	SPT 9	13.4	31	14	17		
▲	DH08-2	SPT- 4	4.0	29	13	15		
★	MW08-1	LPT-3	4.3	24	13	11		
⊙	MW08-1	LPT-7	16.5	27	14	13		
⊛	MW08-1	Shelby-1	24.1	28	13	15		
○	MW08-1	LPT-11	31.7	26	13	13		
△	MW08-3	LPT-2	5.8	25	14	11		
⊗	TP08-A		2.0	24	16	8		
⊕	TP08-B		1.0	29	19	10		
□	TP08-E		2.6	29	15	14		
⊗	TP08-F		2.0	29	14	15		
⊙	TP08-H		2.0	23	12	10		
☆	TP08-J		1.0	27	20	8		
⊗	TP08-J		2.0	40	21	19		
■	TP08-K		2.0	22	15	7		
◆	TP08-L		1.0	30	16	14		
◇	TP08-M		1.0	32	16	16		



Klohn Crippen Berger

PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

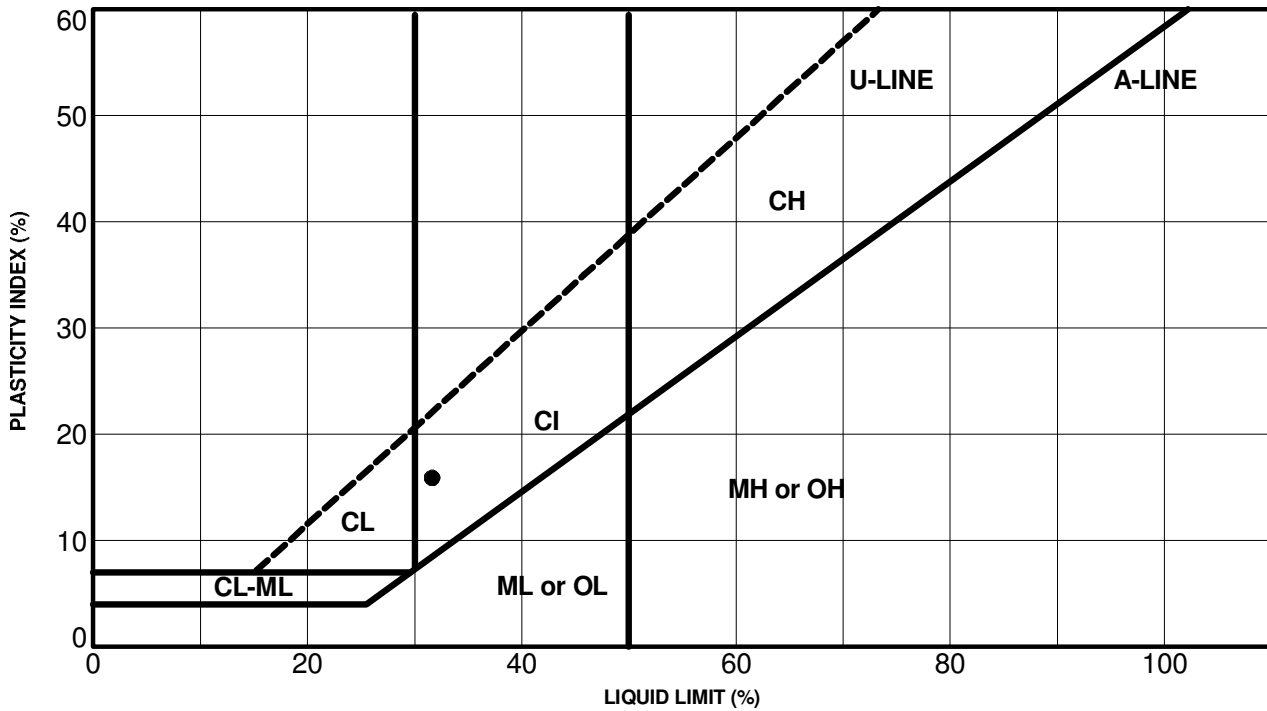
LOCATION: Smithers, BC

FIGURE:

DRAWN BY: CG

CHECKED BY: JG

PLASTICITY CHART

[illegible]

PROJECT NO.: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

LOCATION: Smithers, BC

FIGURE:

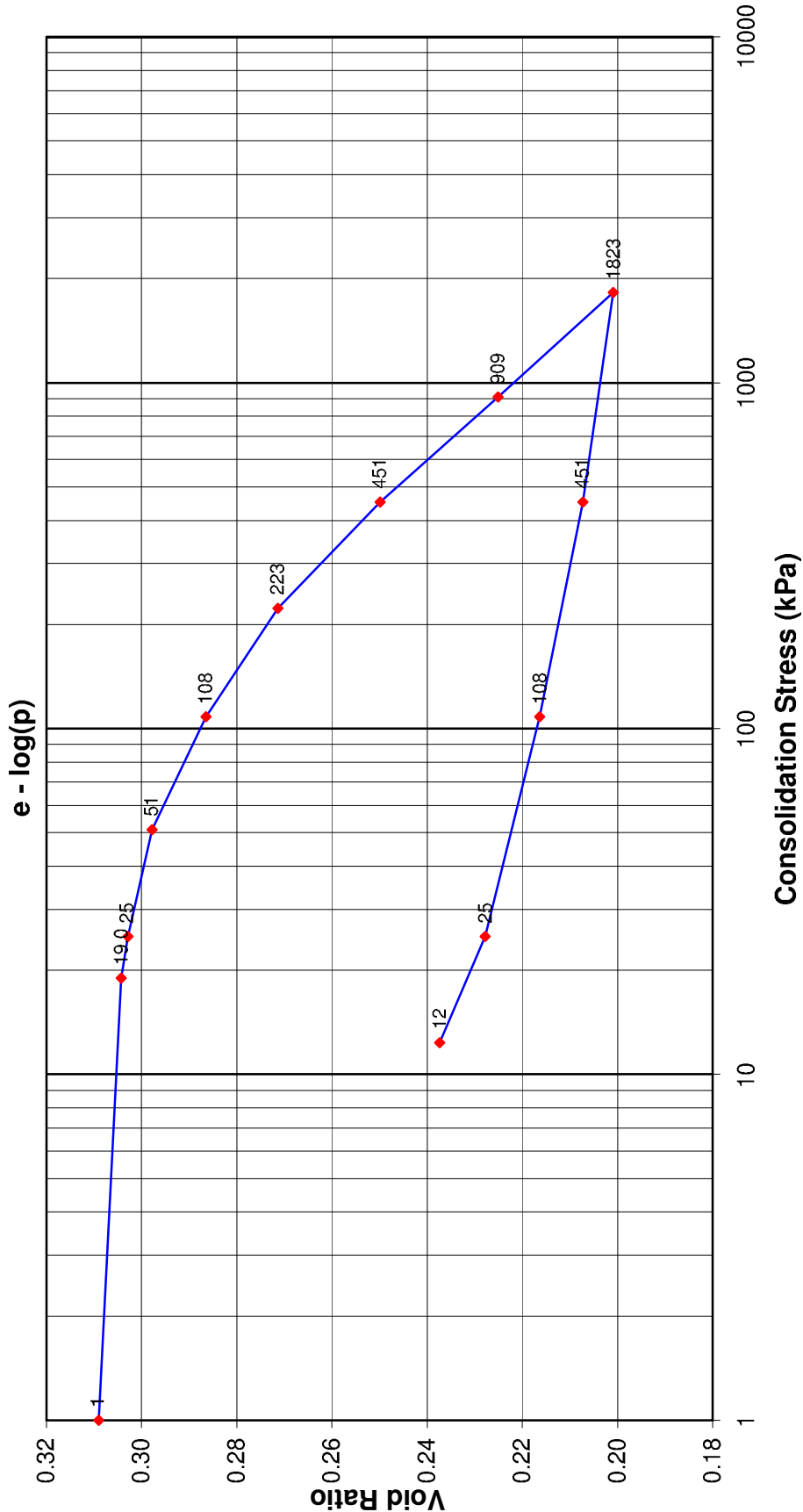
DRAWN BY: CG

CHECKED BY: JG

CONSOLIDATION TEST

PROJECT NO: M09382A01 01 03
PROJECT: Morrison
SAMPLE NO.: MW08-01 (Shelby)
DEPTH: 79'

Morrison MW08-1 79-80 ft



Klohn Crippen Berger

PROJECT NO: M09382A01 01 03

PROJECT: Morrison Copper/Gold Project

LOCATION: Smithers, BC

FIGURE:

DATE TESTED: October 24, 2008

TESTED BY: Juan

CHECKED BY: Bin Y.

Triaxial Test Summary



PROJECT NCM09382A01 01 03
 PROJECT : Morrison Copper/Gold Project
 SAMPLE : MW08-01 @ 79' - 80'
 DATE : October 29, 2008
 TEST BY: BY
 CHECKED BY: JG

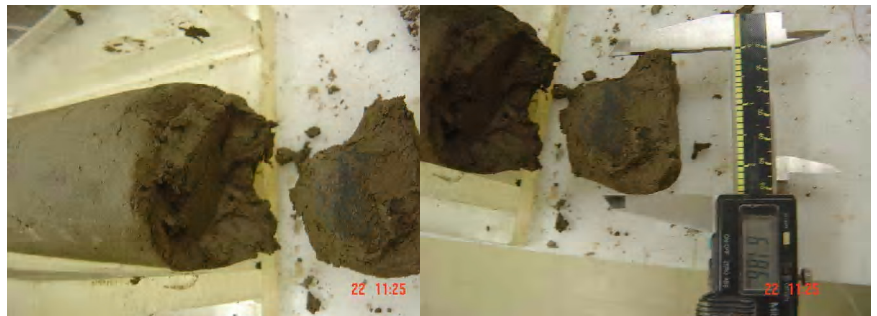
SPECIMEN INFORMATION	UNITS	Stage 1	Stage 2	Stage 3
Date: Nov 05, 2008				
Initial Water Content	%	9.9	-	-
Initial Dry Density	kg/m ³	2132	-	-
Final Water Content	%	-	-	7.8
Skempton's B Parameter		1.00	1.00	1.00
Back Pressure	kPa	146	146	146
Consolidation Stress (σ_3')	kPa	200	500	1000
End of Consolidation / Start of shear				
Dry Density	kg/m ³	2203	2267	2298
Specimen Height	mm	137.4	127.8	116.8
Specimen Area	mm ²	4032.9	4215.8	4548.5



Extrude sample from tube



Remove a large gravel piece from top



Before test



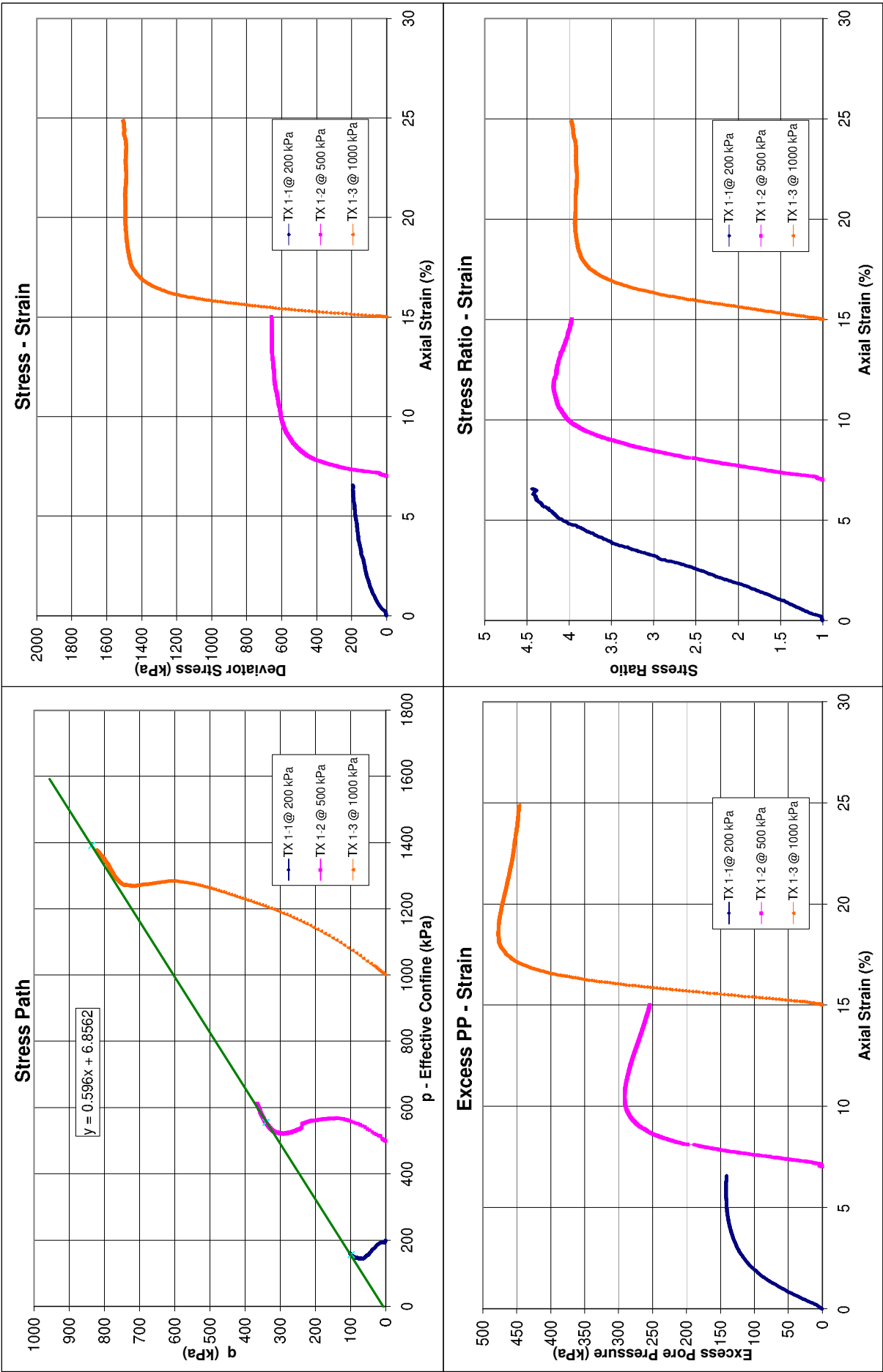
After test

Triaxial Test Summary

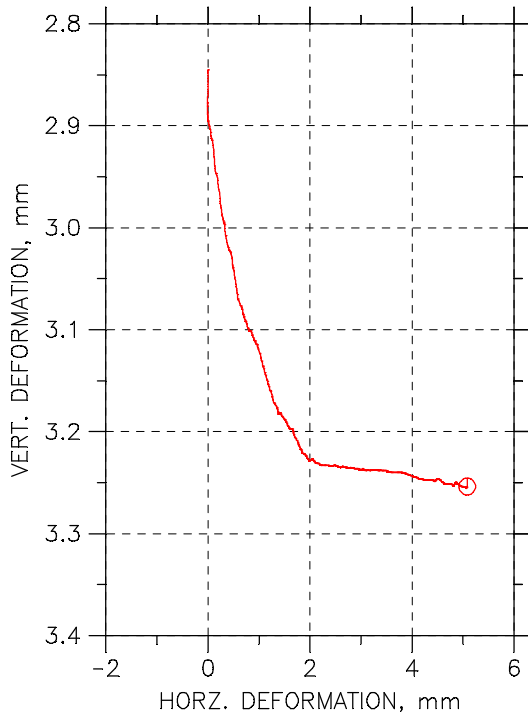
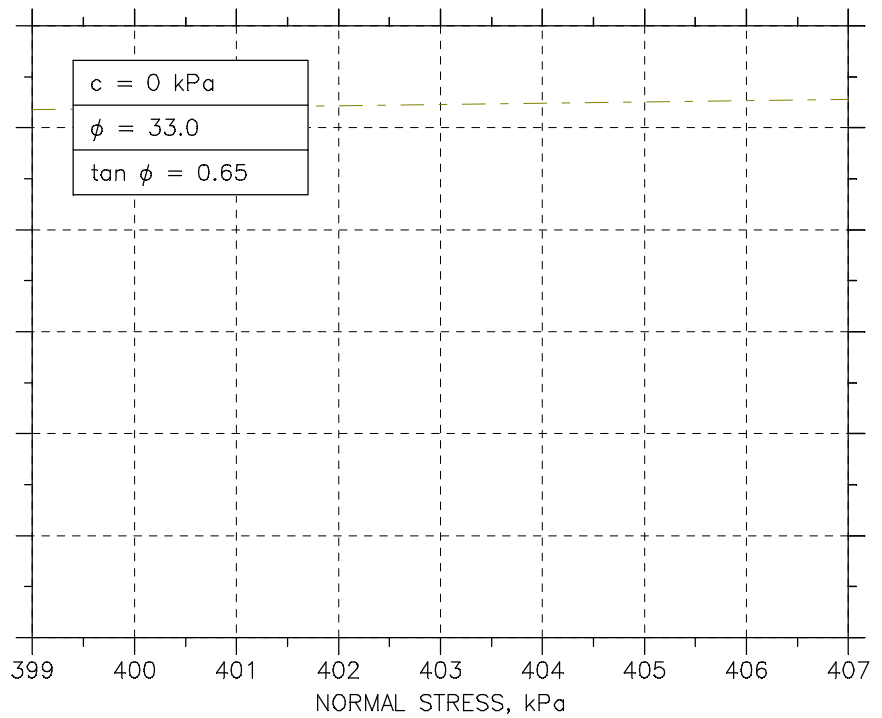
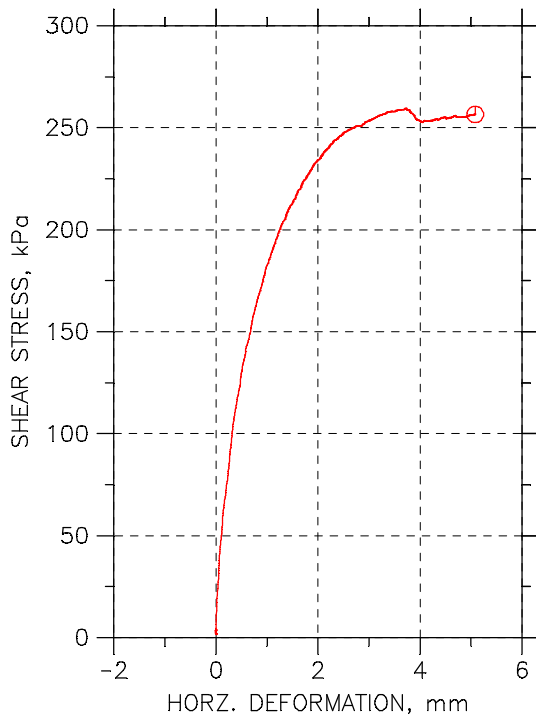


Klohn Crippen Berger

PROJECT NO.: M09382A01 01 03
PROJECT: Morrison Copper/Gold Project
SAMPLE: MW08-01 @ 79' - 80'
DATE: October 29, 2008
TEST BY: BY
CHECKED BY: JG



DIRECT SHEAR TEST REPORT



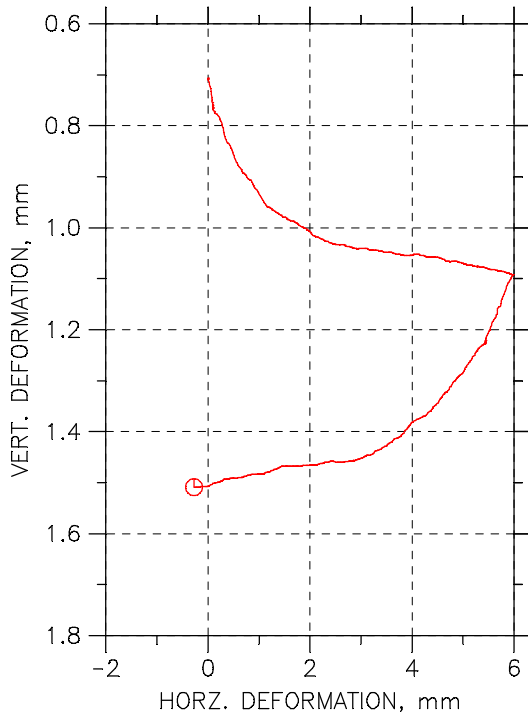
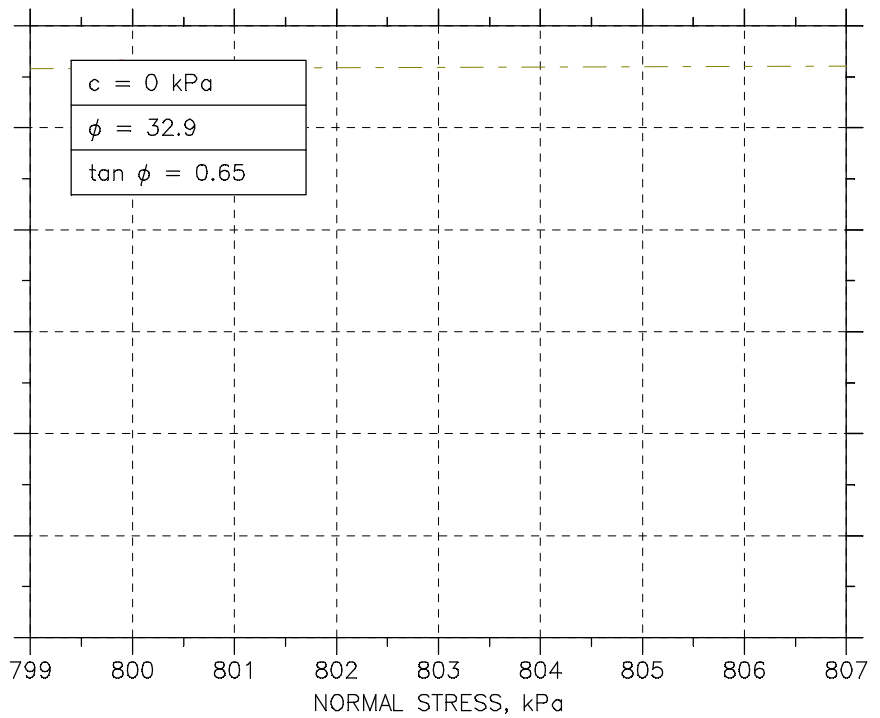
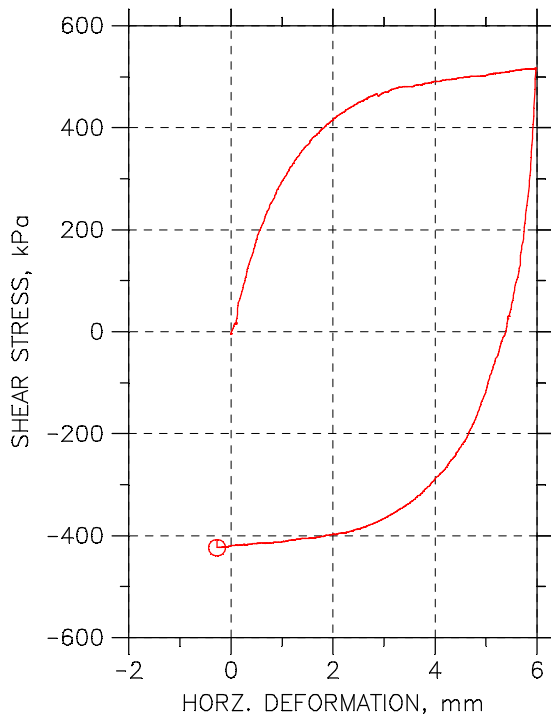
Symbol	⊙			
Test No.	1			
Sample No.	4 and 5			
Shape	Circular			
Initial	Dimension, mm	63.5		
	Area, mm ²	3166.9		
	Height, mm	31.63		
	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Consol. Height, mm		28.81		
Consol. Void Ratio		0		
Final	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Normal Stress, kPa		399.95		
Max. Shear Stress, kPa		259.33		
Ult. Shear Stress, kPa		256.52		
Time to Failure, min		1087		
Disp. Rate, mm/min		0.00364		
Estimated Specific Gravity		0.00		
Liquid Limit		---		
Plastic Limit		---		
Plasticity Index		---		

Project: Morrison Gold	
Location: BC	
Project No.: M09382A01	
Boring No.: BH07-7	
Sample Type:	

Description: Remoulded samples from SPT 4 and 5, 50%-50%. Removed material > 6mm

Remarks: 1st step: consolidation and peak shear at 400 kPa.

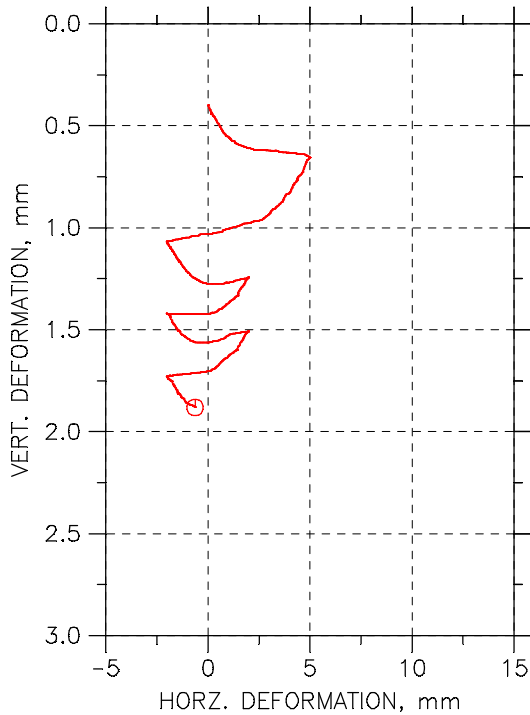
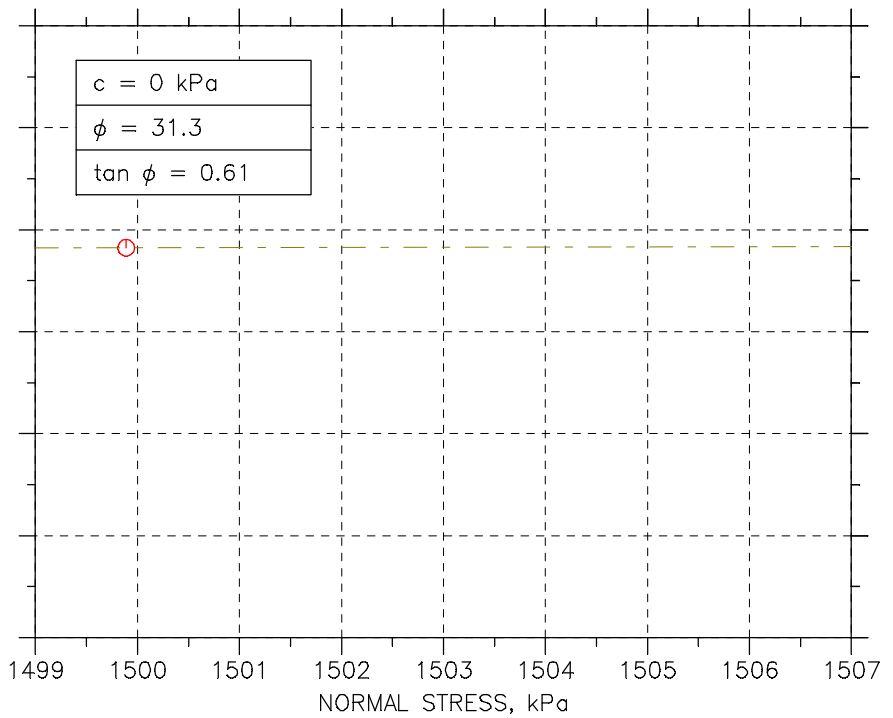
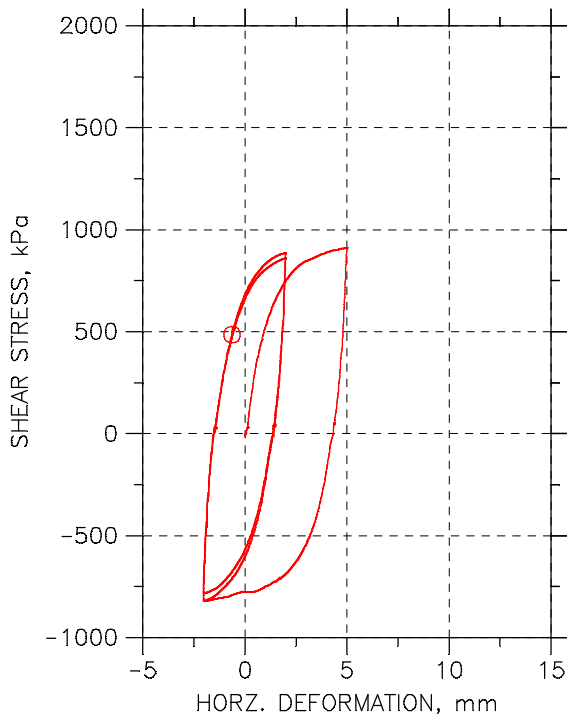
DIRECT SHEAR TEST REPORT



Symbol	⊖			
Test No.	1/b			
Sample No.	4 and 5			
Shape	Circular			
Initial	Dimension, mm	63.5		
	Area, mm ²	3166.9		
	Height, mm	28.38		
	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Consol. Height, mm		27.695		
Consol. Void Ratio		0		
Final	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Normal Stress, kPa		799.89		
Max. Shear Stress, kPa		516.6		
Ult. Shear Stress, kPa		-423.37		
Time to Failure, min		587.53		
Disp. Rate, mm/min		0.0108		
Estimated Specific Gravity		0.00		
Liquid Limit		---		
Plastic Limit		---		
Plasticity Index		---		

Project: Morrison Gold	
Location: BC	
Project No.: M09382A01	
Boring No.: BH07-7	
Sample Type:	
Description: Remoulded samples from SPT 4 and 5, 50%-50%. Removed material > 6mm	
Remarks: 2nd step: consolidation and peak shear at 800 kPa.	

DIRECT SHEAR TEST REPORT



Symbol	⊖			
Test No.	1/b			
Sample No.	4 and 5			
Shape	Circular			
Initial	Dimension, mm	63.5		
	Area, mm ²	3166.9		
	Height, mm	27.28		
	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Consol. Height, mm		26.883		
Consol. Void Ratio		0		
Final	Water Content, %	0.00		
	Dry Density, N/m ³	0		
	Saturation, %	0.00		
	Void Ratio	0		
Normal Stress, kPa		1499.9		
Max. Shear Stress, kPa		911.19		
Ult. Shear Stress, kPa		485.02		
Time to Failure, min		691.82		
Disp. Rate, mm/min		0.007874		
Estimated Specific Gravity		0.00		
Liquid Limit		---		
Plastic Limit		---		
Plasticity Index		---		

Project: Morrison Gold	
Location: BC	
Project No.: M09382A01	
Boring No.: BH07-7	
Sample Type:	
Description: Remoulded samples from SPT 4 and 5, 50%-50%. Removed material > 6mm	
Remarks: 3rd step: consolidation and peak shear at 1500 kPa.	

SPECIFIC GRAVITY OF SOIL SOLIDS (ASTM-D854)

Sample No.	TAILINGS FINE FRACTION					
Flask No.	KL3	KL2	A			
Volume of Flask @ 20° C ml	500	500	500			
Method of Air removal	Boiling	Boiling	Boiling			
De-airing Period hr	2	2	2			
Test temperature ° C	22	22	22			
Mass of Flask+Water (M _a) g	675.53	675.16	678.02			
Mass of Flask+Water+Soil (M _b) g	720.28	718.25	721.84			
Mass of Dish/Flask+Soil	247.08	244.19	248.06			
Mass of Dish/Flask	177.48	177.19	180.12			
Mass of Dry Soil (M _o) g	69.60	67.00	67.94			
Correction factor (K) @ Test Temperature	0.9996	0.9996	0.9996			
Specific Gravity of Solids @ 20° C	2.800	2.801	2.816			
Average Specific Gravity of Solids @ 20° C	2.81					

Sample No.						
Flask No.						
Volume of Flask @ 20° C ml						
Method of Air removal						
De-airing Period hr						
Test temperature ° C						
Mass of Flask+Water (M _a) g						
Mass of Flask+Water+Soil (M _b) g						
Mass of Dish/Flask+Soil						
Mass of Dish/Flask						
Mass of Dry Soil (M _o) g						
Correction factor (K) @ Test Temperature						
Specific Gravity of Solids @ 20° C						
Average Specific Gravity of Solids @ 20° C						

Specific Gravity of Solids @ 20° C = $(K \times M_o) / (M_o + M_a - M_b)$



JOB NO.: M09382A01
PROJECT: Morrison Copper/Gold Project
LOCATION: BC
DATE: 6-Mar-08
TESTED BY: BY
CHECKED BY JG

SPECIFIC GRAVITY OF SOIL SOLIDS (ASTM-D854)

Sample No.	TAILINGS COARSE FRACTION					
Flask No.	2	4	5			
Volume of Flask @ 20° C ml	500	500	500			
Method of Air removal	Boiling	Boiling	Boiling			
De-airing Period hr	2	2	2			
Test temperature ° C	22	22	22			
Mass of Flask+Water (M _a) g	671.80	669.23	677.26			
Mass of Flask+Water+Soil (M _b) g	728.26	727.94	733.96			
Mass of Dish/Flask+Soil	262.72	263.43	268.52			
Mass of Dish/Flask	173.81	170.80	178.98			
Mass of Dry Soil (M _o) g	88.91	92.63	89.54			
Correction factor (K) @ Test Temperature	0.9996	0.9996	0.9996			
Specific Gravity of Solids @ 20° C	2.739	2.730	2.725			
Average Specific Gravity of Solids @ 20° C	2.73					

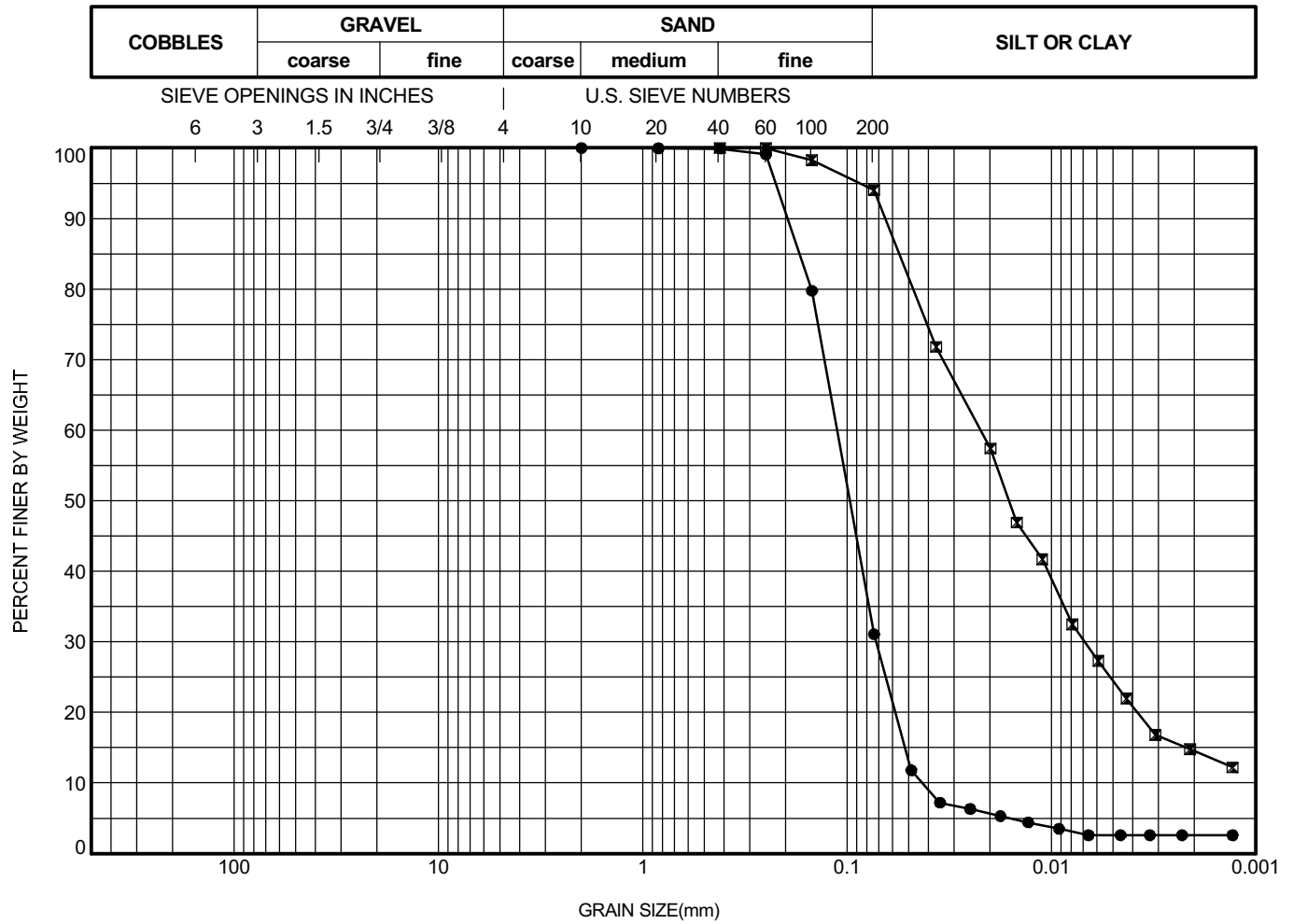
Sample No.						
Flask No.						
Volume of Flask @ 20° C ml						
Method of Air removal						
De-airing Period hr						
Test temperature ° C						
Mass of Flask+Water (M _a) g						
Mass of Flask+Water+Soil (M _b) g						
Mass of Dish/Flask+Soil						
Mass of Dish/Flask						
Mass of Dry Soil (M _o) g						
Correction factor (K) @ Test Temperature						
Specific Gravity of Solids @ 20° C						
Average Specific Gravity of Solids @ 20° C						

Specific Gravity of Solids @ 20° C = $(K \times M_o) / (M_o + M_a - M_b)$



JOB NO.: M09382A01
PROJECT: Morrison Copper/Gold Project
LOCATION: BC
DATE: 6-Mar-08
TESTED BY: BY
CHECKED BY JG

GRAIN SIZE DISTRIBUTION



	HOLE	DEPTH (m)	D85	D60	D50	D15	D10	CU	%GRAVEL	%SAND	%FINES
●	Tailings Coarse	0.00	0.171	0.112	0.097				0.0	68.0	32.0
☒	Tailings Fine	0.00							0.0	5.9	94.1

	HOLE	SAMPLE	DEPTH (m)	W%	W _L	W _P	PI	REMARKS / SAMPLE DESCRIPTION
●	Tailings Coarse		0.00					
☒	Tailings Fine		0.00					

CU = COEFFICIENT OF UNIFORMITY = D60/D10

PARTICLE SIZES, e.g. D85, in mm

Tested by Wet Sieving Method (ASTM D1140 & D422)



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold

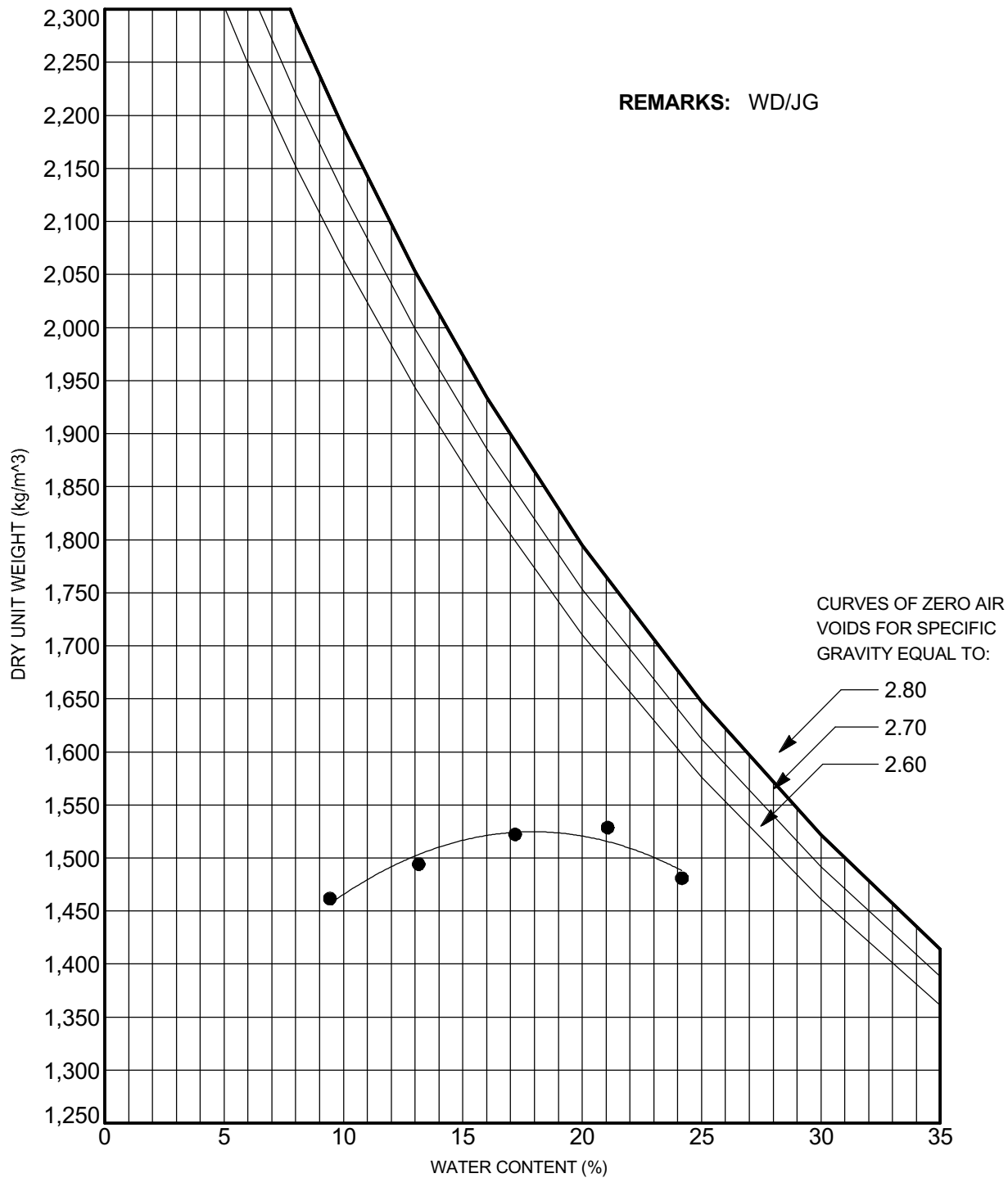
LOCATION: BC

FIGURE:

DRAWN BY: BY

CHECKED BY:

MOISTURE - DENSITY RELATIONSHIP



TEST	DEPTH(m)	METHOD	OWC	MDW	MATERIAL DESCRIPTION
● Tailings Coarse	0.0	698A	18.0	1530.0	From 90% coarse and 10% fines: 18% fines

OWC = Optimum Water Content (%) MDW = Maximum dry Unit Weight (pcf)



PROJECT NO.: M09382A01

PROJECT: Morrison Copper Gold

LOCATION: BC

FIGURE:

DRAWN BY: BY

CHECKED BY:



SETTLING TEST using 2L graduated standard beaker

Project No.: M09182A01
Sample Information: Morrison Copper/Gold Project
Targeted solid content: Tailings with Process Water (from 90% - 10% coarse - fine Tailings at 100% fines)
Weight of solid: 592.00g dry tailings + 1202.00 g water/tailings made up to 1412.5ml

Tested by: JAG Date: 14-Apr-08

Date	Time	Elapsed Time (min)	Temp. (°C)	Readings			Height Supernatant (mm)	Volume Supernatant (cm3)	Volume supernatant VariatSolids (settlement (cm3)	Volume Solids (settlement (cm3)	Wet Density (g/cm3)	Dry Density (g/cm3)	Water Content (%)	Solid Content (%)
				Top Supernatant (mm)	Top Settlement (mm)	Top Solids (mm)								
10-Apr-08 3:02 PM		0	22.5	117	117.00	2.00	0.00	1392.00	0.00	0.00	1.289	0.425	203.04	33.00
		0.17		117	116.50	2.00	0.50	1385.95	0.00	0.00	1.290	0.427	202.02	33.11
		0.5		117	114.00	2.00	3.00	1355.68	0.00	0.00	1.297	0.437	196.91	33.98
		1		117	112.00	2.00	5.00	1331.47	0.00	0.00	1.302	0.445	192.82	34.15
		1.5		117	110.00	2.00	7.00	1307.25	0.00	0.00	1.308	0.453	188.73	34.63
		2		117	107.00	2.00	10.00	1270.93	0.00	0.00	1.316	0.466	182.59	35.39
		2.5		117	105.00	35.00	12.00	145.28	246.72	399.52	1.322	0.475	178.50	35.91
		3		117	104.00	104.00	13.00	157.38	1234.62	1234.87	1.326	0.480	176.46	36.17
		3.5		117	100.00	100.00	17.00	205.81	1186.19	1186.44	1.339	0.489	168.28	37.28
		4		117	99.00	99.00	18.00	217.92	1174.08	1174.33	1.342	0.504	166.23	37.56
		5		117	95.00	95.00	22.00	266.34	1125.66	1125.91	1.357	0.526	158.05	38.75
		6		117	94.80	94.80	22.20	268.77	1123.23	1123.49	1.358	0.527	157.64	38.81
		7		117	91.50	91.50	25.50	308.72	1083.28	1083.54	1.371	0.546	150.89	39.96
		8.5		117	86.00	86.00	31.00	375.30	1016.70	1016.95	1.395	0.562	139.64	41.73
		9		117	83.50	83.50	33.50	405.57	986.43	986.68	1.408	0.600	134.53	42.64
		9.5		117	82.00	82.00	35.00	423.73	968.27	968.52	1.415	0.611	131.46	43.20
		10		117	80.00	80.00	37.00	447.94	944.06	944.31	1.426	0.627	127.37	43.98
		10.5		117	78.50	78.50	38.50	466.10	925.90	926.15	1.434	0.639	124.31	44.58
		11		117	77.00	77.00	40.00	484.26	907.74	907.99	1.443	0.652	121.24	45.20
		11.5		117	75.50	75.50	41.50	502.42	889.58	889.83	1.452	0.665	118.17	45.84
		12		117	74.00	74.00	43.00	520.58	871.42	871.67	1.461	0.679	115.10	46.49
		12.5		117	72.00	72.00	45.00	544.79	847.21	847.46	1.475	0.699	111.01	47.39
		13		117	71.00	71.00	46.00	556.90	835.10	835.35	1.481	0.709	108.97	47.85
		13.5		117	70.00	70.00	47.00	569.01	822.99	823.24	1.489	0.719	106.92	48.33
		14		117	68.50	68.50	48.50	587.17	804.83	805.08	1.499	0.736	103.86	49.09
		14.5		117	67.50	67.50	49.50	599.27	792.73	792.98	1.507	0.747	101.81	49.55
		15		117	66.50	66.50	50.50	611.38	780.62	780.87	1.515	0.758	99.77	50.06
		15.5		117	65.00	65.00	52.00	629.54	762.46	762.71	1.527	0.776	96.70	50.84
		16		117	64.00	64.00	53.00	641.65	750.35	750.61	1.536	0.789	94.65	51.37
		16.5		117	63.00	63.00	54.00	653.75	738.25	738.50	1.545	0.802	92.61	51.92
		18		117	60.00	60.00	57.00	690.07	701.93	702.18	1.573	0.843	86.47	53.63
		22.5		117	56.00	56.00	61.00	738.90	653.50	653.75	1.615	0.906	78.29	56.09
		24		117	55.50	55.50	61.50	744.55	647.45	647.70	1.621	0.914	77.27	56.41
		25		117	55.50	55.50	61.50	744.55	647.45	647.70	1.621	0.914	77.27	56.41
		35		117	53.00	53.00	64.00	774.82	617.18	617.43	1.651	0.969	72.16	58.09
		44		117	51.00	51.00	66.00	799.03	592.97	593.22	1.678	0.998	68.07	59.50
		55		117	50.50	50.50	66.50	805.08	586.92	587.17	1.685	1.008	67.05	59.96
		100		117	49.50	49.50	67.50	817.19	574.81	575.06	1.699	1.030	65.00	60.61
		180		117	49.50	49.50	67.50	817.19	574.81	575.06	1.699	1.030	65.00	60.61
		1058		117	49.00	49.00	68.00	823.24	568.76	569.01	1.707	1.041	63.98	60.98
		2880		117	49.00	49.00	68.00	823.24	568.76	569.01	1.707	1.041	63.98	60.98
		4320		117	49.00	49.00	68.00	823.24	568.76	569.01	1.707	1.041	63.98	60.98
		5760		117	49.00	49.00	68.00	823.24	568.76	569.01	1.707	1.041	63.98	60.98

Initial Dry density (g/cc)	0.425
Final Dry Density (g/cc)	1.041

Initial Bulk Density (g/cc)	1.289
Final Bulk Density (g/cc)	1.707

Initial Water Content (%)	53.85
Final Water Content (%)	66.3

Initial Solid Volume (cc)	1392
Final Solid Volume (cc)	568.76

Dry Weight (g)	592
Initial Wet Weight (g)	1794
Water (g)	1202
Initial Solid Content (%)	33
Final Solid Content (%)	61.0

Final Wet Weight (g)	970.76
Supernatant (g)	823.24
Density Supernatant (g/cc)	1

* Assumed



SETTLING TEST using 2L graduated standard beaker

Project No.: M09182A01 Project: Morrison Copper/Gold Project
Sample Information: Tailings with Process Water
Targeted solid content: 33.0%
Weight of solid: 591.88g dry tailings + 1201.45 g water tailings made up to 1412.5ml

Tested by: JAG Date: 7-Apr-08

Date	Time	Elapsed Time (min)	Temp. (°C)	Readings			Height Supernatant (mm)	Volume Supernatant (cm3)	Volume Remnant Variants (cm3)	Volume Solids (settlement) (cm3)	Wet Density (g/cm3)	Dry Density (g/cm3)	Water Content (%)	Solid Content (%)
				Top Supernatant (mm)	Top Solids (mm)	Top Settlement (mm)								
3-Apr-08 3:28 PM		0	22.5	333	333.00	215.00	0.00	0.00	1412.50	0.00	1.270	0.419	202.98	33.01
		0.5		333	331.00	240.00	2.00	24.21	1388.29	302.66	1.274	0.426	198.89	33.46
		1		333	329.00	245.00	4.00	48.43	1364.07	363.20	1.279	0.434	194.80	33.92
		1.5		333	325.00	250.00	8.00	96.85	1315.65	423.73	1.289	0.450	186.62	34.89
		2		333	320.00	250.00	13.00	157.38	1255.12	423.73	1.303	0.472	176.39	36.18
		2.5		333	315.00	250.00	18.00	217.92	1194.58	423.73	1.319	0.495	166.17	37.57
		3		333	310.00	250.00	23.00	278.45	1134.05	423.73	1.336	0.522	155.94	39.07
		3.5		333	303.00	250.00	30.00	363.20	1049.30	423.73	1.363	0.564	141.62	41.39
		4		333	298.00	250.00	35.00	423.73	988.77	423.73	1.385	0.599	131.39	43.22
		4.5		333	292.00	250.00	41.00	496.37	916.13	423.73	1.416	0.646	119.12	45.64
		5		333	287.00	250.00	46.00	556.90	855.60	423.73	1.445	0.692	108.89	47.87
		5.5		333	281.00	250.00	52.00	629.54	782.96	423.73	1.486	0.756	96.62	50.86
		6		333	277.00	250.00	56.00	677.97	734.53	423.73	1.518	0.806	88.44	53.07
		6.5		333	271.50	250.00	61.50	744.55	667.95	423.73	1.570	0.896	77.19	56.44
		7		333	270.00	250.00	63.00	762.71	649.79	423.73	1.586	0.911	74.12	57.43
		7.5		333	268.00	250.00	65.00	786.92	625.58	423.73	1.609	0.946	70.03	58.81
		8		333	267.00	250.00	66.00	799.03	613.47	423.73	1.621	0.965	67.98	59.53
		8.5		333	266.00	250.00	67.00	811.14	601.36	423.73	1.633	0.984	65.94	60.26
		9		333	265.00	250.00	68.00	823.24	589.26	423.73	1.646	1.004	63.89	61.02
		9.5		333	264.50	250.00	68.50	829.30	583.20	423.73	1.653	1.015	62.87	61.40
		10		333	264.00	250.00	69.00	835.35	577.15	423.73	1.660	1.026	61.85	61.79
		12		333	263.00	250.00	70.00	847.46	565.04	423.73	1.674	1.047	59.80	62.58
		15		333	262.50	250.00	70.50	853.51	553.99	423.73	1.681	1.059	58.78	62.98
		20		333	261.50	250.00	71.50	865.62	546.88	423.73	1.696	1.082	56.73	63.80
		25		333	261.00	250.00	72.00	871.67	540.83	423.73	1.704	1.094	55.71	64.22
		34		333	260.00	250.00	73.00	883.78	528.72	423.73	1.720	1.119	53.67	65.08
		42		333	260.00	250.00	73.00	883.78	528.72	423.73	1.720	1.119	53.67	65.08
		53		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		66		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		73		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		95		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		123		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		180		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		999		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		1346		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		4320		333	259.50	250.00	73.50	889.83	522.67	423.73	1.729	1.132	52.64	65.51
		5483		333	258.50	250.00	74.50	901.94	510.56	423.73	1.746	1.159	50.60	66.40

Initial Dry density (g/cc)	0.419
Final Dry Density (g/cc)	1.139

Initial Bulk Density (g/cc)	1.270
Final Bulk Density (g/cc)	1.876

Initial Water Content (%)	202.98
Final Water Content (%)	50.8

Initial Solid Volume (cc)	1412.3
Final Solid Volume (cc)	510.96

Dry Weight (g)	591.88
Initial Wet Weight (g)	1793.3
Water (g)	1201.42
Initial Solid Content (%)	33
Final Solid Content (%)	66.4

Final Wet Weight (g)	957.95
Supernatant (g)	835.35
Density Supernatant (g/cc)	1

* Assumed



Tested by: JAG Date: 14-Apr-08

JAG

Date:

Date:

Initial Dry density (g/cc)	0.419
Final Dry Density (g/cc)	1.186
Initial Bulk Density (g/cc)	1.270
Final Bulk Density (g/cc)	1.766
Initial Water Content (%)	53.85
Final Water Content (%)	42

Initial Solid Volume (cc)	1412.3
Final Solid Volume (cc)	498.46
Dry Weight (g)	592
Initial Wet Weight (g)	1794
Water (g)	1202
Initial Solid Content (%)	33
Final Solid Content (%)	67.3

Final Wet Weight (g)	879.96
Supernatant (g)	914.04
Density Supernatant (g/cc)	1



MORRISON
M09382A01
Mix 90% coarse-10% fines
33% Solids Content
Apr. 7, 08

7 11:31

MORRISON
M09382A01

y: x 90% coarse- 10%
33% solids content

Apr. 17, 08

7 11:31

PROJECT NO:	M09382A01
PROJECT:	Morrison Copper
SAMPLE NO.:	Tailings - 90% Coarse Tailings - 10% Fine Tailings (32% Fines)
DEPTH:	
LOADING MACHINE NO.:	CS1
Initial Specimen Height (mm):	22.000
Height of Solid (mm):	9.340
Initial void ratio:	1.357
Void Ratio Factor	0.1071
	Initial water content : 50.2 % (based on final settling test) Final water content : 26.6% (based on sample at end of test)
	(Initial dry mass = 80.86 g, Specimen area = 3158.9 mm ² , SG=2.74) * Calibration to be done after test ** Estimated t ₅₀

Pressure (kPa)		Change in Height (mm)	Correction * (mm)	Final Height (mm)	Void Ratio	t ₉₀ ** (min)	Cv (m ² /year)	Mv (cm ² /N)	k (cm/sec)	Cc
From	To									
0.0	1.0	5.41	0.0000	16.590	0.778					
1.0	3.0	0.06	0.0000	16.530	0.5857	0.1	3.1E+02	3.6E-02	1.1E-01	0.013
3.0	6.0	0.04	0.0000	16.490	0.5899	0.1	2.5E+02	1.2E-02	3.0E-02	0.014
6.0	12.0	0.04	0.0000	16.450	0.5942	0.2	2.0E+02	8.1E-03	1.6E-02	0.014
12.0	26	0.070	0.0000	16.380	0.6017	0.2	2.0E+02	7.1E-03	1.4E-02	0.022
26	54	0.080	0.0000	16.300	0.6103	0.2	2.0E+02	3.5E-03	6.8E-03	0.027
54	102	0.07	0.0000	16.230	0.6178	0.2	1.7E+02	1.5E-03	2.5E-03	0.027
102	198	0.2	0.0000	16.030	0.6392	0.3	1.1E+02	2.6E-03	2.8E-03	0.074
198	389	0.392	0.0000	15.638	0.6812	0.3	9.3E+01	2.5E-03	2.3E-03	0.143
389	102	-0.061	0.0000	15.699	0.6746					
102	26	-0.08	0.0000	15.779	0.6661					
26	54	0.02	0.0000	15.759	0.6682					
54	102	0.04	0.0000	15.719	0.6725	0.3	9.2E+01	9.1E-04	8.2E-04	0.016
102	198	0.050	0.0000	15.669	0.6778	0.3	9.1E+01	6.6E-04	5.9E-04	0.019
198	389	0.088	0.0000	15.581	0.6873	0.3	9.1E+01	5.8E-04	5.2E-04	0.032
389	773	0.237	0.0000	15.344	0.7126	0.7	3.6E+01	8.0E-04	2.8E-04	0.085
773	1539	0.382	0.0000	14.962	0.7535	1.4	1.8E+01	6.5E-04	1.1E-04	0.137
1539	389	-0.136	0.0000	15.098	0.7390					
389	102	-0.112	0.0000	15.210	0.7270					
102	26.0	-0.102	0.0000	15.312	0.7161					
26.0	6.0	-0.083	0.0000	15.395	0.7072					
6.0	1.0	-0.065	0.0000	15.460	0.7002					
PROJECT NO: M09382A01										
PROJECT NAME: Morrison Copper										
LOCATION: BC										
FIGURE:										
DATE TESTED: April 2008										
TESTED BY: JG										
CHECKED BY:										

e - log(p)
Tailings: 90% Coarse Tailings - 10% Fine Tailings
(32% Fines)

