

**DIAMOND DRILLING REPORT**

**ON THE**

**Rateria Property  
Tenure Number 513870  
MX-4-402**

**Kamloops Mining Division**

**NTS 092I.036**

**Prepared for**

**HAPPY CREEK MINERALS LTD.  
#2310-1066 West Hastings Street  
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**By**

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**February 2007**

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## Summary

The Rateria property is located approximately 10 kilometres southeast of the Valley Copper operation of Teck-Cominco Ltd, Highland Valley, and approximately 50 kilometres north of Merritt British Columbia.

The Rateria property consists of 7 cell claims totaling approximately 3,800 hectares located between 1400 and 1600 metres elevation. The area has received several exploration programs dating from the early 1950's, and locally a complicated claim ownership history and widespread, thick glacial till has affected exploration programs. Wide spaced and shallow historical percussion drilling from 1970 returned up to 0.57% copper over 9.1 metres at a final depth of 42 metres northeast of the Jay 11 prospect. The property is underlain by the multiphase Guichon batholith, Upper-Triassic Lower Jurassic in age and is hornblende-biotite granodiorite, quartz diorite to quartz monzonite in composition. These rocks are locally described, from east to west, and oldest to youngest, Chataway, Skeena/Bethlehem, and Bethsaida varieties. Small plugs, dikes and sills of Bethsaida or younger include quartz feldspar porphyry, aplite. These rocks are also host to the large Valley, Lornex deposits to the northwest. Large scale structures trend north to northwest and northeast to east. Fractures contain chlorite epidote, calcite, and quartz-sericite, and kaolin minerals. Dominantly bornite, chalcocite and chalcopyrite occur with quartz veins and quartz sericite kaolinite alteration.

In 2006, Happy Creek Minerals Ltd. performed approximately 2,400 metres of NQ diamond drilling in 14 holes covering a portion of a 2005 induced polarization anomaly near the Jay 11 and Three Creeks prospect. Drill holes R06-8, 11 and 14 returned the best results. Drill core samples from R06-08 returned 32.0 metres containing 0.24% copper, and R06-14 returned 94.0 metres of 0.15% copper, including 1.0 metres containing 3.88% copper, 126.0 g/t silver. These holes may occur in proximity with an approximately 200 metre wide northerly trending mineralized fault that is subparallel to the Lornex fault and remains open in extent.

The geology, structure, alteration, and copper minerals present in outcrop, float, and drill core on the Rateria property are consistent with a calc alkaline porphyry copper system of a Highland Valley style.

Recommendations include diamond drilling of 3,000 metres in ten holes to define controls and locate higher grade mineralization in proximity with holes R06-08, 11 and 14 and to the north and south. Cost to complete this work is estimated at approximately \$750,000.

## 1. Location and Access

The Rateria Property is located approximately 10 kilometers southeast of the Valley Copper-Lornex mine, Highland Valley, British Columbia (Figure 1). The property is centred on 120° 57' 27" West longitude and 50° 21' 59" North latitude, on NTS mapsheet 092I.036. Access to the property from Merritt, B.C., is via an all weather logging road, approximately 34 kilometres in length. Good quality, recently built logging roads transect the property. As the property is in relative proximity with the Valley Copper Mine and operating mill, infrastructure is excellent.

The Rateria property is situated within an upland plateau area approximately 1400 and 1600 metres elevation, and is underlain by thick blanket of sand and gravel of glacio fluvial origin. The forest is comprised of lodgepole pine and locally fir, birch, poplar and spruce, and grass covers the forest floor and open swampy areas. The area has burnt several times, and logging activity in response to pine beetle infestation is on-going. The area is characterized by an interior climate; temperatures range from -40 to +40 degrees centigrade, and 50-100 cm of precipitation, occurs mostly as snow in the winter months.

## 2. Claim Status

The Rateria property is composed of seven cell claims totaling approximately 3,800 hectares registered in the name of Brian Malahoff (Figure 2, Table 1). An option agreement was signed in December 2004 with Happy Creek Minerals Ltd. whereby the company can earn a 100% interest in the property by paying cash, issuing shares and performing work. This report was prepared in connection with B.C Permit MX-4-402, Rateria; 1620473, Kamloops.

### 3. History

The Rateria property covers an historical claim boundary between Chataway Explorations Co. Ltd/ King Resources Co, and Pathfinder Resources/ International Mogul Mines Ltd. This boundary was in effect between 1968 and at least 1973 for which exploration data is in part available. Asarco Inc. optioned the Chataway property between 1970 and 1971 (Bayley, 1970). Limited data is available for work done prior to 1971, and after 1972. It is assumed the land positions were, at least in part amalgamated into Highmont Mining Company, Teck Corp, and later National Trust Company, and finally Teck-Cominco Inc., Valley Copper Mines Ltd. By 1999 a large number of claims had lapsed south of the mines, and the Rateria property was staked by Brian Malahoff

Between 1968 and 1973, the area of the Rateria property was subject to regional silt geochemistry, grids, soils (in part by a qualitative Rubianic method), geological mapping and low power induced polarization surveys, bulldozer trenching, road building, percussion and minor diamond drilling (References). In 1970, Asarco drilled percussion holes to test up to 100 feet of bedrock usually to a total depth of approximately 90-120 feet on average, but locally 200 or more feet, on a 2000 foot grid pattern, over a very large area. Two additional percussion holes were drilled 285 metres southwest and 312 metres northeast of percussion hole 70-D8c containing 0.57% copper in the last 30 feet; these holes, drilled to depths of 120 and 200 feet, respectively did not intersect encouraging values. In 1972 a diamond drill hole was located 45 metres west of and drilled toward D-8c at -45 degrees. Hole M72-4 was stopped at 225 feet (68.6 metres, or 48.5 metres in plan view) and the last sample contained 0.06% copper and strong oxidation as noted in drill logs; this hole may not to have gone far enough to cut the mineralized zone in hole 1970-D8c.

Diamond drillhole 1973-4 is 848 feet in length, -60° dip, and directed eastward toward the Three Creeks prospect (outside of the 2005 IP anomaly).

Approximately 100-300 metres north of the Rateria property, the Yubet prospect is reported to contain 30,000 tons grading 2.5% copper (not NI-43-101, for historical reference only) with abundant bornite, chalcopyrite and locally chalcocite (Minfile

092ISE150), and a coincident soil geochemical anomaly trend south (International Mogul Mines).

In 2000 Cominco Ltd. optioned the Rateria property and commissioned an induced polarization survey (Bond, 2000), performed by Scott Geophysics, of Vancouver, B.C. A pole dipole array was used with an “a” spacing of 100 metres and “n” separations of 1 to 6, with a 10 kw generator. The survey was conducted on lines spaced 300 metres apart and oriented east-west. This survey did not cover the north or south portion of the property, however identified several strong through-going structural features comprised of slightly elevated chargeability and resistive values.

In the fall of 2004, and early spring 2005, Happy Creek Minerals Ltd optioned the Rateria property and performed silt geochemistry, gps surveying of topographic and historical features, grids and tied-in approximately, the historical work with current NAD83UTM control. In November, 2005, 12.5 km of line cutting an a 3D induced polarization survey was performed over the Jay 11 and Three Creeks prospects and identified an anomaly approximately 1.6 kilometres by 600 metres in dimension.

#### 4. Regional Geology

The Rateria property is located within the Guichon batholith, 198+/-8my, Upper Triassic-Lower Jurassic in age, covering an area of approximately 1000square kilometres (McMillan, CIM Special Volume 15, 1976). The batholith is elongated in a north-northwesterly direction, and consists of several nearly concentric phases having sharp to locally gradational contacts, and in part are brecciated (Figure 3). Intrusive phases are distinguished by their texture and composition after Northcote, 1969. Cross cutting relationships suggest younger, and more felsic (and less magnetite) intrusive phases appear in the central core of the batholith.

The oldest phase of the Guichon batholith is the Border or Hybrid phase, a fine to medium grained, mafic rich diorite, and quartz diorite and locally contains xenoliths of amphibolite, and monzonite composition. The Highland Valley phase consists of Guichon and Chataway varieties. The Guichon variety is a quartz diorite to granodiorite

and contains 15% mafic minerals, and the Chataway variety is a hornblende granodiorite with 12% evenly distributed mafic minerals.

The Bethlehem phase, a hornblende porphyritic granodiorite contains around 8% mafic minerals, and amoeboid quartz crystals. Skeena variety is similar to Bethlehem phase, however is comprised of coarser grained granodiorite to quartz diorite, slightly lower mafic content, and coarser grained, subhedral to anhedral quartz.

The youngest intrusive phase of the Guichon batholith is the Bethsaida, biotite+/- hornblende quartz porphyry monzonite to granodiorite in composition, and contains around 6% mafic minerals, dominantly biotite. The core of the Guichon batholith, including the Rateria property is within a regional magnetic low (Figure 4).

A swarm of porphyry dykes cut Bethlehem granodiorite north of the Valley Copper deposit, and dykes and small plugs of porphyry cut Skeena variety; some porphyry dykes appear as offshoots of Bethsaida phase (McMillan, 1976).

Mineral occurrences of copper, molybdenum occur widely distributed throughout the Guichon batholith, however, the large deposits are either associated with the dyke swarm, north of the Highland Valley, or occur in or near the contact of the Bethsaida phase and related dykes. The major deposits in and south of Highland Valley all appear younger than Bethsaida phase.

At the Valley and Lornex deposits, dominant ore-controlling fracture sets trend north-northwest to northeast and locally east-southeast. The Lornex Fault strikes north, dips steeply with a dextral sense slip, cuts the length of the Guichon batholith; this fault appears to cut off the northwest end of the Lornex deposit, where a 55-60° west dipping breccia zone contains bornite, and >0.60% copper. Copper minerals are associated with strong cross cutting fault and fracture zones.

Copper sulphides occur in fractures filled with quartz, sericite (2M1 muscovite-McMillan, 1976), k-feldspar and green to brown colored biotite, and quartz vein stock work zones are developed locally. Hypogene copper sulphides consist dominantly of chalcopyrite, bornite, and minor digenite. A total sulphide content of only around 1% occurs in the ore zones, and is comprised of nearly equal amounts of chalcopyrite and bornite. A kaolinite

alteration overprint of the potassic alteration assemblage occurs is spatially associated with ore zones. Pyrite is reported to occur in amounts of less than 1% in a propylitic fringe to potassic alteration. Oxide minerals include limonite, malachite, chalcocite, native copper and possibly tenorite, and occur above hypogene copper sulphides zones.

Alkaline and felsic volcanic dike, flow, and tuff cut all previous units and are Eocene-Miocene in age. The area was covered by ice during glaciation, and removed in part Tertiary and older rocks, and deposited between 1 and 30 metres or more of till, glaciofluvial and lacustrine cover, with a 165° direction.

## 5. Property Geology

Less than 5% of the property is underlain by rock outcrops, and occur in limited exposures such as creek beds, old melt-water channels and locally crest of hills. Although use of a bulldozer for trenching in the 1970' appears widespread, the depth of glacial deposits of between 7 and 30 metres limited trenching effectiveness. Property geology is largely derived from drill core and scattered outcrops.

The western part of the property is underlain by quartz rich, mafic poor intrusive rocks of quartz-diorite, granodiorite, quartz-monzonite composition (possible "Bethsaida variety") and occurs in northerly trending contact with medium grained granodiorite, biotite quartz diorite ( possible "Skeena variety) to the east. Further east, a north trending contact occurs between Skeena variety and medium-coarse grained granodiorite (possible "Chataway variety). Refer to Figures, 4 and 4a. Magnetite concentrations of between 1-5% in part replaces altered mafic minerals, and may be deuteric in origin. Locally dykes and small plugs of quartz monzonite, aplite, quartz and feldspar porphyry, and quartz-k-feldspar-crowded feldspar porphyry occur. Areas of strong to intense fracturing and shearing over 10 to 100 metres occur in drill core. Intensely fractured zones contain alteration that is locally independent of the degree of fracturing. Fractures occurring in drill holes R06-04, R06-05, R06-06, R06-08, R06-11 and R06-14 contain moderate to strong pervasive fine to medium grained, pale green to white flaky sericite or muscovite, minor kaolin, calcite, quartz flooding and veinlets between 5-35 mm in width. Quartz phenocrysts occur from 2-5 mm in size, however, where sericite alteration increases, they become sub-rounded and larger in size and frequency. Quartz vein orientation measurements in vertically oriented drill core infer 1-40 and 70-90 degree dips, and



suggest at least two cross cutting vein sets occur. Quartz veins and sericite+/- kaolinite altered wall rock contain trace to 5% bornite, chalcocite, and locally chalcopyrite. Minor bornite, chalcopyrite occurs with chlorite-epidote and weak sericite-clay altered rocks as in holes R06-1, R06-02, R06-03, R06-10, R06-12 and R06-13. Strong iron oxide and abundant mafic minerals occur in holes R06-10 and R06-12, located in the Three Creeks area and confirm a major rock change to more mafic Chataway variety granodiorite occurs eastward on the property.

## 6. 2006 Exploration

Between August 15 and November 17<sup>th</sup>, 2006, a program of diamond drilling of approximately 2400 metres in 14 holes was completed in the area of the 2005 induced polarization anomaly (Figure 4a). Drill core logs, core recovery, core sample assay results, and certificates of analyses are located in Appendix A, B, respectively. Cross sections of diamond drill holes are located in Figures 6,7,8,9,10,11,12,13, Appendix C.

Diamond drill holes were generally vertical with the exception of holes, 2, 6, 14, and designed to test from west to east a central portion of the IP anomaly. The program required a full time water truck and trailer from Gallant Trucking, Kamloops, B.C., as well as an excavator provided by Al James of Merrit, B.C., to bring water to the drill(s) and prepare drill sites and access trails, respectively. Drill core was in part logged by Marie Brannstrom, Arnie Pollmer, P. Geo, Tobias Schoettler of Coast Mountain Geological Ltd., Vancouver, B.C., and Greg Thomson, P. Geo., a consulting geologist. Drill core was brought from the drill site to Triggs Mini Storage in Lower Nicola, B.C., and logged and split by core saw. Core boxes were transported back to the property and are stored in a 40 foot locked steel container near the northwestern corner of the property. One half of the cut core were placed in plastic bags, and tied closed using zap straps, and between 4 and 10 samples placed into larger rice bags and zap strap closed and shipped by truck or bus to Acme Analytical Laboratories, Vancouver, B.C. There, samples were prepared and analyzed by 15 gram ICP-MS for 34 elements, with over limit and higher grade material re-analyzed by ICP Assay technique for 12 elements.

## 7. Discussion

The Rateria property is located in the southeast portion of the Guichon batholith, approximately 10 kilometres southeast of the Valley Copper operations of Teck-Cominco, Canada's largest metal mine. The property is 95% covered by glacial deposits of sand, gravel and till, however, outcrop, float and historical drilling suggest it is underlain by granodiorite, quartz diorite to quartz monzonite and dikes and small plugs of crowded quartz feldspar porphyry, and locally aplite composition. These rocks are tentatively assigned to the Bethsaida, Skeena, Chataway variety intrusive rocks, representing the youngest phases of the batholith and are similar to the Lornex, Valley, JA deposits further north. North trending geological contacts between these units are affected by regional scale strike slip faults and conjugate splays trending north, northwest, northeast and east-west occur.

Geology, structure, alteration and copper minerals present in outcrop, float, historical percussion and 2006 drill core, and strong soil and silt geochemistry is consistent with a large calc alkaline Highland Valley style porphyry copper-molybdenum system.

Analytical results from 607 core samples have a statistical background of 15-100 ppm copper, and a log normal 80%, 90% and 95% probability values of 224, 400, 565 ppm copper, respectively. Values above 500 ppm copper over 50 or more metres are considered significant for a porphyry copper system. Drill holes R06-08 returned 32.0 metres containing 0.24% copper, and R06-14 returned 94 metres containing 0.15% copper. Locally higher grade intervals include up to 1.0 metre containing 3.88% copper, 126.0 g/t silver. Poor core recovery in zones containing copper mineralization suggests analytical results are approximate for some areas. The geology, structure, alteration, nature and concentration of copper minerals in holes R06-4, 8, 11 and 14 (Figure 8) suggest these holes may lie in proximity with a 200 metre wide northerly trending large scale mineralized fault zone that continues north and south through the Rateria property.

## 8. Conclusions

The Rateria property is located approximately 10 kilometres southeast of the Valley Copper Mine, Highland Valley, in south central British Columbia. Excellent access and infrastructure is in place.

The Rateria property is underlain by granodiorite, quartz diorite to quartz monzonite tentatively assigned Bethsaida, Skeena, Chataway varieties of the Guichon batholith, representing the youngest phases; these rocks are cut by dykes and small plugs of crowded quartz feldspar porphyry and aplite. Faults and fractures trend north to northwest and northeast to locally easterly, and are filled with variable concentrations of chlorite, epidote, calcite, quartz, flaky sericite, k-feldspar, kaolinite. Quartz veins and quartz-sericite filled fractures contain variable concentrations of bornite, chalcocite and locally chalcopyrite. Iron oxides vary from yellow-red to deep red and brown in color and occur generally near surface however, iron oxides to over 150 metres depth occur in the Three Creeks area.

Diamond drilling in 2006 has identified a new zone of copper mineralization containing up to 94.0 metres of 0.15% copper and locally 1.0 metres of 3.88% copper, 126.0 g/t silver in hole R06-14 located northeast of the Jay 11 and west of the Three Creeks prospect. Results from holes R06-04, 8, 11 and 14 suggest they may lie in proximity with a northerly trending large scale and mineralized fault zone that continues north and south through the Rateria property. The geology, structure, alteration and copper minerals present in 2006 drill core are consistent with a calc-alkaline porphyry copper system.

## 9. Recommendations and Budget

The new discovery of porphyry style copper mineralization on the Rateria property is significant and further exploration to define the extent of mineralization in holes R06-08 and R06-14 is recommended. In addition, drilling to the south of R06-11 should also be performed.

- 1) Diamond drilling of 10 holes, 300 metres each totaling 3,000 metres.

Estimated Cost: \$750,000.00

Respectfully Submitted,

*“David E. Blann”*

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David E Blann, P.Eng.

## 10. Statement of Costs

Wages	# days	\$/day	Totals		
D. Blann, P.Eng	40.0	\$700.00		\$28,000.00	
G. Thomson, P.Geo	20.0	\$600.00		\$12,000.00	
T. Schoettler, Geologist	60.0	\$550.00		\$33,000.00	
M. Brannstrom, Geologist	7.0	\$550.00		\$3,850.00	
A. Pollmer, P. Geo	45.0	\$700.00		\$31,500.00	
Stu	65.0	\$450.00		\$29,250.00	
Abe	7.0	\$200.00		\$1,400.00	
Owen Veber	30.0	\$250.00		\$7,500.00	
	274			\$146,500.00	
<u>Disbursements</u>		<u># metres</u>	<u>\$/metre</u>		
Frontier Diamond Drilling		2,400.00	\$140.00	\$336,000.00	
Gallant Trucking- water hauling				\$35,000.00	
Al James, Excavator- access trails and drill site prep				\$22,000.00	
		Total	\$/day		
Four 4X4 Trucks	4	65	260.00	\$100.00	\$26,000.00
Room/Board at Merrit man-days			274	\$90.00	\$24,660.00
Triggs Storage/core logging facility					\$7,000.00
Communications, cell and FM radios			274	\$10.00	\$2,740.00
Field Supplies					\$5,000.00
Analytical Services					
Assays	Rocks/Core/ blanks/ pulps		650	\$17.00	\$11,050.00
		repeats	100	\$12.00	\$1,200.00
Reproductions					\$1,500.00
Data processing and Report					\$5,000.00
					\$482,150.00
				Wages and Disbursements	\$623,650.00
				10% Management	\$62,365.00
			Total		\$686,015.00

## 11. References

- Bayley, E.P, 1970, Summary Report of Percussion Drilling Program, Chataway Exploration Co. LTD, Highland Valley Claim Group, for Asarco.
- Blann, D.E., P.Eng., 2005, Geology, Geochemical Report on the Rateria Property, Kamloops Mining Division, Highland Valley, B.C., for Happy Creek Minerals Ltd.
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- Bond, Lorne, P.Geo, 2000, Geophysical Report on the Rateria Mineral Claims, Kamloops Mining Division, for Cominco Ltd. Philp, RHD, Hawley, R.G., 1971, Report on the Geological, Geochemical, and Magnetometer Surveys on the Roscoe Lake Property, Highland Valley, B.C., for Pathfinder Resources Ltd.
- Hallof, Phillip G., Ashton W. Mullan, 1972, Report on the Induced Polarization and Resistivity Survey on the Chataway Claim Group, prepared for International Mogul Mines Ltd.
- Meyer, W., Robinson, M.C., 1968, Report on Geological (petrographic) Survey of the Chataway Exploration Co LTd., Property, Chataway Lake, B.C., for King Resources Company.
- Reed., A.J., 1971, Report on Geological and Geochemical work performed by Highmont Mining Corporation Ltd on the PEN claims, Highland Valley area, Kamloops Mining Division, B.C. Asst # 2901. (Note property is north of Rateria Claims)
- Sanford, G.R., 1983, Diamond Drilling Report on the Roscoe 1 Mineral Claim, Highmont Mines, prepared for National Trust Company Limited, Ass# 11,369. (Note: Property is north of Rateria Claims)
- Sutherland Brown, Editor, 1976, Porphyry Deposits of the Canadian Cordillera, CIM Special Volume 15.
- Tsang, L.C.H., 1985, Percussion Drilling Report on the Roscoe 1 Mineral Claim, Kamloops Mining Division, Highmont Mining Corporation, prepared for National Trust Company Limited. Asst # 13824 (Note: property is north of Rateria Claims)
- Willars, Jack G., P.Eng., 1972, Report on the Geological Survey and Diamond Drilling on the Property of Chataway Explorations Co. Ltd., for International Mogul Mines Limited. Asst # 4050.

## 12. Statement of Qualifications

I, David E. Blann, P.Eng., of Squamish, British Columbia, do hereby certify:

That I am a Professional Engineer registered in the Province of British Columbia.

That I am a graduate in Geological Engineering from the Montana College of Mineral Science and Technology, Butte, Montana, 1987.

That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology, 1984.

That I have been actively engaged in the mining and mineral exploration industry since 1984, and conclusions and recommendations within this report are based on property fieldwork conducted between 2004, 2005 and 2006 and from a review of historical literature.

Dated in Squamish, B.C., February 12, 2007

*“David E. Blann”*

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David E Blann, P.Eng.

# Table 1

## Mineral Tenure

Claim	Tenure #	Owner	Mapsheet	Area	Expiry
Rateria	513870	116699	0921.036	1154.2	2014/dec/31
New Rateria	511809	116699	0921.036	144.26	2014/dec/31
Rateria NE	522356	116699	0921.036	494.41	2014/Nov17
Mal	528775	116699	0921.036	494.42	2014/feb/23
Mal 2	528778	116699	0921.036	514.86	2014/feb/23
Rateria North	529011	116699	0921.036	514.8	2014/feb/27
Rateria North-2	529013	116699	0921.036	515.1	2014/feb27

Table 2  
Drill Core Assay Summary



Table 2  
2006 Diamond Drilling  
Assay Summary

DDH	Hole Length (m)	Number of Samples	Metres Sampled	Average Copper (ppm)	From (m)	To (m)	Width (m)	Cu %
1	255.0	36	88.4	101 includes	194.2	197.3	3.1	0.254
2	181.0	23	40.87	20				
3	97.0	6	16	62				
4	142.4	64	129.4	318	35.0	41.0	6.0	0.214
5	128.7	46	105.6	134 includes and	96.0 107.0	100.0 109.0	4.0 2.0	0.123 0.158
6	146.0	64	150.33	72 includes	148.0	150.0	2.0	0.106
7	64.0	12	33.8	26				
8	194.8	84	182.8	690 includes and and	10.0 62.0 88.0	94.0 94.0 90.0	84.0 32.0 2.0	0.136 0.241
9	168.9	25	68.6	89				
10	214.0	55	153.4	131 includes	131.7	134.8	3.0	0.107
11	147.8	34	105.5	612 includes	38.3	60.1	21.8	0.130
12	172.9	41	122.6	30				
13	203.3	51	150.3	86 includes	105.8	108.8	3.0	0.105
14	168.3	57	156.1	1041 includes includes includes	12.2 22.5 66.2	106.2 23.5 90.5	94.0 1.0 24.3	0.150 3.884 0.203

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-01	20.43	23.48	3.05	4001	14.1	1.1	<.1	0.5
R06-01	26.52	29.57	3.05	4002	17.1	0.5	<.1	0.8
R06-01	32.62	35.67	3.05	4003	15.7	0.8	<.1	<.5
R06-01	41.77	44.82	3.05	4004	10.1	0.2	<.1	<.5
R06-01	50.91	53.96	3.05	4005	10.1	0.7	<.1	<.5
R06-01	60.06	63.11	3.05	4006	7.5	0.2	<.1	<.5
R06-01	69.21	70.73	1.52	4007	25.4	0.9	<.1	<.5
R06-01	81.40	84.45	3.05	4008	513.4	1.2	0.4	<.5
R06-01	85.98	87.50	1.52	4009	142.5	2.0	<.1	<.5
R06-01	87.50	89.02	1.52	4010	50.6	0.8	<.1	<.5
R06-01	89.02	90.55	1.52	4013	6.7	0.2	<.1	<.5
R06-01	92.07	93.60	1.52	4011	76.7	0.2	<.1	0.6
R06-01	93.60	95.12	1.52	4012	18.3	0.9	<.1	<.5
R06-01	105.79	108.84	3.05	4022	74.7	0.8	16.4	<.5
R06-01	113.41	116.46	3.05	4014	13.8	0.9	<.1	<.5
R06-01	117.99	119.51	1.52	4015	34.6	0.1	<.1	<.5
R06-01	133.23	136.28	3.05	4016	10.4	0.8	<.1	<.5
R06-01	143.90	146.95	3.05	4017	12.2	0.2	<.1	<.5
R06-01	146.95	148.48	1.52	4018	43.5	0.8	<.1	<.5
R06-01	154.57	157.62	3.05	4019	79.7	0.1	<.1	<.5
R06-01	162.20	163.72	1.52	4020	79.7	1.0	<.1	<.5
R06-01	163.72	166.77	3.05	4021	160.9	0.4	0.1	<.5
R06-01	166.77	168.29	1.52	4023	773.2	0.6	0.2	<.5
R06-01	168.29	169.82	1.52	4024	14.7	0.7	<.1	<.5
R06-01	175.91	178.96	3.05	4025	17.0	0.2	<.1	<.5
R06-01	185.06	188.11	3.05	4026	29.0	0.9	<.1	<.5
R06-01	192.68	194.21	1.52	4027	24.9	0.2	<.1	<.5
R06-01	194.21	197.26	3.05	4028	831.9	1.8	0.4	<.5
R06-01	197.26	200.30	3.05	4029	103.3	0.2	<.1	<.5
R06-01	206.40	209.45	3.05	4030	46.2	0.8	<.1	<.5
R06-01	221.65	224.70	3.05	4031	51.2	0.3	<.1	<.5
R06-01	227.74	229.27	1.52	4032	31.2	0.7	<.1	1.3
R06-01	233.84	236.89	3.05	4033	92.3	1.9	<.1	<.5
R06-01	242.99	244.51	1.52	4034	39.2	1.4	<.1	<.5
R06-01	252.13	255.18	3.05	4035	131.3	2.5	<.1	<.5
R06-01	261.28	264.33	3.05	4036	15.6	1.0	<.1	1.2
R06-02	18.00	19.00	1.00	4037	30.2	0.3	<.1	0.7
R06-02	27.00	28.00	1.00	4038	48.8	0.6	<.1	<.5
R06-02	30.00	31.00	1.00	4039	23.0	0.3	<.1	<.5
R06-02	37.00	38.00	1.00	4040	8.2	0.9	<.1	<.5
R06-02	43.00	45.00	2.00	4041	6.3	0.3	<.1	<.5
R06-02	51.00	52.00	1.00	4042	11.4	1.1	<.1	<.5
R06-02	54.00	57.00	3.00	4043	21.7	0.4	<.1	<.5
R06-02	58.00	59.00	1.00	4044	42.2	0.6	<.1	0.8
R06-02	66.00	69.00	3.00	4045	12.4	0.4	<.1	<.5
R06-02	71.00	73.00	2.00	4046	9.2	0.5	<.1	<.5
R06-02	81.00	82.00	1.00	4047	40.3	0.4	<.1	<.5
R06-02	97.00	99.67	2.67	4051	140.3	0.7	<.1	<.5
R06-02	105.00	106.00	1.00	4052	3.6	0.6	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-02	106.00	107.00	1.00	4053	5.5	0.5	<.1	<.5
R06-02	108.00	109.00	1.00	4054	11.2	1.4	<.1	<.5
R06-02	109.00	110.00	1.00	4055	8.0	0.2	<.1	<.5
R06-02	110.00	111.00	1.00	4056	6.5	0.6	<.1	<.5
R06-02	115.00	118.00	3.00	4057	2.3	0.7	<.1	<.5
R06-02	120.00	121.00	1.00	4058	6.0	0.2	<.1	<.5
R06-02	130.00	133.20	3.20	4059	4.3	0.4	<.1	<.5
R06-02	136.00	137.00	1.00	4060	7.7	0.3	<.1	<.5
R06-02	148.00	151.00	3.00	4061	6.1	0.5	<.1	<.5
R06-02	169.00	172.00	3.00	4062	4.1	0.3	<.1	<.5
R06-02	179.00	181.00	2.00	4063	3.5	0.5	<.1	<.5
R06-03	38.00	41.00	3.00	4501	35.7	0.7	<.1	<.5
R06-03	41.00	44.00	3.00	4502	108.1	0.5	<.1	<.5
R06-03	60.00	63.00	3.00	4503	78.0	0.5	<.1	1.7
R06-03	66.00	69.00	3.00	4504	92.0	0.4	<.1	1.3
R06-03	80.00	82.00	2.00	4505	16.1	0.5	<.1	<.5
R06-03	95.00	97.00	2.00	4506	11.7	0.3	<.1	<.5
R06-04	13.00	15.00	2.00	4064	133.1	0.4	0.2	<.5
R06-04	15.00	17.00	2.00	4065	90.8	0.7	0.2	<.5
R06-04	17.00	19.00	2.00	4066	99.4	0.3	0.1	<.5
R06-04	19.00	21.00	2.00	4067	181.4	0.8	0.2	<.5
R06-04	21.00	23.00	2.00	4068	204.8	0.1	0.3	1.0
R06-04	23.00	25.00	2.00	4069	459.9	0.6	0.7	0.7
R06-04	25.00	27.00	2.00	4070	44.9	0.2	<.1	0.7
R06-04	27.00	29.00	2.00	4071	34.3	0.5	<.1	<.5
R06-04	29.00	31.00	2.00	4072	119.1	0.4	<.1	2.9
R06-04	31.00	33.00	2.00	4073	18.2	0.1	<.1	0.5
R06-04	33.00	35.00	2.00	4074	44.4	0.4	<.1	<.5
R06-04	35.00	37.00	2.00	4075	3361.0	0.3	3.9	1.4
R06-04	37.00	39.00	2.00	4078	397.5	0.5	0.5	<.5
R06-04	39.00	41.00	2.00	4079	2655.5	0.6	3.7	0.7
R06-04	41.00	43.00	2.00	4080	771.6	0.2	1.1	0.6
R06-04	43.00	45.00	2.00	4081	976.6	0.5	0.8	2.4
R06-04	45.00	47.00	2.00	4082	193.3	0.1	0.3	0.9
R06-04	47.00	49.00	2.00	4083	396.1	0.4	0.5	1.2
R06-04	49.00	51.00	2.00	4084	108.1	0.1	0.2	<.5
R06-04	51.00	53.00	2.00	4085	283.1	0.6	0.3	1.6
R06-04	53.00	55.00	2.00	4086	123.3	0.2	0.1	<.5
R06-04	55.00	57.00	2.00	4087	129.5	0.5	0.2	<.5
R06-04	57.00	59.00	2.00	4088	18.3	0.1	<.1	<.5
R06-04	59.00	61.00	2.00	4089	338.6	0.5	0.6	<.5
R06-04	61.00	63.00	2.00	4090	6.4	0.2	<.1	0.7
R06-04	63.00	65.00	2.00	4091	1218.5	0.5	1.4	<.5
R06-04	65.00	67.00	2.00	4092	187.5	0.2	0.3	<.5
R06-04	67.00	69.00	2.00	4093	15.8	0.4	<.1	<.5
R06-04	69.00	71.00	2.00	4094	192.5	0.2	0.2	<.5
R06-04	71.00	73.00	2.00	4095	48.2	0.4	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-04	73.00	75.00	2.00	4096	701.2	0.3	0.9	0.9
R06-04	75.00	77.00	2.00	4097	178.9	0.5	0.2	0.7
R06-04	77.00	79.00	2.00	4098	89.2	0.2	0.1	<.5
R06-04	79.00	81.00	2.00	4099	57.1	0.5	<.1	<.5
R06-04	81.00	83.00	2.00	4100	442.9	0.2	0.6	0.9
R06-04	83.00	85.00	2.00	4103	571.8	0.5	0.9	1.0
R06-04	85.00	87.00	2.00	4104	685.1	0.6	1.1	1.7
R06-04	87.00	89.00	2.00	4105	318.9	0.2	0.7	0.8
R06-04	89.00	91.00	2.00	4106	104.2	0.2	0.2	<.5
R06-04	91.00	93.00	2.00	4107	103.4	0.5	0.1	0.5
R06-04	93.00	95.00	2.00	4108	18.5	0.2	<.1	<.5
R06-04	95.00	97.00	2.00	4109	157.6	0.5	0.3	0.9
R06-04	97.00	99.00	2.00	4110	81.3	0.3	0.2	15.9
R06-04	99.00	101.00	2.00	4111	37.3	0.8	<.1	2.3
R06-04	101.00	103.00	2.00	4112	28.6	0.3	<.1	<.5
R06-04	103.00	105.00	2.00	4113	90.2	1.0	0.2	<.5
R06-04	105.00	107.00	2.00	4114	43.4	0.1	<.1	<.5
R06-04	107.00	109.00	2.00	4115	1582.2	0.9	3.3	4.1
R06-04	109.00	111.00	2.00	4116	300.3	0.3	1.0	<.5
R06-04	111.00	113.00	2.00	4117	388.7	0.5	1.1	<.5
R06-04	113.00	115.00	2.00	4118	14.3	0.2	<.1	<.5
R06-04	115.00	117.00	2.00	4119	43.2	0.2	<.1	<.5
R06-04	117.00	119.00	2.00	4120	29.2	0.7	<.1	<.5
R06-04	119.00	121.00	2.00	4121	462.1	0.3	0.8	<.5
R06-04	121.00	123.00	2.00	4122	68.3	0.7	<.1	<.5
R06-04	123.00	125.00	2.00	4123	68.3	0.4	<.1	<.5
R06-04	125.00	127.00	2.00	4124	83.4	0.7	0.2	<.5
R06-04	127.00	129.00	2.00	4125	6.7	0.3	<.1	<.5
R06-04	129.00	131.00	2.00	4126	6.3	0.7	<.1	<.5
R06-04	131.00	133.00	2.00	4129	5.5	1.1	<.1	<.5
R06-04	133.00	135.00	2.00	4130	26.3	0.2	<.1	<.5
R06-04	135.00	137.00	2.00	4131	187.9	0.3	0.1	0.8
R06-04	137.00	139.00	2.00	4132	76.0	0.3	<.1	0.5
R06-04	139.00	141.00	2.00	4133	568.1	0.7	0.4	0.6
R06-04	141.00	142.40	1.40	4134	118.5	0.4	<.1	0.5
R06-05	18.29	22.00	3.71	4507	35.9	1.0	<.1	1.4
R06-05	22.00	24.00	2.00	4510	24.7	0.2	<.1	0.5
R06-05	26.00	28.00	2.00	4508	3.8	0.2	<.1	1.0
R06-05	32.00	34.00	2.00	4509	8.5	0.4	<.1	<.5
R06-05	34.00	38.50	4.50	4751	15.4	5.9	<.1	0.8
R06-05	38.50	40.00	1.50	4752	12.9	1.7	<.1	0.9
R06-05	40.00	44.00	4.00	4511	80.3	1.0	<.1	<.5
R06-05	44.00	47.00	3.00	4753	11.4	1.1	<.1	1.3
R06-05	47.00	50.00	3.00	4754	20.8	0.1	<.1	1.2
R06-05	50.00	52.00	2.00	4512	34.1	0.3	<.1	<.5
R06-05	52.00	56.00	4.00	4755	10.9	0.5	<.1	1.5
R06-05	56.00	58.00	2.00	4756	7.3	0.2	<.1	0.7
R06-05	58.00	60.00	2.00	4757	12.1	0.1	<.1	1.4

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-05	60.00	62.00	2.00	4758	9.9	0.5	<.1	0.9
R06-05	62.00	64.00	2.00	4513	9.8	0.2	<.1	<.5
R06-05	64.00	66.00	2.00	4759	12.5	0.2	<.1	1.1
R06-05	66.00	69.20	3.20	4760	13.7	0.4	<.1	0.9
R06-05	69.20	71.60	2.40	4761	11.1	0.2	<.1	1.5
R06-05	71.00	73.00	2.00	4514	6.3	0.6	<.1	1.2
R06-05	73.00	76.00	3.00	4762	67.5	0.7	<.1	<.5
R06-05	76.00	80.00	4.00	4515	62.9	1.2	<.1	<.5
R06-05	80.00	82.00	2.00	4516	139.7	2.3	<.1	<.5
R06-05	82.00	84.00	2.00	4517	23.8	0.3	<.1	<.5
R06-05	84.00	86.00	2.00	4518	209.9	0.2	<.1	<.5
R06-05	86.00	88.00	2.00	4519	100.0	0.9	<.1	<.5
R06-05	88.00	90.00	2.00	4520	27.3	0.2	<.1	<.5
R06-05	90.00	92.00	2.00	4521	98.3	0.4	<.1	<.5
R06-05	92.00	94.00	2.00	4522	220.1	4.5	0.1	<.5
R06-05	94.00	96.00	2.00	4523	241.9	0.6	<.1	<.5
R06-05	96.00	98.00	2.00	4524	979.8	1.7	0.2	<.5
R06-05	98.00	99.00	1.00	4525	1086.1	3.1	0.2	<.5
R06-05	99.00	100.00	1.00	4526	1869.9	2.3	0.6	<.5
R06-05	100.00	102.00	2.00	4527	455.5	1.7	0.1	<.5
R06-05	102.00	104.00	2.00	4528	66.3	0.6	<.1	<.5
R06-05	104.00	106.00	2.00	4529	282.9	1.5	<.1	<.5
R06-05	106.00	108.00	2.00	4530	164.5	1.1	<.1	<.5
R06-05	108.00	110.00	2.00	4531	243.4	0.4	<.1	<.5
R06-05	110.00	112.00	2.00	4532	157.8	0.2	<.1	<.5
R06-05	112.00	114.00	2.00	4533	102.6	0.3	<.1	<.5
R06-05	114.00	116.00	2.00	4534	239.4	0.5	<.1	1.8
R06-05	116.00	118.00	2.00	4535	104.1	0.3	<.1	<.5
R06-05	118.00	120.00	2.00	4536	116.9	0.2	<.1	2.2
R06-05	120.00	122.00	2.00	4537	124.5	0.2	<.1	<.5
R06-05	122.00	124.00	2.00	4538	104.5	0.3	<.1	<.5
R06-05	124.00	126.00	2.00	4763	238.5	0.2	<.1	0.6
R06-05	126.00	128.70	2.70	4764	213.2	1.3	<.1	<.5
R06-05	128.70	129.30	0.60	4541	438.3	0.3	0.3	5.2
R06-06	23.47	24.00	0.53	4135	122.3	0.5	<.1	<.5
R06-06	24.00	26.00	2.00	4136	228.8	0.9	<.1	<.5
R06-06	26.00	28.00	2.00	4137	684.7	2.7	0.3	<.5
R06-06	28.00	30.00	2.00	4138	362.4	1.5	0.2	1.5
R06-06	30.00	32.00	2.00	4139	115.9	0.3	<.1	2.3
R06-06	32.00	34.00	2.00	4140	138.5	2.0	0.1	1.7
R06-06	34.00	36.00	2.00	4141	218.8	34.7	0.2	1.3
R06-06	36.00	38.00	2.00	4142	102.1	0.3	<.1	1.0
R06-06	38.00	40.00	2.00	4143	79.6	0.4	<.1	0.7
R06-06	40.00	42.00	2.00	4144	49.4	0.3	<.1	<.5
R06-06	42.00	44.00	2.00	4145	81.5	0.2	<.1	0.7
R06-06	44.00	46.00	2.00	4146	110.6	0.6	0.1	0.5
R06-06	46.00	48.00	2.00	4147	38.4	0.2	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-06	48.00	50.00	2.00	4148	40.9	0.4	<.1	1.7
R06-06	50.00	52.00	2.00	4149	34.8	0.2	<.1	<.5
R06-06	52.00	54.00	2.00	4150	48.4	0.4	<.1	<.5
R06-06	54.00	56.00	2.00	4151	48.0	0.4	<.1	<.5
R06-06	56.00	58.00	2.00	4154	147.1	0.2	0.1	<.5
R06-06	58.00	60.00	2.00	4155	33.4	0.4	<.1	1.7
R06-06	60.00	62.00	2.00	4156	58.3	0.2	<.1	1.7
R06-06	62.00	64.00	2.00	4157	155.9	0.8	0.1	1.9
R06-06	64.00	66.00	2.00	4158	6.9	0.9	<.1	0.9
R06-06	66.00	68.00	2.00	4159	22.7	3.4	<.1	1.1
R06-06	68.00	70.00	2.00	4160	11.9	1.4	<.1	<.5
R06-06	70.00	73.00	3.00	4161	21.9	1.0	<.1	0.8
R06-06	77.00	80.00	3.00	4162	31.2	0.5	<.1	<.5
R06-06	81.00	84.00	3.00	4163	103.9	0.4	<.1	0.6
R06-06	86.00	88.00	2.00	4164	6.2	0.4	<.1	1.0
R06-06	88.00	91.00	3.00	4165	44.3	0.1	<.1	2.1
R06-06	98.00	100.00	2.00	4166	10.2	0.5	<.1	<.5
R06-06	100.00	103.00	3.00	4167	25.2	0.2	<.1	<.5
R06-06	105.00	107.00	2.00	4168	2.5	0.3	<.1	<.5
R06-06	107.00	113.00	6.00	4169	14.4	0.1	<.1	<.5
R06-06	113.00	115.00	2.00	4170	4.5	0.5	<.1	<.5
R06-06	103.00	105.00	2.00	4171	3.2	0.1	<.1	<.5
R06-06	124.00	127.10	3.10	4172	9.8	0.4	<.1	<.5
R06-06	128.00	131.00	3.00	4174	6.1	0.4	<.1	<.5
R06-06	134.00	136.00	2.00	4175	15.3	0.3	<.1	0.9
R06-06	138.00	140.00	2.00	4176	34.5	0.2	<.1	<.5
R06-06	146.00	148.00	2.00	4177	311.9	0.4	0.2	<.5
R06-06	148.00	150.00	2.00	4178	1059.0	0.8	0.8	<.5
R06-06	156.00	158.00	2.00	4179	3.8	0.3	<.1	<.5
R06-06	162.00	164.00	2.00	4180	15.9	0.2	<.1	<.5
R06-06	166.00	169.00	3.00	4181	28.1	0.5	<.1	<.5
R06-06	170.00	173.80	3.80	4182	8.2	0.3	<.1	<.5
R06-06	58.00	60.00	2.00	4183	11.9	0.6	<.1	<.5
R06-06	60.00	62.00	2.00	4184	17.2	0.3	<.1	<.5
R06-06	150.00	152.00	2.00	4185	254.3	0.4	0.2	0.7
R06-06	152.00	154.00	2.00	4186	28.3	0.2	<.1	<.5
R06-06	154.00	156.00	2.00	4187	9.6	0.3	<.1	<.5
R06-06	169.00	170.00	1.00	4188	22.8	0.3	<.1	<.5
R06-06	73.00	77.00	4.00	4322	7.2	0.3	<.1	<.5
R06-06	80.00	81.00	1.00	4323	47.1	0.6	<.1	<.5
R06-06	84.00	86.00	2.00	4324	11.4	0.2	<.1	<.5
R06-06	91.00	94.50	3.50	4325	14.3	0.4	<.1	<.5
R06-06	94.50	98.00	3.50	4326	8.8	0.1	<.1	<.5
R06-06	115.00	118.00	3.00	4327	6.3	0.4	<.1	1.3
R06-06	118.00	121.00	3.00	4328	15.2	0.1	<.1	0.6
R06-06	121.00	124.00	3.00	4329	12.2	0.5	<.1	<.5
R06-06	127.10	128.00	0.90	4330	9.5	0.1	<.1	<.5
R06-06	131.00	134.00	3.00	4331	5.5	0.1	<.1	<.5
R06-06	136.00	138.00	2.00	4332	42.3	0.5	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-06	164.00	166.00	2.00	4333	17.2	0.2	<.1	1.6
R06-06	140.00	143.00	3.00	4334	34.7	1.0	<.1	1.1
R06-06	143.00	146.00	3.00	4335	29.3	0.5	<.1	1.0
R06-07	10.00	12.00	2.00	overburden	770.0			
R06-07	17.00	20.00	3.00	4542	9.2	0.3	<.1	<.5
R06-07	24.00	27.00	3.00	4543	4.2	0.2	<.1	0.5
R06-07	33.00	36.00	3.00	4544	14.4	0.5	<.1	0.8
R06-07	36.00	38.00	2.00	4545	27.8	0.3	<.1	0.7
R06-07	38.00	42.00	4.00	4546	37.4	0.5	<.1	0.7
R06-07	42.00	45.00	3.00	4547	23.9	0.3	<.1	0.5
R06-07	45.00	48.00	3.00	4548	139.4	0.5	0.1	1.5
R06-07	48.00	52.00	4.00	4549	4.0	0.7	<.1	0.6
R06-07	52.00	54.00	2.00	4550	8.6	0.8	<.1	0.6
R06-07	58.00	60.00	2.00	4564	2.8	0.8	<.1	<.5
R06-07	60.00	62.00	2.00	4565	13.4	0.7	<.1	0.6
R06-07	62.00	64.77	2.77	4566	18.8	0.5	<.1	<.5
R06-08	10.00	12.00	2.00	4189	735.4	0.3	0.5	<.5
R06-08	12.00	14.00	2.00	4190	91.5	0.2	<.1	<.5
R06-08	14.00	16.00	2.00	4191	522.0	1.0	0.4	<.5
R06-08	16.00	18.00	2.00	4192	405.6	0.7	0.3	<.5
R06-08	18.00	20.00	2.00	4193	305.8	1.8	0.3	<.5
R06-08	20.00	22.00	2.00	4194	334.1	0.3	0.2	<.5
R06-08	22.00	24.00	2.00	4195	545.1	0.6	0.4	<.5
R06-08	24.00	26.00	2.00	4196	293.9	0.2	0.2	<.5
R06-08	26.00	28.00	2.00	4197	2250.1	1.1	1.6	1.7
R06-08	28.00	30.00	2.00	4198	927.7	7.3	0.6	<.5
R06-08	30.00	32.00	2.00	4200	1359.9	8.6	0.8	<.5
R06-08	32.00	34.00	2.00	4201	1491.7	9.2	0.8	<.5
R06-08	34.00	36.00	2.00	4202	446.2	3.5	0.3	<.5
R06-08	36.00	38.00	2.00	4203	634.8	0.6	0.4	1.1
R06-08	38.00	40.00	2.00	4204	657.6	4.4	0.4	<.5
R06-08	40.00	42.00	2.00	4206	1141.1	3.1	1.2	<.5
R06-08	42.00	44.00	2.00	4207	1206.4	4.1	0.9	0.8
R06-08	44.00	46.00	2.00	4208	610.3	3.6	0.9	0.8
R06-08	46.00	48.00	2.00	4209	981.3	11.8	1.5	<.5
R06-08	48.00	50.00	2.00	4210	379.5	2.0	0.3	<.5
R06-08	50.00	52.00	2.00	4211	649.3	28.7	0.9	<.5
R06-08	52.00	54.00	2.00	4212	392.1	2.8	0.2	1.3
R06-08	54.00	56.00	2.00	4213	270.1	4.9	0.3	<.5
R06-08	56.00	58.00	2.00	4214	851.3	0.8	0.6	<.5
R06-08	58.00	60.00	2.00	4215	55.1	0.1	<.1	<.5
R06-08	60.00	62.00	2.00	4216	951.9	8.8	0.9	<.5
R06-08	62.00	64.00	2.00	4217	2559.7	18.2	3.4	1.1
R06-08	64.00	66.00	2.00	4218	433.7	2.4	0.6	<.5
R06-08	66.00	68.00	2.00	4219	1806.0	34.1	1.4	<.5
R06-08	68.00	70.00	2.00	4220	1824.8	18.0	1.4	<.5
R06-08	70.00	72.00	2.00	4221	1752.9	5.8	1.5	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-08	72.00	74.00	2.00	4222	2208.9	15.0	2.8	<.5
R06-08	74.00	76.00	2.00	4223	2974.3	7.7	2.9	<.5
R06-08	76.00	78.00	2.00	4224	1185.8	11.2	1.5	0.5
R06-08	78.00	80.00	2.00	4225	4895.3	12.0	7.2	1.2
R06-08	80.00	82.00	2.00	4226	2183.9	18.5	1.2	0.5
R06-08	82.00	84.00	2.00	4227	1260.6	0.4	1.4	<.5
R06-08	84.00	86.00	2.00	4228	358.7	1.7	0.3	<.5
R06-08	86.00	88.00	2.00	4229	1809.2	0.5	1.5	1.3
R06-08	88.00	90.00	2.00	4230	>10000	13.1	12.0	1.8
R06-08	90.00	92.00	2.00	4231	1216.3	14.7	0.8	0.9
R06-08	92.00	94.00	2.00	4232	2109.8	9.4	1.5	0.6
R06-08	94.00	96.00	2.00	4233	678.2	0.2	0.8	0.5
R06-08	96.00	98.00	2.00	4234	57.4	0.6	<.1	<.5
R06-08	98.00	100.00	2.00	4235	135.5	0.3	<.1	<.5
R06-08	100.00	102.00	2.00	4236	71.2	1.0	<.1	0.9
R06-08	102.00	104.00	2.00	4237	89.7	0.5	<.1	0.5
R06-08	104.00	106.00	2.00	4238	718.8	2.3	2.2	1.4
R06-08	106.00	108.00	2.00	4239	204.8	0.6	0.2	<.5
R06-08	108.00	110.00	2.00	4240	267.1	9.0	0.7	<.5
R06-08	110.00	112.00	2.00	4242	74.0	0.7	0.3	<.5
R06-08	112.00	114.00	2.00	4243	13.0	0.9	<.1	<.5
R06-08	114.00	116.00	2.00	4244	33.3	0.2	<.1	<.5
R06-08	116.00	118.00	2.00	4245	238.5	0.3	0.2	<.5
R06-08	118.00	120.00	2.00	4246	16.8	0.3	<.1	<.5
R06-08	120.00	122.00	2.00	4247	342.2	1.3	0.3	1.3
R06-08	122.00	124.00	2.00	4248	50.2	0.3	<.1	<.5
R06-08	124.00	126.00	2.00	4249	7.9	0.4	<.1	<.5
R06-08	128.00	130.00	2.00	4251	73.7	0.5	<.1	<.5
R06-08	130.00	132.00	2.00	4252	184.3	0.6	0.1	<.5
R06-08	132.00	134.00	2.00	4253	51.9	0.4	<.1	<.5
R06-08	134.00	136.00	2.00	4254	11.6	0.2	<.1	<.5
R06-08	136.00	138.00	2.00	4255	401.4	0.5	0.3	<.5
R06-08	138.00	140.00	2.00	4256	212.1	0.6	0.1	0.7
R06-08	140.00	142.00	2.00	4257	31.5	1.3	<.1	<.5
R06-08	142.00	144.00	2.00	4258	72.8	0.5	<.1	<.5
R06-08	144.00	146.00	2.00	4259	35.5	0.4	<.1	<.5
R06-08	146.00	148.00	2.00	4260	233.6	0.2	0.3	<.5
R06-08	148.00	150.00	2.00	4261	60.6	0.4	<.1	<.5
R06-08	150.00	152.00	2.00	4262	25.7	0.6	<.1	<.5
R06-08	152.00	155.20	3.20	4263	23.6	0.4	<.1	<.5
R06-08	155.20	158.20	3.00	4336	8.2	0.4	<.1	1.5
R06-08	158.20	161.30	3.10	4337	14.7	0.2	<.1	1.6
R06-08	161.30	164.30	3.00	4338	51.1	0.3	<.1	<.5
R06-08	164.30	167.40	3.10	4339	28.1	0.5	<.1	<.5
R06-08	167.40	170.40	3.00	4340	42.0	0.9	<.1	<.5
R06-08	170.40	173.50	3.10	4341	12.1	0.2	<.1	<.5
R06-08	173.50	176.50	3.00	4342	49.8	0.7	<.1	0.5
R06-08	176.50	179.60	3.10	4343	45.0	0.3	<.1	<.5



Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-08	179.60	182.60	3.00	4344	256.6	1.6	0.3	<.5
R06-08	182.60	185.70	3.10	4345	235.4	1.5	0.3	<.5
R06-08	185.70	188.70	3.00	4346	65.9	1.8	<.1	0.9
R06-08	188.70	191.30	2.60	4347	123.2	1.6	<.1	<.5
R06-08	191.30	192.60	1.30	4348	149.6	0.3	0.1	<.5
R06-08	192.60	194.80	2.20	4349	45.1	2.4	<.1	<.5
R06-09	60.00	63.00	3.00	4569	21.3	0.3	<.1	0.5
R06-09	63.00	66.20	3.20	4570	13.3	0.8	<.1	0.5
R06-09	66.20	69.20	3.00	4571	29.7	0.3	<.1	1.9
R06-09	69.20	72.90	3.70	4572	24.3	0.5	<.1	1.1
R06-09	72.90	75.80	2.90	4573	31.5	0.2	<.1	1.9
R06-09	75.80	78.40	2.60	4574	36.4	0.7	<.1	0.8
R06-09	78.40	80.40	2.00	4575	34.4	0.4	<.1	1.0
R06-09	80.40	82.80	2.40	4576	35.0	0.6	<.1	1.5
R06-09	82.80	84.50	1.70	4577	75.6	0.8	<.1	1.5
R06-09	84.50	87.50	3.00	4578	241.5	3.1	0.2	1.0
R06-09	87.50	90.50	3.00	4579	48.7	0.9	<.1	<.5
R06-09	90.50	93.60	3.10	4580	52.5	1.2	<.1	<.5
R06-09	93.60	96.60	3.00	4581	42.2	2.3	<.1	<.5
R06-09	96.60	99.70	3.10	4582	39.8	2.2	<.1	<.5
R06-09	99.70	102.10	2.40	4583	196.8	2.1	0.1	2.2
R06-09	142.40	145.40	3.00	4584	114.7	0.2	<.1	0.5
R06-09	145.40	148.50	3.10	4585	152.3	0.7	0.2	1.2
R06-09	148.50	151.50	3.00	4586	195.0	1.5	0.1	<.5
R06-09	151.50	154.60	3.10	4587	213.5	0.7	0.2	<.5
R06-09	154.60	157.60	3.00	4588	148.5	0.2	0.1	<.5
R06-09	157.60	160.70	3.10	4589	169.8	0.6	0.2	<.5
R06-09	160.70	163.70	3.00	4590	102.2	0.2	<.1	<.5
R06-09	163.70	166.80	3.10	4591	37.0	0.6	<.1	<.5
R06-09	166.80	168.90	2.10	4592	52.5	0.1	<.1	<.5
R06-10	21.95	25.00	3.05	4264	63.7	0.2	<.1	<.5
R06-10	25.00	28.04	3.04	4265	81.3	0.4	0.1	<.5
R06-10	28.04	31.07	3.03	4266	25.2	0.3	<.1	0.6
R06-10	37.30	38.40	1.10	4267	22.2	0.3	<.1	<.5
R06-10	38.40	40.20	1.80	4268	8.0	0.8	<.1	<.5
R06-10	40.20	41.00	0.80	4269	115.0	1.5	<.1	1.0
R06-10	41.00	43.30	2.30	4270	7.1	1.1	<.1	<.5
R06-10	43.30	46.30	3.00	4271	21.0	1.5	<.1	<.5
R06-10	46.30	49.40	3.10	4272	28.1	0.5	<.1	0.5
R06-10	49.40	52.40	3.00	4273	145.8	0.4	<.1	2.1
R06-10	52.40	55.50	3.10	4274	111.6	0.4	<.1	2.2
R06-10	55.50	58.50	3.00	4275	104.4	0.5	<.1	0.9
R06-10	58.50	61.60	3.10	4276	79.8	0.5	<.1	1.8
R06-10	61.60	64.60	3.00	4277	89.6	0.4	<.1	1.0
R06-10	64.60	67.70	3.10	4278	90.3	0.3	<.1	1.3
R06-10	67.70	70.70	3.00	4279	539.2	0.4	0.3	1.7

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-10	70.70	73.80	3.10	4280	95.1	1.4	<.1	1.1
R06-10	73.80	76.80	3.00	4281	46.1	0.3	<.1	<.5
R06-10	76.80	78.30	1.50	4282	68.1	0.4	<.1	1.7
R06-10	78.30	80.70	2.40	4283	195.4	0.7	<.1	1.4
R06-10	80.70	82.50	1.80	4284	30.6	0.5	<.1	2.4
R06-10	82.50	85.90	3.40	4285	26.7	0.3	<.1	1.9
R06-10	85.90	88.80	2.90	4286	150.0	0.1	<.1	3.2
R06-10	88.80	89.50	0.70	4287	91.7	0.5	<.1	1.9
R06-10	89.50	92.05	2.55	4288	627.9	0.3	0.3	15.0
R06-10	92.05	95.10	3.05	4289	140.1	0.4	<.1	1.8
R06-10	95.10	98.70	3.60	4290	99.7	0.2	<.1	2.8
R06-10	98.70	101.20	2.50	4291	83.7	0.5	0.5	2.5
R06-10	101.20	104.20	3.00	4292	202.6	0.4	0.2	0.8
R06-10	110.80	113.40	2.60	4293	368.4	0.6	0.2	1.3
R06-10	125.90	128.70	2.80	4294	68.1	0.3	<.1	0.8
R06-10	128.70	131.70	3.00	4295	252.9	2.3	0.1	1.7
R06-10	131.70	134.80	3.10	4296	1065.8	18.1	0.7	3.2
R06-10	134.80	137.80	3.00	4297	509.6	1.1	0.3	2.9
R06-10	142.00	143.86	1.86	4298	302.7	0.4	0.1	0.5
R06-10	143.86	146.20	2.34	4299	276.5	0.7	0.1	1.6
R06-10	146.20	149.90	3.70	4302	28.9	2.9	<.1	0.8
R06-10	149.90	153.00	3.10	4303	21.2	1.4	<.1	0.5
R06-10	153.00	156.10	3.10	4304	83.4	2.2	<.1	0.7
R06-10	156.10	159.10	3.00	4305	18.3	2.0	<.1	0.7
R06-10	159.10	162.20	3.10	4306	24.7	2.5	<.1	0.5
R06-10	162.20	164.90	2.70	4307	28.8	1.5	<.1	<.5
R06-10	164.90	165.90	1.00	4308	91.0	167.3	<.1	0.7
R06-10	165.90	168.30	2.40	4309	12.1	1.5	<.1	<.5
R06-10	168.30	171.30	3.00	4310	158.7	3.1	<.1	0.7
R06-10	171.30	174.40	3.10	4311	257.1	1.5	<.1	1.1
R06-10	174.40	177.40	3.00	4312	50.0	2.6	<.1	<.5
R06-10	177.40	180.50	3.10	4313	17.3	1.0	<.1	<.5
R06-10	180.50	183.50	3.00	4314	52.3	2.5	<.1	0.8
R06-10	183.50	186.50	3.00	4315	87.2	1.3	<.1	<.5
R06-10	186.50	189.60	3.10	4316	11.6	0.7	<.1	0.6
R06-10	189.60	192.70	3.10	4317	13.2	1.1	<.1	<.5
R06-10	192.70	195.70	3.00	4318	22.3	0.7	<.1	<.5
R06-10	195.70	198.80	3.10	4319	10.7	0.5	<.1	<.5
R06-10	207.90	211.00	3.10	4320	62.0	0.3	<.1	0.9
R06-10	211.00	214.00	3.00	4321	11.7	0.6	<.1	<.5
R06-11	8.20	11.30	3.10	4593	523.5	1.1	0.3	<.5
R06-11	11.30	14.30	3.00	4594	492.0	0.5	0.3	<.5
R06-11	14.30	17.40	3.10	4595	1328.9	0.6	0.8	<.5
R06-11	17.40	20.40	3.00	4596	201.9	0.1	0.1	<.5
R06-11	20.40	23.50	3.10	4597	626.1	0.3	0.4	3.0
R06-11	23.50	26.50	3.00	4598	451.7	0.5	0.3	1.0
R06-11	26.50	29.60	3.10	4599	511.8	0.5	0.3	0.9
R06-11	29.60	32.60	3.00	4600	396.7	0.6	0.4	0.9

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-11	32.60	38.30	5.70	4601	648.0	0.4	0.6	1.5
R06-11	38.30	39.30	1.00	4602	3799.5	1.6	2.3	1.2
R06-11	39.30	41.80	2.50	4603	378.7	0.3	0.4	<.5
R06-11	41.80	44.80	3.00	4606	828.4	0.3	1.1	0.7
R06-11	44.80	47.90	3.10	4607	1587.8	0.2	2.1	0.8
R06-11	47.90	50.90	3.00	4608	433.3	0.5	0.4	1.6
R06-11	50.90	54.00	3.10	4609	30.4	0.2	<.1	0.5
R06-11	54.00	57.00	3.00	4610	3698.6	0.5	3.8	0.5
R06-11	57.00	60.10	3.10	4611	1074.2	0.4	1.0	0.7
R06-11	60.10	63.10	3.00	4612	200.4	0.3	0.2	0.9
R06-11	63.10	66.20	3.10	4613	793.9	1.6	0.6	0.7
R06-11	66.20	69.20	3.00	4614	83.0	0.6	<.1	0.5
R06-11	69.20	72.30	3.10	4615	128.5	0.3	0.3	0.6
R06-11	72.30	75.30	3.00	4616	522.2	0.5	0.6	0.6
R06-11	75.30	78.40	3.10	4617	298.0	0.6	0.3	0.8
R06-11	78.40	81.40	3.00	4618	306.9	0.4	0.2	<.5
R06-11	81.40	84.50	3.10	4619	1682.5	0.3	1.6	<.5
R06-11	84.50	87.50	3.00	4620	54.0	0.2	<.1	<.5
R06-11	90.53	93.57	3.04	4621	29.2	0.3	<.1	1.4
R06-11	96.62	99.70	3.08	4622	173.0	0.3	0.1	<.5
R06-11	102.70	105.80	3.10	4623	608.4	0.3	0.4	1.1
R06-11	105.80	108.80	3.00	4624	753.5	0.3	0.7	1.2
R06-11	108.80	111.86	3.06	4625	59.5	0.2	<.1	<.5
R06-11	111.86	114.90	3.04	4626	203.4	0.3	0.2	<.5
R06-11	139.90	142.40	2.50	4627	66.9	0.3	<.1	<.5
R06-11	142.40	145.40	3.00	4628	50.9	0.3	<.1	<.5
R06-11	145.40	147.75	2.35	4629	34.1	0.2	<.1	<.5
R06-12	18.50	20.60	2.10	4765	17.7	3.1	<.1	<.5
R06-12	37.60	39.70	2.10	4766	2.7	0.7	<.1	0.7
R06-12	39.70	42.70	3.00	4767	2.8	0.7	<.1	<.5
R06-12	42.70	45.70	3.00	4768	2.2	0.9	<.1	<.5
R06-12	45.70	48.70	3.00	4769	3.3	0.5	<.1	<.5
R06-12	48.70	51.00	2.30	4770	1.5	9.9	<.1	1.0
R06-12	65.80	69.00	3.20	4771	8.3	0.3	<.1	<.5
R06-12	69.00	72.00	3.00	4772	1.9	0.5	<.1	<.5
R06-12	72.00	75.00	3.00	4773	1.5	0.7	<.1	<.5
R06-12	75.00	78.00	3.00	4774	55.6	0.6	<.1	<.5
R06-12	78.00	81.00	3.00	4775	5.1	0.4	<.1	<.5
R06-12	81.00	84.00	3.00	4776	5.2	0.8	<.1	<.5
R06-12	84.00	87.00	3.00	4777	10.0	0.3	<.1	<.5
R06-12	87.00	90.00	3.00	4778	6.9	0.8	<.1	<.5
R06-12	90.00	93.00	3.00	4779	14.3	0.5	<.1	<.5
R06-12	93.00	95.00	2.00	4780	13.9	0.5	<.1	<.5
R06-12	95.00	99.00	4.00	4781	5.7	0.4	<.1	<.5
R06-12	99.00	100.40	1.40	4782	45.1	0.7	<.1	<.5
R06-12	100.40	103.00	2.60	4783	87.2	0.3	<.1	<.5
R06-12	103.00	106.00	3.00	4784	24.9	0.6	<.1	<.5
R06-12	106.00	108.80	2.80	4785	17.6	0.3	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-12	108.80	111.90	3.10	4786	153.9	0.7	<.1	<.5
R06-12	111.90	114.90	3.00	4787	98.6	0.3	<.1	<.5
R06-12	114.90	118.00	3.10	4788	21.6	0.9	<.1	<.5
R06-12	118.00	121.00	3.00	4789	16.9	0.9	<.1	<.5
R06-12	121.00	124.10	3.10	4790	3.3	1.0	<.1	<.5
R06-12	124.10	127.10	3.00	4791	17.9	0.9	<.1	<.5
R06-12	127.10	130.20	3.10	4792	12.1	1.3	<.1	<.5
R06-12	130.20	133.20	3.00	4793	73.4	1.2	<.1	<.5
R06-12	133.20	136.30	3.10	4794	5.8	1.7	<.1	<.5
R06-12	136.30	139.30	3.00	4795	61.0	2.7	<.1	<.5
R06-12	139.30	142.40	3.10	4796	7.4	2.1	<.1	<.5
R06-12	142.40	145.40	3.00	4797	51.4	1.2	<.1	<.5
R06-12	145.40	148.50	3.10	4798	63.5	1.3	<.1	<.5
R06-12	148.50	151.50	3.00	4799	52.9	0.8	<.1	<.5
R06-12	151.50	154.60	3.10	4800	8.1	0.7	<.1	0.9
R06-12	154.60	157.60	3.00	4801	40.2	0.7	<.1	0.8
R06-12	157.60	160.70	3.10	4802	38.0	1.8	<.1	0.9
R06-12	160.70	163.70	3.00	4803	76.7	0.8	<.1	1.1
R06-12	163.70	166.80	3.10	4804	46.0	0.9	<.1	<.5
R06-12	166.80	169.80	3.00	4805	31.5	0.2	<.1	0.7
R06-12	169.80	172.90	3.10	4806	34.2	0.5	<.1	1.5
R06-13	31.40	32.40	1.00	4630	6.4	0.8	<.1	0.7
R06-13	54.00	57.00	3.00	4631	6.1	0.6	<.1	0.6
R06-13	57.00	60.00	3.00	4632	6.3	84.6	0.1	0.5
R06-13	60.00	63.10	3.10	4633	11.0	1.1	<.1	0.5
R06-13	63.10	66.10	3.00	4634	7.4	0.3	<.1	0.6
R06-13	66.10	69.20	3.10	4635	2.5	1.1	<.1	0.7
R06-13	69.20	72.20	3.00	4636	4.7	0.2	<.1	0.7
R06-13	72.20	75.30	3.10	4637	5.3	0.9	<.1	1.6
R06-13	75.30	78.30	3.00	4638	4.4	0.2	<.1	1.0
R06-13	78.30	81.40	3.10	4639	8.9	0.6	<.1	0.5
R06-13	81.40	84.40	3.00	4640	7.7	0.3	<.1	0.5
R06-13	84.40	87.50	3.10	4641	8.2	0.4	<.1	0.9
R06-13	87.50	90.50	3.00	4642	5.0	0.3	<.1	0.5
R06-13	90.50	93.60	3.10	4643	45.9	0.5	<.1	<.5
R06-13	93.60	96.60	3.00	4644	15.5	0.3	<.1	<.5
R06-13	96.60	99.70	3.10	4645	6.7	0.5	<.1	<.5
R06-13	99.70	102.70	3.00	4646	29.0	0.2	<.1	0.9
R06-13	102.70	105.80	3.10	4648	222.1	0.2	0.1	0.6
R06-13	105.80	108.80	3.00	4649	1052.7	0.5	0.7	2.6
R06-13	108.80	111.90	3.10	4650	144.6	0.2	0.2	0.7
R06-13	111.90	114.90	3.00	4651	63.6	0.7	<.1	0.8
R06-13	114.90	118.00	3.10	4652	136.8	1.0	0.1	0.9
R06-13	118.00	121.00	3.00	4653	34.5	0.4	<.1	0.8
R06-13	121.00	124.10	3.10	4654	35.4	0.7	<.1	1.3
R06-13	124.10	127.10	3.00	4655	97.2	0.3	<.1	2.3
R06-13	127.10	130.15	3.05	4657	86.1	0.5	<.1	0.7
R06-13	130.15	133.20	3.05	4658	89.9	0.3	<.1	0.7

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-13	133.20	136.25	3.05	4659	62.7	0.7	<.1	0.6
R06-13	136.25	139.30	3.05	4660	8.8	0.2	<.1	0.9
R06-13	139.30	142.34	3.04	4661	7.0	0.5	<.1	<.5
R06-13	142.34	145.40	3.06	4662	3.2	0.1	<.1	0.6
R06-13	145.40	148.44	3.04	4663	253.3	0.7	0.1	<.5
R06-13	148.44	151.50	3.06	4664	45.0	0.1	<.1	1.0
R06-13	151.50	154.50	3.00	4665	43.5	0.6	<.1	0.6
R06-13	154.50	157.60	3.10	4666	16.6	0.1	<.1	0.9
R06-13	157.60	160.60	3.00	4667	58.5	0.1	<.1	<.5
R06-13	160.60	163.70	3.10	4668	50.4	0.3	<.1	<.5
R06-13	163.70	166.70	3.00	4669	207.4	0.2	0.3	1.1
R06-13	166.70	169.80	3.10	4670	49.0	0.3	<.1	<.5
R06-13	169.80	172.80	3.00	4671	64.7	0.2	<.1	<.5
R06-13	172.80	175.90	3.10	4672	77.5	1.8	<.1	<.5
R06-13	175.90	179.00	3.10	4673	86.4	1.1	<.1	0.5
R06-13	179.00	181.97	2.97	4674	101.8	0.5	<.1	<.5
R06-13	181.97	185.00	3.03	4675	117.4	0.3	<.1	2.0
R06-13	185.00	188.06	3.06	4676	117.5	0.4	<.1	1.2
R06-13	188.06	191.10	3.04	4677	138.5	0.3	<.1	0.9
R06-13	191.10	194.16	3.06	4678	143.5	0.9	<.1	<.5
R06-13	194.16	197.20	3.04	4679	62.9	0.2	<.1	1.5
R06-13	197.20	200.25	3.05	4680	267.3	0.5	0.1	1.2
R06-13	200.25	203.30	3.05	4681	124.8	0.2	<.1	0.5
R06-14	12.20	14.30	2.10	4809	1170.9	1.0	1.0	0.7
R06-14	14.30	17.40	3.10	4810	413.8	0.2	0.3	1.1
R06-14	17.40	20.40	3.00	4811	541.9	0.4	0.3	0.7
R06-14	20.40	22.50	2.10	4812	461.6	0.2	0.8	<.5
R06-14	22.50	23.50	1.00	4813	>10000	1.5	>100	9.4
R06-14	23.50	26.50	3.00	4814	415.0	0.3	0.3	<.5
R06-14	26.50	29.60	3.10	4815	519.5	1.1	0.5	<.5
R06-14	29.60	32.60	3.00	4816	937.7	1.2	0.6	<.5
R06-14	32.60	35.70	3.10	4817	336.5	1.1	0.2	<.5
R06-14	35.70	38.70	3.00	4818	197.1	0.5	0.1	<.5
R06-14	38.70	41.80	3.10	4819	1261.4	2.8	1.0	<.5
R06-14	41.80	44.80	3.00	4820	577.5	1.2	0.5	<.5
R06-14	44.80	47.90	3.10	4821	1498.2	3.1	1.3	<.5
R06-14	47.90	50.90	3.00	4822	1438.5	20.3	1.5	<.5
R06-14	50.90	54.00	3.10	4823	661.6	6.9	0.9	0.7
R06-14	54.00	57.00	3.00	4824	624.6	1.9	0.7	0.6
R06-14	57.00	60.10	3.10	4825	578.4	0.4	0.6	<.5
R06-14	60.10	63.10	3.00	4826	381.6	1.0	0.3	<.5
R06-14	63.10	66.20	3.10	4827	356.2	0.7	0.2	0.6
R06-14	66.20	69.20	3.00	4828	1379.4	2.7	1.6	<.5
R06-14	69.20	72.30	3.10	4829	1228.1	2.8	0.8	<.5
R06-14	72.30	75.30	3.00	4830	1090.7	5.1	0.7	<.5
R06-14	75.30	78.40	3.10	4831	2220.1	9.6	1.9	0.5
R06-14	78.40	81.40	3.00	4832	1761.5	9.0	1.1	<.5
R06-14	81.40	84.50	3.10	4833	1434.6	4.8	1.5	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-14	84.50	87.50	3.00	4834	2860.3	9.8	3.0	<.5
R06-14	87.50	90.50	3.00	4835	4264.4	1.9	6.0	<.5
R06-14	90.50	93.60	3.10	4836	819.8	2.0	0.5	0.9
R06-14	93.60	96.60	3.00	4837	237.6	0.3	0.2	<.5
R06-14	96.60	97.60	1.00	4838	2428.1	0.7	2.5	<.5
R06-14	97.60	100.60	3.00	4701	1042.1	4.6	0.8	<.5
R06-14	100.60	102.90	2.30	4702	1790.4	0.7	1.1	1.4
R06-14	102.90	106.20	3.30	4839	980.7	0.3	0.6	<.5
R06-14	106.20	109.20	3.00	4703	139.2	0.6	<.1	<.5
R06-14	109.20	111.90	2.70	4704	156.3	2.0	<.1	<.5
R06-14	111.90	114.90	3.00	4840	149.3	0.4	<.1	<.5
R06-14	114.90	117.90	3.00	4705	233.6	0.3	0.1	0.5
R06-14	117.90	120.50	2.60	4706	135.2	0.6	<.1	<.5
R06-14	120.50	122.00	1.50	4707	479.6	0.7	0.3	<.5
R06-14	122.00	124.10	2.10	4708	155.2	0.4	<.1	<.5
R06-14	124.10	127.10	3.00	4841	1666.6	0.8	1.0	<.5
R06-14	127.10	130.20	3.10	4842	271.5	0.2	0.2	<.5
R06-14	130.20	133.20	3.00	4843	259.0	0.8	0.2	<.5
R06-14	133.20	136.30	3.10	4844	484.3	10.6	0.3	<.5
R06-14	136.30	137.80	1.50	4845	314.7	2.0	0.2	<.5
R06-14	137.80	140.80	3.00	4709	241.9	1.2	0.1	0.6
R06-14	140.80	143.10	2.30	4710	186.9	0.5	0.1	<.5
R06-14	143.10	145.40	2.30	4846	556.9	0.2	0.3	<.5
R06-14	145.40	146.80	1.40	4847	383.8	0.7	0.2	<.5
R06-14	146.80	148.50	1.70	4711	174.2	0.6	<.1	<.5
R06-14	148.50	151.50	3.00	4712	13.8	0.4	<.1	<.5
R06-14	151.50	154.50	3.00	4713	74.9	0.5	<.1	<.5
R06-14	154.50	157.50	3.00	4714	75.2	1.2	<.1	<.5
R06-14	157.50	160.50	3.00	4715	387.2	1.5	0.2	<.5
R06-14	160.50	162.50	2.00	4716	782.2	0.4	0.5	<.5
R06-14	162.50	163.70	1.20	4717	402.8	1.0	0.3	<.5
R06-14	163.70	166.80	3.10	4848	105.0	0.4	<.1	<.5
R06-14	166.80	168.30	1.50	4718	21.9	0.3	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-01	20.43	23.48	3.05	4001	14.1	1.1	<.1	0.5
R06-01	26.52	29.57	3.05	4002	17.1	0.5	<.1	0.8
R06-01	32.62	35.67	3.05	4003	15.7	0.8	<.1	<.5
R06-01	41.77	44.82	3.05	4004	10.1	0.2	<.1	<.5
R06-01	50.91	53.96	3.05	4005	10.1	0.7	<.1	<.5
R06-01	60.06	63.11	3.05	4006	7.5	0.2	<.1	<.5
R06-01	69.21	70.73	1.52	4007	25.4	0.9	<.1	<.5
R06-01	81.40	84.45	3.05	4008	513.4	1.2	0.4	<.5
R06-01	85.98	87.50	1.52	4009	142.5	2.0	<.1	<.5
R06-01	87.50	89.02	1.52	4010	50.6	0.8	<.1	<.5
R06-01	89.02	90.55	1.52	4013	6.7	0.2	<.1	<.5
R06-01	92.07	93.60	1.52	4011	76.7	0.2	<.1	0.6
R06-01	93.60	95.12	1.52	4012	18.3	0.9	<.1	<.5
R06-01	105.79	108.84	3.05	4022	74.7	0.8	16.4	<.5
R06-01	113.41	116.46	3.05	4014	13.8	0.9	<.1	<.5
R06-01	117.99	119.51	1.52	4015	34.6	0.1	<.1	<.5
R06-01	133.23	136.28	3.05	4016	10.4	0.8	<.1	<.5
R06-01	143.90	146.95	3.05	4017	12.2	0.2	<.1	<.5
R06-01	146.95	148.48	1.52	4018	43.5	0.8	<.1	<.5
R06-01	154.57	157.62	3.05	4019	79.7	0.1	<.1	<.5
R06-01	162.20	163.72	1.52	4020	79.7	1.0	<.1	<.5
R06-01	163.72	166.77	3.05	4021	160.9	0.4	0.1	<.5
R06-01	166.77	168.29	1.52	4023	773.2	0.6	0.2	<.5
R06-01	168.29	169.82	1.52	4024	14.7	0.7	<.1	<.5
R06-01	175.91	178.96	3.05	4025	17.0	0.2	<.1	<.5
R06-01	185.06	188.11	3.05	4026	29.0	0.9	<.1	<.5
R06-01	192.68	194.21	1.52	4027	24.9	0.2	<.1	<.5
R06-01	194.21	197.26	3.05	4028	831.9	1.8	0.4	<.5
R06-01	197.26	200.30	3.05	4029	103.3	0.2	<.1	<.5
R06-01	206.40	209.45	3.05	4030	46.2	0.8	<.1	<.5
R06-01	221.65	224.70	3.05	4031	51.2	0.3	<.1	<.5
R06-01	227.74	229.27	1.52	4032	31.2	0.7	<.1	1.3
R06-01	233.84	236.89	3.05	4033	92.3	1.9	<.1	<.5
R06-01	242.99	244.51	1.52	4034	39.2	1.4	<.1	<.5
R06-01	252.13	255.18	3.05	4035	131.3	2.5	<.1	<.5
R06-01	261.28	264.33	3.05	4036	15.6	1.0	<.1	1.2
R06-02	18.00	19.00	1.00	4037	30.2	0.3	<.1	0.7
R06-02	27.00	28.00	1.00	4038	48.8	0.6	<.1	<.5
R06-02	30.00	31.00	1.00	4039	23.0	0.3	<.1	<.5
R06-02	37.00	38.00	1.00	4040	8.2	0.9	<.1	<.5
R06-02	43.00	45.00	2.00	4041	6.3	0.3	<.1	<.5
R06-02	51.00	52.00	1.00	4042	11.4	1.1	<.1	<.5
R06-02	54.00	57.00	3.00	4043	21.7	0.4	<.1	<.5
R06-02	58.00	59.00	1.00	4044	42.2	0.6	<.1	0.8
R06-02	66.00	69.00	3.00	4045	12.4	0.4	<.1	<.5
R06-02	71.00	73.00	2.00	4046	9.2	0.5	<.1	<.5
R06-02	81.00	82.00	1.00	4047	40.3	0.4	<.1	<.5
R06-02	97.00	99.67	2.67	4051	140.3	0.7	<.1	<.5
R06-02	105.00	106.00	1.00	4052	3.6	0.6	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-02	106.00	107.00	1.00	4053	5.5	0.5	<.1	<.5
R06-02	108.00	109.00	1.00	4054	11.2	1.4	<.1	<.5
R06-02	109.00	110.00	1.00	4055	8.0	0.2	<.1	<.5
R06-02	110.00	111.00	1.00	4056	6.5	0.6	<.1	<.5
R06-02	115.00	118.00	3.00	4057	2.3	0.7	<.1	<.5
R06-02	120.00	121.00	1.00	4058	6.0	0.2	<.1	<.5
R06-02	130.00	133.20	3.20	4059	4.3	0.4	<.1	<.5
R06-02	136.00	137.00	1.00	4060	7.7	0.3	<.1	<.5
R06-02	148.00	151.00	3.00	4061	6.1	0.5	<.1	<.5
R06-02	169.00	172.00	3.00	4062	4.1	0.3	<.1	<.5
R06-02	179.00	181.00	2.00	4063	3.5	0.5	<.1	<.5
R06-03	38.00	41.00	3.00	4501	35.7	0.7	<.1	<.5
R06-03	41.00	44.00	3.00	4502	108.1	0.5	<.1	<.5
R06-03	60.00	63.00	3.00	4503	78.0	0.5	<.1	1.7
R06-03	66.00	69.00	3.00	4504	92.0	0.4	<.1	1.3
R06-03	80.00	82.00	2.00	4505	16.1	0.5	<.1	<.5
R06-03	95.00	97.00	2.00	4506	11.7	0.3	<.1	<.5
R06-04	13.00	15.00	2.00	4064	133.1	0.4	0.2	<.5
R06-04	15.00	17.00	2.00	4065	90.8	0.7	0.2	<.5
R06-04	17.00	19.00	2.00	4066	99.4	0.3	0.1	<.5
R06-04	19.00	21.00	2.00	4067	181.4	0.8	0.2	<.5
R06-04	21.00	23.00	2.00	4068	204.8	0.1	0.3	1.0
R06-04	23.00	25.00	2.00	4069	459.9	0.6	0.7	0.7
R06-04	25.00	27.00	2.00	4070	44.9	0.2	<.1	0.7
R06-04	27.00	29.00	2.00	4071	34.3	0.5	<.1	<.5
R06-04	29.00	31.00	2.00	4072	119.1	0.4	<.1	2.9
R06-04	31.00	33.00	2.00	4073	18.2	0.1	<.1	0.5
R06-04	33.00	35.00	2.00	4074	44.4	0.4	<.1	<.5
R06-04	35.00	37.00	2.00	4075	3361.0	0.3	3.9	1.4
R06-04	37.00	39.00	2.00	4078	397.5	0.5	0.5	<.5
R06-04	39.00	41.00	2.00	4079	2655.5	0.6	3.7	0.7
R06-04	41.00	43.00	2.00	4080	771.6	0.2	1.1	0.6
R06-04	43.00	45.00	2.00	4081	976.6	0.5	0.8	2.4
R06-04	45.00	47.00	2.00	4082	193.3	0.1	0.3	0.9
R06-04	47.00	49.00	2.00	4083	396.1	0.4	0.5	1.2
R06-04	49.00	51.00	2.00	4084	108.1	0.1	0.2	<.5
R06-04	51.00	53.00	2.00	4085	283.1	0.6	0.3	1.6
R06-04	53.00	55.00	2.00	4086	123.3	0.2	0.1	<.5
R06-04	55.00	57.00	2.00	4087	129.5	0.5	0.2	<.5
R06-04	57.00	59.00	2.00	4088	18.3	0.1	<.1	<.5
R06-04	59.00	61.00	2.00	4089	338.6	0.5	0.6	<.5
R06-04	61.00	63.00	2.00	4090	6.4	0.2	<.1	0.7
R06-04	63.00	65.00	2.00	4091	1218.5	0.5	1.4	<.5
R06-04	65.00	67.00	2.00	4092	187.5	0.2	0.3	<.5
R06-04	67.00	69.00	2.00	4093	15.8	0.4	<.1	<.5
R06-04	69.00	71.00	2.00	4094	192.5	0.2	0.2	<.5
R06-04	71.00	73.00	2.00	4095	48.2	0.4	<.1	<.5



Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-04	73.00	75.00	2.00	4096	701.2	0.3	0.9	0.9
R06-04	75.00	77.00	2.00	4097	178.9	0.5	0.2	0.7
R06-04	77.00	79.00	2.00	4098	89.2	0.2	0.1	<.5
R06-04	79.00	81.00	2.00	4099	57.1	0.5	<.1	<.5
R06-04	81.00	83.00	2.00	4100	442.9	0.2	0.6	0.9
R06-04	83.00	85.00	2.00	4103	571.8	0.5	0.9	1.0
R06-04	85.00	87.00	2.00	4104	685.1	0.6	1.1	1.7
R06-04	87.00	89.00	2.00	4105	318.9	0.2	0.7	0.8
R06-04	89.00	91.00	2.00	4106	104.2	0.2	0.2	<.5
R06-04	91.00	93.00	2.00	4107	103.4	0.5	0.1	0.5
R06-04	93.00	95.00	2.00	4108	18.5	0.2	<.1	<.5
R06-04	95.00	97.00	2.00	4109	157.6	0.5	0.3	0.9
R06-04	97.00	99.00	2.00	4110	81.3	0.3	0.2	15.9
R06-04	99.00	101.00	2.00	4111	37.3	0.8	<.1	2.3
R06-04	101.00	103.00	2.00	4112	28.6	0.3	<.1	<.5
R06-04	103.00	105.00	2.00	4113	90.2	1.0	0.2	<.5
R06-04	105.00	107.00	2.00	4114	43.4	0.1	<.1	<.5
R06-04	107.00	109.00	2.00	4115	1582.2	0.9	3.3	4.1
R06-04	109.00	111.00	2.00	4116	300.3	0.3	1.0	<.5
R06-04	111.00	113.00	2.00	4117	388.7	0.5	1.1	<.5
R06-04	113.00	115.00	2.00	4118	14.3	0.2	<.1	<.5
R06-04	115.00	117.00	2.00	4119	43.2	0.2	<.1	<.5
R06-04	117.00	119.00	2.00	4120	29.2	0.7	<.1	<.5
R06-04	119.00	121.00	2.00	4121	462.1	0.3	0.8	<.5
R06-04	121.00	123.00	2.00	4122	68.3	0.7	<.1	<.5
R06-04	123.00	125.00	2.00	4123	68.3	0.4	<.1	<.5
R06-04	125.00	127.00	2.00	4124	83.4	0.7	0.2	<.5
R06-04	127.00	129.00	2.00	4125	6.7	0.3	<.1	<.5
R06-04	129.00	131.00	2.00	4126	6.3	0.7	<.1	<.5
R06-04	131.00	133.00	2.00	4129	5.5	1.1	<.1	<.5
R06-04	133.00	135.00	2.00	4130	26.3	0.2	<.1	<.5
R06-04	135.00	137.00	2.00	4131	187.9	0.3	0.1	0.8
R06-04	137.00	139.00	2.00	4132	76.0	0.3	<.1	0.5
R06-04	139.00	141.00	2.00	4133	568.1	0.7	0.4	0.6
R06-04	141.00	142.40	1.40	4134	118.5	0.4	<.1	0.5
R06-05	18.29	22.00	3.71	4507	35.9	1.0	<.1	1.4
R06-05	22.00	24.00	2.00	4510	24.7	0.2	<.1	0.5
R06-05	26.00	28.00	2.00	4508	3.8	0.2	<.1	1.0
R06-05	32.00	34.00	2.00	4509	8.5	0.4	<.1	<.5
R06-05	34.00	38.50	4.50	4751	15.4	5.9	<.1	0.8
R06-05	38.50	40.00	1.50	4752	12.9	1.7	<.1	0.9
R06-05	40.00	44.00	4.00	4511	80.3	1.0	<.1	<.5
R06-05	44.00	47.00	3.00	4753	11.4	1.1	<.1	1.3
R06-05	47.00	50.00	3.00	4754	20.8	0.1	<.1	1.2
R06-05	50.00	52.00	2.00	4512	34.1	0.3	<.1	<.5
R06-05	52.00	56.00	4.00	4755	10.9	0.5	<.1	1.5
R06-05	56.00	58.00	2.00	4756	7.3	0.2	<.1	0.7
R06-05	58.00	60.00	2.00	4757	12.1	0.1	<.1	1.4

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-05	60.00	62.00	2.00	4758	9.9	0.5	<.1	0.9
R06-05	62.00	64.00	2.00	4513	9.8	0.2	<.1	<.5
R06-05	64.00	66.00	2.00	4759	12.5	0.2	<.1	1.1
R06-05	66.00	69.20	3.20	4760	13.7	0.4	<.1	0.9
R06-05	69.20	71.60	2.40	4761	11.1	0.2	<.1	1.5
R06-05	71.00	73.00	2.00	4514	6.3	0.6	<.1	1.2
R06-05	73.00	76.00	3.00	4762	67.5	0.7	<.1	<.5
R06-05	76.00	80.00	4.00	4515	62.9	1.2	<.1	<.5
R06-05	80.00	82.00	2.00	4516	139.7	2.3	<.1	<.5
R06-05	82.00	84.00	2.00	4517	23.8	0.3	<.1	<.5
R06-05	84.00	86.00	2.00	4518	209.9	0.2	<.1	<.5
R06-05	86.00	88.00	2.00	4519	100.0	0.9	<.1	<.5
R06-05	88.00	90.00	2.00	4520	27.3	0.2	<.1	<.5
R06-05	90.00	92.00	2.00	4521	98.3	0.4	<.1	<.5
R06-05	92.00	94.00	2.00	4522	220.1	4.5	0.1	<.5
R06-05	94.00	96.00	2.00	4523	241.9	0.6	<.1	<.5
R06-05	96.00	98.00	2.00	4524	979.8	1.7	0.2	<.5
R06-05	98.00	99.00	1.00	4525	1086.1	3.1	0.2	<.5
R06-05	99.00	100.00	1.00	4526	1869.9	2.3	0.6	<.5
R06-05	100.00	102.00	2.00	4527	455.5	1.7	0.1	<.5
R06-05	102.00	104.00	2.00	4528	66.3	0.6	<.1	<.5
R06-05	104.00	106.00	2.00	4529	282.9	1.5	<.1	<.5
R06-05	106.00	108.00	2.00	4530	164.5	1.1	<.1	<.5
R06-05	108.00	110.00	2.00	4531	243.4	0.4	<.1	<.5
R06-05	110.00	112.00	2.00	4532	157.8	0.2	<.1	<.5
R06-05	112.00	114.00	2.00	4533	102.6	0.3	<.1	<.5
R06-05	114.00	116.00	2.00	4534	239.4	0.5	<.1	1.8
R06-05	116.00	118.00	2.00	4535	104.1	0.3	<.1	<.5
R06-05	118.00	120.00	2.00	4536	116.9	0.2	<.1	2.2
R06-05	120.00	122.00	2.00	4537	124.5	0.2	<.1	<.5
R06-05	122.00	124.00	2.00	4538	104.5	0.3	<.1	<.5
R06-05	124.00	126.00	2.00	4763	238.5	0.2	<.1	0.6
R06-05	126.00	128.70	2.70	4764	213.2	1.3	<.1	<.5
R06-05	128.70	129.30	0.60	4541	438.3	0.3	0.3	5.2
R06-06	23.47	24.00	0.53	4135	122.3	0.5	<.1	<.5
R06-06	24.00	26.00	2.00	4136	228.8	0.9	<.1	<.5
R06-06	26.00	28.00	2.00	4137	684.7	2.7	0.3	<.5
R06-06	28.00	30.00	2.00	4138	362.4	1.5	0.2	1.5
R06-06	30.00	32.00	2.00	4139	115.9	0.3	<.1	2.3
R06-06	32.00	34.00	2.00	4140	138.5	2.0	0.1	1.7
R06-06	34.00	36.00	2.00	4141	218.8	34.7	0.2	1.3
R06-06	36.00	38.00	2.00	4142	102.1	0.3	<.1	1.0
R06-06	38.00	40.00	2.00	4143	79.6	0.4	<.1	0.7
R06-06	40.00	42.00	2.00	4144	49.4	0.3	<.1	<.5
R06-06	42.00	44.00	2.00	4145	81.5	0.2	<.1	0.7
R06-06	44.00	46.00	2.00	4146	110.6	0.6	0.1	0.5
R06-06	46.00	48.00	2.00	4147	38.4	0.2	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-06	48.00	50.00	2.00	4148	40.9	0.4	<.1	1.7
R06-06	50.00	52.00	2.00	4149	34.8	0.2	<.1	<.5
R06-06	52.00	54.00	2.00	4150	48.4	0.4	<.1	<.5
R06-06	54.00	56.00	2.00	4151	48.0	0.4	<.1	<.5
R06-06	56.00	58.00	2.00	4154	147.1	0.2	0.1	<.5
R06-06	58.00	60.00	2.00	4155	33.4	0.4	<.1	1.7
R06-06	60.00	62.00	2.00	4156	58.3	0.2	<.1	1.7
R06-06	62.00	64.00	2.00	4157	155.9	0.8	0.1	1.9
R06-06	64.00	66.00	2.00	4158	6.9	0.9	<.1	0.9
R06-06	66.00	68.00	2.00	4159	22.7	3.4	<.1	1.1
R06-06	68.00	70.00	2.00	4160	11.9	1.4	<.1	<.5
R06-06	70.00	73.00	3.00	4161	21.9	1.0	<.1	0.8
R06-06	77.00	80.00	3.00	4162	31.2	0.5	<.1	<.5
R06-06	81.00	84.00	3.00	4163	103.9	0.4	<.1	0.6
R06-06	86.00	88.00	2.00	4164	6.2	0.4	<.1	1.0
R06-06	88.00	91.00	3.00	4165	44.3	0.1	<.1	2.1
R06-06	98.00	100.00	2.00	4166	10.2	0.5	<.1	<.5
R06-06	100.00	103.00	3.00	4167	25.2	0.2	<.1	<.5
R06-06	105.00	107.00	2.00	4168	2.5	0.3	<.1	<.5
R06-06	107.00	113.00	6.00	4169	14.4	0.1	<.1	<.5
R06-06	113.00	115.00	2.00	4170	4.5	0.5	<.1	<.5
R06-06	103.00	105.00	2.00	4171	3.2	0.1	<.1	<.5
R06-06	124.00	127.10	3.10	4172	9.8	0.4	<.1	<.5
R06-06	128.00	131.00	3.00	4174	6.1	0.4	<.1	<.5
R06-06	134.00	136.00	2.00	4175	15.3	0.3	<.1	0.9
R06-06	138.00	140.00	2.00	4176	34.5	0.2	<.1	<.5
R06-06	146.00	148.00	2.00	4177	311.9	0.4	0.2	<.5
R06-06	148.00	150.00	2.00	4178	1059.0	0.8	0.8	<.5
R06-06	156.00	158.00	2.00	4179	3.8	0.3	<.1	<.5
R06-06	162.00	164.00	2.00	4180	15.9	0.2	<.1	<.5
R06-06	166.00	169.00	3.00	4181	28.1	0.5	<.1	<.5
R06-06	170.00	173.80	3.80	4182	8.2	0.3	<.1	<.5
R06-06	58.00	60.00	2.00	4183	11.9	0.6	<.1	<.5
R06-06	60.00	62.00	2.00	4184	17.2	0.3	<.1	<.5
R06-06	150.00	152.00	2.00	4185	254.3	0.4	0.2	0.7
R06-06	152.00	154.00	2.00	4186	28.3	0.2	<.1	<.5
R06-06	154.00	156.00	2.00	4187	9.6	0.3	<.1	<.5
R06-06	169.00	170.00	1.00	4188	22.8	0.3	<.1	<.5
R06-06	73.00	77.00	4.00	4322	7.2	0.3	<.1	<.5
R06-06	80.00	81.00	1.00	4323	47.1	0.6	<.1	<.5
R06-06	84.00	86.00	2.00	4324	11.4	0.2	<.1	<.5
R06-06	91.00	94.50	3.50	4325	14.3	0.4	<.1	<.5
R06-06	94.50	98.00	3.50	4326	8.8	0.1	<.1	<.5
R06-06	115.00	118.00	3.00	4327	6.3	0.4	<.1	1.3
R06-06	118.00	121.00	3.00	4328	15.2	0.1	<.1	0.6
R06-06	121.00	124.00	3.00	4329	12.2	0.5	<.1	<.5
R06-06	127.10	128.00	0.90	4330	9.5	0.1	<.1	<.5
R06-06	131.00	134.00	3.00	4331	5.5	0.1	<.1	<.5
R06-06	136.00	138.00	2.00	4332	42.3	0.5	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-06	164.00	166.00	2.00	4333	17.2	0.2	<.1	1.6
R06-06	140.00	143.00	3.00	4334	34.7	1.0	<.1	1.1
R06-06	143.00	146.00	3.00	4335	29.3	0.5	<.1	1.0
R06-07	10.00	12.00	2.00	overburden	770.0			
R06-07	17.00	20.00	3.00	4542	9.2	0.3	<.1	<.5
R06-07	24.00	27.00	3.00	4543	4.2	0.2	<.1	0.5
R06-07	33.00	36.00	3.00	4544	14.4	0.5	<.1	0.8
R06-07	36.00	38.00	2.00	4545	27.8	0.3	<.1	0.7
R06-07	38.00	42.00	4.00	4546	37.4	0.5	<.1	0.7
R06-07	42.00	45.00	3.00	4547	23.9	0.3	<.1	0.5
R06-07	45.00	48.00	3.00	4548	139.4	0.5	0.1	1.5
R06-07	48.00	52.00	4.00	4549	4.0	0.7	<.1	0.6
R06-07	52.00	54.00	2.00	4550	8.6	0.8	<.1	0.6
R06-07	58.00	60.00	2.00	4564	2.8	0.8	<.1	<.5
R06-07	60.00	62.00	2.00	4565	13.4	0.7	<.1	0.6
R06-07	62.00	64.77	2.77	4566	18.8	0.5	<.1	<.5
R06-08	10.00	12.00	2.00	4189	735.4	0.3	0.5	<.5
R06-08	12.00	14.00	2.00	4190	91.5	0.2	<.1	<.5
R06-08	14.00	16.00	2.00	4191	522.0	1.0	0.4	<.5
R06-08	16.00	18.00	2.00	4192	405.6	0.7	0.3	<.5
R06-08	18.00	20.00	2.00	4193	305.8	1.8	0.3	<.5
R06-08	20.00	22.00	2.00	4194	334.1	0.3	0.2	<.5
R06-08	22.00	24.00	2.00	4195	545.1	0.6	0.4	<.5
R06-08	24.00	26.00	2.00	4196	293.9	0.2	0.2	<.5
R06-08	26.00	28.00	2.00	4197	2250.1	1.1	1.6	1.7
R06-08	28.00	30.00	2.00	4198	927.7	7.3	0.6	<.5
R06-08	30.00	32.00	2.00	4200	1359.9	8.6	0.8	<.5
R06-08	32.00	34.00	2.00	4201	1491.7	9.2	0.8	<.5
R06-08	34.00	36.00	2.00	4202	446.2	3.5	0.3	<.5
R06-08	36.00	38.00	2.00	4203	634.8	0.6	0.4	1.1
R06-08	38.00	40.00	2.00	4204	657.6	4.4	0.4	<.5
R06-08	40.00	42.00	2.00	4206	1141.1	3.1	1.2	<.5
R06-08	42.00	44.00	2.00	4207	1206.4	4.1	0.9	0.8
R06-08	44.00	46.00	2.00	4208	610.3	3.6	0.9	0.8
R06-08	46.00	48.00	2.00	4209	981.3	11.8	1.5	<.5
R06-08	48.00	50.00	2.00	4210	379.5	2.0	0.3	<.5
R06-08	50.00	52.00	2.00	4211	649.3	28.7	0.9	<.5
R06-08	52.00	54.00	2.00	4212	392.1	2.8	0.2	1.3
R06-08	54.00	56.00	2.00	4213	270.1	4.9	0.3	<.5
R06-08	56.00	58.00	2.00	4214	851.3	0.8	0.6	<.5
R06-08	58.00	60.00	2.00	4215	55.1	0.1	<.1	<.5
R06-08	60.00	62.00	2.00	4216	951.9	8.8	0.9	<.5
R06-08	62.00	64.00	2.00	4217	2559.7	18.2	3.4	1.1
R06-08	64.00	66.00	2.00	4218	433.7	2.4	0.6	<.5
R06-08	66.00	68.00	2.00	4219	1806.0	34.1	1.4	<.5
R06-08	68.00	70.00	2.00	4220	1824.8	18.0	1.4	<.5
R06-08	70.00	72.00	2.00	4221	1752.9	5.8	1.5	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-08	72.00	74.00	2.00	4222	2208.9	15.0	2.8	<.5
R06-08	74.00	76.00	2.00	4223	2974.3	7.7	2.9	<.5
R06-08	76.00	78.00	2.00	4224	1185.8	11.2	1.5	0.5
R06-08	78.00	80.00	2.00	4225	4895.3	12.0	7.2	1.2
R06-08	80.00	82.00	2.00	4226	2183.9	18.5	1.2	0.5
R06-08	82.00	84.00	2.00	4227	1260.6	0.4	1.4	<.5
R06-08	84.00	86.00	2.00	4228	358.7	1.7	0.3	<.5
R06-08	86.00	88.00	2.00	4229	1809.2	0.5	1.5	1.3
R06-08	88.00	90.00	2.00	4230	>10000	13.1	12.0	1.8
R06-08	90.00	92.00	2.00	4231	1216.3	14.7	0.8	0.9
R06-08	92.00	94.00	2.00	4232	2109.8	9.4	1.5	0.6
R06-08	94.00	96.00	2.00	4233	678.2	0.2	0.8	0.5
R06-08	96.00	98.00	2.00	4234	57.4	0.6	<.1	<.5
R06-08	98.00	100.00	2.00	4235	135.5	0.3	<.1	<.5
R06-08	100.00	102.00	2.00	4236	71.2	1.0	<.1	0.9
R06-08	102.00	104.00	2.00	4237	89.7	0.5	<.1	0.5
R06-08	104.00	106.00	2.00	4238	718.8	2.3	2.2	1.4
R06-08	106.00	108.00	2.00	4239	204.8	0.6	0.2	<.5
R06-08	108.00	110.00	2.00	4240	267.1	9.0	0.7	<.5
R06-08	110.00	112.00	2.00	4242	74.0	0.7	0.3	<.5
R06-08	112.00	114.00	2.00	4243	13.0	0.9	<.1	<.5
R06-08	114.00	116.00	2.00	4244	33.3	0.2	<.1	<.5
R06-08	116.00	118.00	2.00	4245	238.5	0.3	0.2	<.5
R06-08	118.00	120.00	2.00	4246	16.8	0.3	<.1	<.5
R06-08	120.00	122.00	2.00	4247	342.2	1.3	0.3	1.3
R06-08	122.00	124.00	2.00	4248	50.2	0.3	<.1	<.5
R06-08	124.00	126.00	2.00	4249	7.9	0.4	<.1	<.5
R06-08	128.00	130.00	2.00	4251	73.7	0.5	<.1	<.5
R06-08	130.00	132.00	2.00	4252	184.3	0.6	0.1	<.5
R06-08	132.00	134.00	2.00	4253	51.9	0.4	<.1	<.5
R06-08	134.00	136.00	2.00	4254	11.6	0.2	<.1	<.5
R06-08	136.00	138.00	2.00	4255	401.4	0.5	0.3	<.5
R06-08	138.00	140.00	2.00	4256	212.1	0.6	0.1	0.7
R06-08	140.00	142.00	2.00	4257	31.5	1.3	<.1	<.5
R06-08	142.00	144.00	2.00	4258	72.8	0.5	<.1	<.5
R06-08	144.00	146.00	2.00	4259	35.5	0.4	<.1	<.5
R06-08	146.00	148.00	2.00	4260	233.6	0.2	0.3	<.5
R06-08	148.00	150.00	2.00	4261	60.6	0.4	<.1	<.5
R06-08	150.00	152.00	2.00	4262	25.7	0.6	<.1	<.5
R06-08	152.00	155.20	3.20	4263	23.6	0.4	<.1	<.5
R06-08	155.20	158.20	3.00	4336	8.2	0.4	<.1	1.5
R06-08	158.20	161.30	3.10	4337	14.7	0.2	<.1	1.6
R06-08	161.30	164.30	3.00	4338	51.1	0.3	<.1	<.5
R06-08	164.30	167.40	3.10	4339	28.1	0.5	<.1	<.5
R06-08	167.40	170.40	3.00	4340	42.0	0.9	<.1	<.5
R06-08	170.40	173.50	3.10	4341	12.1	0.2	<.1	<.5
R06-08	173.50	176.50	3.00	4342	49.8	0.7	<.1	0.5
R06-08	176.50	179.60	3.10	4343	45.0	0.3	<.1	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-08	179.60	182.60	3.00	4344	256.6	1.6	0.3	<.5
R06-08	182.60	185.70	3.10	4345	235.4	1.5	0.3	<.5
R06-08	185.70	188.70	3.00	4346	65.9	1.8	<.1	0.9
R06-08	188.70	191.30	2.60	4347	123.2	1.6	<.1	<.5
R06-08	191.30	192.60	1.30	4348	149.6	0.3	0.1	<.5
R06-08	192.60	194.80	2.20	4349	45.1	2.4	<.1	<.5
R06-09	60.00	63.00	3.00	4569	21.3	0.3	<.1	0.5
R06-09	63.00	66.20	3.20	4570	13.3	0.8	<.1	0.5
R06-09	66.20	69.20	3.00	4571	29.7	0.3	<.1	1.9
R06-09	69.20	72.90	3.70	4572	24.3	0.5	<.1	1.1
R06-09	72.90	75.80	2.90	4573	31.5	0.2	<.1	1.9
R06-09	75.80	78.40	2.60	4574	36.4	0.7	<.1	0.8
R06-09	78.40	80.40	2.00	4575	34.4	0.4	<.1	1.0
R06-09	80.40	82.80	2.40	4576	35.0	0.6	<.1	1.5
R06-09	82.80	84.50	1.70	4577	75.6	0.8	<.1	1.5
R06-09	84.50	87.50	3.00	4578	241.5	3.1	0.2	1.0
R06-09	87.50	90.50	3.00	4579	48.7	0.9	<.1	<.5
R06-09	90.50	93.60	3.10	4580	52.5	1.2	<.1	<.5
R06-09	93.60	96.60	3.00	4581	42.2	2.3	<.1	<.5
R06-09	96.60	99.70	3.10	4582	39.8	2.2	<.1	<.5
R06-09	99.70	102.10	2.40	4583	196.8	2.1	0.1	2.2
R06-09	142.40	145.40	3.00	4584	114.7	0.2	<.1	0.5
R06-09	145.40	148.50	3.10	4585	152.3	0.7	0.2	1.2
R06-09	148.50	151.50	3.00	4586	195.0	1.5	0.1	<.5
R06-09	151.50	154.60	3.10	4587	213.5	0.7	0.2	<.5
R06-09	154.60	157.60	3.00	4588	148.5	0.2	0.1	<.5
R06-09	157.60	160.70	3.10	4589	169.8	0.6	0.2	<.5
R06-09	160.70	163.70	3.00	4590	102.2	0.2	<.1	<.5
R06-09	163.70	166.80	3.10	4591	37.0	0.6	<.1	<.5
R06-09	166.80	168.90	2.10	4592	52.5	0.1	<.1	<.5
R06-10	21.95	25.00	3.05	4264	63.7	0.2	<.1	<.5
R06-10	25.00	28.04	3.04	4265	81.3	0.4	0.1	<.5
R06-10	28.04	31.07	3.03	4266	25.2	0.3	<.1	0.6
R06-10	37.30	38.40	1.10	4267	22.2	0.3	<.1	<.5
R06-10	38.40	40.20	1.80	4268	8.0	0.8	<.1	<.5
R06-10	40.20	41.00	0.80	4269	115.0	1.5	<.1	1.0
R06-10	41.00	43.30	2.30	4270	7.1	1.1	<.1	<.5
R06-10	43.30	46.30	3.00	4271	21.0	1.5	<.1	<.5
R06-10	46.30	49.40	3.10	4272	28.1	0.5	<.1	0.5
R06-10	49.40	52.40	3.00	4273	145.8	0.4	<.1	2.1
R06-10	52.40	55.50	3.10	4274	111.6	0.4	<.1	2.2
R06-10	55.50	58.50	3.00	4275	104.4	0.5	<.1	0.9
R06-10	58.50	61.60	3.10	4276	79.8	0.5	<.1	1.8
R06-10	61.60	64.60	3.00	4277	89.6	0.4	<.1	1.0
R06-10	64.60	67.70	3.10	4278	90.3	0.3	<.1	1.3
R06-10	67.70	70.70	3.00	4279	539.2	0.4	0.3	1.7

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-10	70.70	73.80	3.10	4280	95.1	1.4	<.1	1.1
R06-10	73.80	76.80	3.00	4281	46.1	0.3	<.1	<.5
R06-10	76.80	78.30	1.50	4282	68.1	0.4	<.1	1.7
R06-10	78.30	80.70	2.40	4283	195.4	0.7	<.1	1.4
R06-10	80.70	82.50	1.80	4284	30.6	0.5	<.1	2.4
R06-10	82.50	85.90	3.40	4285	26.7	0.3	<.1	1.9
R06-10	85.90	88.80	2.90	4286	150.0	0.1	<.1	3.2
R06-10	88.80	89.50	0.70	4287	91.7	0.5	<.1	1.9
R06-10	89.50	92.05	2.55	4288	627.9	0.3	0.3	15.0
R06-10	92.05	95.10	3.05	4289	140.1	0.4	<.1	1.8
R06-10	95.10	98.70	3.60	4290	99.7	0.2	<.1	2.8
R06-10	98.70	101.20	2.50	4291	83.7	0.5	0.5	2.5
R06-10	101.20	104.20	3.00	4292	202.6	0.4	0.2	0.8
R06-10	110.80	113.40	2.60	4293	368.4	0.6	0.2	1.3
R06-10	125.90	128.70	2.80	4294	68.1	0.3	<.1	0.8
R06-10	128.70	131.70	3.00	4295	252.9	2.3	0.1	1.7
R06-10	131.70	134.80	3.10	4296	1065.8	18.1	0.7	3.2
R06-10	134.80	137.80	3.00	4297	509.6	1.1	0.3	2.9
R06-10	142.00	143.86	1.86	4298	302.7	0.4	0.1	0.5
R06-10	143.86	146.20	2.34	4299	276.5	0.7	0.1	1.6
R06-10	146.20	149.90	3.70	4302	28.9	2.9	<.1	0.8
R06-10	149.90	153.00	3.10	4303	21.2	1.4	<.1	0.5
R06-10	153.00	156.10	3.10	4304	83.4	2.2	<.1	0.7
R06-10	156.10	159.10	3.00	4305	18.3	2.0	<.1	0.7
R06-10	159.10	162.20	3.10	4306	24.7	2.5	<.1	0.5
R06-10	162.20	164.90	2.70	4307	28.8	1.5	<.1	<.5
R06-10	164.90	165.90	1.00	4308	91.0	167.3	<.1	0.7
R06-10	165.90	168.30	2.40	4309	12.1	1.5	<.1	<.5
R06-10	168.30	171.30	3.00	4310	158.7	3.1	<.1	0.7
R06-10	171.30	174.40	3.10	4311	257.1	1.5	<.1	1.1
R06-10	174.40	177.40	3.00	4312	50.0	2.6	<.1	<.5
R06-10	177.40	180.50	3.10	4313	17.3	1.0	<.1	<.5
R06-10	180.50	183.50	3.00	4314	52.3	2.5	<.1	0.8
R06-10	183.50	186.50	3.00	4315	87.2	1.3	<.1	<.5
R06-10	186.50	189.60	3.10	4316	11.6	0.7	<.1	0.6
R06-10	189.60	192.70	3.10	4317	13.2	1.1	<.1	<.5
R06-10	192.70	195.70	3.00	4318	22.3	0.7	<.1	<.5
R06-10	195.70	198.80	3.10	4319	10.7	0.5	<.1	<.5
R06-10	207.90	211.00	3.10	4320	62.0	0.3	<.1	0.9
R06-10	211.00	214.00	3.00	4321	11.7	0.6	<.1	<.5
R06-11	8.20	11.30	3.10	4593	523.5	1.1	0.3	<.5
R06-11	11.30	14.30	3.00	4594	492.0	0.5	0.3	<.5
R06-11	14.30	17.40	3.10	4595	1328.9	0.6	0.8	<.5
R06-11	17.40	20.40	3.00	4596	201.9	0.1	0.1	<.5
R06-11	20.40	23.50	3.10	4597	626.1	0.3	0.4	3.0
R06-11	23.50	26.50	3.00	4598	451.7	0.5	0.3	1.0
R06-11	26.50	29.60	3.10	4599	511.8	0.5	0.3	0.9
R06-11	29.60	32.60	3.00	4600	396.7	0.6	0.4	0.9

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-11	32.60	38.30	5.70	4601	648.0	0.4	0.6	1.5
R06-11	38.30	39.30	1.00	4602	3799.5	1.6	2.3	1.2
R06-11	39.30	41.80	2.50	4603	378.7	0.3	0.4	<.5
R06-11	41.80	44.80	3.00	4606	828.4	0.3	1.1	0.7
R06-11	44.80	47.90	3.10	4607	1587.8	0.2	2.1	0.8
R06-11	47.90	50.90	3.00	4608	433.3	0.5	0.4	1.6
R06-11	50.90	54.00	3.10	4609	30.4	0.2	<.1	0.5
R06-11	54.00	57.00	3.00	4610	3698.6	0.5	3.8	0.5
R06-11	57.00	60.10	3.10	4611	1074.2	0.4	1.0	0.7
R06-11	60.10	63.10	3.00	4612	200.4	0.3	0.2	0.9
R06-11	63.10	66.20	3.10	4613	793.9	1.6	0.6	0.7
R06-11	66.20	69.20	3.00	4614	83.0	0.6	<.1	0.5
R06-11	69.20	72.30	3.10	4615	128.5	0.3	0.3	0.6
R06-11	72.30	75.30	3.00	4616	522.2	0.5	0.6	0.6
R06-11	75.30	78.40	3.10	4617	298.0	0.6	0.3	0.8
R06-11	78.40	81.40	3.00	4618	306.9	0.4	0.2	<.5
R06-11	81.40	84.50	3.10	4619	1682.5	0.3	1.6	<.5
R06-11	84.50	87.50	3.00	4620	54.0	0.2	<.1	<.5
R06-11	90.53	93.57	3.04	4621	29.2	0.3	<.1	1.4
R06-11	96.62	99.70	3.08	4622	173.0	0.3	0.1	<.5
R06-11	102.70	105.80	3.10	4623	608.4	0.3	0.4	1.1
R06-11	105.80	108.80	3.00	4624	753.5	0.3	0.7	1.2
R06-11	108.80	111.86	3.06	4625	59.5	0.2	<.1	<.5
R06-11	111.86	114.90	3.04	4626	203.4	0.3	0.2	<.5
R06-11	139.90	142.40	2.50	4627	66.9	0.3	<.1	<.5
R06-11	142.40	145.40	3.00	4628	50.9	0.3	<.1	<.5
R06-11	145.40	147.75	2.35	4629	34.1	0.2	<.1	<.5
R06-12	18.50	20.60	2.10	4765	17.7	3.1	<.1	<.5
R06-12	37.60	39.70	2.10	4766	2.7	0.7	<.1	0.7
R06-12	39.70	42.70	3.00	4767	2.8	0.7	<.1	<.5
R06-12	42.70	45.70	3.00	4768	2.2	0.9	<.1	<.5
R06-12	45.70	48.70	3.00	4769	3.3	0.5	<.1	<.5
R06-12	48.70	51.00	2.30	4770	1.5	9.9	<.1	1.0
R06-12	65.80	69.00	3.20	4771	8.3	0.3	<.1	<.5
R06-12	69.00	72.00	3.00	4772	1.9	0.5	<.1	<.5
R06-12	72.00	75.00	3.00	4773	1.5	0.7	<.1	<.5
R06-12	75.00	78.00	3.00	4774	55.6	0.6	<.1	<.5
R06-12	78.00	81.00	3.00	4775	5.1	0.4	<.1	<.5
R06-12	81.00	84.00	3.00	4776	5.2	0.8	<.1	<.5
R06-12	84.00	87.00	3.00	4777	10.0	0.3	<.1	<.5
R06-12	87.00	90.00	3.00	4778	6.9	0.8	<.1	<.5
R06-12	90.00	93.00	3.00	4779	14.3	0.5	<.1	<.5
R06-12	93.00	95.00	2.00	4780	13.9	0.5	<.1	<.5
R06-12	95.00	99.00	4.00	4781	5.7	0.4	<.1	<.5
R06-12	99.00	100.40	1.40	4782	45.1	0.7	<.1	<.5
R06-12	100.40	103.00	2.60	4783	87.2	0.3	<.1	<.5
R06-12	103.00	106.00	3.00	4784	24.9	0.6	<.1	<.5
R06-12	106.00	108.80	2.80	4785	17.6	0.3	<.1	<.5



Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-12	108.80	111.90	3.10	4786	153.9	0.7	<.1	<.5
R06-12	111.90	114.90	3.00	4787	98.6	0.3	<.1	<.5
R06-12	114.90	118.00	3.10	4788	21.6	0.9	<.1	<.5
R06-12	118.00	121.00	3.00	4789	16.9	0.9	<.1	<.5
R06-12	121.00	124.10	3.10	4790	3.3	1.0	<.1	<.5
R06-12	124.10	127.10	3.00	4791	17.9	0.9	<.1	<.5
R06-12	127.10	130.20	3.10	4792	12.1	1.3	<.1	<.5
R06-12	130.20	133.20	3.00	4793	73.4	1.2	<.1	<.5
R06-12	133.20	136.30	3.10	4794	5.8	1.7	<.1	<.5
R06-12	136.30	139.30	3.00	4795	61.0	2.7	<.1	<.5
R06-12	139.30	142.40	3.10	4796	7.4	2.1	<.1	<.5
R06-12	142.40	145.40	3.00	4797	51.4	1.2	<.1	<.5
R06-12	145.40	148.50	3.10	4798	63.5	1.3	<.1	<.5
R06-12	148.50	151.50	3.00	4799	52.9	0.8	<.1	<.5
R06-12	151.50	154.60	3.10	4800	8.1	0.7	<.1	0.9
R06-12	154.60	157.60	3.00	4801	40.2	0.7	<.1	0.8
R06-12	157.60	160.70	3.10	4802	38.0	1.8	<.1	0.9
R06-12	160.70	163.70	3.00	4803	76.7	0.8	<.1	1.1
R06-12	163.70	166.80	3.10	4804	46.0	0.9	<.1	<.5
R06-12	166.80	169.80	3.00	4805	31.5	0.2	<.1	0.7
R06-12	169.80	172.90	3.10	4806	34.2	0.5	<.1	1.5
R06-13	31.40	32.40	1.00	4630	6.4	0.8	<.1	0.7
R06-13	54.00	57.00	3.00	4631	6.1	0.6	<.1	0.6
R06-13	57.00	60.00	3.00	4632	6.3	84.6	0.1	0.5
R06-13	60.00	63.10	3.10	4633	11.0	1.1	<.1	0.5
R06-13	63.10	66.10	3.00	4634	7.4	0.3	<.1	0.6
R06-13	66.10	69.20	3.10	4635	2.5	1.1	<.1	0.7
R06-13	69.20	72.20	3.00	4636	4.7	0.2	<.1	0.7
R06-13	72.20	75.30	3.10	4637	5.3	0.9	<.1	1.6
R06-13	75.30	78.30	3.00	4638	4.4	0.2	<.1	1.0
R06-13	78.30	81.40	3.10	4639	8.9	0.6	<.1	0.5
R06-13	81.40	84.40	3.00	4640	7.7	0.3	<.1	0.5
R06-13	84.40	87.50	3.10	4641	8.2	0.4	<.1	0.9
R06-13	87.50	90.50	3.00	4642	5.0	0.3	<.1	0.5
R06-13	90.50	93.60	3.10	4643	45.9	0.5	<.1	<.5
R06-13	93.60	96.60	3.00	4644	15.5	0.3	<.1	<.5
R06-13	96.60	99.70	3.10	4645	6.7	0.5	<.1	<.5
R06-13	99.70	102.70	3.00	4646	29.0	0.2	<.1	0.9
R06-13	102.70	105.80	3.10	4648	222.1	0.2	0.1	0.6
R06-13	105.80	108.80	3.00	4649	1052.7	0.5	0.7	2.6
R06-13	108.80	111.90	3.10	4650	144.6	0.2	0.2	0.7
R06-13	111.90	114.90	3.00	4651	63.6	0.7	<.1	0.8
R06-13	114.90	118.00	3.10	4652	136.8	1.0	0.1	0.9
R06-13	118.00	121.00	3.00	4653	34.5	0.4	<.1	0.8
R06-13	121.00	124.10	3.10	4654	35.4	0.7	<.1	1.3
R06-13	124.10	127.10	3.00	4655	97.2	0.3	<.1	2.3
R06-13	127.10	130.15	3.05	4657	86.1	0.5	<.1	0.7
R06-13	130.15	133.20	3.05	4658	89.9	0.3	<.1	0.7

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-13	133.20	136.25	3.05	4659	62.7	0.7	<.1	0.6
R06-13	136.25	139.30	3.05	4660	8.8	0.2	<.1	0.9
R06-13	139.30	142.34	3.04	4661	7.0	0.5	<.1	<.5
R06-13	142.34	145.40	3.06	4662	3.2	0.1	<.1	0.6
R06-13	145.40	148.44	3.04	4663	253.3	0.7	0.1	<.5
R06-13	148.44	151.50	3.06	4664	45.0	0.1	<.1	1.0
R06-13	151.50	154.50	3.00	4665	43.5	0.6	<.1	0.6
R06-13	154.50	157.60	3.10	4666	16.6	0.1	<.1	0.9
R06-13	157.60	160.60	3.00	4667	58.5	0.1	<.1	<.5
R06-13	160.60	163.70	3.10	4668	50.4	0.3	<.1	<.5
R06-13	163.70	166.70	3.00	4669	207.4	0.2	0.3	1.1
R06-13	166.70	169.80	3.10	4670	49.0	0.3	<.1	<.5
R06-13	169.80	172.80	3.00	4671	64.7	0.2	<.1	<.5
R06-13	172.80	175.90	3.10	4672	77.5	1.8	<.1	<.5
R06-13	175.90	179.00	3.10	4673	86.4	1.1	<.1	0.5
R06-13	179.00	181.97	2.97	4674	101.8	0.5	<.1	<.5
R06-13	181.97	185.00	3.03	4675	117.4	0.3	<.1	2.0
R06-13	185.00	188.06	3.06	4676	117.5	0.4	<.1	1.2
R06-13	188.06	191.10	3.04	4677	138.5	0.3	<.1	0.9
R06-13	191.10	194.16	3.06	4678	143.5	0.9	<.1	<.5
R06-13	194.16	197.20	3.04	4679	62.9	0.2	<.1	1.5
R06-13	197.20	200.25	3.05	4680	267.3	0.5	0.1	1.2
R06-13	200.25	203.30	3.05	4681	124.8	0.2	<.1	0.5
R06-14	12.20	14.30	2.10	4809	1170.9	1.0	1.0	0.7
R06-14	14.30	17.40	3.10	4810	413.8	0.2	0.3	1.1
R06-14	17.40	20.40	3.00	4811	541.9	0.4	0.3	0.7
R06-14	20.40	22.50	2.10	4812	461.6	0.2	0.8	<.5
R06-14	22.50	23.50	1.00	4813	>10000	1.5	>100	9.4
R06-14	23.50	26.50	3.00	4814	415.0	0.3	0.3	<.5
R06-14	26.50	29.60	3.10	4815	519.5	1.1	0.5	<.5
R06-14	29.60	32.60	3.00	4816	937.7	1.2	0.6	<.5
R06-14	32.60	35.70	3.10	4817	336.5	1.1	0.2	<.5
R06-14	35.70	38.70	3.00	4818	197.1	0.5	0.1	<.5
R06-14	38.70	41.80	3.10	4819	1261.4	2.8	1.0	<.5
R06-14	41.80	44.80	3.00	4820	577.5	1.2	0.5	<.5
R06-14	44.80	47.90	3.10	4821	1498.2	3.1	1.3	<.5
R06-14	47.90	50.90	3.00	4822	1438.5	20.3	1.5	<.5
R06-14	50.90	54.00	3.10	4823	661.6	6.9	0.9	0.7
R06-14	54.00	57.00	3.00	4824	624.6	1.9	0.7	0.6
R06-14	57.00	60.10	3.10	4825	578.4	0.4	0.6	<.5
R06-14	60.10	63.10	3.00	4826	381.6	1.0	0.3	<.5
R06-14	63.10	66.20	3.10	4827	356.2	0.7	0.2	0.6
R06-14	66.20	69.20	3.00	4828	1379.4	2.7	1.6	<.5
R06-14	69.20	72.30	3.10	4829	1228.1	2.8	0.8	<.5
R06-14	72.30	75.30	3.00	4830	1090.7	5.1	0.7	<.5
R06-14	75.30	78.40	3.10	4831	2220.1	9.6	1.9	0.5
R06-14	78.40	81.40	3.00	4832	1761.5	9.0	1.1	<.5
R06-14	81.40	84.50	3.10	4833	1434.6	4.8	1.5	<.5

Table 2  
2006 Diamond Drill Hole Assays

DDH	From (m)	To(m)	Width (m)	SAMPLE No #	Cu ppm	Mo ppm	Ag ppm	Au ppb
R06-14	84.50	87.50	3.00	4834	2860.3	9.8	3.0	<.5
R06-14	87.50	90.50	3.00	4835	4264.4	1.9	6.0	<.5
R06-14	90.50	93.60	3.10	4836	819.8	2.0	0.5	0.9
R06-14	93.60	96.60	3.00	4837	237.6	0.3	0.2	<.5
R06-14	96.60	97.60	1.00	4838	2428.1	0.7	2.5	<.5
R06-14	97.60	100.60	3.00	4701	1042.1	4.6	0.8	<.5
R06-14	100.60	102.90	2.30	4702	1790.4	0.7	1.1	1.4
R06-14	102.90	106.20	3.30	4839	980.7	0.3	0.6	<.5
R06-14	106.20	109.20	3.00	4703	139.2	0.6	<.1	<.5
R06-14	109.20	111.90	2.70	4704	156.3	2.0	<.1	<.5
R06-14	111.90	114.90	3.00	4840	149.3	0.4	<.1	<.5
R06-14	114.90	117.90	3.00	4705	233.6	0.3	0.1	0.5
R06-14	117.90	120.50	2.60	4706	135.2	0.6	<.1	<.5
R06-14	120.50	122.00	1.50	4707	479.6	0.7	0.3	<.5
R06-14	122.00	124.10	2.10	4708	155.2	0.4	<.1	<.5
R06-14	124.10	127.10	3.00	4841	1666.6	0.8	1.0	<.5
R06-14	127.10	130.20	3.10	4842	271.5	0.2	0.2	<.5
R06-14	130.20	133.20	3.00	4843	259.0	0.8	0.2	<.5
R06-14	133.20	136.30	3.10	4844	484.3	10.6	0.3	<.5
R06-14	136.30	137.80	1.50	4845	314.7	2.0	0.2	<.5
R06-14	137.80	140.80	3.00	4709	241.9	1.2	0.1	0.6
R06-14	140.80	143.10	2.30	4710	186.9	0.5	0.1	<.5
R06-14	143.10	145.40	2.30	4846	556.9	0.2	0.3	<.5
R06-14	145.40	146.80	1.40	4847	383.8	0.7	0.2	<.5
R06-14	146.80	148.50	1.70	4711	174.2	0.6	<.1	<.5
R06-14	148.50	151.50	3.00	4712	13.8	0.4	<.1	<.5
R06-14	151.50	154.50	3.00	4713	74.9	0.5	<.1	<.5
R06-14	154.50	157.50	3.00	4714	75.2	1.2	<.1	<.5
R06-14	157.50	160.50	3.00	4715	387.2	1.5	0.2	<.5
R06-14	160.50	162.50	2.00	4716	782.2	0.4	0.5	<.5
R06-14	162.50	163.70	1.20	4717	402.8	1.0	0.3	<.5
R06-14	163.70	166.80	3.10	4848	105.0	0.4	<.1	<.5
R06-14	166.80	168.30	1.50	4718	21.9	0.3	<.1	<.5

# Appendix 1

## Drill Core Logs Drill Core Recovery Logs

Rateria Property 2006

Core Log Coding Description

<b>Mineralization</b>	bo	bornite	
	cpy	chalcopyrite	v = % in vein
	cc	chalcocite	d = % disseminated
	mal	malachite	.1 = trace
	py	pyrite	Note:
	mag	magnetite	Mineralization % is per sample interval.
	mo	molybdenite	
	spec	specular hematite	

<b>Alteration</b>	<b>Assemblage</b>		
	L1	Silicic	qtz+/-sx;w/haloes of ser/musc, fspar w/plag
	L2	Potassic (inc. hydro bio)	kspar; after ser. plag, musc; secondary bio
	L3	Phyllic (vein sericitic)	musc-ser in qtz veins; selvages; fract fill
	L4	Argillic	perv. kaol. + ser.; w/qtz, calc.
	L5	Propylitic	chlor, epid, carb,+/- py, spec.
	L6	Hematitic	Fe oxidation: hematite
	<b>Extent</b>		<b>Intensity</b>
	1	Confined to fractures/veins (local)	1 subtle
	2	In and around fractures/veins	2 weak
	3	Penetrated into rock, but some of rock remains unaltered (patchy)	3 moderate
	4	All of the rock is altered, but fabric remains (pervasive)	4 strong
	5	Fabric is obliterated by alteration (ubiquitous)	5 intense

<b>Veining</b>	<b>Assemblage</b>		
	V1	Quartz	vein/m
	V2	Carbonate	47.6mm=diameter of NQ core
	V3	Gypsum	

<b>Fracturing</b>	<b>Intensity</b>		
	0	none	
	1	weak	1 fracture per meter
	2	moderate	2-6 fractures per meter
	3	strong	~1 fracture per 10cm
	4	intense	> 1 fracture per cm
	5	jigsaw breccia	
	6	rotated breccia	
7	chaotic breccia		

<b>Structures</b>	Ft	Fault angle to core axis	Fr1	Primary fracture angle to core axis
	Sl	Slickenside angle on fault/shear pl:	Fr2	Secondary fracture angle to core axis
	CU	Upper contact angle to core axis	Fr3	Tertiary fracture angle to core axis
	CL	Lower contact angle to core axis		
	V1	Primary vein angle to core axis		
	V2	Secondary vein angle to core axis		
	V3	Tertiary vein angle to core axis		

Hole ID	Easting (M)	Northing (M)	Elev (M)	Distance (M)	From (M)	To (M)	Azimuth	Dip
R06-01	645337	5582440	1565	273.4	0	273.4	0	-90
R06-02	645320	5582460	1565	187.45	0	187.45	300	-45
R06-03	645485.5	5582674	1575	99.67	0	99.67	0	-90
R06-04	645805	5582457	1570	142.4	0	142.4	0	-90
R06-05	645945	5582462	1570	129.9	0	129.9	0	-90
R06-06	645650	5582250	1565	173.8	0	173.8	135	-50
R06-07	646180	5582478	1568	108.2	0	108.2	0	-90
R06-08	645810	5582620	1570	204	0	204	0	-90
R06-09	645952	5582763	1570	168.9	0	168.9	0	-90
R06-10	646840	5582488	1515	216.5	0	216.5	0	-90
R06-11	645840	5582284	1568	147.75	0	147.75	0	-90
R06-12	646455	5582705	1540	175.9	0	175.9	0	-90
R06-13	646345	5582480	1550	203.3	0	203.3	0	-90
R06-14	645810	5582615	1574	168.3	0	168.3	0	-47
				<u>2399.47</u>				

Metres

From (m)	To (m)	Description	Lith	Mineralization			Alteration						Structural Angles						
				cpy-v	mag-d	mag-v	L1 Qtz	L2 K-fel	L3-ser	L4 Arg	L5 Chl-ep	L6 Hem	CL	V1	V2	V3			
0.00	12.20	Overburden; no recovery	ob																
12.20	14.33	Rubble	rb				42												
		Quartz diorite; minor kaolinite in fractures and pervasive weak chlorite after bio and hornblende; weak pervasive silicification	qd				42			12	41								
14.33	15.85																		
15.85	17.38	Same as above	qd				42				41								
17.38	18.90	Minor Fe staining and Qtz veining; 2.5 inch kaolinite seam @	qd				42,11				41,12								
18.90	20.43	Minor kaolinite, Fe staining	qd				42				41,11								
20.43	21.95	Same as above	qd				42				41								
		At 76 ft: minor quartz fracture fill; 76 to 81 ft: kspars, chloritic, kaolinite altertn, envelope to gouge (kspars only at lower contact); minor disse mag.	qd		0.1		42,11		23	23	41,23								
21.95	23.48	Minor perv. chloritic and silic altered qd	qd				42				41								
23.48	25.00	Same as above	qd				42				41								
25.00	26.52	Same as above	qd				42				41								
26.52	28.05	Same as above	qd				42				41								
		At 94ft: 10 in chloritic alteration associated w/ approx. 1cm Qtz veinlet. Core broken	qd				42				24								
28.05	29.57	Same as above	qd				42				41								
29.57	30.00	Chloritized zone: locally intense zones of chloritization, favouring fspars. At 110ft 2/3 inch Qtz-mag vein 45 deg to CA	qd			0.1	42				41,13								
30.00	33.84																		45
33.84	35.67	Relatively unaltered qd	qd				42				32								
35.67	36.89	Same host lithology: weak pervasive chlorite	qd				42				41								
36.89	38.72	approx 40% recovery; strongly chloritized gouge zones	qd				42				24								
38.72	41.77	Same as above: 30% recovery moderate patchy chloritization	qd				42				33								
		Broken core; moderate patchy chlorite w/ epidote after horn. At 141ft 1/4 in Qtz 45 to CA assoc. w/gouge and moderate chloritization	qd				42				23								
41.77	43.29	Patchy weak chloritization; at 144.2 ft Qtz vein w/hem (45 deg to CA) intense chloritic envelop	qd				42				32,24								45
43.29	44.82	Fairly fresh host; weak patchy chlorite	qd				42				32								
44.82	46.34	At 155 ft localized wk zone of chloritic alt	qd				42				41, 32								
46.34	47.26	Patchy weak chloritization	qd				42				32								
47.26	49.39	Patchy weak chloritic alt.	qd				42				32								
49.39	50.91	Pervasive, moderate intensity chlorite	qd				42				43								
50.91	52.44	Moderate pervasive chloritic alt	qd				42				43								
52.44	53.20	Less intense, patchy subtle chlorite; 176 to 177ft: patchy	qd				42			32	31								
53.20	53.96	Pervasive weak chloritization, and patchy bleached fspars	qd				42			32	32								
53.96	55.49	Banded hematitic alteration	qd				42				41								
55.49	56.25	Moderate, pervasive chloritization	qd				42				43								
56.25	56.71	Subtle, pervasive chloritization	qd				42				41								
56.71	57.01	Subtle pervasive chloritization	qd				42				41								
57.01	58.23	Weak to moderate patchy chloritic alteration	qd				42				33								
58.23	58.84	Weak to moderate pervasive Fe alteration in core	qd				42				41	43							
58.84	61.59	Patchy iron alteration	qd				42				41	32							
		Subtle pervasive chloritic alteration w/ patches of weak iron alteration; rock is more competent	qd				42				41	32							
61.59	63.11	Same as above	qd				42				41	32							
63.11	64.63	Clay and chlorite filled ?gouge zone at 213 ft; major core loss, 50% core loss; at 216 ft 10 in chlorite band	qd				42			25	25								
64.63	66.16	relatively unaltered host; pervasive 1 chlorite	qd				42												
66.16	67.68	At 225: patchy 2-3 chlorite alt.; at 227 to 232 gouge zone w/ Qtz vein (1 ft long min); 227 to 230 gouge, moderate (3) chloritization	qd				42												
67.68	69.21	50% recov. Mod 3 perv chlor	qd				42												
69.21	70.73	increasing levels of Fe alter. (3) pervasive 234 ft; narrow Qtz band,	qd				42												
70.73	72.26	3 Fe alteration to 243	qd				42												90
72.26	73.78	.5 in white bull Qtz vein w/hematite perpendicular to CA; spec sx, too small to identify. Chlorite 42	qd				42												
73.78	74.09	Increased Qtz veining (.25 in, various orientations, inc. perp);	qd				42												
74.09	75.30	42 chlorite	qd				42												
		42 chlorite, some small 45+ Qtz veinlets w/ assoc. blebs mag.	qd				42												
75.30	76.83	Getting some visible disse mag	qd				42												
76.83	78.35	32 to 33 chlorite alt.	qd				42												
78.35	79.88	41 chlorite; at 259 ft gouge zone (50% recov)	qd				42												
79.88	81.40	41 chlorite; competent core	qd				42												
81.40	82.93	32 chlorite; 271 to 272 ft: more altered gouge zone; minor Qtz veinlets (45 deg to CA), w/ associated Fe staining	qd				42												45
82.93	83.23						42												
83.23	84.45						42												
84.45	85.98	Variable 31 to 32 chlor; small Qtz vein w/mag					42												
85.98	87.50	286 1 inch Qtz vein w/mag w/ tr cpy 45 to core			1.0		42												
		42 chlorite; 41 silica; 2mm wide Qtz vein w/kspars envelope (at 290 ft) 45 to CA.					42												
87.50	89.02	42 chlorite, 293 to 297 fspars bleaching to clay? Accomp. By Fe staining (32), also some epidote (31). At 296 minor tr disse cpy					42												
89.02	90.55	41 Chlorite; fairly fresh unaltered. At 301 beginning to have fspars bleaching, to clay?					42												
90.55	92.07	41 Chlorite, same bleaching of fspars as previous; at 306 to 307 broken core, containing 3mm size bleb of cpy			1.0		42												
92.07	93.60	41 chloritic; minor increase in bio and horn.					42												
93.60	95.12	41 chlorite; fairly unaltered core; 312 to 322 ft: minor epidote along fractures 45 deg to core. Increase in Fe staining					42												
95.12	99.70																		





From (m)	To (m)	Description	Lith	Mineralization			Alteration						Structural Angles					
				cpy-v	mag-d	mag-v	L1 Qtz	L2 K-fed	L3-ser	L4 Arg	L5 Chl-ep	L6 Hem	CL	V1	V2	V3		
227.74	229.27	41 chlorite; series of fractures 45 to 60 deg to CA, opposing				42												
229.27	230.79	At 755 to 757 few mm-scale qtz filled fractured; 31 chlorite				42												
230.79	232.32	41 chlorite; At 762ft, three 45 deg to CA fe-stained fractures				42												
232.32	233.84	At 765.5ft, 4 minute qtz veinlets ranging from 45 to 60 deg to				42				1								
233.84	235.37	At 767.8, minute qtz fracture w/ chloritic envelope; 41 chlorite;		0.1		42				1								
235.37	236.89	EOH																

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
0.00	12.19			0%	
12.19	14.33	0.40	0.00	19%	0.00
14.33	17.37	3.60	0.94	118%	0.26
17.37	20.42	3.10	0.54	102%	0.17
20.42	23.47	3.10	0.43	102%	0.14
23.47	26.52	2.60	0.28	85%	0.11
26.52	29.57	3.40	0.41	112%	0.12
29.57	32.61	2.70	0.60	89%	0.22
32.61	35.66	3.07	1.22	101%	0.40
35.66	38.71	2.29	0.42	75%	0.18
38.71	41.76	0.87	0.22	29%	0.25
41.76	44.81	3.23	0.00	106%	0.00
44.81	47.85	2.96	0.25	97%	0.08
47.85	50.90	3.08	1.21	101%	0.39
50.90	53.95	3.06	0.88	100%	0.29
53.95	57.00	3.26	1.63	107%	0.50
57.00	60.05	3.40	1.05	112%	0.31
60.05	63.09	2.60	1.10	85%	0.42
63.09	66.14	3.14	6.25	103%	1.99
66.14	69.19	3.38	1.72	111%	0.51
69.19	72.24	1.73	0.21	57%	0.12
72.24	75.29	3.84	0.99	126%	0.26
75.29	78.33	3.14	0.62	103%	0.20
78.33	81.38	2.80	1.41	92%	0.50
81.38	84.43	3.22	0.67	106%	0.21
84.43	87.48	3.06	2.01	100%	0.66
87.48	90.53	3.11	1.23	102%	0.39
90.53	93.57	3.30	1.13	108%	0.34
93.57	96.62		0.93	100%	
96.62	99.67		2.33	100%	
99.67	102.72		1.03	100%	
102.72	105.77		1.06	100%	
105.77	108.81		0.60	100%	
108.81	111.86		1.32	100%	
111.86	114.91		1.29	95%	
114.91	117.96		1.27	100%	
117.96	121.01		1.27	100%	
121.01	124.06		1.37	100%	
124.06	127.10			100%	
127.10	130.15		0.71	100%	
130.15	133.20		0.21	80%	
133.20	136.25		1.07	100%	
136.25	139.30		1.92	100%	
139.30	142.34		1.45	100%	
142.34	145.39		0.65	80%	
145.39	148.44		0.25	90%	
148.44	151.49		0.69	100%	
151.49	154.54		0.46	95%	
154.54	157.58		0.81	100%	
157.58	160.63		1.20	100%	

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
160.63	163.68		0.88	100%	
163.68	166.73		2.10	100%	
166.73	169.78		0.73	100%	
169.78	172.82		0.49	100%	
172.82	175.87		0.85	100%	
175.87	178.92		0.88	100%	
178.92	181.97		2.30	100%	
181.97	185.02		1.48	100%	
185.02	188.06		1.47	100%	
188.06	191.11		0.91	100%	
191.11	194.16		0.95	100%	
194.16	197.21		0.16	95%	
197.21	200.26		0.58	95%	
200.26	203.30		1.80	100%	
203.30	206.35		2.42	100%	
206.35	209.40		2.31	100%	
209.40	212.45		2.20	100%	
212.45	215.50		1.62	100%	
215.50	218.54		1.00	100%	
218.54	221.59		1.35	100%	
221.59	224.64		1.90	100%	
224.64	227.69		2.47	100%	
227.69	230.74		1.94	100%	
230.74	233.78		1.61	100%	
233.78	236.83		1.06	90%	

From (m)	To (m)	Sample	Description	Mineralization				Alteration									
				cha-d	chal-v	mag-d	mag-v	sil	pot	musc after bio	kao	prop	fe				
0.00	15.24		no recovery														
15.24	17.52		overburden														
17.52	17.29		Silicified green-tan pink intrusive, cut by regular mm -scale qtz clay filled fractures at 35 to 45 deg to CA orientation; qtz in fractures is comminuted; faulting? Silica obliterates most textures; observable subtle to weak pervasive chlorite, strong pervasive and fracture filling silicification. Phenocrysts limited to unidentifiable mafic (biotite, horn?) minerals, altering to chlorite; also mm-scale clots of hematite (after mag?). Minor limonitic staining of fracture surfaces.			tr		44				22	31	31			
17.29			Fault; clay qtz + minor limonite rubble zone; surrounded by zone of large qtz eye development					24				23					11
17.29	17.44		Silicified green-tan pink intrusive with mm sized qtz eyes			tr		44				21	31	31			
17.44	18.48	4037	gouge zone, as above; 4 cm wide					24				24	23	21			
18.48	19.00	4037	20cm mod kao-K-spar alt local fracture zone; minor musc repl; minor Fe; minor malachite		0.5				32			32	32	31			
19.00	20.00		Low recovery; 19.5cm @ 19.5 clay qtz						41					42			41
20.00	21.00		Broken core fragments														
21.00	22.00		Broken core fragments														
22.00	23.00		Broken core fragments														
23.00	24.00		localized K-spar flooding;					43	22					42			
24.00	25.00		K-spar vienlets & flooding; Fe stained qtz veinlets 45 deg erratic;					43				43					41
25.00	26.00		25.5 clay gorge; broken core; dis limonite; 25.8 increased k-spar alt									42	42				
26.00	27.00		Lg chl-bio phenos; weak kao alt					42	41	41	41						
27.00	28.00	4038	27.5-27.65 K-sap envelope; 27.65 increased chl-qtz					43				33	42	41			
28.00	29.00		Same as above						32					42			
29.00	30.00		29.75 6 cm clay-qtz gouge 45 deg						32			42	42				
30.00	31.00	4039	Increased epidote/chl; K-spar qtz veinlets +50 deg					42	22			21	33				
31.00	32.00		Same as above 31.4; clay-epidote 34.4 to 30.8;					41						32			
32.00	33.00		Variable weak to mod prop alt & weak K-spar; random clay fracture fill @ 45 deg					41				12	32				
33.00	34.00		Same as above					41	42			31	42				
34.00	35.00		Same as above					41	42			31	42				
35.00	36.00		Same as above					41	42			31	42				
36.00	37.00		Same as above					41	42			31	42	12			
37.00	38.00	4040	Same as above; plus limonite fractures @ 45-60 deg					41	42			31	42	11			
38.00	39.00		Sample as above; less limonite					41	42			31	42				
39.00	40.00		Same as above ; clay fill veinlets @ 45-60 deg					41	42			31	42				
40.00	41.00		Same as previous, minor increase in clay					41	42			32	42				
41.00	42.00		Fairly fresh intrusive w/ Fe? plus qtz staining; broken core. At 41.4, intense clay alteration. Zones of increased propylitic, to 42.					41	42			33	42	41			
42.00	43.00		Broke core w/ limonitic staining; v. poor core recovery.					41	42			32	42	41			
43.00	44.00	4041	30% recovery; interval is clay qtz gouge					24				24					
44.00	45.00	4041	At 44.0 to 44.9, envelope of limonitic staining. Series of chloritic fractures at 50 deg to CA					42						22			
45.00	46.00		Broken core					43						41			
46.00	47.00		At 46.2, 25 cm clay filled fracture, 50 to CA, w/ limonitic lining at both contacts; 46.6 to 47.0 decrease in alteration					42				11	42	21			

From (m)	To (m)	Sample	Description	Mineralization				Alteration						
				cha-d	chal-v	mag-d	mag-v	sil	pot	musc after bio	kao	prop	fe	
47.00	48.00		Low chlorite qtz alteration; at 47.85 pervasive epidote					41			41, 23	41		
48.00	49.00		To 48.7, continuing pervasive epidote; at 48.7, envelope of clay-qtz-fe. At 48.8 to 48.9 increase in chlorite					22			22	43	22	
49.00	50.00		Moderately chloritized host					42			41	43		
50.00	51.00		At 50.0 to 51.0 clay pebbly qtz gouge zone orientated at 50 deg to CA, w/ limonite on fractures. 50 percent recovery					24			24	42	12	
51.00	52.00	4042	Same intrusive rock w/ Fe-qtz, qtz-chlorite alteration ranging from low to mod intensity; low to moderate pervasive kaol replacement of ?fspar, positively correlated with increases in qtz-chlorite.					42			31	42	42	
52.00	53.00		52.0 to 52.5 broken core					41			31	42	41	
53.00	54.00		Same as above; at 54.0 to 54.5, intense brown Fe alteration					41			33	32	34	
54.00	55.00	4043	Same as above					41			33	32	33	
55.00	56.00	4043	Broken core and gouge to 57.4m; accompanied by repeated 45 to 60 deg to CA qtz veinlets and by moderate chlorite and quartz (pervasive) alteration.					43,13			33	43		
56.00	57.00	4043	Same as above; gouge ends at 57.4. At 57.4 to 57.5 increased qtz (eyes - mm scale), increased chlorite content					43				44		
57.00	58.00		Same as above					43				44		
58.00	59.00	4044	Random qtz-kaol? Veinlets. 58 to 58.8 incresed chlorite-silica; at 58.8 return to low levels of alteration					12,43			12	44		
59.00	60.00		Same intrusive rock w/ Fe-qtz, qtz-chlorite alteration ranging from low to mod intensity; low to moderate pervasive kaol replacement of ?fspar (bleaching), positively correlated with increases in qtz-chlorite. Introduction of large cm-sized bio phenos in less altered core.					42			32	42	41	
60.00	61.00		Same as above					42			32	42	41	
61.00	62.00		Same as above					42			32	42	41	
62.00	63.00		Same as above					42			32	42	41	
63.00	64.00		Same as above					42			32	42	41	
64.00	65.00		Same as above					42			32	42	41	
65.00	66.00		Same as above					42			32	42	41	
66.00	67.00	4045	Same as above					42			32	42	41	
67.00	68.00	4045	67 to 67.6: 2 cm wide qtz vein at 40 deg to CA, w/ 1cm wide chlorite-hematite envelope. Minor musc after bio; Followed by approx 2cm wide gouge.					42			32	42, 14	14	
68.00	69.00	4045	At 68.5, gouge zone; poor recovery. Slight increase in clay and chlorite; broken core at 68.3.					23,42			23,33	43	41	
69.00	70.00		Relatively unaltered					42			32	42	41	
70.00	71.00		70 to 72, poor recovery: 40 percent					42			32	43	41	
71.00	72.00	4046	Slight increase in chlorite					42			32	43	41	
72.00	73.00	4046	Same as above					42			32	43	41	
73.00	74.00		Decrease in chloritic alteration					42			32	41	41	
74.00	75.00		Same as above					42			32	41	41	
75.00	76.00		Same as above					42			32	41	41	
76.00	77.00		Same as above					42			32	41	41	
77.00	78.00		Same as above					42			32	41	41	
78.00	79.00		Same as above					42			32	41	41	
80.00	81.00		Same as above					42			32	41	41	
81.00	82.00	4047	Same as above					42			32	41	41	

From (m)	To (m)	Sample	Description	Mineralization				Alteration						
				cha-d	chal-v	mag-d	mag-v	sil	pot	musc after bio	kao	prop	fe	
83.00	84.00		Same as above					42				32	41	41
85.00	86.00		Same as above					42				32	41	41
86.00	87.00		Same as above					42				32	41	41
87.00	88.00		Same as above					42				32	41	41
88.00	89.00		Same as above					42				32	41	41
89.00	90.00		Same as above					42				32	41	41
90.00	91.00		Same as above					42				32	41	41
91.00	92.00		Same as above, w/ patches of chlorite and clay . Clay after fspar					42				33	32	41
92.00	93.00		Same as above					42				33	32	41
93.00	94.00		At 93.8, increase in silica and propylitic alteration					43				33	33	41
94.00	95.00		94.0 to 94.4: small gouge zone, 45 deg to CA, 2cm wide; followed by broken core					42				32	32	42
95.00	96.00		Blotchy Fe alteration (pink, interstitial--looks like kspar)					42				31	32	32
96.00	97.00		Weak fracturing at 45 to CA, lined w/ chlorite					43				31	22,33	42
97.00	98.00	4051	Broken core, still in increased chlorite; slight increase in pervasive iron staining					43				31	33	43
98.00	99.00	4051	Same as above, w/ minor increase in patchy epidote					43				31	33, 31	
99.00	100.00	4051	Broken core; bleached qtz-clay-chlorite w/ pink hematite gouge zone at 99.67 to 103. Followed by more competent core w/increase in pervasive chlorite/Fe; minor mm-scale musc.					23,43		41	24	43	22,42	
100.00	101.00		Same as above					23,43		41	24	43	22,42	
101.00	102.00		Same as above					23,43		41	24	43	22,42	
102.00	103.00		Same as above					23,43		41	24	43	22,42	
103.00	104.00		At 103.6, end of gouge zone; return to more competent host					43				31	32	32
104.00	105.00		Competant host: patchy chlorite and fe staining to 105.5m					43				31	32	32
105.00	106.00	4052	Increase in pervasive chlorite and silica; fspar replaced by clay. Minor musc after bio.					43		41	42,24	43	41	
106.00	107.00	4053	Same as above; 10 cm gouge at 106.5					23,43		41	24	43	41	
107.00	108.00		Same as above					23,43		41	24	43	41	
108.00	109.00	4054	Broken core					43		41		43	41	
109.00	110.00	4055	Slight increase in musc. At 109.4 to 110.4 gouge: clay, qtz, chlorite, fe at 40 deg to CA					23		22	24	23	22	
110.00	111.00	4056	Competant host w/ qtz-chlorite alteration 110.4 to 111.0; 110.9 to 111.0: small gouge					43				41	43	41
111.00	112.00		Gouge at 111.4 to 111.7 at 50 deg to CA; followed by broken core to 112					23,42				42	21	
112.00	113.00		112 to 114.5: relatively unaltered host; some kao after fspar and fe stained qtz. Moderate fracturing 30 to 45 deg to CA					42				42	42	42
113.00	114.00		Same as above					42				42	42	42
114.50	115.00		Slight increase in silica and chlorite					43				41	43	42
115.00	116.00	4057	Same as above					43				41	43	42
116.00	117.00	4057	Same as above					43				41	43	42
117.00	118.00	4057	117.96, small gouge zone					43				41	43	42
118.00	119.00		118 to 120.0: 50% core loss. Gradual increase in bleaching of core. 118.5 to 120.0: gouge zone w/ qtz, clay, Fe.					23				24	32	22
119.00	120.00		Same as above					23				24	32	22
120.00	121.00	4058	Same as above, slightly less bleached					23				23	32	22

From (m)	To (m)	Sample	Description	Mineralization				Alteration					
				cha-d	chal-v	mag-d	mag-v	sil	pot	musc after bio	kao	prop	fe
121.00	122.00		From 121 to 124: 75% core loss. Broken core					43			31	43	41
122.00	123.00		Same as above					43			31	43	41
123.00	124.00		Same as above					43			31	43	41
124.00	125.00		Broken and crushed core					43			31	43	41
125.00	126.00		Same as above					43			31	43	41
126.00	127.00		Same as above					43			31	43	41
127.00	128.00		127 to 130.0m: moderate to intense bleaching, less than 25 % core recovery.					43			33	43	41
128.00	129.00		Same as above					43			33	43	41
130.00	131.00	4059	Series of slickensided shears to 133: gouge, clay, qtz, fe staining. Very poor recovery, approx 30%					23			24	23	22
131.00	132.00	4059	Same as above					23			24	23	22
132.00	133.00	4059	Same as above					23			24	23	22
133.00	134.00		133.0 to 135.0: v. poor recovery: 20 %. Broken, relatively unaltered core					42			32	41	41
134.00	135.00		Same as above					42			32	41	41
135.00	136.00		Same as above to 135.5. At 135.5 m: increase in qtz, chlorite to moderate in intensity					43			32	43	41
136.00	137.00	4060	Same, w/ slight increase in fe staining and clay after fspar. Locally moderate patches of epidote. Core very competent					43			33	33	42
137.00	138.00		Decrease in alteration; local epidote to 138.55					42			32	32	41
138.00	139.00		138.4 to 138.55: very small qtz veins (mm scale) at 30 deg to CA., otherwise relatively unaltered core					42, 12			31	41	41
139.00	140.00		Same intrusive rock w/ Fe-qtz, qtz-chlorite alteration ranging from low to mod intensity; low to moderate pervasive kaol replacement of ?fspar (bleaching), positively correlated with increases in qtz-chlorite. Introduction of large cm-sized bio phenos in less altered core.					42			42	41	41
140.00	141.00		Same as above					42			42	41	41
141.00	142.00		Same as above					42			42	41	41
142.00	143.00		Same as above					42			42	41	41
143.00	144.00		Same as above					42			42	41	41
144.00	145.00		Same as above					42			42	41	41
145.00	146.00		Same as above; 145.4-145.8 slight increase in propylitic alteration; mm scale qtz veinlet					42			42	42	41
146.00	147.00		Same as above					42			42	42	41
147.00	148.00		Same as above; At 147.4m small kspar dikelett					42			42	42	41
148.00	149.00	4061	Same as above					42			42	42	41
149.00	150.00	4061	Same as above; at 150.0m to 154.6m, slight increase in propylitic alteration					42			42	42	41
150.00	151.00	4061	Same as above					42			42	42	41
151.00	152.00		Same as above					42			42	42	41
152.00	153.00		Same as above					42			42	42	41
153.00	154.00		Same as above					42			42	42	41
154.00	155.00		Same as above					42			42	41	42
155.00	156.00		Same as above					42			42	41	42
156.00	157.00		Same as above; 156.3 6.0 cm wide sandy gouge zone					42			42	41	42
157.00	158.00		Same as above; 157.,4-158.0 series of closely spaced 20 deg to CA fractures w/ limonite coating					42			42	41	42
158.00	159.00		Same as above					42			42	41	42

From (m)	To (m)	Sample	Description	Mineralization				Alteration					
				cha-d	chal-v	mag-d	mag-v	sil	pot	musc after bio	kao	prop	fe
159.00	160.00		Same as above					42			42	41	42
160.00	161.00		Same as above					42			42	41	42
161.00	162.00		Same as above; slight increase in chlorite and epidote; minor muscovite					42			42	42	42
162.00	163.00		Same as above					42			42	41	42
163.00	164.00		Same as above, with intervals of increased pervasive propylitic alteration					42			42	42	42
164.00	165.00		Same as above					42			42	42	42
165.00	166.00		Same as above					42			42	42	42
166.00	167.00		Same as above					42			42	42	42
167.00	168.00		Same as above; at 167.7 to 168.0: associated epidote (w/chlorite)					42			42	42	42
168.00	169.00		Same as above					42			42	41	42
169.00	170.00	4062	Same as above					42			42	41	42
170.00	171.00	4062	Same as above; 170 to 170.4 increase in chlorite and epidote					42			42	42	42
171.00	172.00	4062	Same as above; 172.4 0.5 cm wide qtz vein w/ musc border; no sulphides					42		11	42	42	42
172.00	173.00		Same as above					42			42	42	42
173.00	174.00		Same as above					42			42	42	42
174.00	175.00		Same as above					42			42	42	42
175.00	176.00		Same as above; propylitic alteration peripheral to 30 deg to C <sub>1</sub> fractures.					42			42	22	42
176.00	177.00		Same as above					42			42	22	42
177.00	178.00		Same as above					42			42	22	42
178.00	179.00		Same as above					42			42	22	42
179.00	180.00	4063	Same as above					42			42	22	42
180.00	181.00	4063	Same as above					42			42	22	42
181.00	182.00	4063	Same as above					42			42	22	42
182.00	183.00		Same as above					42			42	22	42
183.00	184.00		Same as above					42			42	22	42
184.00	185.00		Same as above					42			42	22	42
185.00	186.00		Same as above					42			42	22	42
186.00	187.45		Same as above					42			42	22	42
			End of hole										



From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
0.00	15.24	0.00	0.00	0%	
15.24	17.37	2.13		100%	0.00
17.37	23.47	3.25	0.85	53%	0.14
23.47	26.52	3.20	1.10	105%	0.36
26.52	29.57	3.12	1.06	102%	0.35
29.57	32.61	3.09	1.76	102%	0.58
32.61	35.66	3.12	1.16	102%	0.38
35.66	38.71	3.18	1.12	104%	0.37
38.71	41.76	3.09	0.50	101%	0.16
41.76	44.81	2.25	0.24	74%	0.08
44.81	47.85	3.28	0.83	108%	0.27
47.85	50.90	2.66	1.27	87%	0.42
50.90	53.95	3.15	1.25	103%	0.41
53.95	57.00	2.80	0.84	92%	0.28
57.00	60.05	3.16	2.20	104%	0.72
60.05	63.09	3.09	2.65	102%	0.87
63.09	66.14	3.15	2.23	103%	0.73
66.14	68.28	2.95	1.53	138%	0.71
68.28	72.24	2.62	1.09	66%	0.28
72.24	75.29	3.18	1.38	104%	0.45
75.29	78.33	3.05	2.11	100%	0.69
78.33	81.38	3.09	2.33	101%	0.76
81.38	84.43	3.02	2.76	99%	0.90
84.43	87.48	3.24	2.73	106%	0.90
87.48	90.53				0.00
90.53	93.57	3.12	2.19	103%	0.72
93.57	96.62	3.10	1.00	102%	0.33
96.62	99.67	2.99	0.21	98%	0.07
99.67	102.72	2.90	1.96	95%	0.64
102.72	105.77	3.06	0.88	100%	0.29
105.77	108.81	2.77	0.31	91%	0.10
108.81	111.86	3.10	0.70	102%	0.23
111.86	114.91	3.50	0.74	115%	0.24
114.91	117.96		0.00	0.00	0.00
117.96	121.01		0.00	50.00	0.00
121.01	124.06		0.00	30.00	0.00
124.06	127.10		0.00	40.00	0.00
127.10	130.15		0.00	24.00	0.00
130.15	133.20		0.00	52.00	0.00
133.20	136.25		0.27	50.00	0.09
136.25	139.30		2.57	50.00	0.84
139.30	142.34				
142.34	145.39	3.05	2.38	100%	0.78
145.39	148.44	3.05	2.40	100%	0.79
148.44	151.49	3.05	1.78	100%	0.58
151.49	154.54	2.95	1.92	97%	0.63
154.54	157.58	3.04	1.47	100%	0.48
157.58	160.63	3.05	1.78	100%	0.58
160.63	163.68	3.05	1.62	100%	0.53
163.68	166.73	3.05	1.53	100%	0.50

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
166.73	169.78	3.05	1.38	100%	0.45
169.78	172.82	3.04	1.47	100%	0.48
172.82	175.87	3.05	1.20	100%	0.39
175.87	178.92	3.05	1.58	100%	0.52
178.92	181.97	2.80	0.70	92%	0.23
181.97	185.02	3.05	1.39	100%	0.46
185.02	187.45	2.23	1.30	92%	0.53

From (m)	To (m)	Sample No.	Description	Alteration								
				sil	pot	ser	musc	clay	iron	carb	chlor	
0.00	21.34		Overburden: no recovery									
21.34	22.00		Med grained quartz-feldspar biotite-hornblende phyric intrusive. Quartz crystals are anhedral and transparent, mm scale in size; feldspar consists of sub to euhedral mm-scale feldspar crystals; biotite is an to subhedral mm to cm sized crystals. Hornblende are sub to euhedral prisms, and less than 1 cm in size. Both hornblende and biotite are pervasively altered to chlorite.						41		41	
22.00	23.00		Relatively unaltered core, minor fracturing w/random orientations. Biotite phenocrysts are large: <=cm in size.						41		41	
23.00	24.00		Same as above						41		41	
24.00	25.00		Minor patchy sericite, rare chlorite microfracture			31			41		41	
25.00	26.00		Same as above; rare carbonate lining fracture						41	11	41	
26.00	27.00		Relatively unaltered core						41		41	
27.00	28.00		Intensively broken core from 27.15 to 27.60m: minor limonite						41		41	
28.00	29.00		Very slight increase in iron staining						42		41	
29.00	30.00		Intensively broken core from 29.00 to 29.60m; minor patchy sericite. Epidote in mm-scale veinlets.						41		41,11	
30.00	31.00		Minor qtz-carbonate +/-epidote-chlorite veinlets, mm scale, 30.95 at various orientations.	11					41	11	42,11	
31.00	32.00		Patchy alteration: slight elevations in sericite/epidote, chlorite and iron alteration.			31			32		32	
32.00	33.00		Same as previous			31			32		32	
33.00	34.00		Same as previous; epidote sericite carb in and around minor fractures			22		21	42	21	41	
34.00	35.00		Missing core: nor recovery									
35.00	36.00		35.0 to 35.6 missing core; no recovery. Qtz+/-carb veinlets at various orientations to mm in width; smeared hematite on fracture surface (45 deg to CA)						42	21	41	
36.00	37.00		Strongly fractured core at high angles (sub perpendicular). Minor patchy epidote and pervasive hematitic alteration lending a pink colour to the core.						43	42	32	
37.00	38.00		Strongly to intensively fractured core; no preferred orientation.Minor patchy epidote and pervasive hematitic alteration as above.							42	41,32	
38.00	39.00	4501	Short interval: major core loss. 38.0 to 38.71m: recovery less than 30%. Core is smashed and gravelly. At 38.71m, small gouge, w/ hematite clay on fault surface.					12	12,42		12	
39.00	40.00	4501	Significant core loss; strong local fracturing w/ patchy epidote and clay.			41		22	31	41	42	
40.00	41.00	4501	Decrease in fracturing; large chlorite after biotite phenocrysts, up to cm scale			31		21	41	21	32	
41.00	42.00	4502	Locally intense fracturing of core					12	41	41,12	41	
42.00	43.00	4502	42.17 to 42.80 intensively fractured/shattered core grading into silty/gravelly gouge					22	41	32	41	
43.00	44.00		Same as above					22	41	22	41	
44.00	45.00		44.8 to 45.00m: intensively fractured core grading into gouge. Sericite and chlorite haloes around mm scale shallow angled qtz fractures			21		22	42		22	
45.00	46.00		From 45.00 to 45.15 m: clayey, ductile to sandy gouge zone. Sandy fault gouge at 45.4 to 45.50m. Remainder of core competent and lightly altered			31		22	41		42	

From (m)	To (m)	Sample No.	Description	Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor
46.00	47.00		Chlorite filled microfracture at 46.08m, w/minor sericite halo. Remainder of core competent and less altered			21		21	41	21	41,12
47.00	48.00		Very minor sericitic haloes around sub parallel hairline qtz fractures. Biotite (and hornblende?) altering directly to muscovite; no chlorite			22	41		41	11	
48.00	49.00		At 48.90m: carbonate bearing ductile clayey gouge; slight increase in muscovite alteration. Fracturing at variable orientations: 35 to 60 deg to CA			22	42		41	22	11
49.00	50.00		Epidote and sericite in and around fractures; at 49.00m chlorite-carb clay gouge zone			41	41		41	41	11
50.00	51.00		Same as above; 51.48m: 2cm wide qtz -carb vein			41	41		41	21	11
51.00	52.00		Same as above			41	41		41	41,22	
52.00	53.00		At 52.01m, a 1 cm wide clay-sericite, minor carbonate gouge w/ qtz eyes. Weak 4cm envelope of epidote			32			41	12,41	
53.00	54.00		Same as above, patchy epidote & qtz, chl & carbonate veinlets	32		32			41	12,41	42
54.00	55.00		SAA, Downward chl alt increase, minor Fe on fractures, strongly broken core	32		32			41	12,41	43
55.00	56.00		SAA, strongly broken core					11			
56.00	57.00		Intensely broken core, carb and chl and quartz grain bearing gouge intervals, intensely bleached					34	31,11	41	43
57.00	58.00		Same as above					34	31,11	41	43
58.00	59.00		Same as above					34	31,11	41	43
59.00	60.00		80% lost gouge zone, no primary, predominant chl, clay					34		42,11	43
60.00	61.00		SAA, primary texture 60.1 to 60.5					34	32	42,11	43
61.00	62.00		SAA, intensely broken core, decrease in gorge, patchy carb					41		31	42
62.00	63.00		SAA, intensely broken core, increase in gorge					34	32	32	42
63.00	64.00		SAA, intensely bleached					34	32	32	42
64.00	65.00		Intensely broken core, mod carb and low chl bearing gouge intervals,					34	31	33	41
65.00	66.00		Patches of primary textures, decreasingly broken core, from 65 to 65.4 m. Intensivelz broken core from 65.6 to 66 m.cm scale alteration halos bearing minor (blebby?) quartz and sericite.	21?		22		41	32	22	41
66.00	67.00		Decreasing alteration, decreasing fracturing, relatively fresh appearing material. Preferred orientation of fracture planes @ 50 to 60 deg to CA. Rhodochrosite and/ or K-spar bearing hairline veinlets.		11?	21		32,22	41	32	42
67.00	68.00		Increasing clay mineral bearing alteration, but primary textures remain. Up to > dm wide clayey-ductile to gravely, carbonate bearing gouge zones.	31?				33	31	11,31	31
68.00	69.00		Similar to previous, but increasing alteration, +/- obliterating primarz textures, grading into > dm wide clayey, ductile to fine gravely, carbonate bearing gouged zones with (blebby) quartz grains (primary, escaped alteration?)	32?		32		34	31	32	31
69.00	70.00		Strongly decreasing alteration (leaving fault zone). Approx 2 mm wide, orange rhodochrosite and/ or K-spar bearing veinlets are subparallel to CA and amount to %-range. Trace epidote.		11?	31		32	41	11,41	42
70.00	71.00		Same as previous. Strongly fractured subsections.		11?	31		31	41	21	42
71.00	72.00		SAA		11?	32		31	41	22	11,42

From (m)	To (m)	Sample No.	Description	Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlcr
72.00	73.00		SAA, but lack of a.m. orange veinlets. Trace patchz epidote. From 72.2 to 72.4 sub cm to 3 cm wide clayey, ductile, minor carbonate bearing, gouged zones.			31		42	41	31	42
73.00	74.00		SAA					32	41	11	42
74.00	75.00		SAA					31	41	11	42
75.00	76.00		SAA					31	41	11	42
76.00	77.00		Low level alteration, minor yet pervasive clay replacement of feldspar, qty porphyry, minor chl envelopes along fractures; minor carbonate					41	41	11	41
77.00	78.00		SAA					41	41	11	41
78.00	79.00		SAA					41	41	11	41
79.00	80.00		SAA					41	41	11	41
80.00	81.00		SAA, 8cm wide gouge zone and increased chl & sericite halo,			31		41	41	11	41, 33
81.00	82.00		SAA Core loss >90%					41	41	11	41
82.00	83.00		SAA Core loss >90%					41	41	11	41
83.00	84.00		SAA Core loss >90%					41	41	11	41
84.00	85.00		SSA, with slight increase in chl alt					41	41	11	42
85.00	86.00		SSA, with slight increase in chl alt					41	41	11	42
86.00	87.00		SSA, with slight increase in chl alt					41	41	11	42
87.00	88.00		SSA, with slight increase in chl alt					41	41	11	42
88.00	89.00		Fault zone; broken core; limonite stain in predominantly clay gouge;					43	42,33	11	42
89.00	90.00		Fault zone; broken core; limonite stain in predominantly clay gouge;					43	42,33	11	42
90.00	91.00		Low level alteration, minor yet pervasive clay replacement of feldspar, qty porphyry, minor chl envelopes along fractures;					41	41	11	42
91.00	92.00		SAA, small gouge zone; broken core; minor epidote					41	41	11	42
92.00	93.00		SAA Broken core					41	41	11	42
93.00	94.00		94.5 to 95.0m Fault zone; broken core; mod high limonite stain in predominantly clay gouge;					41, 33	33	11	41
94.00	95.00		Low level alteration, minor yet pervasive clay replacement of feldspar, qty porphyry, minor chl envelopes along fractures;					41	41	11	41
95.00	96.00		Low level alteration, minor yet pervasive clay replacement of feldspar, qty porphyry, minor chl envelopes along fractures; minor carbonate Possible actinolite or diopside					41	41	11	41
96.00	97.00		SSA, small chlorite slip at 96.9					41	41	11	41, 33
97.00	98.00		SAA					41	41	11	41
98.00	99.67		SAA, Minor Fe on slip					41	41	11	41
			END OF HOLE								

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
0.00	21.34	0.00	0.00	0%	
21.34	23.47	1.74	1.34	82%	0.77
23.47	26.52	2.76	1.67	90%	0.61
26.52	29.57	2.46	0.94	81%	0.38
29.57	32.61	2.84	0.36	93%	0.13
32.61	35.66	1.40	0.59	46%	0.42
35.66	38.71	1.37	0.12	45%	0.09
38.71	41.75	2.70	0.22	89%	0.08
41.75	44.80	2.62	0.90	86%	0.34
44.80	47.80	2.27	1.06	76%	0.47
47.80	50.90	3.10	1.75	100%	0.56



From (m)	To (m)	Sample	Description	Mineralization						Alteration							
				bor-d	bor-v	cpy-d	cpy-v	cha-d	cha-v	mag-v	sil	pot	ser	musc	clay	chlor	iron
48.00	49.00		Patchy alteration. At top of gouge zone, beginning w/ 47.95m: dense pink quartz w/patchy sericite zone 20 cm wide. Interval highly altered where primary textures are nearly obliterated. At 49.00m, 10 cm wide zone of gouge containing clay and cm-size qtz blebs. At 48.65m, bright red hematitic <del>specs--chalcocite??</del>							34		33		23	32	32	32,12
49.00	50.00		Interval of clay-qtz-carb gouge							23		23		23	22	21	22
50.00	51.00		same as above							23		23		23	22	21	22
51.00	52.00		Strongly fractured core; fractures to 45 deg to CA. Minor qtz carb veining, sub mm to 5mm in width. Primary textures significantly affected by alteration. Strongly qtz-sericitic. From 51.00 to 51.50 m disseminated hematite, appears to be after sulphide							43		43	42	23	32	32	22
52.00	53.00		Strongly to intensely fractured, grading to gouge. 52.00 to 52.50m, clay-blebby quartz gouge zone.							42		42	41	24	32	32	
53.00	54.00		Same as above; gouge zone at 53.25 to 53.35m.							42		42	41	24	32	32	
54.00	55.00		More competent core; alteration obliterating primary textures							42		42	41	11	42	41	
55.00	56.00		Same as above; 55.1 to 55.40m clay-qtz w/minor carb gouge							42		42	41	22	42	41	
56.00	57.00		Same as above; 56.20 to 56.30m clay-qtz w/ minor carb gouge zone							42		42	41	22	42	41	
57.00	58.00		Same as above; at 57.25m, localized zone of dissem. Hematite after chalcocite??At 57.90 m a 3cm clay-qtz ductile to fine gravel gouge.							42		42	41	22	42	41	
58.00	59.00		Increase in ser content, decrease in iron. Approx. 0.5% hem after? -disseminated.							42		33	41	22	42	31	
59.00	60.00		Same as above: hematitic specs are patchy. Lack of primary textures							42		32	41	21	32	31	31
60.00	61.00		Approx. 1% Disseminated mm-scale black, metallic, striated specs, hardness 4, with a dark grey-black streak. Associated w/hematitic halo. Interval has slight increase in muscovite. At 60.90m, cm wide qtz vein, very shallow angle to CA, and cut by mm-scale variable angle clay-carbonate filled fractures.							42		32	42	21	32	31	31
61.00	62.00		Strongly fractured core w/ up to 5 cm wide clay gouge zones between 61.10 to 61.30m. Black disseminated metallic minerals replaced by hematitic specs, approx. 2%. Interval also has increased quartz blebs.							43		42	41	23	42	42	31
62.00	63.00		Same as above, but minor gouge. Increase in disseminated hematitic specs (over 3%); fracturing in core has a preferred subparallel to CA orientation, with subordinate randomly oriented fractures							43		42	41	23	42	43	31
63.00	64.00		Same as above; at 63.30 and 64.0m 3mm wide hematite veinlet oriented at 30 deg to CA; decrease in disseminated hematite to 2%.							42,11		42	41	23	42	42,11	31
64.00	65.00		Core more competent; patchy alteration. At 64.30 and 64.60 approx 5mm wide qtz-carb veinlet, subperpendicular to CA.							42,11		33	41	21	32	32	21
65.00	66.00		More uniform alteration; muscovite content slightly increased.							42		43	42	11	42	32	21
66.00	67.00		At 66.34m: onset of severe sericite-clay alteration of a qtz rich zone; minor veinlet hematite and chlorite.							43		44		44	11	11	
67.00	68.00		Same as above							43		44		44	11	11	
68.00	69.00		Same as above							43		44		44	11	11	
69.00	70.00		Intensively fractured core, locally grading into clay-fine gravel fault gouge at 69.30- 69.7 m. At 69.90 cm a cm wide qtz carb veinlet at 55 deg to CA. Minor patchy epidote, and increased patchy chlorite.							42		41		23	43	41	22
70.00	71.00		Minor patchy epidote, increase in sericite at expense of chlorite. At 70.30m a cm wide qtz+- carb vein sub-perpendicular to core. Minor dissem specs of hematite							42		42	41	11	42	41	32
71.00	72.00		Increase in dissem hematite specs to 2% and as large as 1cm sized blebs. Core highly fractured.							42		42	41	11	42	41	32
72.00	73.00		Intensively fractured core, interspersed w/ subintervals of clay-fine gravelly gouge. Large anhedral cm scale chlorite (after bio-horn). This interval has an increased level of carbonate alteration.							42		42		21	42	41	42
73.00	74.00		Less fractured core; core is slightly less altered w/ local patches of iron staining.							41		42		21	42	11,32	42
74.00	75.00		Same as above, w/ gravelly clay-qtz gouge zone containing a cm sized carbonate vein at 74.60 to 74.90m; upper contact is at 40 deg to CA, lower is perpendicular to CA							41		32		22	42	32	42,22
75.00	76.00		First 30 cm very broken (shattered) core--alteration same as previous interval							41		32		22	41	32	42
76.00	77.00		Same as above; from 76.30 to 76.90 broken core grading locally in small subsections of clayey-fine gravel gouge, containing minor carbonate							41		32		22	41	32	41
77.00	78.00		Same as above, sericite becoming patchy. Trace amounts of disseminated hematite specs							31		32		21	32	42	42
78.00	79.00		78.40 3cm wide carbonate vein at 45 deg to CA; at 78.90m 2 cm wide carbonate-qtz vein perpendicular to CA.									32		42	42	31	12,42
79.00	80.00		Same as above; slight increase in clay alteration of fspar.									33		33	42	32	31
80.00	81.00		Strongly fractured core, w/ clay lining fractures.									41		33	42	42	41
81.00	82.00		From 81.40 to 81.80 highly fractured core w/ clay gouge; localized blebby qtz							31		31		41,24	42	41	



From (m)	To (m)	Sample	Description	Mineralization						Alteration							
				bor-d	bor-v	cpy-d	cpy-v	cha-d	chal-v	mag-v	sil	pot	ser	musc	clay	chlor	iron
82.00	83.00		Less fractured core;									31		33,12	42	41	22
83.00	84.00		From 83.40 to 83.90: fault zone, filled w/ clay gouge and minor qtz blebs							32		31		14,42	42	42	22
84.00	85.00		Fairly competent core, w/ localized zone(s) of intense clay alteration. Up to cm wide qtz veins +/- carb at steep angle to core							12		32		23	42	42	22
85.00	86.00		Patches of blebby quartz and chlorite. 85.15 to 85.30 m shattered core w/ small (2cm) clay fault gouge at steep angle to CA.							33		32		12,32	42	42	22
86.00	87.00		Introduction of patchy silicification							32		32		12,32	42	41	22
87.00	88.00		Same as above							32		32		12,32	42	41	22
88.00	89.00		88.0 to 88.6m highly altered zone w clay, carb, qtz blebs and patchy sericite							32		33		34	32	31	32
89.00	90.00		Relatively unaltered core, few fractures									31		41	41	41	11
90.00	91.00		From 90.70 to 91.26m: zone of patchy qtz, sericite, iron, chlorite alteration enveloping series of sub-perpendicular fractures, some lined w/ clay gouge							32		32			32,41	31,41	12
91.00	92.00		Patchy alteration ending at 91.26m, rest of interval relatively unaltered									41		42	41	41	
92.00	93.00		Relatively unaltered core, few fractures									31	41	42	41	41	
93.00	94.00		Same as above									31	41	42	41	41	
94.00	95.00		Same as above									31	41	42	41	41	
95.00	96.00		Same as above. Few perpendicular clay filled fractures w/chlorite-sericite +/-iron bearing cm scale alteration haloes. At 95.2m, perpendicular cm wide qtz vein.									31	41	42	41	41	
96.00	97.00		Interval is fractured and altered; fracture orientation is variable; carbonate lined parallel and 35 deg to CA fractures.									23			41	41	22
97.00	98.00		Clay gouge and carbonate veinlet from 97.15 to 97.25m; carbonate veinlet at									41			41	41	22
98.00	99.00		Same as above									41			41	41	22
99.00	100.00		Same as above; minor patchy sericite alteration; minor clay on perp. To CA fracture									31		11	41	41	21
100.00	101.00		Lost core from 100.40 to 101.00m									21			41	41	11
101.00	102.00		Same as above									21			41	41	11
102.00	103.00		Same as above									41			41	41	11
103.00	104.00		At 103.30 to 103.60 m: strong chlorite-sericite-carbonate alteration zone									32			32	31	32
104.00	105.00		Same as previous; decreasing alteration. Minor chlorite-sericite on fracture surfaces.									32			32	41	31
105.00	106.00		Intensively broken core from 105.00 to 105.40									22			22	41	21
106.00	107.00		Carbonate in and around hairline fractures: no preferred orientation. Rhodocrosite veinlet 0.5cm wide at 106.7m: subperpendicular to CA									32,22		11	22	41,11	23
107.00	108.00		From 107.23 to 107.90m fault zone containing alternating qtz and carbonate veining at subperp orientation. To CA , with several decimetre wide blebby qtz, chlorite carb clay halo. From 107.75 to 107.95m clayey ductile to fine gravel fault gouge							23		21		24	23	21	22
108.00	109.00		More competent core, w/modest patchy alteration. Some broken core and minor silicification.							42		42		21	32	42	22
109.00	110.00		Relatively unaltered core, minor alteration. Minor hematite on fracture surfaces									31			41	41,11	42,22
110.00	111.00		Strong alteration, almost obliterating primary textures. Consist mostly of pervasive sericite, blebby quartz and patches of hematite w/quartz-carbonate. Friable core. Minor ductile clay gouge zone at 110.50 to 110.60.							43		43	41	22	32	31	21
111.00	112.00		Same as previous; At 111.6, dissem bornite specs associated w/ patchyqtz-carb-hematite alteration	0.1						43		43	41	22	32	31	21
112.00	113.00		Same as above, at 112.30m, decreasing alteration and increasing competency of core; at 112.00 and 112.20, 2cm wide clay filled gouge zones. Interval contains variably oriented sub-3mm qtz-carb veinlets.							42		32	41	23	42	31	23,32
113.00	114.00		Moderate pervasive carbonate alteration. At 130.52m: mm wide qtz veinlet at 70 deg to CA w/ hematite-carbonate halo 3mm wide							33,12		32	42	22	32		43
114.00	115.00		Patchy alteration							42		32	42	11	32	41	42
115.00	116.00		115.7 to 116.00m intensively broken core grading to sandy gouge							42		32	42	22	32	32	42
116.00	117.00		Broken core, w/ local clay and sandy gouge. Alteration same as above							42		32	42	22	32	32	42
117.00	118.00		Same as above							42		32	42	22	32	32	42
118.00	119.00		At 118.80m 3 cm fault gouge							32		33		32,21	42	31	42
119.00	120.00		Several small gouge zones at steep angles, up to cm width. Intensively broken core from 119.80 to 120.00m							32		33		32,21	42	31	42
120.00	121.00		120.04 to 120.50m, intensely carbonate-sericite-clay-blebby quartz altered zone. Minor hematite-carbonate-chlorite veining at 121.00m. Trace bornite associated.	0.1						11,43		43		14	32	12	41,12
121.00	122.00		At 121.20m outwardly zoned qtz-hem-carb vein at steep angle to CA, 3 cm wide. Interval has significantly less clay alteration, but has blebby qtz, giving a speckled appearance.							33,12		32		11	33	31	43
122.00	123.00		Decreasing alteration to patchy.							42		23		11	32	32	22

From (m)	To (m)	Sample	Description	Mineralization						Alteration								
				bor-d	bor-v	cpy-d	cpy-v	cha-d	chal-v	mag-v	sil	pot	ser	musc	clay	chlor	iron	carb
123.00	124.00		Fracture-envelope sericite alteration and hairline fracture filling chlorite. Regular 20 deg to CA fractures.								42		22	41	11	11	32	22
124.00	125.00		Strongly broken to shattered core. 60 deg to CA fractures: cm scale. 125.80 to 126.00m minor clay fault gouge. Minor hematite on fracture surface and as hairline fracture surface.								32		32	41	22	41	32	12
125.00	126.00													42	41	12	41	31
126.00	127.00		Core loss; minor alteration										31			41	41	11
127.00	128.00		Same as above										31		41	41	41	11
128.00	129.00		Same as above										21	41	41	41	41	11
129.00	130.00		Same as above										21	41	41,11	41	41	11
130.00	131.00		Same as above										21	41	41,11	41	41	11
131.00	132.00		Decreasing alteration, chlorite and hematite lining fractures										21	41	41,11	41,11	41	11
132.00	133.00		Pervasive clay after feldspar alteration										31	41	32	41,11	41	41,11
133.00	134.00		Minor carbonate-hematite veinlets at 65 deg to CA; clay alteration in and around fractures. Clay and carbonate on fracture planes								32		32		22	42,31	41	41
134.00	135.00		Strongly, locally intensively broken cre. Gouged zone from 134 to 134.3 m. Pervasive quartz-, sericite-, chlorite alteration obliterating primarz textures. Carbonate- and hematite bearing vein at 34.5 m @ steep angle to CA								43		32		22	42	12	33
135.00	136.00		Decreasing alteration relativ to previous interval,								32		32	41	41,11	42	31	22,41
136.00	137.00		Strongly to intensively broken core, grading into local, narrow, gouged zones. Slightly increased alteration relative to previous interval. 3 mm wide, carbonate, +/- hematite bearing vein at 136.9. @ 50 deg to CA								43		42		12,41	42	11,31	22,32
137.00	138.00		Decreasing fracturing, decreasing alteration, preferred orientation of fractures @ approx 60 deg and subvertical to CA.										31		11	11,42	41	11
138.00	139.00		Same as previous interval										32		41	41	31	22,41
139.00	140.00		Same as previous interval, mismatch from 139.5 to 139.8										32			12	31	22,42
140.00	141.00		Same as previous interval, intensively broken core with > 5 cm clayey, ductile, carbonate bearing fault gouge at 140.1 to 140.3								31		31		12	12,42	41	21,42
141.00	142.40		Same as previous interval								31		31			42	41	21,42
142.40			E O H															

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>
0.00	12.19			0%
12.19	14.33		0.47	90%
14.33	17.37		0.62	100%
17.37	20.42		0.57	90%
20.42	23.47		1.03	100%
23.47	26.52	3.03	2.10	99%
26.52	29.57	3.13	1.84	103%
29.57	32.61	2.84	0.60	93%
32.61	35.66	2.99	0.83	98%
35.66	38.71	1.50	0.11	49%
38.71	41.76	1.84	1.50	60%
41.76	44.81	3.00	0.70	98%
44.81	47.89	2.86	0.70	93%
47.89	50.90	2.50	0.34	83%
50.90	53.95	3.10	0.25	102%
53.95	57.00	3.20	0.66	105%
57.00	60.05	1.50	0.57	49%
60.05	63.09	3.06	0.88	101%
63.09	66.14	2.87	1.00	94%
66.14	69.19	2.75	0.88	90%
69.19	72.24	2.45	0.10	80%
72.24	75.29	2.55	0.32	84%
75.29	78.33	2.81	0.28	92%
78.33	81.38	1.42	0.11	47%
81.38	84.43	2.88	0.69	94%
84.43	87.48	2.90	0.97	95%
87.48	90.53	2.97	1.54	97%
90.53	93.57	3.04	2.31	100%
93.57	96.62	3.03	2.30	99%
96.62	99.06	3.20	2.12	131%
99.06	102.72	2.71	1.71	74%
102.72	105.77	2.67	0.95	88%
105.77	108.81	3.20	0.55	105%
108.81	111.86	2.83	0.47	93%
111.86	114.91	2.70	0.80	89%
114.91	117.96	2.58	0.64	85%
117.96	121.00	2.27	0.88	75%
121.00	124.05	3.01	1.84	99%
124.05	127.10	2.53	0.54	83%
127.10	130.15	2.44	0.75	80%
130.15	133.20	2.60	1.40	85%
133.20	136.30	2.60	0.92	84%
136.30	139.80	2.49	0.40	71%
139.80	142.40	3.20	1.90	123%

From (m)	To (m)	a m	Lith	Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
18.29	22.00		Intensely broken core, mod carb and low chl bearing gouge intervals; 20.4 to 22.0 clay gouge zone; pale light grey bleach											34		33	41
22.00	24.00		Intensely broken core, low carb and mod chl bearing rock gouge intervals,											34		33	42
24.00	26.00		Lost Core														
26.00	28.00		SAA											34		33	42
28.00	30.00		Lost core														
30.00	32.00		30% core, primary textured conserved											32		41	41
32.00	34.00		Intensely broken core, low carb and low chl; Fe Silica patchy alt													32	41
34.00	36.00		Bleached clay & sericite alt, Fe-Silica patchy alt, dark grey sub to mm carb; high angle veinlet,													22	41
36.00	38.00		Lost Core														
38.00	40.00		Patchy k-feldspar to clay alt; patchy Fe; chlorite envelops along fractures							41	41			32	21	22	21
40.00	42.00		20% recovery; bleached gouge; fractured core; high clay							41	41			34	41	32	
42.00	44.00		Bleached core;intensively fracture							42	41			41 31	32		
44.00	46.00		Bleached clay & sericite alt, Fe-Silica patchy alt, minor epidote							41	41	41			41	21	
46.00	48.00		SAA; primary textured conserved;							41	41	41		33	41	21	31
48.00	50.00		SAA							41	41	41		33	41	21	31
50.00	52.00		Intensively fractured and gouge core; mod clay; patchy Si; minor chl alt							32	41	31		33	41-21	22	31
52.00	54.00		SAA; possible K-spar or Fe-carb bearing veinlet							32	41	31		33	41-21	22	31
54.00	56.00		SAA; slight increase sericite							32	41	31		33	41-21	22	31
56.00	58.00		SAA; slight increase sericite							32	41	31		33	41-21	22	31
58.00	60.00		Decrease in 1) alt; 2) fracturing; 3) gouge; conpntent low altered core; minor sericite							31	41	21		22-32	41	21	41-11
60.00	62.00		SAA; massive core							31	41	21		22-32	41	21	41-11
62.00	64.00		SAA; increase Sericite; qtz alt							42	41	32				21	41
64.00	66.00		Moderate fractured; primary texture conserved; clay with fractured sub parallel to core; patchy sericite							41	41	32		22	41		41
66.00	68.00		SAA							41	41	32		22	41		41
68.00	70.00		Broken core low recovery;some gouge							41	41	32		22	41		41
70.00	72.00		SAA; possible K-spar or Fe-carb bearing veinlets							41	41	32		22	41		41
72.00	74.00		SAA;							41	41	32		22	41		41
74.00	76.00		Low fractured; primary texture conserved; low chl; low clay; low Fe							41	41	32		22	41		41
76.00	78.00		SAA; 50% recovery; highly fractured;mm veinlets 30% carb Fe or K-spar filling							41	41	32		22	41	22	41
78.00	80.00		SAA:Epidote veinlets							41	41	41		31	41	22	41-11
80.00	82.00		SAA; Recovery 30%;							41	41	41		22	42	22	41
82.00	84.00		SAA; Ssome broken core; 80.9 to 81.2 clay gouge							41	41	41		33	42	23	41
84.00	86.00		Low but pervasive qtz blebs; K-spar, chl alt; broken core; clay gouge							41	41			43		31	41
86.00	88.00		SAA; highly bleached fault zone; kaol; trace cpy + 1 mm patchy born vnit @~ 86.6 m ( across 3 cm)							41				43			
88.00	90.00		SAA: Intermittent fault gouge 20%							41	41	41		43		21	41
90.00	92.00		SAA; slightly more massive core							41	41	41		31	41	21	41
92.00	94.00		SAA; quite broken; intermittent gouge sections							41	41	41		31		21	41
94.00	96.00		Broken core; increased K-spar;							41	43	42		21	41	21	41
96.00	98.00		SAA; Moderately broken							41	43	42		21	41	21	41
98.00	100.00		Weakly broken; fractured related Fe-with minor bornite; cpy blebs 98.6 to 98.9m; 98.2 bornite; 99.7 cpy spec							41	43	42			42		42
100.00	102.00		Moderately broken core; minor gouge; pervasive K-spar							41	43	42			41		43

From (m)	To (m)	a m	Lith	Mineralization						Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor						
102.00	104.00		Broken core; minor gouge; pervasive K-spar; tr cpy with hemitite							41	44	41			41		41
104.00	106.00		SAA;							41	44	41			41		41
106.00	108.00		Strongly broken; low recovery; higher sericite; low K-spar							41	41	44		32	42		41
108.00	110.00		Moderately broken core; pervasive K-spar;							41	44	42			41		41
110.00	112.00		SAA; broken core; moderate K-spar							41	43	42			41		41
112.00	114.00		SAA							41	43	42			41		41
114.00	116.00		SAA; tr cpy @ 112.3; increased bio mafic phenos starting @ 115							41	43	42			41		41
116.00	118.00		SAA; pervasive k-spar alt stops at 118.5							41	43	42			41		41
118.00	120.00		Low altered qtz diorite							41	41	41			41		41
120.00	122.00		SAA:							41	41	41			41		41
122.00	124.00		SAA; 40 cm gouge @ 123 to 123.4, mod brkn 123.4-124.0							41	41	42			41		42
124.00	126.00		SAA; moderately broken, minor gouge on fract							41	41	42			41		42
126.00	128.00		SAA, moderately-strongly brkn, minor gouge on fract, mod-strong gouge @ 126.9-127.4 m							41	41	42			41		42
128.00	129.90		SAA, moderately-strongly brkn, minor gouge on fract, EOH							41	41	42			41		42

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
18.29	20.42	0.63	0.00	30%	0.00
20.42	23.47	1.27	0.00	42%	0.00
23.47	26.52	1.03	0.18	34%	0.17
26.52	29.57	0.92	0.12	30%	0.13
29.57	32.61	0.56	0.00	18%	0.00
32.61	35.66	2.35	0.57	77%	0.24
35.66	38.71	0.90	0.00	30%	0.00
38.71	41.76	1.40	0.29	46%	0.21
41.76	44.80	1.64	0.15	54%	0.09
44.80	47.85	2.30	0.23	75%	0.10
47.85	50.90	2.07	0.30	68%	0.14
50.90	53.90	1.80	0.55	60%	0.31
53.90	56.57	1.16	0.00	43%	0.00
56.57	60.05	2.30	0.73	66%	0.32
60.05	63.10	2.90	2.46	95%	0.85
63.10	66.14	2.90	1.10	95%	0.38
66.14	69.19	1.67	0.40	55%	0.24
69.19	72.24	2.90	1.05	95%	0.36
72.24	75.28	1.20	0.12	39%	0.10
75.28	78.33	1.45	0.00	48%	0.00
78.33	81.38	2.25	0.77	74%	0.34
81.38	84.42	1.48	0.27	49%	0.18
84.42	87.47	2.27	0.16	74%	0.07
87.47	90.52	1.92	0.77	63%	0.40
90.52	93.57	1.36	0.00	45%	0.00
93.57	96.62	1.74	0.12	57%	0.07
96.62	99.66	1.80	0.75	59%	0.42
99.66	102.71	2.19	0.43	72%	0.20
102.71	105.76	2.72	0.23	89%	0.08
105.76	108.81	1.42	0.17	47%	0.12
108.81	111.86	2.19	0.54	72%	0.25

From (m)	To (m)	Sample No.		Mineralization						Alteration								
										sil	pot	ser	musc	clay	iron	carb	chlor	
			General description: There appears to be no change in primary lithology. Primary lithology is +/- obliterated by strong to intensive quartz, carbonate, sericite, chlorite and clay mineral bearing alteration (variable alteration, variably intense), frequently associated with strong - intense bleaching. The distribution and abundance of the various alteration minerals is variable from patchy - pervasive or occurring as fracture halos, changes are generally gradual, rarely abrupt. There is a general trend, with the degree of alteration decreasing downwards very slowly: with subsections displaying discrete primary textures around 90 m. It may be important to note, that within the dense and pale bleached subsections it is very difficult to estimate mineral contents.															
23.47	24.00		Moderately to intensively, clay?-, quartz-, carbonate- and sericite bearing rock, with primary textures +/- obliterated by alteration. From 23.6 to 24.0 irregular, variably orientated white pinkish, quartz- and carbonate (rhodochrosite?) bearing veins, up to several cm wide. Sub cm to several cm wide gouged subsections. Blebbly quartz grading into poorly defined veins/ veinlets. Fractures preferably steep and @ 55 deg to CA. Bleached.								42,13		43		42,32	31	41,23	42
24.00	26.00		Similar to previous interval, but intensively fractured core grading into gouge. Fracture planes preferably orientated steep and subparallel (slickensides) to CA (drilling down fracture). Competent core from 25.9 to 26 m.								42		43		43	41	41	41
26.00	28.00		Similar/ same as "23.47 to 24", more competent and less fractured than previous interval. Dm wide gouged section at 26.5 m. Abundant blebbly quartz and variably orientated, partially patchy and 5 % variably orientated quartz- +/- carbonate bearing veinlets/ veins. At 26.9 cm wide quartz- and carbonate bearing veinlet @ steep angle to CA. Bleached								43		43		11,42	31	43,22	41
28.00	30.00		From 28 to 28.5 same as previous. From 28.5 to 29 moderately gouged, associated with colour change from cream - apple green - pinkish to light olive green grey, presumably associated with increasing chlorite. Downwards decreasing silicification, alteration and bleaching, faintly developed primary textures.								42		42		41	31	41	41
30.00	32.00		Similar to "23.47 - 28.0", but with dirty olive green grey appearance, based on increased chlorite content. Blebbly quartz and minor carbonate. Lack of primary textures. Intensively fractured with narrow clayey gouge from 30.8 to 31.5.								43		32	41	32	31	41	42,12
32.00	34.00		Same as previous interval from 32 to 33 m. Colour change to pale cream - beige (primary textures entirely lacking) at 33 m. Clayey gouge with minor carbonate from 33.5 to 34 m. Carbonate- and hematite bearing veinlet @ 40 deg to CA at 33.4 m.								32		42	41	33	31	41	32
34.00	36.00		Same, dense, pale material as 33 to 34 m. Intensively broken core and up to several dm wide gouge sections from 34 to 35 m. Indications of a.m. carbonate- hematite veins. Few sub cm to > cm wide, variably orientated quartz- +/- carbonate veins								42		31		33	31	21,41	
36.00	38.00		Similar to 30 to 33 m: Primary textures obliterated by quartz-, chlorite-, sericite bearing alteration. 1 cm carbonate- hematite vein @ 60 deg to CA. Quartz +/- carbonate veins rarely > cm, predom @ steep angle to CA. Chlorite veinlets. Pale green clayey gouge from 37.6 to 37.8 m.								43		32		32		41,22	32
38.00	40.00		Continuation of previous, downwards grading into cream coloured, pale bleached, dense material as described before, but with prominent sericite bearing patches. Intensively fractured core from 38 to 38.7 m: clayey gouge from 38.7 to 39 m. Carbonate- hematite veinlet at 39.5 m.								32		32		32	31	41,21	31
40.00	42.00		Continuation of previous interval, with chlorite, blebbly quartz and sericite bearing subsection (as described before) from 40.5 to 41 m.								33		32	41	21	31	41	32
42.00	44.00		Cream coloured, pale bleached, dense material without primary textures, as described before with associated with dirty green chlorite bearing patches (halos around chlorite veinlets, predom @ 60 deg to CA. Clayey gouge from 43.2 to 43.4 m								33		32		32		21,41	32
44.00	46.00		Same as previous, from 45 m downwards strongly - intensively fractured with narrow clayey gouged subsections. Vuggy, cm wide, quartz- carbonate vein @ 30 deg to CA at 45.3 m. Locally accessory, metallic, submm sized specks, +/- with red halos: Hematite and/ or bornite?								32		32	41	23	31	22,41	31
46.00	48.00		Continuation of previous interval, chlorite bearing patches grading into subsections.								42		42		22	31	22,41	32
48.00	50.00		Same as previous interval. Strongly to intensively fractured core from 51 to 52 m with several narrow (cm scale) clayey, +/- carbonate and chlorite bearing gouged subsections, at 49.7 with remnants of cm wide quartz-, carbonate-, chlorite vein.								42		42		22	31	22,41	32

From (m)	To (m)	Sample No.		Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
50.00	52.00		Same as previous. Patchy clay alteration. Several cm clayey ductile fault gouge overlying fracture plane @ 70 deg to CA.							42		42		22	31	22,41	31
52.00	54.00		Sam as previous. Dense. Minor clayey gouge, associated with cm wide quartz- carbonate vein 40 deg @ 43.7							42		42		22	31	22,41	31
54.00	56.00		SAA; minor gouge @ 55.6							42		42		22	31	22,41	31
56.00	58.00		SAA; increasing patchy chl; minor gouge @ 57.4;							42		42		22	31	22	31
58.00	60.00		SAA; minor gouge @ 58.8, 60							42		42		22	31	22	42
60.00	62.00		SAA; increasing sericite; qtz blebs; minor gouge 60.5							42		32		22		21	42
62.00	64.00		SAA; decreasing chl; clay gorge @ 61.9; carb-Fe veinlets steep @ 63.5							43		32			22	42	41
64.00	66.00		SAA; irregular patchy qtz-carb veinlets up 1cm 3%;							43		33		11	31	22	41
66.00	68.00		SAA; modeate gouge 67.2 to 67.5; 4cm wide qtz-carb vein 66.25 @ 60; sericite envelope; carb-Fe vein + clay @ 67.7							33		33		32	41	32	42
68.00	70.00		SAA; 68 carb-Fe withinclay and sericite envelope; incresing broken core							32		33		32		41	41
70.00	72.00		Same as previous. Quartz blebbs, patchy chlorite. Few scattered sericite bearing envelopes around hematite- and carbonate bearing veinlets (for example at 72 m) @ variable orientation to CA. Minor clayey gouge from 70 to 70.2 m.							43	31	21		22	21	22	32
72.00	74.00		Same a previous. Locally very minor gouge. Slightly increasing patchy sericite, associated with hematite and carbonate bearing veinlet at 73.2 m. Very slightly increasing k-spar alteration.							43	31	21		21	21	22	32
74.00	76.00		Same a previous. Few scattered hematite- carboante veins, +/- 5 mm wide, preferably @ teep angel to CA. Decreasing chlorite and significantly increasing patchy sericite. Slightly decreasing silicification							32		32	41	22	21	21	31
76.00	78.00		Same as previous, but discrete primary textures from 76 to 77, downwards grading into dense appearing sericite and quartz bearing altered material.							42	31	31	41	21		22	31
78.00	80.00		Continuation of previous. 3 cm clayey and strongly carbonate bearin gouge at 78 m @ 70 deg to CA. Minor patchy K-spar.							32	31	42		21		22	41
80.00	82.00		Same as before. Dense, pale cream, strongly bleached. Clay bearing alteration? Carboante- hematite vein @ 50 deg to CA at 81 m. Few scattered hematite bearing specks. 5 cm quartz vein with several dm wide strongly sericite- and clay bearing halo (grading into gouge along contact plane) at 81.9 m.							43		33	41	32		41	31
82.00	84.00		Same as before. Increasing carboante content, both disseminated and white carboante veins < 4 cm: At 83.4 @ steep angle to CA, near clayey, ductile, cm wide gouge zone with same orientation							42		43		22		23,42	31
84.00	86.00		Same as before. Increasing disseminated chlorite. 5 cm gouge underlying hematite carboant veinlet @ 70 deg to CA at 84.2 m. Scatterd carbonate- hematite veinlets up to several mm, @ 60 to 70 dg to CA.							42	31	33		22		41	32
86.00	88.00		Same as before. 6 cm quartz carboan t vein @ 60 deg to CA at 86.7 m wih minorly hematite bearing seam. Fe scatterd hematite- carboante veins preferably @ +/- 60 deg to CA. Small subsections with faint primary textures.							42	31	32		22		31	31
88.00	90.00		Discrete primary textures throughout this interval: Quartz bering diorite. Weak - very weak chlorite- and sericite bearing alteration. At 89.8 m a > 5 cm wide orange red k-spar bearing dike or vein underlain by moderately to strongly sericite alterd material.							41	41, 11	31	41				41
90.00	92.00		Continuation of previous. Downwards decreasing sericite bearing alteration. Fresh appearance from 91.3 m downwards.							41	31	31	41				
92.00	94.00		Same as previous. Downwards slightly increasing, pachty sericite bearing alteration. At 93.9 5 mm hematite- carboante vein @ 70 deg to CA with dm wide sericite bearing alteration halo.							41	31	31	41				
94.00	96.00		Continuation of previous. From 95 m downwards increasing sericite bearing alteration obliterating primar textures. K-spar bearing patches. Trace epidote.							31	31	31	41			21	31
96.00	98.00		Same as previous. Sericite-, +/- quartz, +/- carbonate, +/- clay, +/- chlorit bearing alteration obliterate primary textures. Sericite an clay (locally grading into narrow gouged bands) preferably in > dm alteration halos around scattered several mm wide carboante hematite veins @ 60 - 70 deg to CA.							31	31	33	41	22		31,21	41
98.00	100.00		From 98 to 99.1 same as previous. At 99.1 6 cm quartz vein underlain by highly clay bearing, carbonate bearing moderately to strongly gouged material.							31		33	41	33		33	31
100.00	102.00		Starting @ 99.0m fault gouge zone/fault breccia; bleached and altered predominately to clay; small qtz veining trend 50 to 60 deg; high sericite; sections of low core recovery.							41		44		43	22		41
102.00	104.00		SAA; fault zone ends @ 103.4: folled by broken core .5 to 1.0 cm hem-carb veinlets							42	41	43		43	33	31	42
104.00	106.00		SAA; broken core; low recovery; low Fe														
106.00	108.00		Moderately broken; low K-spar; sericite; low clay							41	41	42					42



From (m)	To (m)	Sample No.		Mineralization						Alteration								
										sil	pot	ser	musc	clay	iron	carb	chlor	
108.00	110.00		Core Missing; no recovery															
110.00	112.00		Core Missing; no recovery															
112.00	114.00		Moderately altered; 2.0cm vein @ 113.2; 40 deg Fe filled bounded by carb;							42	41	42				23	23	42
114.00	116.00		Starting @ 113.7m to 114.4 gouge zone; bleached and altered predominately to clay, minor groundmass epidote @115.5-							41	41	42				22		42
116.00	118.00		Low alteration; consisting weak to mod broken; low chl; low sericite; low K-spar; no clay							41	41	42						42
118.00	120.00		SAA;							41	41	42						42
120.00	122.00		SAA; 120. 6 K-spar envelope 6cm wide							41	41	41						42
122.00	124.00		SAA; lessor alteration; @123.6 stronger alt, mainly sericite, chl;							41	41	41						42
124.00	126.00		SAA; Stronger @ 124.8 silica & sericite flooding; slightly higher clay/carb; 125 to 125.7 high Qtz within gouge							43	41	43		33				42
126.00	128.00		SAA; broken core;mod alt qtz; sericite; chl; 127.5 to 128 patchy clay; Fe veinlets; clay alt							41	42	42				22		42
128.00	130.00		Moderately alteration with bands of higher clay alt and assoc K-spar envelopes							41	42	42		42				42
130.00	132.00		SAA; 130.4 to 130.7 sericite gouge zone;minor qtz/carb veinlets mm; moderately broken							41	41	42		23				42
132.00	134.00		SAA; 133.6 10cm gouge zone							41	41	42		42				42
134.00	136.00		SAA; 134.1 chl/epidote veinlet; 135 on broken core							41	41	42		42				42
136.00	138.00		Less altered, whole core							41	41	41		0				41
138.00	140.00		Low alteration minor bleached 15cm @ 139.5 to 139.6 minor Fe/carb							41	41	41		0				41
140.00	142.00		Pervasive low alteration							41	41	41		0				41
142.00	144.00		Pervasive low alteration							41	41	41		0				41
144.00	146.00		Pervasive low alteration; slight increase in sericite from 145.5 to 146							41	41	41		0				41
146.00	148.00		Increased alteration; patchy K-spar; sericite; minor qtz veining							42	42	42		42	21			42
148.00	150.00		Increased alteration to near gouge; mainly sericite; clay; minor Fe veinlets; ends at 149.5							41		43		43	21			41
150.00	152.00		Pervasive low alteration; 151.3 to 151.6 sericite/clay gouge; bleached to 152							41	41	41		0				41
152.00	154.00		Pervasive low alteration; slight increase in sericite and chl alt							41	41	42		0				42
154.00	156.00		SAA; with gradational zones of higher sericite and chl alt							41	41	43		0				42
156.00	158.00		SAA; slight increase in alt; more broken; minor clay on fractures							41	41	43		0				42
158.00	160.00		SAA; broken core; sericite gouge zones; weak patchy K-spar							41	41	43		0				41
162.00	164.00		SAA; broken core; intermittent sericite/clay gouge zones; otherwise low-mod alt; weak K-spar; minor Fe 1 - 2 mm veinlets							41	41	43		0				42
164.00	166.00		SAA							41	41	43		0				42
166.00	168.00		SAA							41	41	43		0				42
168.00	170.00		SAA							41	41	43		0				42
170.00	172.00		SAA							41	41	43		0				42
172.00	173.80		SAA							41	41	43		0				42
			END OF HOLE 06-06															

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
23.47	26.52	2.54	0.68	83%	0.27
26.52	29.57	2.73	1.45	90%	0.53
29.57	32.61	2.50	0.39	82%	0.16
32.61	35.66	2.10	0.10	69%	0.05
35.66	38.70	2.20	0.81	72%	0.37
38.70	41.76	2.74	0.93	90%	0.34
41.76	44.80	2.20	0.49	72%	0.22
44.80	47.85	2.57	0.11	84%	0.04
47.85	50.90	2.54	0.25	83%	0.10
50.90	53.95	2.69	0.52	88%	0.19
53.95	57.00	2.77	1.14	91%	0.41
57.00	60.04	2.64	0.40	87%	0.15
60.04	63.09	2.55	0.42	84%	0.16
63.09	66.14	2.87	1.83	94%	0.64
66.14	69.19	2.93	1.27	96%	0.43
69.19	72.24	2.43	0.27	80%	0.11
72.24	75.29	2.39	0.61	78%	0.26
75.29	78.33	2.47	0.71	81%	0.29
78.33	81.38	2.72	1.22	89%	0.45
81.38	84.43	2.57	1.27	84%	0.49
84.33	87.48	2.81	1.95	89%	0.69
87.48	90.53	2.57	1.01	84%	0.39
90.53	93.57	2.76	1.80	91%	0.65
93.57	96.62	2.58	1.24	85%	0.48
96.62	99.67	2.76	1.54	90%	0.56
99.67	102.72	1.44	0.00	47%	0.00
102.74	105.77	2.05	0.00	68%	0.00
105.77	108.81	2.23	0.28	73%	0.13
108.81	112.17	0.10	0.00	3%	0.00
112.17	114.91	2.29	0.60	84%	0.26
114.91	117.96	2.43	0.72	80%	0.30
117.96	121.00	2.70	1.55	89%	0.57
121.00	124.05	2.75	1.06	90%	0.39
124.05	127.10	2.58	0.76	85%	0.29
127.10	130.15	2.60	1.19	85%	0.46
130.15	133.20	2.18	0.32	71%	0.15
133.20	136.29	2.30	0.47	74%	0.20
136.29	139.29	2.76	1.54	98%	0.56
139.29	142.34	2.99	1.52	98%	0.51
142.34	145.39	2.80	2.08	100%	0.74
145.39	148.44	2.64	0.67	98%	0.25
148.44	151.49	2.84	1.08	98%	0.38

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
151.49	154.53	2.42	0.57	90%	0.24
154.53	157.58	2.70	0.61	98%	0.23
157.58	160.63	2.41	0.52	85%	0.22
160.63	163.68	2.27	0.21	95%	0.09
163.68	166.80	1.89	0.31	80%	0.16
166.80	169.80	2.45	0.00	98%	0.00
169.80	172.90	2.63	0.47	95%	0.18
172.90	173.80	0.48	0.00	67%	0.00
	END OF HOLE 06-06				

From (m)	To (m)	Sample No.	General description: From 12.2 to approx 66 m, there appears to be no change in primary lithology. Primary lithology is +/- obliterated by strong to intensive quartz, carbonate, sericite,	Lith	Mineralization						Alteration						
					sil	pot	ser	musc	clay	iron	carb	chlor					
12.20	14.00		Strongly to intensively fractured core. Primary textured obliterated by alteration; patchy sericite and clay alteration locally grade into into minor clay gouge zone; quartz blebs. Minor, scattered hematite specs. Prominent iron oxide coating on fracture planes.							42		32	41		41	41	1
14.00	16.00		Same as before, > 50 % core loss, strongly - intensively fractured core. Locally cm spaced, carbonate bearing hairline veinlets.							32		32	21	11	41	41	31
16.00	18.00		Same as before, > 50 % core loss, strongly to intensively fractured core.. Pinkish, iron oxide bearing patches. Patches with chlorite altered mafics.							2		32	41	41	32	31	31
18.00	20.00		Same as before, > 50 % core loss, subsections with intensively fractured core. Increasing hematite coating on fracture planes, hematite bearing hairline veinlets. Locally cm spaced +/- carbonate bearing quartz hairline veinlets.							33		32	41	41	22	31	31
20.00	22.00		Same as before, slightly decreasing fracturing. Subsections with quartz-, carbonate veinlets, rarely > mm width. Iron oxide coated fracture planes, locally with mm scale, irregular hematitic halos.							42		33	41		2	41	
22.00	24.00		Same as previous, strong fracturing, with increasing chlorite, patchy, irregular iron oxide bearing patches, decreasing hematite specks, dm wide clayey, carbonate bearing gouge at 23.5 m							42		42	41	32	31	41	31
24.00	26.00		Continuation of previous, strong fracturing, beige pale bleached patches							42		42			41	41	31
26.00	28.00		Continuation of previous. > 50 % core loss. Fracturing intense, within subsections. Subsections with prominent hematite staining on fracture planes. Increasing hematite specs, iron oxid coloured patches, chlorite altered mafics, trace epidote							42		42			31	41	32
28.00	30.00		Same as previous; > 50 % core loss. Intensively fractured core. Decreasing hematite and chlorite, increasing sericite and quartz. Minor sericitic gouge at 29.6 m.							3		42	1	21		1	
30.00	32.00		Same as previous, > 50 % core loss. Decreasing fracturing. Hematite specks, hematite bearing hairline veinlets, minor hematite on fracture planes and patches. Quartz blebs. Locally trace epidote							43		42	41		1	41	
32.00	36.00		> 50 % core loss. From 32 to 32, 6 same as previous, from 32, 6 to 36 increasing fracturing, increasing sericite, clay, bleaching. Up to several cm wide clayey, gouged subsections. Minor hematite specs.							32		33		33	31	41	
36.00	38.00		Same as previous; From 36 to 36.7 competent core, bleached, sericite bearing, decreasing clay. From 36.7 to 38 clayey, ductile - fine gravelly gouge.									43		33		1	
38.00	40.00		> 75 % core loss. Strongly broken core. From 38 to 38, 6 a.m. gouge. From 28.6 to 38.7 highly clay bearing pale cream material, grading into increasingly sericitic material.							31		32		33	1	1	
40.00	42.00		> 75 % core loss. Sericitic material a before grades from 41.6 to 42 weakly pink (K-spar, iron) - cream bleached clay? and sericite bearing material. Intensively fractured core. Locally hematite specks +/- trace sulphides														
42.00	44.00		> 50 % lost core, strongly, locally intensively fractured. Pale cream (clay) - pinkish (K-spar, iron oxide) mottled. Minor patchy sericite.								33	31		33	31?	1	
44.00	46.00		> 50 % lost core. From 44 to 44.8 pale cream bleached (clay, +/- sericite) gravelly broken core and gouge. From 44.8 to 46 strongly - intensively broken core, clay downwards decreasing, sericite and quartz blebs downwards increasing. Remnants of iron oxide bearing veinlets? From 45. 2 to 46 sericite and quartz blebs as before +/- mottled K-spar? ( orange specs - mottled). Prominent fractures @ 30 - 40 deg to CA.							32	31	32		34		1	
46.00	48.00		> 75 % core loss; intnsively gravelly broken core. Continuation of previous, with highly clay bearing? cream pale bleached patch. Quartz blebs locally grading into weak flooding							32	31	1		32		1	
48.00	52.00		> 75 % lost core, strongly to intensively fractured core. Same as previous: Mottled K-spar, quartz blebs and patchy clay and sericite. Trace to minor chlorite. minor qtz +/- carb vnlts							32	31	32		32	31	41	1
52.00	54.00		Fracturing decreasing to strong, intensive within subsections. Clayey, ductile gouge from 52.2 to 52. 7. From 52.7 to 53.5, significant increase in chlorite with quartz blebs. From 53. 5 to 54 increasing bleaching, and sericite with moderate, pervasive silicification.							32	41	32	31	32		41	32
54.00	56.00		Same a before, patchy chlorite and sericite, locally very minor patchy clay. +/- pervasive, moderate silicification. Slightly decreased fracturing. Minor mottled K-spar scattered throughout.							43	41	32		31		1	1
56.00	58.00		Same as previous. Lost core from 56.7 to 57.6. Locally minor, patchy FE-oxides, Quartz-, +/- carbonate- hematite hairline veinlets @ 60 deg to CA. Variably orientated fractures, slightly preferred @ 40 - 60 deg to CA, crosscutting.							43	41	32		31	1	1	32

From (m)	To (m)	Sample No.	General description: From 12.2 to approx 66 m, there appears to be no change in primary lithology. Primary lithology is +/- obliterated by strong to intensive quartz, carbonate, sericite,	Lith	Mineralization							Alteration						
					sil	pot	ser	musc	clay	iron	carb	chlor						
58.00	60.00		Same as previous, downwards decreasing chlorite and increasing sericite and clay, associated with increasing fracturing and minor, narrow gouged zones and decreasing K-spar.. Hematite coating on fracture planes @ 30 - 40 deg to CA, crosscutting. From 59.8 to 60 soft and pale bleached material (clay), displays highly hematite bearing hairline veinlets @ 50 - 60 deg to CA and grades into minor clayey gouge.								32		32	41	33	22	1	31
60.00	62.00		From 60.0 to 60.2 continuation of clayey, hematitic patch, underlain by 20 cm quartz, sericite patch and downwards grading into strongly clayey, sericitic and patchy siliceous material, intensively fractured with intermittent, clayey, gouged zones. From 61.8 to 62 remnants of hematite bearing hairline veinlets and < 3 cm, zoned quartz- carbonate hematite veins @ 50 deg? to CA.								32		32			33	1	
62.00	64.00		> 50 % lost core, locally strongly - intensively fractured. From 62 to 63 decreasing clay and fracturing grading into siliceous(quartz blebs - pervasive), +/- sericite, +/- chlorite bearing material. At 63 m > 4 cm highly hematite bearing vein @ 60 deg to CA (slickensides). From 63 to 64 dirty disseminated Fe-oxides and rusty coated fracture planes. Locally sheeted quartz-, carbonate veinlet @ subparallel to CA.								33		32		31	22	42	31
64.00	66.00		Continuation of previous, with 8 cm moderately gouged, sericitic, moderately quartz- and carbonate bearing gouge at 60.1 @ 70 deg to CA. From 60.1 to 66 decreasing alteration (as described before) and increasingly discrete primary textures of a medium grained weakly K-spar bearing, quartz bearing diorite as described before.								1	1	1		1			1
66.00	108.20		Medium grained, quartz- and minor K-spar bearing diorite. Very fresh subsections alternate with minorly sericite and chlorite (chloritised mafics) bearing subsections. K-spar is disseminated, locally < 3 cm wide dense, massive, K-spar bearing veins with variable orientation, preferably @ steep angle to CA. Locally pink, soft, variably orientated (subparallel to 50 deg to CA), sub mm to several mm wide +/- carbonate-, gypsum_?, ankerite-?, K-spar-? bearing veinlets amount to << % range. Subsections with trace epidote (veinlets and disseminated). Very minor quartz- and or carbonate veining/ veinlets. At 93.8 chalcicite and bornite bearing hairline veinlet @ 50 deg to CA. At 94.7 chalcicite-, bornite spec along hairline crack @ 30 deg to CA. From 72 m (minor sandy, hematite bearing gouge) to 75.3 m (very minor hematite bearing gouge) intensively broken core, > 3 m core loss and weak sericite- and chlorite bearing alteration. Clayey ductile, fault gouge from 99.8 to 100.2, associated with fracturing subparallel to CA; from 105.1 to 105.4 intensively fractured core, locally few cm wide gouged zones, associated w								1	1	1		1			1
E O H																		

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
12.2	14.3	0.82	0	39%	0.00
14.3	17.4	0.91	0.18	29%	0.20
17.4	18.9	1.19	0.11	79%	0.09
18.9	20.4	0.99	0	66%	0.00
20.4	22.1	1.26	0.1	74%	0.08
22.1	23.5	1.03	0.21	74%	0.20
23.5	25.5	0.77	0	39%	0.00
25.5	26.5	0.92	0.14	92%	0.15
26.5	29.6	1.47	0.3	47%	0.20
29.6	32.6	1.58	0.34	53%	0.22
32.6	35.7	1.43	0.33	46%	0.23
35.7	38.7	1.3	0.41	43%	0.32
38.7	41.8	0.68	0	22%	0.00
41.8	44.8	1.87	0.15	62%	0.08
44.80	47.85	1.05	0.12	34%	0.11
47.85	50.90	0.38	0.00	12%	0.00
50.90	52.58	0.99	0.00	59%	0.00
52.58	53.49	0.53	0.13	58%	0.25
53.49	54.71	1.14	0.26	93%	0.23
54.71	55.02	0.28	0.00	90%	0.00
55.02	56.69	1.34	0.45	80%	0.34
56.69	57.61	0.15	0.00	16%	0.00
57.61	60.05	1.67	0.40	68%	0.24
60.05	61.57	0.74	0.00	49%	0.00
61.57	63.09	0.88	0.18	58%	0.20
63.09	64.77	0.69	0.00	41%	0.00
64.77	66.14	1.04	0.11	76%	0.11
66.14	69.19	2.55	1.58	84%	0.62
69.19	72.24	2.11	1.20	69%	0.57
72.24	75.28	0.37	0.11	12%	0.30
75.28	78.33	2.35	1.23	77%	0.52
78.33	81.40	2.93	1.42	95%	0.48
81.40	84.50	2.60	1.13	84%	0.43
84.50	87.50	2.66	0.92	89%	0.35
87.50	90.50	2.29	1.01	76%	0.44
90.50	93.60	2.06	0.90	66%	0.44
93.60	96.60	2.35	0.33	78%	0.14
96.60	99.70	2.11	0.70	68%	0.33
99.70	102.70	2.23	1.10	74%	0.49
102.70	105.80	2.16	0.49	70%	0.23
105.80	108.20	2.18	0.66	91%	0.30

From (m)	To (m)	Sample No.	Lith	Mineralization						Alteration								
										sil	pot	ser	musc	clay	iron	carb	chl	
			General description: There appears to be no change in primary lithology. Primary lithology is +/- obliterated by strong to intensive quartz, carbonate, sericite, chlorite and clay mineral bearing alteration (variable alteration, variably intense), frequently associated with strong - intense bleaching. The distribution and abundance of the various alteration minerals is variable from patchy - pervasive or occurring as fracture halos, changes are generally gradual, rarely abrupt. There is a general trend, with the degree of alteration decreasing downwards very slowly; with subsections displaying discrete primary textures around 90 m. It may be important to note, that within the dense and pale bleached subsections it is very difficult to estimate mineral contents.															
9.10	12.00		Subsections with strongly broken core. Moderate alteration obliterating primary intrusive textures, k-spar, chlor, seric, clay qtz blebs +/- carb, fract @ 50 to c. axis, k-spar as diffuse patchy areas							42		43	41	22		41	42	
12.00	14.00		SAA; 5 cm gouge zone @ 134.0 m underlain 1 cm k-spar vnt @ 20 deg to ca., @ 13.9 m: 5 mm hem-carb vnt @ 60 deg to c.a.							42		43	41	21	32	21	42	
14.00	16.00		10 cm gouge zone 14.1m, 5 cm gouge, 40 deg @ 14.6; 4 cm qtz cb vnt(4 cm) @ 15.4 m							42		43	41	21	32	42	41	
16.00	18.00		SAA; slight increase in hematite, carbonate, pinkish patchy areas possibly ankerite w. associated specularite increase							42		43	41	21	32	42	41	
18.00	20.00		SAA; 20 cm gouge @ 18.3 enveloping 2 cm qtz-cb-hem vn, @ 50 deg to c.a., decrease in pinkish patchy ank							42		43	41	21	32	41	41	
20.00	22.00		SAA, 8 cm gouge @ 30 deg to c.a., @ 21 m, 1 cm qtz-cb-hem vnt @ 21.6 @ 50 deg to c.a., slight chlor increase							42		43	41	21	31	42	42	
22.00	24.00		SAA; greater than 50% core loss, minor gouge associated w. 1 cm cb vnlt @ 23.4 m							42		43	41	21	31	42	42	
24.00	26.00		SAA							42		43	41	21	31	42	42	
26.00	28.00		SAA; qtz flooding 26.0-26.3, increased specularite blebs, 27.2-27.4: seric clay +/- cb gouge: specularite blebs w. possible chalcocite @ 28.0 m							42		42	41	22	32	42	42	
28.00	30.00		SAA; qtz flooded patches, 29.0-29.2, minor qtz-cb vnlt to 1 cm, steep angles							43		42	41	21	31	42	41	
30.00	32.00		SAA: patchy silic'n, increased pinkish patchy ank, 31.5-31.7 fract/gouge zone, increased (~3%) dissem hem blebs, pinkish patches assoc w increase in hematite, quartz porph texture w. pervasive patchy silica-seric alt'n							43		42	41	21	32	42	41	
32.00	34.00		SAA; minor qtz cb vnlt to 2 cm @ 40-60 deg to c.a., fract @ 60 deg to c.a., increasing pinkish patches							42		32		21	32	41	41	
34.00	36.00		SAA: pervasive pinkish patches w intervening pale green qtz-seric patches, pinkish patches intimately associated w specularite disseminations							43		32		21	32	41	41	
36.00	38.00		SAA: minor qtz-cb vnlt to 2 mm							43		32		21	32	41	41	
38.00	40.00		SAA: few qtz +/- cb vnlt to 2 cm @ 50 deg to c.a., increased chlor as halos around qtz vnlt							43		42			31	41	42	
40.00	42.00		SAA: qtz-cb-hem, 1 cm @ 50 deg to c.a at 41.3 m, 41.5-42.0 w gouge @ 41.9-42.0 m (recovery loss through gouge section)							43		42	41	21	31	41	42	
42.00	44.00		SAA; <50% recovery, increased pinkish alt'n w distinct primary textures, wky altered, partially contain previous fault/gouge zone							41		41		11	42	41	31	
44.00	46.00		SAA: subsections w strong-intense brkn sections, 45.7-46.0: 4- <1 cm wide qtz-cb vnlt @ 40- 50 deg to c.a., pervasive pinkish apatches							41		41	41	11	42	41	31	
46.00	48.00		SAA: 46.1-46.3 gouge section within fract planes at 50 deg to steep angles, underlain by strong to intensely brkn core							41		41	41	11	42	41	31	
48.00	50.00		SAA: increasing pink patches, Mod-strongly fract'd w. minor gouge on fract, minor increase in dissem specular hem							41		41	41	11	42	41	31	
50.00	52.00		SAA: local; primary textures evisent, pervasive pink patchy areas, minor qtz-cb vnlt, 50.1, 1 cm vnt @ 20 deg to c.a w. 3 mm bornite bleb							42		42	41	11	42	41	31	
52.00	54.00		SAA: increasing seric + clay, decreasing fract, minor qtz-cb vnlt at steep angles, local bands of reddish hem replacing plag phenos, pervasive pinkish alteration decreased							42		42	41	11	43	41	31	
54.00	56.00		SAA: slightly decreased seric, perv pale pinkish wash through groundmass, one-1 cm qtz cb vnt, trc-minor 1 mm qtz cb vnlt w variable orientation							42		42	41	11	43	41	31	
56.00	58.00		SAA: minor increase in seric +/- chlor, lesser pinkish patches, minor gouge @ 56.0-56.1 m, wk dissem hem							42		42	41	11	41	41	31	
58.00	60.00		SAA, gouge @ 59.9-60							42		42	41	11	41	41	31	
60.00	62.00		SAA: chlor mainly as mafic replacements, minor qtz-cb vnlt at 60 deg to c.a, vnlt locally contain hem blebs, gouge sections @ 62.1-62.2, 63.6-63.7							42		42	41	12	41	41	42	
62.00	64.00		SAA: gouge 64.0-64.1, faintly developed primary intrusive textures, decreased seric, increasing silic'n							43		42	41	12	41	41	42	
64.00	66.00		SAA: gouge zone @ 64.0-64.1, decreasing alt'n w faintly developed primary intrusive textures,							43		41	41	11	41		41	

From (m)	To (m)	Sample No.	Lith	Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
66.00	68.00		SAA: general increase in alteration masking primary textures, minor sporadic pinkish patches, minor qtz-cb vnlt hairline-1 mm, minor hairline hem vnlt, local patchy specularite specs							43		32	41		31	41	42
68.00	70.00		SAA: general increase in alteration masking primary textures, minor sporadic pinkish patches, minor qtz-cb vnlt hairline-1 mm, minor hairline hem vnlt, local patchy specularite specs							43		32	41		31	41	42
70.00	72.00		SAA: ~ 50% core loss, continuous of previous w increased pink patches, 70.3-70.4 two qtz-cb vnlt +/- steep core axis angles w. ~ 20% chalcocite blebs, main recovery loss between 71.0-72.0 m, minor sporad hem specs, clay gouge @ 71.0-72.0							42		42	41		31	41	42
72.00	74.00		SAA: strongly to intensely fract'd grading into 0.5 m gouge sections							31		43	41	33	31	42	41
74.00	76.00		SAA: strongly to intensely brkn w gouge from 74.0-74.3, 74.7-76.0 ( w.partial solid pieces 5-10 cms), minor fine born fract fills in gouge (across 5 cms) @75.3 m							31		43	41	34	31	33	41
76.00	78.00		Mottled w blebby qtz, pervasive pinkish patches decreasing down, increased hem patches/blebs @77.6-77.9, gouge 77.9-78.0							43		32	41	21	32	41	42
78.00	80.00		SAA: overall decreased pink patches, @ 79.3, 1 cm patch chalcocite +/- hem +/- bornite, similar appearance to previously described hematite specks (end of previous section), increased chlor alt'n @ 78.3-79.3 m, gouge zone @ 79.5-79.6, minor qtz vnlt to 2 mm, blebby qtz texture, pervasive dk gray hem specs throughout							43		32	41	12	32	41	43
80.00	82.00		SAA: minor gouge on fract @ 81.4 m, 82.0 m. Quartz blebs, locally grading into quartz flooded patches. Hematite specks locally grading into irregular, inconsistent hairline veinlets, where minor chalcocite may be displayed.							43		32	41	12	32	41	43
82.00	84.00		SAA, moderately fract'd, decreasing chlor, increase clay in gouge areas: 82-82.2 ( l. cont @ 55deg.), 82.4-82.5, 82.8-83.8, overall fracturing 50-70 deg to c.a., partial recovery loss. Decreasing speckled hematite.							42		33	41	33	31	41	31
84.00	86.00		SAA: decrease gouge and clay, subsections w mod. fract'd core, wk localized pink patches, minor hem specs, 1-2 mm							43		43	41	11	31	41	41
86.00	88.00		SAA; minor localized hem specs w. wk assoc pinkish patches, qtz blebby to pervasive silic'n							43		43	41	11	31	41	41
88.00	90.00		SAA to 88.5, from 88.5-90 section contains increased chlorite w increased hematite specs w associated sporadic patches and blebs chalcocite +/- bornite, sporadic pink bands to 10 cms, increased qtz vnlt (3-5%) to 1.0 cm, 0.5 cm msv f.g.chalcocite + qtz band (60 deg) @ 89.1m, 89.1 -89.3: partial gouge (qtz-seric) w. fine fract fillings chalcocite, gouge area is centrally located within chalcocite mineralized zone both above and below gouge area (0.5-0.6 m above and below gouge)							43		42	41	22	33	41	43
90.00	92.00		SAA, stronger chlorite alteration to 90.4 m, @ 90.5 decreasing chlorite w. increasing seric and clay, carbonate bearing clay gouge @ 90.7-91.2, minor clay-cb gouge @ 91.6-91.7, perv. silic'n between gouge zones, minor hem specs, qtz texture varies between elongate blebs to vein-like veins							33		33	41	33	31	42	32
92.00	94.00		SAA @ 92.0-92.9 w increased chlorite w.increased hem specs w. minor qtz +/- cb vnlt to 0.5 cm @ 70 deg to c.a. 92.9-93.6: intensely fract'd w. intermittent gouge, 93.6-94.0 clay ductile cb-bearing pale greenish gray gouge							32		32	41	34	31	32	32
94.00	96.00		SAA: strongly decreased clay, hematite, pervasive silic'n, moderate chlorite alt'd mafics + hem specs, minor pinkish patches, 94.8-95.1: narrow gouge zones along variable angle fract planes w qtz +/- cb vnlt @ 50 deg to c.a, < 1 cm widths							43		42	41	11	41	31	41
96.00	98.00		SAA: 96.8-97.8; strongly brkn core, minor clay on fract, @ 98.0: 1 cm qtz-cb vnlt @70 deg to c.a, decreasing hem specs.							43		42	41	11	41	31	41
98.00	100.00		SAA; overall decreased fracturing @ 99.3 - 3 mm hem vnlt at 50 deg to c.a, 99.7-100: increased fractures w increased seric, wk -mod pink patches							43		42	41	11	41	31	41
100.00	102.00		SAA: mod-strongly fract'd w. local gouge on fract, wk hem spots							43		42	41	11	41	31	41
102.00	104.00		SAA: mod-strongly broken and fract'd w 30-40% intermittent gouge zones, increased clay and sericite, negligible hem specs							32		43	41	13		31	41
104.00	108.80		Qtz-Plag porphyry, coarse grained, euhedral-subhedral qtz/plag phenos 0.5-1 cm, predominantly pinkish brown to locally greenish tan aphanitic groundmass, plag phenos are preferentially seric alt'd, blebby qtz to perv. silic'n, mod-strongly fract'd w sporadic clay on fract, strong gouge @ 103.9-104.9 w 30 % solid (<10 cm competent pieces), minor bornite in qtz vnlt @ 105.0-105.3 m, vnlt at variable angles, 1-3 mm, 60 degree u. fract contact @ 104.0m														



From (m)	To (m)	Sample No.	Lith	Mineralization						Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor						
108.80	112.00		SAA (102.0-104.). Increasing sericite, qtz blebs w isolated bright green chlor patches, pervasive pinkish patches, sporadic strongly to intensively brkn sections w. local gouge areas, 108.8-109.3: intensely brkn grading into gouge, minor scattered hem specs, sporadic minor patchy magnetic areas, approx 50 % core loss through interval							32		31	41	12	31	31	41
112.00	114.00		SAA: >50% core loss, gouge @113.8-114.0, strongly brkn w intermittent gouge sections							32		31	41	12	31	41	41
114.00	116.00		SAA, decreased fracturing, decreasing pinkish patches, increasing chlor w decreased clay, decreasing seric, decreasing hem specs, mod clay coatings on fract planes, perv. silic'n							32		31	41	11	31		42
116.00	118.00		SAA, increasing pink patches, qtz blebs locally grading into qtz sweats, 117.8-118, strong pinkish patches w. perv. Qtz flooding, @ 116.8 - 5 cm brkn qtz-cb vn w hem specs, @ 116.9 - 1 cm qtz vnl w. marcasite blebs							33		41	41	11	31	41	41
118.00	120.00		SAA; 50% core loss; section of intensive broken core; increasing qtz blebs; minor scattered qtz; small carb veins;							43		32		11	31	41	32
120.00	122.00		SAA; intensive fractured core; clay/carb gouge 120.8 to 121.4; increasing sericite; 121.7 1cm qtz-carb vein @ 60 deg with <b>calc &amp; bornite specs</b> . Locally minor hematite specks, patchy. At 124.4 > 5 cm quartz, +/- carbonate vein @ 50 deg to CA, with > m wide highly sericitic and clay bearing halo.							43		33		33	32	41	
122.00	124.00		SAA. Increasing alteration: Increasing patchy sericite and quartz flooding. Scattered, +/- dm wide clayey, intensively gouged subsections.							33		33		33	31	42	31
124.00	126.00		SAA; Intensively broken core; decreasing alt; gouge; sil;							42		43		22	31	41	
126.00	128.00		Lost core														
128.00	130.00		Decreasing fracturing; increasing chl; sil pervasive;							43		42	41	11	41	41	41
130.00	132.00		Primary textured obliterated by alteration; patchy sericite and clay alt grading into clay gouge zone; qtz blebs grading into pervasive qtz flooding; chlorite alt mafics; minor Fe specs increasing to Fe halos; sub sections broken core							43		42	41	22	31	41	42
132.00	134.00		SAA; 133. 1cm hem bearing vein @ 60deg along with Fe envelope (anchorite); 133.7 increasing clay and sericite							43		33		33	22	41	31
134.00	136.00		Primary textured obliterated by alteration; patchy sericite and clay alt grading into clay gouge zone; qtz blebs grading into pervasive qtz flooding; chlorite alt mafics; minor Fe specs increasing to Fe halos; sub sections broken core							43		42	41	11	31	41	42
136.00	138.00		SAA; 133. 1cm hem bearing vein @ 60deg along with Fe envelope (anchorite); 133.7 increasing clay and sericite; 136.5 and @ 137.0 qtz vein/carb 5cm wide with a gouge halo. Patches with +/- mm sized hematitic specks, +/- trace sulphides							43		33		33	22	41	31
138.00	140.00		SAA; increasingly fractured; decreasing clay; local qtz/carb veins low angle							43		33	41	11	41	41	
140.00	142.00		SAA; increasing clay; increasing Fe grading into veinlets; minor gouge zone							43		33	41	11	22	41	
142.00	144.00		SAA; increasing sericite and clay; halos surrounding 10 cm gouge zones; 143.1 anchorite & 143.7 3cm qtz/carb veins; trace Fe and sulphide							32		33	41	33	42	41	
144.00	146.00		SAA; decreasing clay							32		33	41	32	42	41	
146.00	148.00		SAA; slight increase in clay; small Qtz/Fe veins							32		33	41	32	42	41	
148.00	150.00		SAA; small Qtz/Fe vein @ 149; disseminated Fe spec; 149.8 minor gouge zone							32		33	41	32	42	41	
150.00	152.00		SAA; increased fracturing; increasing clay; qtz blebs; gouge zones							32		33	41	32	42	41	
152.00	154.00		SAA.							32		33	41	32	42	41	
154.00	155.10		SAA. < cm wide quartz, carbonate veins @ steep angle to CA with approx 30 cm spacing bear trace to minor chalcocite and bornite. Hematite specks as described before. Quartz blebs							42		33	41	32	41	31	
155.10	176.00		Continuation of drill hole @ 155.1 m (11/1/06); strongly broken, primary textures mainly obliterated by pervasive sericite + quartz alteration, locally with pinkish iron alteration patches, locally narrow sections (10-20 cm) with weak alteration displaying fine-med grain primary k-spar through groundmass, quartz appears as irregular blebs, approx 10-20% intermittent strongly fractured and altered zones (10-20 cms) grading to seicitic gouge, fractures generally oriented at 50-60 degrees to c.a, trc hematite as smears on slickenside surfaces, @157.8m - 3 cm carb vnl @ 50 deg to c.a, @170.2m- 5 cm qtz +/- carb vn with purplish hem selvages at 50 degrees to c.a, partial recovery from 167.4-176.5m							2		3	1	2	1	1	

From (m)	To (m)	Sample No.	Lith	Mineralization							Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor							
176.00	181.10		Predominantly gouge/fault gouge interval: from 176.0 to 177.7m, interval consists of intense pale green ductile sericite + clay gouge with minor inbedded siliceous fragments, from 177.7 to 181.1 m, interval consists of intensely altered (seric), semi-competent rock material containing numerous polished slickenside surfaces (bluish gray) at variable core angles, mainly 20 deg to c.a., locally 70 degrees, sharp lower contact with competent rock at 10-20 degrees to c.a. (contact extends through 20 cms of core interval (180.9-181.1m)										5		3		2	
181.00	187.90		Weakly broken, competent, moderately altered with primary textures mainly obliterated by pervasive salmon colored iron staining/overprint, lesser sporadic patches of pale green quartz-seric alteration, quartz mainly as 0.5-1 cm blebs throughout groundmass, conspicuous 1-3 mm hem blebs throughout, possibly with trace associated chalcocite +/- bornite, minor sporadic qtz +/- carb +/- hem vnlt, 1-3 mm, occasionally 1-3 cms, generally oriented at 30-40 degrees to c.a										2		2		2	1
187.90	191.30		Similar to previous section with decreased salmon colored iron patches and more prevalent pervasive green seric-quartz flooding, < 1% fine grain disseminated hematite specs, 1-2 mm, several purplish qtz-carb-hem vnlt 0.5-1 cm, coincident with general fracturing @ 50 deg to c.a, weakly fractured throughout										3		2		1	
191.30	192.60		Zone of broken quartz flooding with lesser intervening pale apple green sericite, sporadic gougy fracture zones to 5 cms, wk carbonate in fractures, several fine blebs of bornite with - chalcocite rims noted in quartz across 1-2 cms @ 191.7 m										4		3	2	2	1
192.60	199.20		Moderate obliteration of primary textures, consistent quartz flooding with decreased sericite from above, mafics and primary k-spar are readily apparent, mafics (mainly biotite) are variably chloritized, 10-15%, up to 0.5 cm, competent, weakly fractured @ 40-50 degrees to c.a., minor fine grain magnetite, from 198.7 to 199.2: increased pervasive sericite alteration surrounding central 5 cm gouge zone at 40 degrees to c.a., rare qtz -carb +/- hem vnlt to 3 mm										3		1			1
199.20	204.00		Quartz diorite, medium grained, fresh, lacking any appreciable alteration, clear intrusive texture with pervasive 1-2% fine grained pink primary k-spar through groundmass, 10-15% variably chloritized biotite books to 0.5 cm, mainly 1-3 mm, <1% fine grained disseminated magnetite, weakly fractured															
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From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
9.10	11.30	1.50	0.61	68%	0.41
11.30	14.30	2.63	0.78	88%	0.30
14.30	17.40	2.39	0.88	77%	0.37
17.40	20.40	2.97	1.01	99%	0.34
20.40	23.50	1.71	0.94	55%	0.55
23.50	26.50	1.97	0.94	66%	0.48
26.50	29.60	2.68	1.20	86%	0.45
29.60	32.60	3.23	1.10	108%	0.34
32.60	35.70	2.67	2.14	86%	0.80
35.70	38.70	2.87	1.90	96%	0.66
38.70	41.80	3.03	2.56	98%	0.84
41.80	44.80	1.87	0.65	62%	0.35
44.80	47.90	2.54	0.73	82%	0.29
47.90	50.90	2.37	0.51	79%	0.22
50.90	54.00	2.76	1.56	89%	0.57
54.00	57.00	2.36	0.87	79%	0.37
57.00	60.10	2.35	1.34	76%	0.57
60.10	63.10	2.60	1.65	87%	0.63
63.10	66.20	2.72	1.29	88%	0.47
66.20	69.20	2.91	1.94	97%	0.67
69.20	72.30	2.23	1.45	72%	0.65
72.30	75.30	2.21	0.39	74%	0.18
75.30	78.40	2.17	0.92	70%	0.42
78.40	81.40	2.94	1.61	98%	0.55
81.40	84.50	2.33	0.77	75%	0.33
84.50	87.50	2.04	0.82	68%	0.40
87.50	90.50	2.89	1.98	96%	0.69
90.50	93.60	2.39	0.59	77%	0.25
93.60	96.60	2.60	1.20	87%	0.46
96.60	99.70	2.43	1.43	78%	0.59
99.70	102.70	2.68	0.44	89%	0.16
102.70	105.80	3.45	0.11	111%	0.03
105.80	106.80	2.06	0.00	206%	0.00
106.80	111.90	0.95	0.16	19%	0.17
111.90	114.90	0.93	0.00	31%	0.00
114.90	118.00	2.48	1.01	80%	0.41
118.00	121.00	2.06	0.72	69%	0.35
121.00	124.05	2.37	0.92	78%	0.39
124.05	127.10	1.68	0.00	55%	0.00
127.10	130.15	2.40	0.79	79%	0.33
130.15	133.20	2.68	0.81	88%	0.30
133.20	136.25	2.62	0.83	86%	0.32

From (m)	To (m)	a m	Lith	Alteration									
				sil	pot	ser	musc	clay	iron	carb	chlor		
0.00	12.20												
12.20	36.50				2		2	1	3	1	1	2	
36.50	62.60					1	1		1		1	1	
62.60	72.90				2		2		1	1	1	2	
72.90	75.80				42		42		31	1	1	42	

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
136.25	139.29	2.24	1.14	74%	0.51
139.29	142.34	2.21	0.64	72%	0.29
142.34	145.39	2.41	0.57	79%	0.24
145.39	148.44	2.70	0.89	89%	0.33
148.44	151.49	2.60	0.96	85%	0.37
151.49	155.14	2.17	0.57	59%	0.26

From (m)	To (m)	a m	Lith	Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor
75.80	82.80	Strongly - intensively broken core. From 75.8 and 77.9 50 % lost core. Pale pink to light green to pale cream bleached. Significant increase of clay, grading into clayey, carbonate bearing moderately gouged zones (fracture planes @ 30 - 40 deg to CA with strong slicks): From 77.8 to 79 m pale green, predom sericitic with few scattered competent pieces. Hematite specs with prominent reddish halos. Locally apparent intrusive texture with weak clay, +/- sericite alteration. Slight increase of Fe-oxides/ iron carbonate.		31		33		34	2	32	
82.80	102.10	Alteration decreasing to generally weak, locally moderate. Primary textures discrete throughout the majority of interval, locally obliterated by alteration. Chloritised mafics and weak patchy sericite, pervasive in subsections. Locally fine interstitial epidote, locally grading into faint patches. Pervasive interstitial K-spar amounts to 3 - 5 %. Minor patchy hematite ( at 89.6 to 89.9 pervasive: red hematite through groundmass) and locally (at 93.5) hematite bearing veinlets. Localized bleaching +/- in and around gouged zones: From 82.9 to 83.1; 88.2 to 82.5; 90.9 to 91.6; 97.8 to 98.1 (lower contact @ 20 deg to CA). Variably orientated fracture planes with slickensides, preferably @ 40 deg to CA. Very gradual decrease of alteration downwards, LC +- arbitrary chosen.		31	41	32		32	31	41	41
102.10	168.90	Medium to coarse grained, quartz- and minor K-spar bearing, weakly magnetic (patchy) diorite. < cm sized mafics amount to 10 to 15 % cm sized. Fresh appearing subsections alternate with minorly sericite and chlorite bearing subsections. Locally trace epidote, patchy and/ or in and around minor veinlets. Few scattered, pale orange, soft, +/- carbonate bearing, variably orientated veinlets (gypsum? and Fe bearing carbonate). Faintly developed stockwork of carbonate bearing hairline veinlets, locally resulting in shattered appearance. Orientation of fracture plane is variable from steep to subparallel to CA, shallow angles increasing downwards. Strongly - intensively broken, locally with very minor clayey and weakly carbonate bearing gouge from 121 to 124 and 127.1 to 127.7. Overall weakly to moderately broken core.			41	31		31	1	11	41
		From 149.3 to 150.7: intensively broken core and < dm wide clayey to sandy, carbonate bearing gouge. From 152 to 154.6 strongly broken core with < dm to < 40 cm wide gouged zones (from 152.6 to 153 clayey ductile, beige to reddish brown, clay mineral?, sericite? and carbonate bearing gouge; UC along fracture plane @ 60 deg to CA, LC along fracture plane @ 50 deg to CA? m wide, weakly epidote bearing halo). From 142.5 to 151.5 locally trace sulphide mineralisation (chalcopyrite, chalcocite, bornite) occurring as sub mm to rarely cm sized specs, part of quartz hairline veinlets. From 151.5 to 168.9 accessory to trace, disseminated, copper bearing mineralisation replacing mafics.									
	E O H										

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
12.20	14.30	1.30	0.00	62%	0.00
14.30	17.40	1.87	0.20	60%	0.11
17.40	20.40	2.47	0.38	82%	0.15
20.40	23.50	2.48	0.84	80%	0.34
23.50	26.50	2.21	0.62	74%	0.28
26.50	29.60	2.43	0.81	78%	0.33
29.60	32.60	1.81	0.34	60%	0.19
32.60	35.70	2.11	0.20	68%	0.09
35.70	38.70	2.10	0.47	70%	0.22
38.70	41.80	2.09	0.82	67%	0.39
41.80	44.80	2.37	0.42	79%	0.18
44.80	47.90	2.25	0.90	73%	0.40
47.90	50.90	2.88	1.84	96%	0.64
50.90	54.00	2.44	1.07	79%	0.44
54.00	57.00	2.42	0.22	81%	0.09
57.00	60.10	2.24	0.69	72%	0.31
60.10	63.10	2.57	0.49	86%	0.19
63.10	66.20	2.22	0.61	72%	0.27
66.20	69.20	2.40	0.28	80%	0.12
69.20	72.30	2.87	0.90	93%	0.31
72.30	75.30	2.55	0.40	85%	0.16
75.30	78.40	2.02	0.26	65%	0.13
78.40	81.40	2.81	0.30	94%	0.11
81.40	84.50	2.32	0.24	75%	0.10
84.50	87.50	2.48	0.45	83%	0.18
87.50	90.50	1.80	0.38	60%	0.21
90.50	93.60	2.49	0.27	80%	0.11
93.60	96.60	2.74	0.47	91%	0.17
96.60	99.70	2.82	1.00	91%	0.35
99.70	102.70	2.65	0.23	88%	0.09
102.70	105.80	2.81	1.54	91%	0.55
105.80	108.81	2.72	1.75	90%	0.64
108.81	111.86	2.60	1.58	85%	0.61
111.86	114.91	2.64	21.12	87%	8.00
114.91	117.96	2.91	2.21	95%	0.76
117.96	121.00	2.63	1.02	87%	0.39
121.00	124.05	2.45	0.31	80%	0.13
124.05	127.10	2.46	0.89	81%	0.36
127.10	130.15	3.13	1.30	103%	0.42
130.15	133.20	3.07	2.31	101%	0.75
133.20	136.30	2.93	1.31	95%	0.45
136.30	139.30	2.90	2.07	97%	0.71

<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
139.30	142.40	2.68	1.30	86%	0.49
142.40	145.40	2.63	0.75	88%	0.29
145.40	148.50	3.06	1.80	99%	0.59
148.50	151.50	2.16	1.21	72%	0.56
151.50	154.60	2.37	0.52	76%	0.22
154.60	157.60	2.51	1.40	84%	0.56
157.60	160.70	2.43	1.80	78%	0.74
160.70	163.70	3.38	2.70	113%	0.80
163.70	166.80	2.71	1.90	87%	0.70
166.80	168.90	1.74	0.94	83%	0.54



From (m)	To (m)	Sample No.	Lith	Mineralization							Alteration										
											sil	pot	ser	musc	clay	iron	carb	chlor			
15.24	22.40		Pale grey and black spotted, fine to medium grained, intermediate, quartz bearing? diorite. Trace finely scattered to faintly patchy epidote. Subsections of strongly broken core, locally with very minor gouge (sericite, chlorite? minor carbonate). From 22.3 to 24.4 intensively broken, grading into gouge. Alteration is subtle to entire lacking. Except gouged zones weakly to moderately magnetic throughout.													11					41
22.40	25.80		primary textures obliterated by pervasive quartz sericite alteration and pale green to cream bleaching. Strongly fractured and broken, with weak to moderate clay and carbonate on fractures. Locally trace hematite, in fractures and pervasive. Accessory quartz veinlets.								43		42		11	1	11				
25.80	26.70		Transition zone, continuation of previous, with alteration fading out over 40 cm and fresh textures as described at "15.24 - 22.4" from 26.2 to 26.7								32		31								31
26.70	29.50		From 26.7 to 27 sericitic, minor carbonate bearing gouged zone with two 3 mm to 3 cm wide quartz- carbonate veins (trace hematite) @ 70 deg to CA. From 27 to 29.5 strongly fractured, pale to medium green material. Primary textures obliterated by moderate alteration (sericite, chlorite, +/- carbonate). 5 mm quartz carbonate vein subparallel to CA. Locally minor gouge. cm wide, quartz carbonate hematite veins @ 10 - 20 deg to CA amount to < 1 %.										42								
29.50	37.30		Pale grey and black spotted, fine to medium grained, intermediate, quartz bearing? diorite. Trace epidote. From 29.7 to 31 moderately broken core with minor sericite-, carbonate-, +/- trace hematite bearing gouge along fracture plane subparallel to CA. 15 cm gouge (as before) at 37.8 m sandwiched between fracture planes @ 30 deg to CA. Except gouged zones weakly to moderately magnetic throughout.												11						41
37.50	42.80		Very similar to 26.7 - 29.5: From 37.4 to 38.8 pale to medium green, primary textures obliterated by sericite and chlorite bearing alteration. At 38.6 to 38.8 silicification associated with patchy hematite bands and suspected trace native copper associated with hematite. Few mm wide hematite bearing veinlets @ steep angle to CA. From 38.8 to 41 m strongly broken core grading into dm up to > 0.5 m, sericitic, chlorite and weakly carbonate bearing gouged zones (38.8 - 39.6, with UC @ 10 deg to CA: Locally silicified, hematite bearing core pieces, hematite increasing within last 20 cm of this subsection). From 40.2 to 41: Strongly to intensively fractured core, primary textures obliterated by sericite and chlorite bearing alteration. From 40.4 to 40.6 quartz vein?, quartz flooding? with 20 % patchy and purple red hematite. From 41 to 42.8 subsections of strongly broken core, primary textures obliterated by quartz-, sericite-, and chlorite bearing alteration.								32		32					32			42
42.80	45.20		Pale grey and black spotted, fine to medium grained, intermediate, quartz bearing? diorite. Weakly magnetic throughout. Moderately broken. From 44.8. 45.2 increasing sericite bearing alteration.											31							41
45.20	48.00		Clayey, sericite- chlorite-, minor carbonate- gouge zone with 20 %, < 10 cm competent, strongly altered (sericite) core pieces. UC @ 30 deg to CA, LC @ 30 deg to CA.											43		42				41	42
48.00	71.60		Alternating, approx m wide zones of fresh to weakly altered (as before) material. Sporadic zones of 10 to 50 cm wide gouge zones. Altered subsections envelope the gouged subsections and display sub cm - > 3 cm wide, +/- quartz-, +/- carbonate-, +/- hematite veins, preferably @ shallow angles to CA, rarely steep to CA. Moderately broken core increasing to intensively broken near gouged zones. Downwards decreasing width and abundance of gouged zones. Gouged zones (sericite, chlorite, minor carbonate): 48.7 to 49.1; 50.4 to 50.7; 52.1 to 52.9; 56.1 to 56.7 (with 3cm wide, vuggy - bladed quartz carbonate vein @ 20 deg to CA and quartz-, carbonate- vein fragments within gouge); 58 to 58.4 (partial gouge); 58.8 to 59 (with 6 cm quartz-, carbonate fragment); 62.2 to 62.3 (LC enveloped with strong hematite impregnation over 7 cm); 62.7 to 62.9. 68.7 to 69 sporadic, white, < 4 mm quartz veinlets @ 40 to 70 deg to CA, branching.																		
71.60	72.90		Pale olive green grey to locally cream (locally with faintly developed reddish bands: hematite) coloured, weakly to moderately to strongly gouged material. UC: Sharp @ 50 deg to CA (associated with an indistinct parallel quartz-, carbonate vein), LC: 20 deg to CA (associated with a distinct, parallel, cm wide quartz-, carbonate vein). Gouge material presumably bears sericite, minor chlorite, minor hematite, clay minerals and minor carbonate).											44		43	31	41			41

From (m)	To (m)	Sample No.	Lith	Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
72.90	76.90		Strongly - locally intensively broken core with intermittend < dm wide, gouged zones as a.m.. Primary textures obliterated by quartz-, sericite-, and chlorite bearing alteration. Minor quartz-, +/- carbonate veining, grading into quartz flooding.							42		41	41	31	41	31	42
76.90	78.30		Distinctly chloritised mafics (carboante bearing) embedded in pale cream to dull white altered (presumably clay bearing) groundmass. Intrusive textures discrete. Strongly broken with locally closed spaced fracturing. Minor gouge. Locally abundant, preferably @ 60 deg to CA orientated (parallel to prominent fracture orientation) chlorite-, +/- hematite bearing hairline veinlets. At 78 - 78.3 fracturing subparallel to CA. Loclly (at 77.7) trace pyrite specs forming faintly developed 2 cm patch. Minor quartz-, carboante veinlets < 3 mm, prefferably at steep angles to CA.							41		41		41	41	21	42
78.30	88.80		Pale green, sericitic (clay-, carboante-, chlorite, locally patchy hematite bearing as described before) gouge, which locally grades into minor competent, strongly fractured core. Top 20 cm brownish, hematite bearing. Amount of gouge decreases near LC. From 80.6 to 82.5 m < dm sized core pieces (moderately to strongly broken) with weak to discrete primary textures: Weakly to moderately chlorite bearing (chloritised mafics) and locally +/- siliceous altered as described before, locally with faintly developed patchy hematite, weakly magnetic throughout.							31		34		33	31	31	42
88.80	93.70		Fresh appearing, locally weakly altered material (weakly chloritised mafics throughout, from 88.8 to 89.8 with weak quartz flooding, +/- weak sericite): Discrete primary textures with pale grey and black spotted, fine to medium grained, intermediate, quartz bearing? diorite. Subsections of strongly broken core, locally with very minor gouge (sericite, clay minerals minor carbonate: 10 cm at 89.5), associated with pale pinkish halos. Scattered, orange (FE bearing carboante?), sub mm - 3 mm wide vinlets amount to << 1 %. Few, scatterd quartz-, carbonate veinlets, prefferably steep to CA. <b>89.8 to 89.9: Scattered blebs of bornite.</b>							31		31		31	1	1	41
93.70	106.10		Strongly - locally intensively broken core with intermittend < dm to < m wide, gouged zones as a.m..Primary intrusive textures are variably discrete to predominantly +/- obliterated by quartz-, sericite-, and chlorite (chloritised mafics) bearing alteration. Pale cream, clayey ductile gouge (sericite, clay minerals, carbonate) from 93.7 to 94.7. UC (of gouge) parallel to highly carbonate bearing cm wide vein @ 15 deg to CA. LC (of gouge) along fracture plane @ 20 deg to CA. Pale cream, clayey ductile gouge (sericite, clay minerals, +/- minor carbonate) from 99.4 to 100.0. At 99.3 1 cm hematite-, carbonate vein @ 40 deg to CA. At 01.5 to 101.9: Pale pinkish (bearing < 1 % hematite specs and hematite hairline veinlets @ 60 deg to CA), quartz flooded material, bearing trace disseminated pyrite, within a.m. hematite hairline veinlets. UC (of quartz flooding) @ 70 deg to CA. From 104.3 to 106.1 discrete primary intrusive textures as described before.							32		32		33	1	31	41
106.10	115.90		Very similar to 93.7 to 106.1, but with significantly increased chlorite content, decreasing fracturing (moderate to strong) and less gouged subsections (decreasing abundance, width and degree of gouging: From 112.4 to 113 partial gouge/ semi kompetent material with moderate to strong sericite- and carbonate alteration and with sporadic carbonate-, hematite fragments. LC of moderately gouged subsecdction @ 20 deg to CA with crowded to patchy hematite specs on lower side of LC, extending to 113.4) From 113.4 to 115.9 with primary textures increasingly discrete, downwards decreasing quartz flooding and downwards decreasing chlorite. Within altered subections minor carbonate-, hematite veining as before. Within non altered subsections weak magnetism.							32		32		32	31	32	32
115.90	126.30		Weakly to locally moderately broken core, discrete, primary intrusive textures as before (quartz bearing diorite with 10 to 15 %, 1 to 3 mm biotite) with sporadic very weak quartz, +/- sericite alteration. Few, faintly developed, small, orange patches. Trace pyrite on fracture planes (for example at 121.9 m). Trace disseminated sulphides and minor magnetite. Moderately magnetic. From 124.3 to 124.9 pale green to cream highly sericite and carbonate (+/- clay minerals?) altered with numerous fine hematite-, carbonate stringers, grading into 10 cm gouge at 124.9. UC of gouge with slickensides @ 20 deg to CA. From 125.9 to 126.9 fracturing increaing to strong.														

From (m)	To (m)	Sample No.	Lith	Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
126.30	137.60		q							21	31	42		31	1	31	41
			Strongly to locally intensively broken core. Primary textures +/- obliterated by moderate sericite, +/- quartz-, +/- minor carbonate-, +/- minor clay minerals and minor chlorite (chloritised mafics) bearing alteration and locally strong bleaching. Scattered minor, narrow, gouged bands. At 130.6 to 131.1 pervasively pale cream bleached, primary textures entirely lacking, trace hematite specs. At 131.3 two close spaced, several mm sized specs of chalcocite? At 132 to 132.4 quartzflooding, sericite and K-spar bearing alteration engulfing multiple, 1 mm to < 3 cm quartz veinlets @ 50 to 60 deg to CA. At 135.1 m two 3 and 5 cm wide zoned quartz- chalcocite (< 5 mm wide chalcocite bands) @ 70 deg to CA, approx 3 cm apart. At 136.3 to 136.5 cm wide open space cavities, 2 mm by 5 cm with quartz-, carbonate lining.														
137.60	141.90																
			Weakly broken core, discrete, primary intrusive textures as before (quartz bearing diorite with 10 to 15 %, 1 to 3 mm biotite). Weakly to moderately magnetic; weakly chloritised mafics, minor disseminated chlorite. From 141.5 to 141.9: Weak patchy epidote bearing alteration														
141.90	145.90									11	31	33		33	31		42
			Primary textures obliterated by moderate to strong alteration (chlorite, hematite, clay minerals sericite). Significant increase of chlorite content. Competent core pieces with minor, pervasive, primary K-spar. Strongly to locally intensively broken core, grading into > 50 % gouge (< dm to > 1.5 m, variably intense: from moderate with competent core pieces to intense, clayey ductile). The gouge is assumed to comprise clay minerals, sericite, minor chlorite and minor hematite. Hematite occurs as dm sized patches and and poorly defined rusty red < cm to < 5 cm wide bands. Gouged subsections with few, < 4 cm quartz- carbonate veins @ 40 to 60 deg to CA, parallel to preferred orientation of fracture planes. LC: Fracture plane truncating gouged zone @ 30 deg to CA.														
145.90	154.40									43		43		32	11	1	42
			Fracturing decreases to weak to moderate. Locally patches displaying primary textures, Majority of interval with primary textures obliterated by sericite-, silicification, +/- minor chlorite bearing alteration. Few scattered, < dm, silty to sandy, chlorite bearing gouged zones. Few and far apart to locally close spaced quartz-, +/- hematite, +/- minor chlorite bearing veinlets (hairline to rarely < 3 cm) with somewhat preferred orientation from 60 deg to steep to CA. From 148.5 to 149.2: Pale cream to dirty olive green grey bleached (sericite and clay minerals) with scattered hematite specs and few, hematite bearing hairline veinlets, hematite coating on fracture planes. From 151.2 to 154.4: Increasingly intense quartz-, sericite alteration entirely obliterating primary textures.														
154.90	165.10									32		33		34	32		33
			Interval broken out based on strongly weahtering and/ or gouging, associated with a discrete earthy appearance and total obliteration of primary textures by quartz-, sericite alteration with patchy subsections displaying increased chlorite. Numerous subsections (50 %) of brick red hematitic staining (patchy, mottled, blotchy) within strongly sericite/ clay bearing, incompetent to moderately gouged subsections. Staining is frequently associated with irregular poorly defined, +/- brecciated quartz-, carbonate veins, and slickensides bearing fracture planes @ 10 to 20 deg to CA (indicating drilling down a fault). Strongly to locally intensively fractured.														
165.10	165.50									45					3	2	
			Strongly broken. Pale white, dense quartz veins with fine, closely spaced, dark coloured fine bands (specularite?, +/- trace chalcocite?) @ 10 deg to CA, with associated traces yellowish sulphide (pyrite) and minor hematitic streaks. UC and LC unknown: Broken core and/ or poor definition.														
165.50	179.70									33		33		1	22	41	33
			Interval broken out based on pervasively increasing chlorite content relatively to overlying intervals. Moderately to locally intensively broken core, associated with gouged material; gouge decreasing to minor, local occurrences and < 5 cm wide. Locally very faintly developed primary textures; the majority of interval with primary textures obliterated by quartz sericite + chlorite bearing alteration. Patches grading into subsections with strong pervasive silicification, associated with dense appearance and pale bleached colour. Sporadic to numerous rusty red hematite stained patches enveloping hairline fractures and associated with intense fracturing (variable orientation, from subparallel to steep).														
179.70	183.80									33		33			31		32
			Increasing sericite and clay mineral content, decreasing chlorite content (50 % localised areas, similar to overlying interval and 50 % pale bleached quartz-, sericite altered material with a pale dirty appearance). Few, scattered, < dm sized rusty red, hematite bearing patches, +/- associated with intensively broken core. Strongly to intensively broken core throughout.														

From (m)	To (m)	Sample No.	Lith	Mineralization							Alteration												
											sil	pot	ser	musc	clay	iron	carb	chlor					
183.80	188.50		183.8 to 184.5 strongly broken, semi competent material with abundant gouge. From 184.5 to 185.3: Competent, sericite altered rock. From 185.3 to 188.5: Sericite-, clay mineral-, carboante- and minor hematite bearing, predominantly pale cream, intensively gouged material.												44		44	31	42				
188.50	195.70		Strongly to intensively broken core, displaying variably sericite, +/- quartz, chlorite, clay mineral, +/- minor hematite (patchy and hematite-, carboante veinlets) bearing alteration resulting in variably coloured gravely subsections. Very poor recovery.											42		43		32	31	31	31		
195.70	201.10		Locally moderately to intensively broken core. Return of primary textures within subsections and partially obliterated by weak quartz-, sericite alteration. Patchy, weak, salmon pink K-spar alteration. Weakly magnetic (also +/- within broken subsections). Pervasive weak chlorite alteration.											41	31	41					31	42	
201.10	213.10		Transition zone between overlying strongly altered and underlying fresh, non altered material. Intrusive textures (partially faintly developed as a result of weak to moderate sericite-, chlorite- and epidote bearing alteration) apparent throughout. Locally moderate fracturing, predominantly strong to intensive fracturing, grading into variably wide (typically < dm), scattered gouged zones. 201.1 to 202: Pervasive, salmon pink (hematite?, K-spar?) alteration with numerous sericitic fracture fillings. Carbonate bearing in and around variably orientated hairline fractures. From 202 downwards to 213.2: Weakly epidote bearing (within fractures and minor isolated patches). Few and far apart, < 4 cm, salmon orange (K-spar?), variably orientated veins. Predominant gouged, +/- clayey ductile, zone from 208 to 209.5 (brownish, +/- minor carbonate, +/- minor K-spar?, chlorite bearing). From 211 to 213.1 strongly to intensively broken, partially semi competent to clayey ductile gouged (sericite, epidote, carbonate, +/- chlorite).													32	32		33		32	42	
213.10	216.50		Fresh, non - weakly altered (partially chloritised mafics), fine to medium grained, 15 to 20 %, < 3 mm, mafics, predominantly biotite. Quartz bearing. Interpreted as quartz bearing diorite as described before. Weakly broken. Minor, sub mm to mm, bright white carbonate veinlets.																			11	41
		E O H																					

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
15.24	15.90	0.22	0.10	33%	0.45
15.90	17.37	1.43	0.67	97%	0.47
17.37	18.90	0.99	0.14	65%	0.14
18.90	21.95	2.69	0.55	88%	0.20
21.95	25.00	1.98	0.00	65%	0.00
25.00	28.04	2.63	0.91	87%	0.35
28.04	31.09	2.86	0.73	94%	0.26
31.09	34.10	2.88	0.93	96%	0.32
34.10	37.20	2.86	0.86	92%	0.30
37.20	40.20	2.49	0.65	83%	0.26
40.20	43.30	2.81	0.45	91%	0.16
43.30	46.30	2.87	0.91	96%	0.32
46.30	49.40	2.73	0.21	88%	0.08
49.40	52.40	1.67	0.12	56%	0.07
52.40	53.50	2.07	0.10	188%	0.05
53.50	58.50	2.84	0.38	57%	0.13
58.50	61.60	2.39	0.32	77%	0.13
61.60	64.60	2.66	0.68	89%	0.26
64.60	67.70	2.71	0.33	87%	0.12
67.70	70.70	2.78	0.90	93%	0.32
70.70	73.76	2.73	0.27	89%	0.10
73.76	76.81	2.12	0.22	70%	0.10
76.81	79.90	2.45	0.00	79%	0.00
79.90	82.90	2.62	0.21	87%	0.08
82.90	85.90	1.86	0.00	62%	0.00
85.90	89.00	2.60	0.11	84%	0.04
89.00	92.05	2.89	0.70	95%	0.24
92.05	95.10				
95.10	98.15	2.77	0.11	91%	0.04
98.15	101.19	3.28	0.51	108%	0.16
101.19	104.24	1.04	0.00	34%	0.00
104.24	107.29	2.45	0.45	80%	0.18
107.29	110.34	2.55	0.10	84%	0.04
110.34	113.39	2.83	0.53	93%	0.19
113.39	116.43	2.69	0.43	88%	0.16
116.43	119.48	2.86	2.36	94%	0.83
119.48	122.53	2.97	1.71	97%	0.58
122.53	125.58	2.84	0.46	93%	0.16
125.58	128.70	1.91	0.12	61%	0.06
128.70	131.70	2.42	0.43	81%	0.18
131.70	134.80	2.49	0.00	80%	0.00
134.80	137.80	2.50	0.64	83%	0.26

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
137.80	140.90	2.88	2.10	93%	0.73
140.90	143.86	2.70	0.66	91%	0.24
143.86	146.91	2.65	0.59	87%	0.22
146.91	149.96	2.55	1.30	84%	0.51
149.96	153.00	2.29	0.92	75%	0.40
153.00	156.60	2.65	0.96	74%	0.36
156.60	159.10	2.21	0.21	88%	0.10
159.10	162.15	2.18	0.67	71%	0.31
162.15	165.20	2.37	0.71	78%	0.30
165.20	168.25	2.61	1.02	86%	0.39
168.25	171.30	2.47	1.37	81%	0.55
171.30	174.35	2.42	0.20	79%	0.08
174.35	177.39	1.73	0.21	57%	0.12
177.39	180.50	2.64	0.69	85%	0.26
180.50	183.49	2.22	0.30	74%	0.14
183.49	186.54	2.13	0.55	70%	0.26
186.54	189.60	2.22	0.00	73%	0.00
189.60	192.70	0.87	0.00	28%	0.00
192.70	195.70	0.75	0.11	25%	0.15
195.70	198.80	1.73	0.47	56%	0.27
198.80	201.80	1.87	0.26	62%	0.14
201.80	204.90	2.72	0.28	88%	0.10
204.90	207.90	2.58	0.76	86%	0.29
207.90	211.00	2.39	0.10	77%	0.04
211.00	214.00	2.46	0.20	82%	0.08
214.00	216.50	2.14	1.70	86%	0.79
	E O H				

From (m)	To (m)	Sample No.	Mineralization							Alteration														
										sil	pot	ser	musc	clay	iron	carb	chlor							
6.10	23.83		<p>Variably fractured core, from weakly to moderately, locally strongly. Primary textures are variably discrete (locally) to predominatly partially obliterated, to entirely lacking (locally) as a result of pervasive silicification and sericite-, +/- minor carboante bearing alteration. &lt; 3 % fine grained, primary? K-spar and 10 % chloritised mafics (pyroxenes?) throughout. Protolith is interpreted to be a medium grained quartz bearing diorite. Few minor weakly pinkish patches, presumably weakly hematite bearing? Sub sections with minor hematite specs as described before. Crosscut by few and far apart quartz-, carboante veinlets. Locally (patch from 10.7 to 11.4) a fine hematite veinlet stockwork locally grading into &lt; cm wide, variably orientated specularite veinlets, embedded in patchy siliceous, pale cream bleached to rusty red (disseminated hematite) and +/- clay mineral bearing? host material. From 14.4 to 14.6 weakly pitted material, with significantly increased sericite content and 15 % hematite specs and blebs, possibly associated with trace chalcocite and bornite? At 16.7 a &gt; 4 cm v</p>														43	41	42	41		41	41	41
23.83	41.80		<p>Very similar to previous, but with overall increased alteration: Significantly decreasing abundance of subsections displaying primary textures and the majority of interval with primary textures entirely lacking as a result of sericite- and quartz bearing alteration. Locally intensively fractured core, grading into narrow, &lt; dm wide clayey, ductile and swelling (clay minerals) gouge (at strongly broken with partial gouge from 34 to 34.5, swelling, strongly clay bearing gouge at 40.5 to 40.7). Patches with discrete hematite staining and from 38.3? (3 m of missing core somewhere in this interval) to 38.8 a &gt; 0.5 m wide? (missing core?), pervasively salmon coloured, weakly siliceous and minorly carbonate bearing intensively specularite speckled, and/ or fine meshed hematite veinlet stockwork bearing subsection. Hematite is associated with minor to moderate? chalcocite. Subsections displaying hematite specs as described before, locally (for example at 29.25 to 29.45 within a 3 mm quartz-, carbonate vein @ 50 deg to CA) with minor chalcocite. From 32.8 to 41.8 gradually increasing primary</p>														43		43	41	31	33	21	41
41.80	71.20		<p>Variably fractured core, from weakly to moderately, locally strongly, rarely grading into &lt; dm wide gouged zones. Primary textures are variably discrete (locally) to predominatly partially obliterated, to entirely lacking (locally) as a result of pervasive, mottled silicification and sericite-, +/- minor carboante (weakly pervasive as well as in and around hairline fractures) bearing alteration. &lt; 5 to 10 % fine grained, primary? K-spar and 10 % chloritised, &lt; cm mafics (pyroxenes?) throughout and locally chlorite bearing patches (at 66.7 as 5 cm wide halo around chlorite bearing hairline fractures @ 80 deg to CA). Minor biotite. Very minor, &lt; 5 mm hematite- and carbonate veinlets as described before. Protolith is interpreted to be a medium grained quartz bearing granodiorite. Pale, pinkish, non potassic patches scattered throughout amount to 20 to 30 %, presumably weakly hematite bearing? Except moderately to strongly altered subsections weakly to moderately magentic. Crosscut by few and far apart, &lt; cm quartz-, carboante veinlets. Fracturing and veining generally @ 60 to 70 deg to CA. 59.3 to 60 m missing c</p>														32	42	32	31	31	32	21	32
71.20	82.40		<p>Similar to previous interval, but with increasingly abundant pinkish patches grading into pervasive pink to cream coloured alteration associated with significantly increasing bleaching (weakly to moderately sericite bearing), which obliterates primary textures +/- entirely throughout the majority of the interval, resulting in a +/- dense, pale, featureless appearance. Variably moderately to locally strongly broken and then grading into &lt; cm to &lt; dm wide highly clay, sericite- and moderately carbonate bearing gouge. Prominently, clayey ductile gouged zone from 80.8 to 81.0 m; UC and LC @ 40 deg to CA. From 81 to 81.9 patchy to pervasive, strong, pale cream silicification ( quartz flooding), bearing dark specs of unknown composition (chlorite?) and trace chalcocite specs at 81.6 m and 81.9 m. From 81.9 to 82.4 mixed, fine grained, aphanitic, banded (flow banding? @ 40 to 50 deg to CA ) sericite altered, grading into 15 cm fine grained, pale green felsic material with minor hematite stringers @ 50 deg to CA and translucent quartz patches (possibly a dike with contacts camouflaged by alteration</p>														33	32?	42		32	42?	32	31

From (m)	To (m)	Sample No.		Mineralization						Alteration							
										sil	pot	ser	musc	clay	iron	carb	chlor
82.40	86.42		Moderate to strong, pervasive, quartz-, sericite- and chlorite bearing alteration +/- obliterating primary textures. 8 % chloritised mafics Moderately to locally strongly broken core, often with sericite-, +/- clay and minor carbonate bearing gouge. Minor, sporadic hairline hematite veinlets/ fracture filling. At 84.4 1 cm quartz veinlet with approx 50 % chalcocite blebs @ 40 deg to CA. 84.7 to 84.9: Clayey, ductile gouge bearing solid rock pieces.							43		43		32	11	11	41
86.20	111.80		Throughout the entire interval fresh and unaltered subsections (bearing 3 to 5 % primary k-spar) and/ or patches from < dm to > 1.5 m alternating with equally sized, variably weakly to moderately quartz-, sericite altered subsections and patches. Few subsections with intensively broken core, grading into approx dm wide, clayey ductile clay mineral and +/- sericite bearing gouge: 93.6 to 94.1. From 102.7 to 105.6: Strongly to intensively broken core with trace to minor, silty to sandy gouged material intermixed. Trace hematite hairline veinlets (at 93.57 and 111 m < 3 mm hematite-, carbonate veinlet @ 60 deg to CA). Very minor carboante veinlets from hairline to approx mm width. From 107.1 bis 107.6 5 pieces 3 mm to 2 cm wide quartz- carbonate veins @ steep angle to CA within strongly quartz-, sericite (+ minor carbonate) altered subsection.							32		32	31	31		32	41
111.80	147.75		Same as previous interval but overall increased to moderate fracturing, increasing amont of gouge (abundance and width of gouged subsections to moderate overall). Fresh subsections display weak magnetism. Prominent gouged subsections from 111.8 to 114: Strongly broken core, grading into intermitten moderately gouged (semi competent with sericite, clay, +/- quartz belbs), rarely strongly to intensively gouged material. Minor quartz-, carbonate-, hemnatite veinlets, grading into irregular patches. From 129 to 129.2: Moderately to strongly gouged (sericite, clay minerals, carboante, +/- minor hematite as before). 140.5 to 142: Strongly gouged (clay minerals and sericite). At 143 m: 6 cm gouge sandwiched between fracture planes @ 40 to 50 deg to CA; cm sized competent hematite patches . At 143.4 m 5 cm gouge sandwiched between fracture planes @ 70 deg to CA. Prominent weakly to non altered sections: From 117 to 121.3: Granodiorite with < 3 mm, locally 3 to 10 mm sized mafics as described before. From 129.3 to 131.7 m: Granodiorite as before wih minor, weak, patchy sericitic alteration. From 136.3 to 139.9: Granodiorite as before							31		32		32	1	31	31
E O H																	



<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
6.10	8.23	1.54	0.10	72%	0.06
8.23	11.28	2.32	0.52	76%	0.22
11.28	14.33	2.20	0.98	72%	0.45
14.33	17.37	2.59	0.89	85%	0.34
17.37	20.42	2.43	1.28	80%	0.53
20.42	23.47	2.23	1.26	73%	0.57
23.47	26.52	2.45	0.86	80%	0.35
26.52	29.57	2.57	0.69	84%	0.27
29.57	32.61	2.59	1.34	85%	0.52
32.61	38.71	2.02	0.41	33%	0.20
38.71	41.76	2.26	0.49	74%	0.22
41.76	44.80	2.77	0.56	91%	0.20
44.80	47.90	2.83	1.03	91%	0.36
47.90	50.90	2.21	0.26	74%	0.12
50.90	54.00	2.78	1.93	90%	0.69
54.00	57.00	2.47	0.99	82%	0.40
57.00	60.10	1.76	0.38	57%	0.22
60.10	63.10	2.90	1.98	97%	0.68
63.10	66.20	2.80	0.60	90%	0.21
66.20	69.20	2.96	1.31	99%	0.44
69.20	72.30	2.64	0.90	85%	0.34
72.30	75.30	2.95	1.35	98%	0.46
75.30	78.40	2.92	0.33	94%	0.11
78.40	81.40	2.93	0.31	98%	0.11
81.40	84.50	2.98	1.19	96%	0.40
84.50	87.48	2.90	0.64	97%	0.22
87.48	90.53	2.63	0.44	86%	0.17
90.53	93.57	2.82	0.84	93%	0.30
93.57	96.62	2.98	2.03	98%	0.68
96.62	99.70	2.63	0.85	85%	0.32
99.70	102.70	2.42	0.72	81%	0.30
102.70	105.80	2.37	0.38	76%	0.16
105.80	108.80	2.48	0.80	83%	0.32
108.80	111.86	2.93	0.83	96%	0.28
111.86	114.90	2.35	0.12	77%	0.05
114.80	118.00	2.79	0.26	87%	0.09
118.00	121.00	2.96	1.21	99%	0.41
121.00	124.05	2.52	0.39	83%	0.15
124.05	127.10	2.72	0.85	89%	0.31
127.10	130.15	2.80	0.22	92%	0.08
130.15	133.20	2.84	0.59	93%	0.21
133.20	136.25	2.70	0.37	89%	0.14
136.25	139.30	2.95	0.54	97%	0.18
139.30	142.40	2.92	0.11	94%	0.04
142.40	145.40	2.92	0.95	97%	0.33
145.40					

From (m)	To (m)	Sample No.		Alteration							Veining			
				sil	pot	ser	musc	clay	iron	carb	chlor	%Qtz	%Qtz Carb	
0.00	12.20		Casing/OB											
12.20	18.50		Gchataway. pale grey, fine-medium grained quartz diorite, +10% mafics dominantly biotite weakly to moderately chlorite+magnetite. Weak to moderately magnetic. Epidote veins 0.1-2.0 cm with cloudy quartz+white feldspar envelopes to 2 cm. Moderately silicified around fractures. Weak Yellow orange FeOx filled fractures (Weakly fractured CA 35-60+ 80degrees) .	2		2	0	1	1	1	3	0	5	
18.50	20.60		Gchataway. Moderately broken core. Moderate to strong pervasive silicification, and hematite along fractures and disseminated in matrix. White clay altered fractures 20 cm at 18.6 CA 70 degrees. followed by pervasive quartz flooding, silicification. Moderately fractured with strong Red FeOx along fractures CA 55 and subparallel. zone is non magnetic.	4		3	0	3	3	1	2			
20.60	25.70		Gchataway. Moderate pervasive chlorite-magnetite. Moderate silicification, sericite-epidote veins+ fine grained pink quartz-feldspar(k-feld) veins to 1 cm. Weak FeOx, fractures	3	1	2	0	1	1	1	3			
25.70	26.45		Pale green fine grained quartz feldspar porphyry (andesite?) Contact CA 15 upper, 40 lower. Strong chlorite + weak magnetic, trace Red-Orange FeOX filled fracture CA 25 degrees.	0	0	3		2	1		3			
26.45	64.30		Gchataway. Weak pervasive chlorite, sericite, feldspars cloudy. Moderate silicification, quartz _epidote-sericite flooding, veins to 30 cm CA 45-60, fine grained pink-flesh colored quartz-feldspar dike 5 cm, CA 70@33.4. @39.7m-41m 45.8-47.0 intense quartz-muscovite-clay+minor FeOx along fractures CA 60.Dominant hairline to 2 cm fractures weak @ 45-70degrees+subparallel with white clay, chlorite, sericite , @48.2 48.9: strongly silicified with densely packed med grain mixed green chloritized mafics (30%) and magnetite blebs (5%) crossed by sporadic patchy epidote (10%)	2	1	1	1	1	1	1	3			
64.30		95	Gchataway. Increasing pervasive quartz-sericite, hematite altered magnetite. Pale to dark green to locally cloudy plagioclase, locally flaky sericite. 55.8-66.2 strong white clay to gouge CA 45degrees. 69.2-78.0 moderately broken, fractures filled with chlorite, quartz-sericite, clay, red FeOx+cuprite/native copper CA 45-70 degrees+subparallel and locally cross cutting. 78-95.0 weakly broken, increasing sericite and hematized magnetite, and hematite-cuprite-native copper filled quartz+flaky sericite veinlets CA 50-70 degrees.	3	0	2	1	2	2	1	2	3	5	
95.00		156.6	Gchataway. Increasing pervasive qtz-ser +/- kaol +/- carb, mod strongly fractured with pervasive obliteration of primary textures, trc cp +/- hem +/- cuprite? In fractures, flaky sericite + clay altered (fault gouge zones), gouge occupies approx 20% of section w. variable moderate to intense development, core angles, fracture and core angles generally 45-60 degrees to core angles, locally at 90 degrees to c.a, minor sporadic qtz +/- hem +/- carb veinlets to 1 cm at 50-60 degrees to c.a, sporadic brick red hem fracture coatings often with strong slickensides, downsection increased frequency of hematite fracture fillings and hem fracture halos beginning at approx 115.0 m, from 120.4 - 156.3: section contains numerous zones of intermittent bleached partial gouge/fault breccia zones 10 cm to > 1 m, w.strong to intense fracture fillings of patchy brick red hematite (qtz-ser-carb-hem), intense alteration zones @ 120.4-123.6,121.1 -127.7, 137.0-138.7 (sporadic), 140-141.4, 144.6-146.1, 155.3-155.6, ;strongest hematite often forms halos around wk to mod alteration w partial primary textures @ 150.0-	2	0	3	1	2	3	1	2			
156.60	163.00		Gchataway. Strongly broken with pervasive obliteration of primary textures, cream to pale pinkish cream color, 1-2% red hematite spots 1-2mm, localized gouge areas (seric + carb), locally preferential bluish-green seric replacement of plag phenos	3	0	3	1	2	1	1	0			

From (m)	To (m)	Sample No.		Alteration							Veining		
				sil	pot	ser	musc	clay	iron	carb	chlor	%Qtz	%Qtz Carb
163.00	172.90		Gchataway. Fault gouge/fault breccia, predominantly msv pale yellowish green, locally with reddish hematite patches, contains < 40% pale cream (as above) altered rock fragments to ~ 167.3 (alteration is qtz-seric +/- clay), from 167.3 to 172.9 m, gouge becomes increasingly kaolinitic w downward increasing fragments with modeerate to clear intrusive texture	2	0	4	0	4	1	2	0		
172.50	175.90		Gchataway. Fresh-weakly altered medium grained qtz diorite, 10-15% mafics (mainly chloritized biotite), 2-7 mm, , weak pinkish fine patches through groundmass , ~ 1% distinct f.g dissemen. magnetite, 2-3 mm, trace fine epidote patches through groundmass, weak-mod fractured at 60 degrees to core axis , weak fine chlorite +/- carb +/-seric fracture fils	1	0	1	0	1	1	1	1		
	EOH												

From (m)	To (m)	Sample No.		Alteration								
				sil	pot	ser	musc	clay	iron	carb	chlor	
6.10	23.50		Overburden: Mixed gravel and diorite to granodiorite throughout (boulder fragments), intermittent pieces of sandy, ductile clay.									
23.50	30.90		Pale grey to olive green grey, equigranular, medium grained quartz bearing diorite, as described before. 20 %, euhedral to anhedral, mm to < 3 mm (rarely < 1 cm), partially chloritised mafics, mainly biotite. Weakly magnetic. Weak to moderate, patchy, sericite bearing alteration, with partial to complete obliteration of primary textures. Locally trace clay minerals? and minor carbonate. Moderately to locally intensively broken, grading into minor, narrow, gouged zones (minor clay minerals, minor sericite and minor carbonate).	31		42		31		31		41
30.90	36.20		Moderately to strongly broken, locally intensively broken> Primary texture obliterated by moderate to strong quartz-, sericite bearing alteration. At 31.5 to 32.1: Pale cream bleached subsection, cut by numerous, < cm, variably orientated quartz-, hematite-, carbonate bearing veinlets.	42		42		31	12	41		42
36.20	54.60		Pale grey to olive green grey, equigranular, medium grained quartz bearing diorite, as described before. Weakly magnetic. 20 %, euhedral to anhedral, mm to < 3 mm (rarely < 1 cm), chloritised mafics. Moderate, patchy, quartz- and sericite bearing alteration, with partial to complete obliteration of primary textures. Locally minor clay minerals? and minor carbonate. Weakly to locally intensively broken, grading into minor, narrow, gouged zones (minor clay minerals, minor sericite and minor carbonate). Up to 40 cm wide, bleached subsections, associated with pink non K-spar bearing patches and patchy epidote, sporadic epidote bearing heirline fractures. Minor, bright white, mm to 3 mm wide, variably orientated carbonate veinlets, scattered. At 46.1 m 1 cm gypsum vein @ 40 deg to CA. At 46 m a 1.5 cm wide, fine grained, dense, pale pinkish dike @ 20 deg to CA, and 46.6 m a 4 cm wide, pale pinkish to pale green dike @ 50 deg to CA; both non potassic. Fractures are preferably @ 60 deg to CA.	41		41		31		41		41
54.60	85.20		Abrupt change from weakly broken to strongly broken and grading into a > 1.5 m wide gouged zone and significantly increased sericite-, clay minerals- chlorite and carbonate bearing alteration. Strongly to intensively broken core with estimated 20 % gouged zones from predominately < dm to rarely several dm wide or even > m wide. Within competent subsections primary textures are +/- obliterated by sericite, chlorite, clay mineral and locally quartz bearing alteration. Rusty maroon colored, hematite bearing patches scattered throughout. Locally bleached subsections, sporadic epidote bearing (patches). From 65.1 to 66.2: Suspected intermittent diking (5 to 10 cm wide with very poorly defined contacts as a result of a.m. fracturing and alteration), associated with numerous hematite bearing fracture fillings and hematite bearing, +/- clayey ductile gouge (at 65.1 to 65.6), and patchy silicification. From 60 to 65.1: Strongly to intensively broken core, but alteration decreases from strong overall to weak with discrete primary textures, epidote, chlorite	31		43		33	23	31		42

From (m)	To (m)	Sample No.		Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor
85.20	100.20		Moderately to strongly broken, locally weakly broken; fracture intensity downwards increasing to intensive. Intrusive textures mainly obliterated, locally faintly developed. Pervasive, quartz- (quartz blebs), sericite alteration, +/- chlorite, resulting in pale green to dirty green colour. Several, < 0.5 m wide pale beige to weakly pinkish (Fe- oxide bearing?) bleached sections (predominantly clay minerals? and sericite?), locally ( at 87.7) with 1 to 3 mm quartz carbonate veinlets @ 60 deg to CA and +/- grading into minor clayey - ductile gouge; abundance increasing downwards. Locally minor hematite specs and hematite coated fracture panes . Moderately altered subsections with apparent (primary) K-spar. Rare 2 to 3 mm wide carbonate veinlets @ 60 deg to CA, parallel to preferred orientation of fracture planes. From 96.6 to 100.2 pervasive chlorite (associated with sericite and quartz blebs).	42		43		43	1	21	32
100.20	125.70		Pale cream to pale beige to weakly reddish (patchy) to faintly greenish coloured, locally non gouged to predominantly moderately gouged (material is in place, densely packed, but easily crumbles on pick up), +/- intensively altered throughout (clay minerals, sericite, minor patchy hematite, minor carbonate: strongest pervasive alterations seen so far; dense, massive, bleached appearance completely obliterating primary textures). The gouged material bears small intermittent weakly to moderately competent subsections, which are very gradationally increasing near UC and LC and display clay alteration of feldspar. Locally hematite bearing halos enveloping fractures, which are preferably orientated @ 50 to 60 deg to CA. Locally hematite-, sericite slickensides. From 100.2 to 102.6 pale yellow beige bleached, competent and +/- siliceous, sericite- and clay mineral bearing material, displays numerous, red, presumably hematitic specs.	31		44		44	31	41	
125.70	129.30		Dirty green with pink K-spar phenos throughout, partially distinct intrusive texture, weak to moderate quartz-, sericite and chlorite alteration, bears distinctive 5 - 10 % primary K-spar, disseminated throughout matrix. From 171.1 to 129.3, decreasingly apparent intrusive texture, fracturing increasing from weak to strong/ intense, with intermittend narrow, sericite-, clay and carbonate bearing gouge subsections.	42		42		32		32	42
129.30	133.50		Pale grey, dirty green grey to locally pinkish (hematite) weakly ductile to sandy gouge (sericite, clay minerals: swelling, carbonate) with few minor, competent, < 5 cm sized core pieces.			44		44	31	43	41

From (m)	To (m)	Sample No.		Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor
133.50	169.90		Cream to weakly pale greenish to faintly pinkish (Fe-bearing carbonate?) as described before. From 133.5 to 163.7 interval displays discrete primary, intrusive textures: (15 to 20 % anhedral, pervasively chloritised, < 5 mm mafics, weak magnetism. Weakly altered: Sericite, +/- minor clay minerals?, +/- minor carbonate) alternating with predominantly narrow, very intensively altered to gouged subsections, reminiscent to a clay bearing stockwork (highly clay-, sericite- and +/- minor carbonate bearing: Locally quartz flooding and/ or veining < 0.5 m, minor epidote in and around fractures). Fractures are preferably oreintated @ 50 to 60 deg to CA, locally variably orientated. Competent subsections cut by approx %, variably orientated, white (carbonate) to orange - pinkish (presumably Fe-carboante) bearing veinlets. Transitions between weak and intense alteration are predominatly very sharp. Prominet intensively alterd subsections from 142.8 to 143.6: Intensively pale beige bleached and pervasive quartz-, sericite clay mineral bearing alteration, competent core pieces near centre of subsec	32		33		33	41	31	31
169.90	183.00		Small subsections of this interval very reminiscent to overlying interval, but overall primary textures are increasingly obliterated by quartz (quartz blebs), sericite and chlorite bearing alteration. Overall increasing abundance of gouge (+/- 20 %: Clay minerals, sericite, +/- carboante), reminiscent to a stockwork, as described above with typically very sharp contacts along very variable orientated fracture planes. Strongly to intensively fractured throughout, with preferred orientation of fracture planes @ 50 to 60 deg to CA. From 177 m to 183 m increasing hematite staining and K-spar grading from specs and patchy to +/- pervasive pink associated with increasingly prominent primary textures. Trace sulphides (pyrite) on fracture planes.	43	32	43	41	33	1	31	41
183.00	193.10		Primary textures are discrete throughout this interval, with relatively decreased amount of mafics (< 3 %): Mainly fresh appearing, < 5 mm biotite. Sub mm to rarely < 5 mm feldspar, increased quartz content?; crowded, intergranular texture, different to the the common intrusives of the area and therefore tentatively interpreted as potential dike? Very weak to weak, sericite and clay mineral (cloudy to chalky feldspar) bearing alteration increasing downwards, associated with fracturing increasing from moderate to intense near LC. Patchy to weakly pervasive pinkish tint as a result of (primary?) K-spar and +/- Fe-bearing carbonate? Locally trace sulphide altered mafics (chalcocite and bornite) very rarely grading to cm sized specs/ blebs. Variably orientated, sub mm to mm wide, orange, Fe-carbonate bearing veinlets. Variably orientated fracturing			1		1	1	11	21

From (m)	To (m)	Sample No.		Alteration							
				sil	pot	ser	musc	clay	iron	carb	chlor
193.10	203.30		Intensively to very intensively fractured core, with > 20 % moderately to clayey ductile gouged subsections. Few core pieces with faint primary textures reminiscent to overlying interval, predominantly primary textures obliterated by sericite, clay mineral and +/- carbonate bearing alteration and pale bleached appearance: Reminiscent to 169.9 to 183. Clay mineral, +/- carbonate and sericite bearing gouge. Competent core pieces with pinkish tint as described before. Locally quartz belbs, rarely grading into flooding. Trace sulphide specs. From 194.5 to 200.6: Moderately gouged to locally clayey ductile subsections (generally pale bleached coloured, locally rusty red as a result of minor hematite) +/- with < cm sized angular fragments. From 201 to 203.3 increasing primary textures (bearing weak to moderate pervasive sericite and decreasing clay and decreasing gouge. EOH	32		43	41	33	1	31	1

From (m)	To (m)	Recovered (m)	RQD Recovery (m)	Recovery (%)	RQD
6.10	8.20	0.22	0.11	10%	0.50
8.20	11.30	0.36	0.00	12%	0.00
11.30	14.30	0.31	0.12	10%	0.39
14.30	17.40	0.60	0.13	19%	0.22
17.40	20.40	0.40	0.18	13%	0.45
20.40	23.50	0.13	0.00	4%	0.00
23.50	26.50	2.39	1.07	80%	0.45
26.50	29.60	2.32	0.27	75%	0.12
29.60	32.60	2.44	1.04	81%	0.43
32.60	35.70	1.78	0.36	57%	0.20
35.70	38.70	2.25	1.16	75%	0.52
38.70	41.80	2.10	0.52	68%	0.25
41.80	44.80	2.70	0.56	90%	0.21
44.80	47.85	2.77	1.77	91%	0.64
47.85	50.90	3.00	1.75	98%	0.58
50.90	53.95	2.69	0.66	88%	0.25
53.95	57.00	2.28	0.42	75%	0.18
57.00	60.05	1.54	0.00	50%	0.00
60.05	63.09	1.51	0.10	50%	0.07
63.09	63.09	0.35	0.00	#DIV/0!	0.00
63.09	66.14	1.37	0.36	45%	0.26
66.14	69.19	1.15	0.00	38%	0.00
69.19	72.24	1.10	0.12	36%	0.11
72.24	75.28	1.92	0.35	63%	0.18
75.28	78.33	1.02	0.00	33%	0.00
78.33	81.38	1.07	0.20	35%	0.19
81.38	84.43	0.84	0.00	28%	0.00
84.43	87.48	2.29	0.33	75%	0.14
87.48	90.53	2.18	0.95	71%	0.44
90.53	93.57	2.20	0.28	72%	0.13
93.57	96.62	1.93	0.42	63%	0.22
96.62	99.67	1.39	0.00	46%	0.00
99.67	102.72	1.88	0.10	62%	0.05
102.72	105.79	2.73	0.51	89%	0.19
105.79	108.81	2.60	0.41	86%	0.16
108.81	111.90	2.77	0.14	90%	0.05
111.90	114.90	2.70	0.11	90%	0.04
114.90	118.00	2.92	0.46	94%	0.16
118.00	121.00	2.74	0.50	91%	0.18
121.00	124.10	2.75	0.53	89%	0.19
124.10	127.10	2.60	0.71	87%	0.27
127.10	130.15	1.43	0.00	47%	0.00



<b>From (m)</b>	<b>To (m)</b>	<b>Recovered (m)</b>	<b>RQD Recovery (m)</b>	<b>Recovery (%)</b>	<b>RQD</b>
127.10	133.20	1.50	0.00	25%	0.00
127.10	136.25	2.23	0.38	24%	0.17
127.10	139.30	2.34	0.33	19%	0.14
127.10	142.34	2.76	0.46	18%	0.17
127.10	145.39	2.49	0.37	14%	0.15
127.10	148.44	2.30	0.43	11%	0.19
127.10	151.50	2.84	0.87	12%	0.31
127.10	154.53	2.70	1.05	10%	0.39
127.10	157.60	2.92	1.51	10%	0.52
127.10	160.60	2.48	0.44	7%	0.18
127.10	163.70	3.20	0.34	9%	0.11
127.10	166.70	2.60	1.62	7%	0.62
127.10	169.80	2.42	0.70	6%	0.29
127.10	172.80	2.52	0.00	6%	0.00
127.10	175.90	2.28	0.00	5%	0.00
127.10	179.00	2.20	0.31	4%	0.14
127.10	181.97	1.92	0.14	3%	0.07
127.10	185.00	2.18	0.44	4%	0.20
127.10	188.06	2.72	1.49	4%	0.55
127.10	191.10	2.63	1.20	4%	0.46
127.10	194.16	2.62	0.10	4%	0.04
127.10	197.20	1.75	0.00	2%	0.00
127.10	200.25	1.53	0.00	2%	0.00
127.10	203.20	2.02	0.00	3%	0.00
	E O H				

From (m)	To (m)		Mineralization						Alteration								
									sil	pot	ser	musc	clay	iron	carb		
0.00	12.20	Overburden/casing															
12.20	97.00																
		Medium grained pale grayish green with pervasive sporadic salmon colored patches, moderate pervasive qtz-seric alteration mainly obliterating primary textures, plag phenocrysts are generally euhedral, 2-4 mm, generally w. pale apple green to cream colored with weak clay +/- seric alteration, moderately to strongly broken with numerous sporadic sericite + clay gouge sections 10-20 cms, weak carbonate on fractures and within gouge intervals, fracturing and gouge intensity and frequency increases down section, very low to absent (<2%) mafic chloritized component, pervasive 1-2% fine sooty dark spots (1-3 mm) through groundmass, mainly hematite with local indistinguishable chalcocite +/- bornite association, minor sporadic qtz veins 1-4 cms, generally at 70 degees to core axis, locally to 40 degrees , 2-3% muscovite books(1-5 mm) through, less altered rock, @ 20 m: 1 cm qtz vn at 40 degrees top c.a with minor chalcocite blebs along upper selvage ( 2 mm wide), @ 22.5-23.4: strong to intense mottled qtz-sericite with increased muscovite with numerous fine blebs and patches of ch								2		2	2	1	1	1	
97.00	102.90	Brown felsic dyke: plag + quartz porphyritic with brown cryptocrystalline siliceous medium brown matrix, upper chilled margin (40 cms @ 97.0-97.4) lacking phenos with conspicuous chalcocite +/- bornite in fine fracture fillings, aphanitic, weakly porphyritic lower chill margin @ 102.7-102.9, moderately broken with broken sharp contact @ 102.9, plag texture is mainly crowded euhedral plag phenos, 2-5 mm, with pale greenish weak clay +/- seric alt'n, scattered diffuse quartz eyes/blebs through groundmass, 3-10 mm, indistinct mafic component 1-2% with pervasive chlor +/- qtz +/- hematite replacements, @98.8-99.7: mod-strongly broken with weak bleaching and minor localized gougy fractures														1	
102.90	143.30	Similar alteration as above dike (12.2-97.0) ; pervasive weak to moderate qtz-seric alteration obliterating primary intrusive rock textures, minor sporadic salmon colored patches, moderately to locally strongly broken with minor locally bleached areas around minor narrow gouge zones (5-20 cms), wk - negligible mafic component (chloritized), pervasive fine hematite spots to local fine patches/veinlets/fracture fills of hematite, fractures variable at 40-70 degrees to core axis, negligible veining throughout, @ 137.2m -1 cm qtz -carb veinlet at 30 degrees to core axis w. gougy margins and hematite halo 10 cm below vn, well defined 13 cm gouge band @ 133.2 m @ 70 degrees to c. axis,								2		2	2	1	1	1	
143.30	146.80	Abrupt alteration change: conspicuous blebby quartz texture with increased pervasive fine chlorite through groundmass, chlorite is generally associated with increased fine reddish hematite, several sporadic epidote bands or fine patches through section, sericite diminished from previous section, lower contact of chloritic alteration is marked by 5 cm sericite gouge band								2		1	1			2	
146.80	168.30	Weak-moderate qtz-sericite alteration, mod-strongly broken, @ 163.2-166.8; strong to intensively broken with numerous gouge areas, negligible mafics, approx 1 % f.g disseminated hematite specs								2		2	1			1	
	EOH																

# Appendix 2

## Assay Certificates

ASSAY CERTIFICATE

Happy Creek Minerals Ltd. PROJECT RATERIA File # A608653R

2304 - 1066 W. Hastings S, Vancouver BC V6E 3X2 Submitted by: David Blann



SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %		
4809	<.001	.119	<.01	<.01	<2<.001	<.001	.09	1.22	<.01	.011	<.001	<.001	<.01	2.40	.042	.001	.30	.73	.05	.36	<.001	<.001			
4810	<.001	.040	<.01	<.01	<2<.001	<.001	.06	1.16	<.01	.010	<.001	.001	<.01	1.81	.036	.001	.35	1.00	.13	.40	<.001	<.001			
RE 4810	<.001	.041	<.01	<.01	<2<.001	<.001	.06	1.16	<.01	.010	<.001	.002	<.01	1.84	.036	.001	.35	1.04	.13	.40	<.001	<.001			
4811	<.001	.055	<.01	<.01	<2<.001	<.001	.08	1.24	<.01	.011	<.001	.001	<.01	2.12	.040	.001	.32	1.02	.11	.42	<.001	<.001			
4812	<.001	.049	<.01	<.01	<2<.001	<.001	.08	1.09	<.01	.011	<.001	<.001	<.01	2.56	.044	.001	.23	1.08	.09	.53	<.001	<.001			
4813	<.001	3.884	<.01	<.01	124<.001	<.001	.09	1.04	<.01	.008	<.001	.001	<.01	2.06	.039	.001	.12	1.24	.03	.81	<.001	<.001			
4814	<.001	.045	<.01	<.01	<2<.001	<.001	.12	1.29	<.01	.013	<.001	.001	<.01	2.76	.040	.001	.27	1.16	.09	.46	<.001	<.001			
4815	<.001	.054	<.01	<.01	<2<.001	<.001	.08	1.14	<.01	.013	<.001	.001	<.01	2.51	.042	.001	.21	1.11	.09	.48	<.001	<.001			
4816	<.001	.100	<.01	<.01	<2<.001	<.001	.11	1.13	<.01	.012	<.001	.001	<.01	2.90	.039	.001	.34	1.14	.07	.59	<.001	<.001			
4817	<.001	.033	<.01	<.01	<2<.001	<.001	.11	1.04	<.01	.014	<.001	.001	<.01	3.01	.042	.001	.24	1.15	.07	.57	<.001	<.001			
4818	<.001	.020	<.01	<.01	<2<.001	<.001	.08	1.22	<.01	.014	<.001	.002	<.01	2.30	.043	.001	.24	1.08	.10	.49	<.001	<.001			
4819	<.001	.127	<.01	<.01	<2<.001	<.001	.10	1.08	<.01	.013	<.001	.001	<.01	2.36	.041	<.001	.21	1.15	.08	.61	<.001	<.001			
4820	<.001	.059	<.01	<.01	<2<.001	<.001	.10	1.16	<.01	.011	<.001	<.001	<.01	2.24	.046	.001	.21	1.08	.08	.52	.001	<.001			
4821	<.001	.153	<.01	<.01	<2<.001	<.001	.09	.77	<.01	.010	<.001	.001	<.01	2.12	.039	.001	.12	1.11	.08	.56	<.001	<.001			
4822	.002	.151	<.01	<.01	<2<.001	<.001	.08	.42	<.01	.008	<.001	.001	<.01	1.79	.011	.001	.08	1.20	.07	.73	<.001	<.001			
4823	.001	.066	<.01	<.01	<2<.001	<.001	.05	.33	<.01	.007	<.001	.001	<.01	1.62	.009	<.001	.06	.88	.07	.54	<.001	<.001			
4824	<.001	.064	<.01	<.01	<2<.001	<.001	.07	.90	<.01	.009	<.001	<.001	<.01	2.00	.032	.001	.18	1.02	.06	.54	<.001	<.001			
4825	<.001	.060	<.01	<.01	<2<.001	<.001	.08	1.21	<.01	.013	<.001	.001	<.01	2.43	.045	.001	.19	1.15	.09	.58	<.001	<.001			
4826	<.001	.038	<.01	<.01	<2<.001	<.001	.06	1.18	<.01	.013	<.001	<.001	<.01	1.85	.041	<.001	.28	.99	.10	.45	<.001	<.001			
4827	<.001	.035	<.01	<.01	<2<.001	<.001	.06	1.08	<.01	.013	<.001	.001	<.01	1.93	.037	.001	.27	1.01	.11	.44	<.001	<.001			
4828	<.001	.143	<.01	<.01	<2<.001	<.001	.09	1.23	<.01	.016	<.001	<.001	<.01	2.54	.040	.001	.31	1.07	.09	.53	<.001	<.001			
4829	<.001	.130	<.01	<.01	<2<.001	<.001	.09	1.18	<.01	.012	<.001	<.001	<.01	2.01	.040	.001	.26	1.18	.12	.55	<.001	<.001			
4830	<.001	.112	<.01	<.01	<2<.001	<.001	.08	1.29	<.01	.016	<.001	.001	<.01	2.43	.040	.001	.22	1.07	.10	.52	<.001	<.001			
4831	.001	.223	<.01	<.01	2<.001	<.001	.11	1.23	<.01	.014	<.001	<.001	<.01	2.68	.039	<.001	.27	1.14	.06	.63	<.001	<.001			
4832	.001	.185	<.01	<.01	2<.001	<.001	.16	1.45	<.01	.021	<.001	.001	<.01	4.01	.038	.001	.46	1.06	.05	.60	<.001	<.001			
4833	<.001	.146	<.01	<.01	2<.001	<.001	.10	1.09	<.01	.013	<.001	.001	<.01	2.60	.042	.001	.20	1.20	.07	.67	<.001	<.001			
4834	.001	.297	<.01	<.01	3<.001	<.001	.10	1.22	<.01	.011	<.001	.001	<.01	2.35	.045	.001	.19	1.15	.08	.63	<.001	<.001			
4835	<.001	.447	<.01	<.01	7<.001	<.001	.11	1.15	<.01	.014	<.001	<.001	<.01	2.81	.042	<.001	.21	1.37	.07	.73	.001	<.001			
4836	<.001	.082	<.01	<.01	<2<.001	<.001	.07	.70	<.01	.010	<.001	.001	<.01	2.18	.029	<.001	.12	1.00	.09	.54	<.001	<.001			
4837	<.001	.022	<.01	<.01	<2<.001	<.001	.06	1.20	<.01	.013	<.001	<.001	<.01	2.12	.042	.001	.26	.98	.11	.35	<.001	<.001			
4838	<.001	.251	<.01	<.01	3<.001	<.001	.06	.95	<.01	.010	<.001	.001	<.01	1.82	.029	.001	.16	1.16	.09	.50	<.001	<.001			
4839	<.001	.098	<.01	<.01	<2<.001	<.001	.08	1.39	<.01	.012	<.001	<.001	<.01	1.99	.042	.001	.35	1.20	.10	.41	<.001	<.001			
STANDARD R-3	.073	.812	1.98	4.05	194	.527	.061	.07	31.02	.04	.003	.023	.038	<.01	1.34	.047	.013	1.08	1.14	.04	.44	<.001	.002		

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.  
- SAMPLE TYPE: CORE PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data  FA

DATE RECEIVED: JAN 8 2007

DATE REPORT MAILED:.....

JAN 16 2007



ASSAY CERTIFICATE

Happy Creek Minerals Ltd. PROJECT RATERIA File # A608504R Page 1

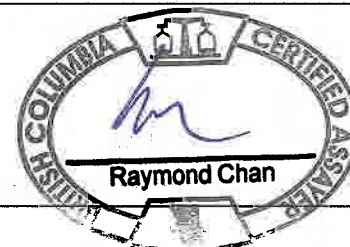
2304 - 1066 W. Hastings S, Vancouver BC V6E 3X2 Submitted by: David Blann



SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	
4189	<.001	.077	<.01	<.01	<2<.001	<.001	.07	1.20	<.01	.009	<.001	<.001	<.01	2.26	.041	.001	.24	.77	.06	.38	<.001	<.001		
4190	<.001	.008	<.01	<.01	<2<.001	<.001	.06	1.35	<.01	.010	<.001	.001	<.01	1.84	.037	.001	.31	.74	.09	.29	<.001	<.001		
4191	<.001	.054	<.01	<.01	3<.001	<.001	.15	1.42	<.01	.018	<.001	.001	<.01	3.79	.038	.001	.36	.62	.04	.37	<.001	<.001		
4192	<.001	.038	<.01	<.01	<2<.001	<.001	.10	1.16	<.01	.011	<.001	<.001	<.01	2.56	.044	.001	.20	.70	.05	.41	<.001	<.001		
4193	<.001	.029	<.01	<.01	<2<.001	<.001	.08	1.32	<.01	.012	<.001	.001	<.01	2.31	.047	.001	.32	.73	.06	.37	.001	<.001		
4194	<.001	.031	<.01	<.01	<2<.001	<.001	.10	1.24	<.01	.011	<.001	<.001	<.01	2.60	.040	.001	.19	.77	.05	.37	<.001	<.001		
4195	<.001	.055	<.01	<.01	<2<.001	<.001	.08	1.30	<.01	.010	<.001	<.001	<.01	2.30	.044	<.001	.23	.77	.06	.38	<.001	<.001		
4196	<.001	.028	<.01	<.01	<2<.001	<.001	.06	1.24	<.01	.010	<.001	.001	<.01	2.10	.046	<.001	.22	.72	.08	.29	<.001	<.001		
4197	<.001	.215	<.01	<.01	3<.001	<.001	.09	1.14	<.01	.010	<.001	.001	<.01	2.42	.043	.001	.26	.67	.04	.40	<.001	<.001		
4198	.001	.092	<.01	<.01	<2<.001	<.001	.12	1.09	<.01	.011	<.001	<.001	<.01	2.82	.041	<.001	.19	.73	.04	.45	<.001	<.001		
4199(pulp)	.073	.763	.01	<.01	69	.001	<.001	.02	.93	.01	.017	<.001	.015	<.01	1.09	.033	.024	.11	.37	.04	.21	<.001	<.001	
4200	.001	.135	<.01	<.01	2<.001	<.001	.12	1.04	<.01	.009	<.001	.001	<.01	2.66	.040	.001	.15	.80	.03	.54	.001	<.001		
4201	.001	.146	<.01	<.01	<2<.001	<.001	.12	1.21	<.01	.010	<.001	<.001	<.01	2.58	.041	.001	.20	.69	.05	.41	<.001	<.001		
4202	.001	.046	<.01	<.01	2<.001	<.001	.12	1.25	<.01	.012	<.001	<.001	<.01	2.65	.044	<.001	.24	.63	.04	.41	<.001	<.001		
4203	<.001	.064	<.01	<.01	<2<.001	<.001	.09	1.30	<.01	.013	<.001	.001	<.01	2.51	.045	.001	.23	.72	.05	.36	<.001	<.001		
4204	<.001	.063	<.01	<.01	<2<.001	<.001	.08	1.21	<.01	.014	<.001	<.001	<.01	2.41	.042	.001	.25	.67	.05	.38	<.001	<.001		
4205(rock)	<.001	.003	<.01	<.01	<2<.001	.001	.06	3.14	<.01	.007	<.001	<.001	<.01	.96	.048	.001	1.02	1.96	.26	.15	.001	<.001		
4206	<.001	.108	<.01	<.01	<2<.001	<.001	.10	1.07	<.01	.014	<.001	.001	<.01	2.60	.040	.001	.17	.72	.04	.48	<.001	<.001		
4207	<.001	.122	<.01	<.01	2<.001	<.001	.06	.41	<.01	.007	<.001	.001	<.01	1.75	.008	<.001	.04	.65	.05	.47	<.001	<.001		
4208	.001	.061	<.01	<.01	<2<.001	<.001	.05	.32	<.01	.007	<.001	<.001	<.01	1.72	.011	.001	.04	.64	.04	.49	<.001	<.001		
4209	.001	.099	<.01	<.01	2<.001	<.001	.06	.36	<.01	.008	<.001	<.001	<.01	2.02	.010	<.001	.06	.62	.05	.43	<.001	<.001		
4210	<.001	.038	<.01	<.01	<2<.001	<.001	.06	.37	<.01	.010	<.001	.001	<.01	2.03	.010	<.001	.06	.66	.06	.43	<.001	<.001		
4211	.003	.063	<.01	<.01	<2<.001	<.001	.07	.39	<.01	.013	<.001	<.001	<.01	2.58	.011	.001	.06	.63	.04	.43	.001	<.001		
4212	<.001	.038	<.01	<.01	<2<.001	<.001	.08	.60	<.01	.011	<.001	.001	<.01	2.76	.019	<.001	.11	.74	.05	.45	<.001	<.001		
4213	.001	.026	<.01	<.01	<2<.001	<.001	.05	.33	<.01	.008	<.001	.002	<.01	1.81	.008	<.001	.06	.59	.05	.40	<.001	<.001		
4214	<.001	.084	<.01	<.01	<2<.001	<.001	.07	.87	<.01	.011	<.001	<.001	<.01	2.60	.032	<.001	.18	.62	.04	.39	<.001	<.001		
4215	<.001	.005	<.01	<.01	<2<.001	<.001	.06	1.28	<.01	.015	<.001	<.001	<.01	2.09	.039	.001	.26	.77	.07	.24	<.001	<.001		
4216	.001	.094	<.01	<.01	<2<.001	<.001	.11	1.05	<.01	.011	<.001	<.001	<.01	2.95	.037	<.001	.18	.72	.03	.52	<.001	<.001		
4217	.002	.256	<.01	<.01	4<.001	<.001	.11	1.04	<.01	.010	<.001	<.001	<.01	2.65	.038	<.001	.15	.83	.02	.63	<.001	<.001		
RE 4217	.002	.259	<.01	<.01	5<.001	<.001	.11	1.04	<.01	.010	<.001	.001	<.01	2.65	.036	.001	.15	.86	.02	.64	<.001	<.001		
4218	.001	.042	<.01	<.01	<2<.001	<.001	.07	1.24	<.01	.011	<.001	<.001	<.01	1.92	.039	<.001	.25	.78	.07	.36	<.001	<.001		
4219	.004	.171	<.01	<.01	2<.001	<.001	.11	1.20	<.01	.012	<.001	.001	<.01	2.66	.041	<.001	.20	.74	.04	.51	<.001	<.001		
4220	.002	.175	<.01	<.01	2<.001	<.001	.10	1.20	<.01	.012	<.001	<.001	<.01	2.44	.042	<.001	.20	.78	.03	.56	<.001	<.001		
4221	.001	.175	<.01	<.01	2<.001	<.001	.11	1.16	<.01	.013	<.001	<.001	<.01	2.80	.042	<.001	.17	.75	.03	.54	<.001	<.001		
4222	.002	.216	<.01	<.01	3	.001	<.001	.10	1.38	<.01	.012	<.001	<.001	<.01	2.53	.047	<.001	.21	.78	.03	.52	<.001	<.001	
4223	.001	.298	<.01	<.01	5<.001	<.001	.12	1.23	<.01	.010	<.001	.001	<.01	2.63	.039	<.001	.17	.73	.02	.53	<.001	<.001		
4224	.001	.117	<.01	<.01	<2<.001	<.001	.11	.93	<.01	.011	<.001	.001	<.01	2.56	.040	.001	.12	.70	.02	.55	<.001	<.001		
STANDARD R-3	.077	.824	1.99	4.03	197	.548	.062	.07	31.99	.04	.003	.023	.040	<.01	1.35	.050	.012	1.07	1.13	.04	.44	.006	.002	

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.  
- SAMPLE TYPE: CORE PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA \_\_\_\_\_ DATE RECEIVED: JAN 8 2007 DATE REPORT MAILED:.....JAN.17.2007





SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %
4225	.001	.481	<.01	<.01	7<.001<.001			.12	1.08	<.01	.008<.001<.001	<.01			2.53	.038	<.001	.13	.64	.01	.53	<.001	<.001
4226	.002	.225	<.01	<.01	2<.001 .001			.13	1.30	<.01	.008<.001 .001	<.01			2.63	.042	<.001	.16	.73	.02	.61	<.001	.001
4227	<.001	.126	<.01	<.01	<2<.001<.001			.09	1.17	<.01	.014<.001 .001	<.01			2.72	.043	<.001	.18	.69	.03	.42	<.001	<.001
4228	<.001	.035	<.01	<.01	<2<.001 .001			.07	1.32	<.01	.013<.001 .001	<.01			2.10	.045	<.001	.25	.72	.06	.34	<.001	<.001
4229	<.001	.183	<.01	<.01	2<.001<.001			.08	1.26	<.01	.012<.001<.001	<.01			2.12	.043	<.001	.24	.46	.03	.27	<.001	<.001
4230	.002	1.071	<.01	<.01	11<.001<.001			.12	1.28	<.01	.011<.001<.001	<.01			2.80	.043	<.001	.21	.38	.02	.35	<.001	.001
4231	.002	.122	<.01	<.01	<2<.001<.001			.11	1.19	<.01	.011<.001 .001	<.01			2.71	.045	<.001	.19	.43	.02	.35	<.001	.001
4232	.001	.211	<.01	<.01	<2<.001<.001			.12	1.27	<.01	.015<.001 .001	<.01			3.29	.043	.001	.25	.45	.02	.37	<.001	<.001
4233	<.001	.068	<.01	<.01	<2<.001<.001			.07	1.26	<.01	.015<.001<.001	<.01			2.16	.042	<.001	.30	.51	.03	.30	<.001	<.001
STANDARD R-3	.077	.806	1.96	3.97	196 .536 .060			.07	31.25	.04	.003 .023 .039	<.01			1.29	.049	.012	1.05	1.08	.04	.43	.001	.003

Sample type: CORE PULP.



ASSAY CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608608R

2304 - 1066 W. Hastings S, Vancouver BC V6E 3X2 Submitted by: N/ A

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %
4595	<.001	.137	<.01	<.01	2<.001	<.001	.10	1.21	<.01	.005	<.001	<.001	<.01	2.40	.048	.001	.26	.61	.04	.28	<.001	<.001	
4596	<.001	.019	<.01	<.01	<2<.001	<.001	.07	1.48	<.01	.006	<.001	<.001	<.01	1.38	.048	.001	.41	.72	.07	.18	.001	<.001	
4597	<.001	.064	<.01	<.01	<2<.001	<.001	.07	1.33	<.01	.006	<.001	<.001	<.01	1.83	.047	<.001	.32	.67	.06	.25	<.001	<.001	
4598	<.001	.045	<.01	<.01	<2<.001	<.001	.08	1.26	<.01	.007	<.001	<.001	<.01	2.15	.047	<.001	.30	.54	.05	.25	<.001	<.001	
4599	<.001	.051	<.01	<.01	<2<.001	<.001	.08	1.20	<.01	.007	<.001	<.001	<.01	2.54	.046	<.001	.21	.48	.05	.30	.001	<.001	
4600	<.001	.039	<.01	<.01	<2<.001	<.001	.10	1.26	<.01	.007	<.001	<.001	<.01	2.62	.049	<.001	.32	.66	.04	.26	.001	<.001	
4601	<.001	.066	<.01	<.01	<2<.001	<.001	.08	1.15	<.01	.007	<.001	.001	<.01	2.31	.047	<.001	.21	.51	.04	.27	.001	<.001	
4602	<.001	.384	<.01	<.01	2<.001	.001	.09	1.32	<.01	.009	<.001	<.001	<.01	2.26	.056	<.001	.35	.83	.04	.36	<.001	<.001	
4603	<.001	.037	<.01	<.01	<2<.001	<.001	.06	1.28	<.01	.008	<.001	.002	<.01	1.89	.048	<.001	.41	.81	.05	.25	<.001	<.001	
4604(pulp)	.034	.185	.01	.02	33	.008	.003	.10	6.99	.03	.014	<.001	.009	.02	9.54	.084	.006	.39	1.77	.05	.20	.006	.001
4605(rock)	<.001	.012	<.01	<.01	<2	.001	.001	.03	2.61	<.01	.003	<.001	.001	<.01	.85	.061	.002	.67	1.11	.10	.36	.001	<.001
4606	<.001	.087	<.01	<.01	<2<.001	<.001	.06	1.26	<.01	.007	<.001	.001	<.01	1.59	.046	<.001	.34	.75	.05	.30	.001	<.001	
4607	<.001	.166	<.01	<.01	2<.001	<.001	.07	1.14	<.01	.007	<.001	<.001	<.01	1.79	.045	<.001	.31	.64	.03	.28	.001	<.001	
4608	<.001	.042	<.01	<.01	<2<.001	.001	.08	1.38	<.01	.009	<.001	<.001	<.01	2.34	.052	<.001	.38	.76	.05	.26	.001	<.001	
RE 4608	<.001	.042	<.01	<.01	<2<.001	<.001	.08	1.36	<.01	.008	<.001	<.001	<.01	2.35	.049	<.001	.38	.74	.05	.26	.001	<.001	
4609	<.001	.003	<.01	<.01	<2<.001	<.001	.07	1.28	<.01	.008	<.001	<.001	<.01	1.94	.049	<.001	.34	.67	.04	.28	.001	<.001	
4610	<.001	.368	<.01	<.01	5<.001	<.001	.09	1.07	<.01	.006	<.001	<.001	<.01	2.05	.035	<.001	.24	.58	.03	.29	.001	<.001	
4611	<.001	.108	<.01	<.01	<2<.001	<.001	.07	1.18	<.01	.006	<.001	<.001	<.01	1.69	.040	<.001	.29	.65	.04	.32	<.001	<.001	
4612	<.001	.020	<.01	<.01	<2<.001	<.001	.06	1.59	<.01	.007	<.001	<.001	<.01	1.19	.047	<.001	.45	.78	.07	.19	.001	<.001	
4613	<.001	.083	<.01	<.01	<2<.001	<.001	.06	1.12	<.01	.006	<.001	<.001	<.01	1.74	.035	<.001	.25	.63	.05	.29	.001	<.001	
4614	<.001	.007	<.01	<.01	<2<.001	<.001	.06	1.33	<.01	.008	<.001	<.001	<.01	1.63	.043	<.001	.34	.69	.06	.20	.001	<.001	
4615	<.001	.012	<.01	<.01	<2<.001	<.001	.06	1.21	<.01	.008	<.001	<.001	<.01	2.06	.045	<.001	.26	.68	.05	.30	.001	<.001	
4616	<.001	.052	<.01	<.01	<2<.001	<.001	.06	.62	<.01	.005	<.001	<.001	<.01	1.72	.015	<.001	.15	.45	.03	.26	.001	<.001	
4617	<.001	.030	<.01	<.01	<2<.001	<.001	.05	.43	<.01	.006	<.001	<.001	<.01	1.59	.014	<.001	.07	.41	.05	.31	.001	<.001	
4618	<.001	.031	<.01	<.01	<2<.001	<.001	.08	.69	<.01	.006	<.001	.001	<.01	2.24	.017	<.001	.19	.54	.04	.29	.001	<.001	
4619	<.001	.167	<.01	<.01	<2<.001	<.001	.06	.82	<.01	.014	<.001	.002	<.01	2.12	.032	<.001	.19	.66	.04	.26	<.001	<.001	
4620	<.001	.005	<.01	<.01	<2<.001	<.001	.06	1.14	<.01	.007	<.001	<.001	<.01	1.86	.043	<.001	.28	.67	.05	.25	.001	<.001	
4621	<.001	.003	<.01	<.01	<2<.001	<.001	.05	1.34	<.01	.008	<.001	<.001	<.01	1.75	.046	<.001	.28	.65	.06	.26	<.001	<.001	
4622	<.001	.017	<.01	<.01	<2<.001	<.001	.06	1.25	<.01	.010	<.001	<.001	<.01	1.81	.044	<.001	.32	.67	.06	.24	.001	<.001	
4623	<.001	.063	<.01	<.01	<2<.001	<.001	.06	1.42	<.01	.012	<.001	<.001	<.01	1.71	.045	<.001	.32	.75	.06	.30	<.001	<.001	
4624	<.001	.077	<.01	<.01	<2<.001	<.001	.11	1.11	<.01	.012	<.001	<.001	<.01	2.73	.044	<.001	.23	.63	.03	.33	<.001	<.001	
STANDARD R-3	.075	.820	2.00	4.01	201	.541	.060	.07	30.50	.04	.003	.023	.040	<.01	1.34	.050	.012	1.07	1.11	.04	.44	.002	.002

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.  
- SAMPLE TYPE: CORE PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data *HF* FA \_\_\_\_\_

DATE RECEIVED: JAN 8 2007 DATE REPORT MAILED:.....

JAN 12 2007





GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A607848

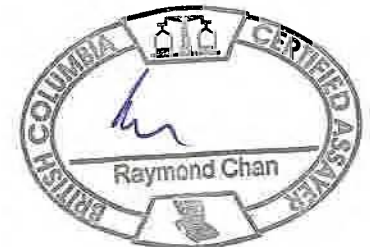
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	.5	5.2	3.2	43	<.1	7.6	5.4	523	1.98	.6	2.5	<.5	3.8	55	<.1	.1	.1	40	.49	.077	6	8	.64	183	.115	1	1.04	.065	.47	.2	<.01	1.9	.3	<.05	5	<.5
151171	3.5	61.8	2.4	26	<.1	2.0	2.5	1208	.88	<.5	.4	<.5	1.2	90	.1	.1	<.1	12	2.88	.049	6	5	.09	205	.001	2	.25	.007	.20	.1	<.01	.9	<.1	<.05	1	<.5
151172	1.4	430.3	2.3	43	.2	5.9	9.2	615	2.27	1.4	.4	2.6	1.6	35	<.1	.1	.1	55	1.96	.084	7	5	.19	147	.002	1	.48	.021	.10	.2	.03	3.4	<.1	<.05	2	<.5
151173	10.9	2719.8	2.5	34	1.2	7.4	8.7	727	2.37	6.2	.5	10.6	2.2	24	<.1	1.8	1.9	61	1.12	.070	10	6	.07	76	.004	4	.52	.009	.15	3.6	.01	4.1	<.1	<.05	2	<.5
151174	3.5	658.5	1.6	23	.3	3.4	2.3	344	1.06	1.4	.2	2.0	1.1	44	.1	<.1	.3	25	1.98	.053	4	4	.06	705	.001	2	.46	.021	.13	2.1	.02	2.4	<.1	<.05	1	<.5
151175	.9	252.2	2.7	53	.1	9.6	12.2	670	2.35	.9	.9	2.4	1.8	79	<.1	.1	.1	48	3.73	.052	7	6	1.54	105	.022	1	.60	.037	.07	.1	.04	2.5	<.1	<.05	3	<.5
151176	1.0	111.0	1.6	9	<.1	2.3	1.4	259	.64	1.4	.2	<.5	2.8	22	<.1	.3	<.1	10	.47	.015	6	5	.03	93	.001	2	.24	.031	.09	.1	.01	.8	<.1	<.05	1	<.5
151177	.5	39.1	1.4	14	<.1	1.5	1.8	203	.68	1.2	.1	.8	1.6	23	<.1	.2	<.1	14	.73	.019	6	3	.05	63	.003	1	.26	.024	.07	.1	.01	1.0	<.1	<.05	1	<.5
51744	19.2	>10000	5.6	46	>100	4.7	3.9	145	2.03	182.7	11.5	1053.0	.6	8	.2	.7	132.4	9	.22	.014	2	7	.10	47	.001	1	.13	.007	.04	.2	13.48	1.0	.1	3.22	1	47.6
STANDARD DS7	20.9	109.8	72.4	417	.9	56.3	9.4	641	2.45	49.0	5.0	68.7	4.5	72	6.4	6.2	4.7	84	.95	.079	12	173	1.08	389	.125	40	1.00	.078	.47	4.0	.21	2.5	4.3	.20	5	3.6

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: ROCK R150

11-10-06 10:51 OUT

Data    FA    DATE RECEIVED: OCT 16 2006 DATE REPORT MAILED:.....







GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608505

2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Sample
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	kg	
G-1	1.5	3.1	2.7	50	<.1	8.4	4.9	563	2.02	<.5	3.0	14.8	4.1	70	<.1	<.1	.1	48	.60	.082	10	158	.60	253	.150	1	1.09	.111	.56	.1	<.01	2.7	.4	<.05	6	<.5	-
151178	1.2	64.5	.9	34	<.1	2.8	5.5	402	1.66	2.4	.3	<.5	1.3	37	<.1	.1	<.1	53	.94	.054	6	4	.27	77	.023	1	.40	.054	.08	<.1	.01	3.1	<.1	<.05	2	<.5	4.00
151179	2.9	39.5	.7	23	<.1	2.8	5.5	343	1.85	3.1	.4	1.4	1.4	33	<.1	.2	.1	54	.26	.053	7	8	.18	89	.053	1	.46	.073	.10	.2	.01	2.5	<.1	<.05	3	<.5	1.80
151180	2.3	9.2	2.7	32	<.1	3.4	7.8	789	1.77	2.6	.5	<.5	1.6	49	<.1	1.4	.1	21	2.24	.026	15	2	.85	76	.002	2	.31	.022	.10	.2	.01	1.7	<.1	<.05	1	<.5	1.70
151181	1.8	662.9	2.3	43	.3	4.3	8.6	713	1.89	1.0	.3	4.0	1.4	39	<.1	.1	.2	35	2.55	.058	7	4	.27	189	.001	1	.45	.072	.11	.1	.04	3.6	<.1	<.05	2	<.5	2.90
151182	.5	56.5	1.9	36	<.1	9.6	10.8	389	2.34	1.8	.6	<.5	1.7	22	<.1	.2	<.1	69	.42	.073	8	6	.45	82	.043	1	.79	.045	.06	.2	<.01	3.6	<.1	<.05	4	<.5	1.50
STANDARD DS7	21.5	107.6	71.2	403	.9	58.9	10.1	645	2.48	47.5	5.0	74.2	4.5	72	6.3	6.0	4.6	86	.96	.077	14	273	1.08	379	.130	39	1.04	.090	.46	3.9	.20	2.6	4.2	.22	5	3.1	-

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: ROCK R150

12-20-06 10:52 OUT

Data    FA    DATE RECEIVED: OCT 31 2006 DATE REPORT MAILED:.....





GEOCHEMICAL ANALYSIS CERTIFICATE

Happy Creek Minerals Ltd. PROJECT RATERIA File # A608504 Page 1

2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
G-1	.2	4.2	4.2	48	<.1	3.7	3.9	551	1.90	.5	3.1	1.1	4.2	95	<.1	<.1	.2	40	.64	.076	10	12	.58	239	.134	2	1.34	.161	.57	.1	<.01	2.9	.4	<.05	6	<.5
4165	.1	44.3	2.6	29	<.1	1.2	2.9	305	1.10	.7	1.2	2.1	2.4	114	.1	12.2	.1	26	.85	.035	7	5	.26	290	.023	3	.62	.063	.20	.1	<.01	1.1	<.1	<.05	3	<.5
4166	.5	10.2	3.2	12	<.1	1.2	2.1	721	.71	.9	1.8	<.5	1.7	194	.1	.1	<.1	9	3.11	.037	8	4	.15	642	.001	3	.52	.015	.31	.1	<.01	.9	<.1	<.05	1	<.5
4167	.2	25.2	5.5	18	<.1	.6	2.1	1141	.80	.6	.8	<.5	1.1	262	.1	.2	<.1	8	4.77	.045	8	3	.27	2308	<.001	3	.48	.009	.29	.1	<.01	1.1	<.1	<.05	1	<.5
4168	.3	2.5	3.3	33	<.1	1.2	3.7	567	1.03	1.0	.9	<.5	1.2	137	.1	.4	<.1	14	1.96	.059	8	4	.20	361	.001	2	.57	.034	.25	<.1	<.01	1.3	<.1	<.05	2	<.5
4169	.1	14.4	1.9	26	<.1	1.2	3.3	636	.98	.8	.7	<.5	1.3	172	.1	.3	<.1	15	2.19	.054	8	3	.31	2155	.003	3	.59	.028	.25	<.1	<.01	1.3	<.1	<.05	2	<.5
4170	.5	4.5	2.8	32	<.1	1.3	3.8	611	1.40	1.3	.8	<.5	1.2	181	.1	.2	<.1	24	2.25	.046	7	4	.43	426	.001	3	.73	.041	.22	<.1	<.01	1.7	<.1	<.05	2	<.5
4171	.1	3.2	3.9	22	<.1	.7	2.9	601	1.03	.9	.5	<.5	1.2	181	.1	.1	<.1	15	2.53	.056	9	3	.16	407	.001	3	.55	.024	.29	.1	<.01	1.4	<.1	<.05	1	.5
4172	.4	9.8	3.9	26	<.1	1.2	2.9	550	1.00	1.0	.6	<.5	1.0	201	.1	.1	<.1	17	2.22	.044	7	4	.15	2310	.001	2	.54	.023	.27	.1	<.01	1.3	<.1	<.05	2	<.5
4173 (rock)	.3	26.3	2.1	40	<.1	5.3	10.3	561	2.87	1.4	.9	<.5	3.8	66	<.1	.3	<.1	74	.95	.048	7	9	1.05	92	.178	1	1.93	.170	.14	.3	<.01	4.4	<.1	<.05	6	<.5
4174	.4	6.1	2.1	24	<.1	1.0	2.8	480	1.03	1.2	.5	<.5	1.0	167	.1	.1	<.1	20	1.96	.055	7	5	.18	370	.001	3	.59	.026	.30	.1	<.01	1.7	<.1	<.05	2	<.5
RE 4174	.4	5.9	1.8	23	<.1	1.0	2.9	479	1.02	1.1	.4	<.5	1.0	169	.1	.1	<.1	18	1.94	.053	6	4	.17	346	.001	3	.58	.026	.30	.1	<.01	1.6	<.1	<.05	2	<.5
RRE 4174	.2	7.1	2.2	23	<.1	.9	3.0	473	1.05	1.1	.5	<.5	1.0	167	<.1	.1	<.1	20	1.92	.053	6	5	.18	329	.001	3	.61	.027	.31	<.1	<.01	1.5	<.1	<.05	2	<.5
4175	.3	15.3	2.4	37	<.1	1.8	4.2	411	1.40	1.5	.6	.9	1.1	198	<.1	.4	<.1	32	1.40	.053	8	4	.37	447	.005	2	.73	.045	.18	<.1	<.01	1.6	<.1	<.05	4	<.5
4176	.2	34.5	1.9	34	<.1	1.6	4.0	406	1.48	.5	.8	<.5	1.2	187	<.1	.1	<.1	38	1.28	.047	6	5	.32	365	.025	3	.87	.054	.20	<.1	<.01	1.5	<.1	<.05	3	<.5
4177	.4	311.9	1.6	14	.2	.8	2.6	1177	.78	<.5	.5	<.5	1.1	129	<.1	.1	.1	9	2.77	.049	6	3	.19	835	.001	2	.64	.015	.35	.1	<.01	1.1	.1	<.05	2	<.5
4178	.8	1059.0	3.6	18	.8	.6	2.4	1173	.77	1.1	.7	<.5	1.0	216	.1	.1	.3	8	3.36	.034	5	3	.22	1451	.001	3	.62	.010	.31	.1	<.01	.9	.1	.06	1	<.5
4179	.3	3.8	3.5	26	<.1	.8	3.3	598	1.08	<.5	.5	<.5	1.1	187	.1	.1	<.1	16	2.39	.051	8	4	.19	472	.001	3	.61	.024	.32	.1	<.01	1.4	<.1	<.05	2	<.5
4180	.2	15.9	1.9	23	<.1	1.0	3.1	487	1.11	.8	.5	<.5	1.0	170	<.1	.2	<.1	18	1.84	.053	8	4	.24	475	.001	2	.61	.025	.27	<.1	<.01	1.1	<.1	<.05	2	<.5
4181	.5	28.1	2.4	30	<.1	1.6	3.4	487	1.20	1.1	.5	<.5	1.2	138	<.1	.4	<.1	27	1.77	.051	8	4	.26	337	.004	3	.64	.038	.24	.1	<.01	1.5	<.1	<.05	3	<.5
4182	.3	8.2	1.6	26	<.1	1.0	3.7	459	1.15	1.7	.5	<.5	1.2	139	<.1	.1	<.1	25	1.88	.049	8	4	.16	413	.001	5	.61	.033	.27	<.1	<.01	1.5	<.1	<.05	2	<.5
4183	.6	11.9	3.0	29	<.1	1.0	3.2	542	1.06	.7	.4	<.5	.9	208	.1	.2	<.1	19	2.22	.053	7	3	.17	307	.001	4	.68	.022	.32	.2	<.01	1.3	<.1	<.05	2	<.5
4184	.3	17.2	3.0	34	<.1	2.0	4.0	535	1.40	1.3	.6	<.5	1.1	136	<.1	.4	<.1	27	1.95	.050	8	4	.43	450	.001	3	.69	.045	.23	<.1	<.01	1.7	<.1	<.05	3	<.5
4185	.4	254.3	1.8	26	.2	1.5	3.5	475	1.23	1.0	.7	.7	1.6	142	<.1	.1	.1	24	1.52	.043	7	4	.22	288	.003	3	.62	.030	.24	<.1	<.01	1.4	<.1	<.05	3	.6
4186	.2	28.3	2.2	30	<.1	1.0	4.4	519	1.45	1.0	.9	<.5	1.5	215	<.1	.2	<.1	30	1.74	.049	7	5	.45	433	.004	2	.76	.045	.21	<.1	<.01	1.6	<.1	<.05	3	<.5
4187	.3	9.6	2.6	27	<.1	1.3	3.5	458	1.18	.8	.5	<.5	1.1	177	.1	.1	<.1	22	1.87	.047	8	4	.23	291	.001	3	.68	.026	.29	.1	<.01	1.4	<.1	<.05	2	<.5
4188	.3	22.8	1.9	27	<.1	1.5	3.8	542	1.13	1.3	.5	<.5	1.1	154	<.1	.1	<.1	24	1.96	.054	8	4	.20	301	.001	3	.63	.035	.30	<.1	<.01	1.5	<.1	<.05	2	.6
4189	.3	735.4	1.8	24	.4	1.0	3.2	689	1.08	<.5	.5	<.5	.9	69	<.1	.1	.1	19	2.04	.038	7	3	.23	221	.001	2	.67	.027	.28	<.1	.01	1.1	<.1	<.05	2	<.5
4190	.2	91.5	2.5	37	<.1	1.7	4.1	553	1.21	<.5	.7	<.5	1.3	92	<.1	.1	<.1	26	1.65	.044	8	4	.31	747	.003	4	.71	.047	.26	<.1	.01	1.4	<.1	<.05	3	.5
4191	1.0	522.0	4.0	47	.4	1.2	5.8	1393	1.31	<.5	1.1	<.5	1.0	165	.2	.1	<.1	18	3.29	.040	7	3	.37	1628	.001	4	.59	.018	.29	.1	.02	1.2	<.1	<.05	2	<.5
4192	.7	405.6	1.8	28	.3	1.1	3.6	898	1.11	<.5	.6	<.5	1.3	98	<.1	.1	<.1	20	2.37	.047	7	4	.21	225	.001	3	.68	.024	.34	<.1	.01	1.3	<.1	<.05	2	<.5
4193	1.8	305.8	2.2	32	.3	1.4	4.4	744	1.21	<.5	.8	<.5	1.2	107	<.1	.1	<.1	21	2.13	.048	7	4	.33	419	.001	3	.71	.031	.28	<.1	.01	1.4	<.1	<.05	2	<.5
4194	.3	334.1	1.8	27	.2	1.1	4.0	971	1.11	<.5	.5	<.5	1.4	97	<.1	.1	<.1	19	2.38	.043	8	3	.19	170	.001	3	.70	.021	.30	<.1	.01	1.2	<.1	<.05	2	<.5
4195	.6	545.1	1.6	25	.4	1.1	3.7	786	1.14	<.5	.6	<.5	1.0	97	<.1	.2	.1	23	2.08	.046	8	2	.23	158	.001	4	.69	.030	.31	<.1	.01	1.4	.1	<.05	2	<.5
4196	.2	293.9	1.5	24	.2	1.1	3.7	617	1.14	<.5	.7	<.5	1.0	92	<.1	.1	<.1	24	1.93	.044	8	4	.22	303	.001	3	.70	.038	.24	<.1	.01	1.1	<.1	<.05	3	<.5
STANDARD DS7	20.4	108.0	66.9	403	.8	56.6	9.8	652	2.50	49.7	4.8	68.1	4.7	85	6.5	6.1	4.4	85	1.00	.079	16	278	1.08	386	.129	42	1.20	.077	.47	3.8	.20	2.5	4.2	.20	5	3.7

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

12-20-06 P01:49 OUT

Data    FA    DATE RECEIVED: OCT 31 2006 DATE REPORT MAILED:.....



All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	.2	3.2	3.2	42	<.1	2.7	4.1	522	1.81	<.5	2.7	1.6	4.2	75	<.1	<.1	.2	38	.56	.075	9	13	.57	199	.129	2	1.08	.108	.50	.1	<.01	2.9	.3	<.05	5	.5
4197	1.1	2250.1	2.0	23	1.6	.6	3.5	896	1.00	<.5	.6	1.7	1.0	90	<.1	.2	.6	17	2.29	.046	7	3	.27	210	.001	2	.45	.019	.26	.1	.01	1.1	<.1	.06	1	<.5
4198	7.3	927.7	1.4	22	.6	.8	2.8	1133	.92	<.5	.5	<.5	1.0	94	<.1	.1	.2	17	2.57	.040	6	4	.19	130	.001	3	.46	.018	.26	<.1	.01	1.2	<.1	<.05	1	.6
4199 (pulp)	627.6	7293.4	118.8	67	76.6	5.7	1.8	235	.83	58.1	.9	33.8	.7	151	.9	150.8	6.2	9	1.06	.037	4	235	.11	126	.006	1	.27	.016	.15	.2	.40	.5	.1	.79	1	1.3
4200	8.6	1359.9	1.3	17	.8	.5	2.7	1240	.92	<.5	.4	<.5	1.2	77	<.1	.2	.2	15	2.54	.044	7	4	.16	132	.002	2	.50	.012	.30	<.1	.01	1.2	<.1	<.05	1	<.5
4201	9.2	1491.7	1.2	19	.8	.6	3.5	1148	1.08	<.5	.5	<.5	1.0	90	<.1	.1	.2	18	2.43	.042	7	4	.20	170	.001	3	.50	.020	.25	.1	.01	1.2	<.1	<.05	1	<.5
4202	3.5	446.2	1.5	29	.3	.8	4.5	1160	1.10	.7	.8	<.5	1.4	127	.1	.1	.1	21	2.53	.049	8	3	.25	285	.001	1	.46	.023	.30	<.1	.01	1.7	<.1	<.05	1	<.5
4203	.6	634.8	1.5	26	.4	.9	3.9	902	1.16	<.5	.6	1.1	1.3	114	<.1	.1	.1	19	2.39	.044	7	4	.24	143	.001	1	.54	.021	.23	.1	.01	1.4	.1	<.05	2	.7
4204	4.4	657.6	1.8	31	.4	1.0	4.5	810	1.08	.5	.6	<.5	1.6	143	<.1	.1	.1	21	2.26	.052	9	4	.25	292	.001	2	.49	.027	.29	<.1	.01	1.5	<.1	<.05	1	<.5
4205 (rock)	.5	34.3	1.8	38	<.1	4.2	10.7	534	2.77	.6	1.0	<.5	4.0	54	.1	.2	<.1	72	.79	.046	8	9	.98	71	.154	1	1.60	.155	.09	.2	<.01	3.9	<.1	<.05	5	<.5
4206	3.1	1141.1	2.1	26	1.1	.5	3.5	985	.96	<.5	.7	<.5	1.3	125	<.1	.1	.1	11	2.46	.044	7	2	.18	165	.001	3	.53	.016	.31	<.1	.01	1.0	<.1	<.05	1	<.5
RE 4206	3.2	1108.6	2.1	28	1.2	.4	3.1	975	.94	.5	.7	<.5	1.4	123	.1	.1	.1	11	2.43	.041	7	4	.18	168	.001	2	.51	.016	.32	<.1	.01	1.0	<.1	<.05	1	.5
RRE 4206	3.2	1093.8	2.2	28	1.2	.5	3.8	966	.98	.7	.7	<.5	1.4	126	.1	.1	.1	12	2.46	.043	7	4	.19	176	.001	2	.52	.017	.31	.1	.01	1.1	<.1	<.05	1	<.5
4207	4.1	1206.4	3.1	7	.9	.3	.6	581	.35	1.3	1.0	.8	2.9	67	.1	.1	.2	2	1.63	.009	8	4	.03	85	<.001	4	.44	.023	.30	.1	.03	.4	<.1	<.05	1	<.5
4208	3.6	610.3	1.8	7	.9	.5	.5	520	.27	.5	1.1	.8	3.0	67	.1	.1	.1	2	1.63	.010	7	4	.03	76	<.001	3	.44	.017	.33	.1	.03	.4	<.1	<.05	1	<.5
4209	11.8	981.3	1.8	5	1.5	<.1	.6	575	.30	1.0	1.0	<.5	2.5	79	.1	.1	.1	2	1.88	.009	6	4	.05	106	<.001	2	.40	.021	.27	.1	.02	.3	<.1	<.05	1	<.5
4210	2.0	379.5	2.1	6	.3	<.1	.8	560	.31	.6	.8	<.5	2.3	83	.1	.1	.1	2	1.89	.009	6	4	.04	83	<.001	3	.40	.024	.26	.2	.02	.4	<.1	<.05	1	<.5
4211	28.7	649.3	2.3	7	.9	<.1	.7	682	.33	<.5	1.1	<.5	2.4	127	.1	<.1	.1	2	2.39	.011	6	4	.05	971	<.001	2	.40	.021	.27	<.1	.03	.4	<.1	<.05	1	<.5
4212	2.8	392.1	3.9	19	.2	.4	1.6	759	.52	<.5	.7	1.3	1.9	108	.1	.1	.1	5	2.50	.019	6	3	.10	157	<.001	1	.49	.023	.28	.1	.04	.8	<.1	<.05	1	.5
4213	4.9	270.1	1.5	5	.3	.2	.6	450	.29	<.5	.7	<.5	2.6	75	<.1	.1	<.1	2	1.70	.007	5	3	.05	454	<.001	2	.42	.023	.26	<.1	.04	.4	<.1	<.05	1	<.5
4214	.8	851.3	2.7	21	.6	<.1	2.3	720	.75	.5	.7	<.5	1.9	106	.1	.1	.1	11	2.39	.032	7	3	.19	543	.001	3	.48	.020	.25	.1	.02	.9	<.1	<.05	1	.5
4215	.1	55.1	2.8	27	<.1	1.2	3.9	576	1.16	<.5	.7	<.5	1.7	144	<.1	.1	<.1	22	2.03	.043	8	4	.27	382	.001	2	.58	.035	.16	<.1	.04	1.7	<.1	<.05	2	<.5
4216	8.8	951.9	1.8	23	.9	.2	3.1	1136	.94	<.5	.5	<.5	1.5	99	.1	.1	.1	9	2.71	.035	7	4	.18	459	.001	3	.48	.010	.29	.1	.02	.9	<.1	<.05	1	<.5
4217	18.2	2559.7	2.1	22	3.4	.1	2.8	1074	.90	<.5	.5	1.1	1.9	94	.1	.1	.2	9	2.49	.037	7	4	.14	171	.001	2	.51	.007	.37	.1	.02	.8	<.1	.07	1	<.5
4218	2.4	433.7	1.9	24	.6	.9	3.5	692	1.14	.7	1.0	<.5	1.8	98	<.1	.1	.1	25	1.81	.041	7	4	.26	397	.009	3	.59	.030	.25	.1	.03	1.3	<.1	<.05	2	.6
4219	34.1	1806.0	1.6	20	1.4	.4	3.9	1116	1.11	<.5	.7	<.5	1.5	108	<.1	.1	.2	16	2.53	.042	7	4	.21	247	.001	2	.52	.016	.34	<.1	.04	1.3	<.1	.06	1	<.5
4220	18.0	1824.8	1.6	18	1.4	1.1	4.2	1040	1.11	1.0	.7	<.5	1.3	114	.1	.1	.2	14	2.37	.043	7	4	.21	130	.001	3	.53	.013	.37	<.1	.03	1.0	.1	<.05	1	<.5
4221	5.8	1752.9	1.9	18	1.5	.4	3.5	1044	1.01	<.5	.5	<.5	1.4	120	.1	.1	.2	10	2.58	.038	6	3	.17	123	.001	3	.49	.011	.32	.1	.03	1.0	<.1	<.05	1	.5
4222	15.0	2208.9	1.8	25	2.8	.7	4.6	1011	1.26	.5	.6	<.5	1.4	117	.1	.1	.2	15	2.36	.047	7	4	.22	72	.001	3	.57	.013	.32	.1	.04	1.1	<.1	.06	1	<.5
4223	7.7	2974.3	1.7	19	2.9	.5	3.6	1156	1.09	<.5	.6	<.5	1.7	93	.1	.1	.3	12	2.46	.039	6	3	.17	66	.001	2	.47	.008	.34	.1	.04	1.0	<.1	.09	1	<.5
4224	11.2	1185.8	1.8	19	1.5	.5	2.5	1045	.82	<.5	.5	.5	1.4	103	.1	.1	.1	8	2.35	.042	6	2	.12	93	.001	2	.45	.008	.33	.1	.03	.9	<.1	<.05	1	<.5
4225	12.0	4895.3	2.0	17	7.2	.3	3.1	1188	1.02	<.5	.5	1.2	1.4	73	.1	.1	.8	11	2.47	.042	6	3	.14	101	.001	3	.49	.005	.35	.1	.04	.9	<.1	.12	1	<.5
4226	18.5	2183.9	1.6	15	1.2	.5	3.5	1232	1.16	.5	.4	.5	1.2	73	<.1	.2	.3	15	2.40	.044	6	4	.16	95	.001	3	.58	.008	.38	.1	.03	1.0	<.1	.06	1	<.5
4227	.4	1260.6	2.0	21	1.4	.4	3.4	914	1.04	<.5	.5	<.5	1.0	136	.1	.1	.2	11	2.50	.041	6	3	.18	261	.001	2	.55	.016	.27	.1	.02	1.1	<.1	<.05	1	<.5
4228	1.7	358.7	1.6	26	.3	1.0	4.1	666	1.19	.5	.5	<.5	1.1	125	.1	.1	.1	20	1.99	.045	6	4	.26	279	.001	2	.58	.030	.23	<.1	.02	1.3	<.1	<.05	2	<.5
STANDARD DS7	21.6	109.1	69.9	419	.9	58.6	10.1	645	2.52	51.9	4.9	68.5	4.6	90	6.8	6.3	4.8	85	.98	.083	15	277	1.08	391	.141	41	1.05	.091	.47	4.1	.20	2.7	4.3	.21	5	3.5

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	1.1	4.3	3.5	51	<.1	4.5	4.8	537	1.94	.7	3.3	2.4	5.1	58	<.1	<.1	.1	43	.54	.083	9	15	.58	218	.139	1	1.01	.075	.50	.1	<.01	2.2	.4	<.05	5	<.5
4229	.5	1809.2	2.1	25	1.5	1.1	4.3	778	1.12	<.5	.6	1.3	1.2	102	<.1	.1	.3	18	2.05	.048	7	3	.24	243	.001	1	.33	.017	.16	<.1	.03	1.3	<.1	.06	1	<.5
4230	13.1	>10000	2.4	23	12.0	.4	4.1	1142	1.13	<.5	.8	1.8	1.1	88	.1	.1	1.4	10	2.55	.046	6	5	.21	113	.001	1	.25	.008	.20	<.1	.06	1.0	<.1	.29	1	<.5
4231	14.7	1216.3	2.0	25	.8	.7	3.9	1077	1.07	<.5	.5	.9	1.2	97	<.1	.1	.2	13	2.50	.049	7	4	.20	69	.001	2	.27	.011	.20	<.1	.02	1.0	<.1	<.05	1	<.5
4232	9.4	2109.8	2.7	27	1.5	.6	4.2	1142	1.17	.5	.8	.6	1.1	121	.1	.1	.3	12	3.05	.047	6	5	.25	208	.001	2	.30	.012	.23	.1	.02	1.1	<.1	.07	1	<.5
4233	.2	678.2	2.6	36	.8	.9	4.1	650	1.13	.6	.6	.5	1.4	123	.1	.1	.1	13	1.99	.047	8	4	.31	460	.001	2	.36	.017	.16	<.1	.02	1.2	<.1	<.05	1	<.5
4234	.6	57.4	2.3	33	<.1	.9	3.9	623	1.10	<.5	.5	<.5	1.2	116	<.1	.1	<.1	18	2.00	.046	8	5	.32	276	.001	1	.47	.023	.14	<.1	.01	1.4	<.1	<.05	2	<.5
4235	.3	135.5	2.0	30	<.1	1.0	4.0	651	1.19	<.5	.6	<.5	1.5	104	<.1	.1	<.1	20	2.13	.049	8	4	.32	306	.001	2	.45	.030	.15	<.1	.01	1.4	<.1	<.05	2	<.5
4236	1.0	71.2	2.1	33	<.1	1.4	4.4	518	1.30	.6	.7	.9	1.5	109	<.1	.1	<.1	24	1.64	.049	7	6	.35	257	.002	1	.52	.038	.12	<.1	.01	1.7	<.1	<.05	2	<.5
4237	.5	89.7	2.7	31	<.1	.8	3.9	714	1.07	<.5	.7	.5	1.2	152	.1	.3	<.1	13	2.42	.044	7	3	.27	234	.001	2	.35	.020	.14	<.1	<.01	1.2	<.1	<.05	1	<.5
4238	2.3	718.8	1.9	23	2.2	<.1	1.6	510	.52	1.9	.3	1.4	.5	76	.3	19.6	.2	3	1.55	.033	7	4	.09	166	<.001	2	.32	.015	.23	<.1	.13	.4	<.1	<.05	1	<.5
4239	.6	204.8	1.7	16	.2	.2	1.5	586	.55	.7	.2	<.5	.4	72	.1	.4	<.1	4	1.72	.030	7	2	.08	87	.001	1	.31	.022	.18	<.1	<.01	.4	<.1	<.05	1	<.5
4240	9.0	267.1	1.2	17	.7	.3	1.3	484	.52	1.1	.3	<.5	.4	60	.4	5.8	<.1	4	1.41	.031	8	4	.07	79	.001	1	.36	.015	.27	.1	.04	.4	<.1	<.05	1	<.5
4241 (pulp)	601.3	7704.1	121.7	65	77.8	5.0	1.6	230	.84	53.7	.9	44.1	.7	127	.6	143.8	6.4	8	1.08	.035	4	214	.11	125	.006	<.1	.26	.016	.13	.2	.40	.5	.1	.82	1	1.1
4242	.7	74.0	1.9	23	.3	.6	3.4	533	.92	.6	1.0	<.5	3.1	70	.1	1.5	.2	8	1.64	.037	10	4	.21	38	.001	2	.27	.026	.16	.1	.05	.6	<.1	<.05	1	<.5
4243	.9	13.0	2.4	40	<.1	.3	4.0	823	.97	<.5	.9	<.5	2.6	94	.1	.2	<.1	5	2.38	.031	9	5	.29	49	.001	2	.29	.018	.19	.1	.01	.7	<.1	<.05	1	<.5
4244	.2	33.3	3.6	29	<.1	.5	3.9	809	.98	<.5	.5	<.5	1.1	119	.1	.2	<.1	5	2.67	.048	8	4	.32	123	.001	2	.30	.020	.19	.1	<.01	.8	<.1	<.05	1	<.5
RE 4244	.2	33.5	3.1	30	<.1	.6	4.1	811	.99	<.5	.5	<.5	1.0	120	.1	.2	<.1	5	2.67	.049	8	4	.32	124	.001	3	.30	.020	.19	.1	<.01	.7	<.1	<.05	1	<.5
RRE 4244	1.0	32.7	3.1	28	<.1	.5	4.0	788	.95	<.5	.5	<.5	1.1	118	.1	.1	<.1	5	2.62	.048	8	6	.30	106	.001	2	.30	.021	.18	<.1	.01	.8	<.1	<.05	1	<.5
4245	.3	238.5	2.2	30	.2	1.3	4.3	688	1.11	<.5	.5	<.5	1.1	102	<.1	.2	.1	13	2.32	.051	8	4	.26	109	.001	2	.39	.032	.15	.1	.01	.8	<.1	<.05	1	<.5
STANDARD DS7	21.5	107.6	71.2	403	.9	58.9	10.1	645	2.48	47.5	5.0	74.2	4.5	72	6.3	6.0	4.6	86	.96	.077	14	273	1.08	379	.130	39	1.04	.090	.46	3.9	.20	2.6	4.2	.22	5	3.1

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

GEOCHEMICAL ANALYSIS CERTIFICATE

Happy Creek Minerals Ltd. PROJECT RATERIA File # A608500

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2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
G-1	.3	5.8	2.9	47	<.1	8.2	4.6	535	1.90	<.5	2.5	.6	4.1	50	<.1	<.1	.1	38	.51	.073	6	11	.62	206	.113	1	.93	.062	.50	.1	<.01	1.8	.3	<.05	4	<.5
4246	.3	16.8	2.3	30	<.1	6.8	4.5	561	1.23	<.5	.5	<.5	.9	131	.1	.4	.1	17	2.04	.047	6	7	.32	195	.001	1	.48	.034	.17	.1	<.01	1.2	<.1	<.05	1	<.5
4247	1.3	342.2	3.0	25	.3	2.8	3.8	758	1.13	<.5	.6	1.3	1.0	135	.1	.3	.1	11	2.43	.044	7	8	.24	320	.001	3	.44	.021	.26	<.1	.01	1.3	<.1	.08	1	<.5
4248	.3	50.2	2.4	21	<.1	1.1	2.7	730	.95	<.5	.5	<.5	.9	164	.1	.3	<.1	11	2.57	.045	6	5	.18	187	.001	2	.40	.018	.20	<.1	<.01	1.2	<.1	.05	1	<.5
4249	.4	7.9	3.2	35	<.1	1.2	4.8	803	1.41	<.5	.6	<.5	1.0	190	.2	.2	<.1	14	2.87	.046	7	6	.43	935	.001	2	.48	.032	.20	<.1	<.01	1.3	<.1	.09	1	<.5
4250 (rock)	.3	20.2	1.7	42	<.1	5.1	10.0	542	2.72	<.5	.9	<.5	3.5	43	.1	.1	.1	69	.74	.050	5	9	.93	82	.125	<1	1.47	.136	.08	.1	<.01	3.3	<.1	<.05	5	<.5
4251	.5	73.7	2.0	31	<.1	1.5	4.1	599	1.24	<.5	.5	<.5	1.3	146	<.1	.1	.1	21	2.00	.047	6	7	.32	252	.002	1	.48	.036	.18	<.1	<.01	1.5	<.1	<.05	2	<.5
4252	.6	184.3	1.8	24	.1	1.4	4.4	727	1.21	<.5	.5	<.5	1.4	131	<.1	.1	.1	20	2.04	.046	7	5	.31	276	.001	2	.50	.032	.17	<.1	.01	1.3	.1	<.05	2	<.5
4253	.4	51.9	1.8	34	<.1	1.2	4.0	712	1.00	<.5	.5	<.5	1.6	130	<.1	.5	<.1	11	2.08	.054	8	5	.27	119	.001	2	.34	.029	.17	<.1	.01	1.0	<.1	<.05	1	<.5
4254	.2	11.6	2.7	22	<.1	1.0	3.1	491	1.01	<.5	.7	<.5	2.1	164	.1	.2	<.1	15	2.04	.052	9	6	.19	387	.001	2	.38	.032	.19	<.1	.01	1.3	<.1	<.05	1	<.5
4255	.5	401.4	2.6	23	.3	.8	3.4	850	1.09	<.5	.5	<.5	1.3	166	.1	.1	.1	10	2.67	.043	7	4	.30	520	.001	2	.35	.018	.17	<.1	<.01	.9	<.1	<.05	1	<.5
4256	.6	212.1	1.9	22	.1	1.0	4.0	657	1.12	<.5	.3	.7	1.0	154	<.1	.1	<.1	14	2.17	.046	7	5	.23	505	.001	2	.42	.023	.15	.1	<.01	1.2	<.1	<.05	1	<.5
4257	1.3	31.5	2.7	27	<.1	1.3	3.4	913	1.02	<.5	.3	<.5	1.0	207	.1	.2	<.1	11	2.82	.047	8	4	.21	392	.001	1	.39	.019	.22	.1	<.01	1.2	<.1	<.05	1	<.5
4258	.5	72.8	3.1	19	<.1	.7	3.1	855	1.03	<.5	.4	<.5	.7	225	.1	.2	<.1	9	2.98	.042	6	4	.31	1650	.001	2	.32	.017	.19	<.1	<.01	1.1	<.1	<.05	1	<.5
4259	.4	35.5	3.1	24	<.1	.8	3.5	550	1.20	<.5	.4	<.5	1.0	211	.1	.2	<.1	15	2.17	.050	8	5	.25	1076	.001	2	.42	.025	.21	<.1	<.01	1.4	<.1	<.05	1	<.5
4260	.2	233.6	3.2	25	.3	.8	3.2	627	1.09	<.5	.4	<.5	.9	188	.1	.2	<.1	12	2.35	.049	7	3	.28	366	.001	2	.37	.023	.18	.1	<.01	1.3	<.1	<.05	1	<.5
4261	.4	60.6	1.6	15	<.1	2.1	3.2	276	.97	.5	.6	<.5	1.9	90	<.1	.1	<.1	18	1.53	.034	5	6	.26	160	.005	2	.47	.042	.18	.2	.09	.9	<.1	<.05	1	<.5
4262	.6	25.7	1.8	31	<.1	3.1	5.9	555	1.32	.9	.9	<.5	2.1	85	.1	.1	<.1	21	2.81	.050	7	5	.46	123	.005	1	.46	.023	.15	.2	.04	1.7	<.1	<.05	1	<.5
4263	.4	23.6	1.8	32	<.1	5.3	8.1	463	1.94	<.5	.8	<.5	1.8	85	<.1	.1	<.1	42	2.94	.074	8	6	.52	147	.014	2	.80	.025	.21	.2	<.01	2.5	<.1	<.05	3	<.5
4264	.2	63.7	3.1	25	<.1	1.2	3.6	896	1.17	<.5	.4	<.5	1.0	211	.1	.2	<.1	9	3.10	.045	7	3	.30	755	<.001	2	.35	.015	.21	<.1	<.01	1.3	<.1	<.05	1	<.5
4265	.4	81.3	4.3	18	.1	.7	2.8	857	1.03	<.5	.4	<.5	.9	174	.1	.2	<.1	8	2.90	.047	7	4	.20	408	.001	3	.38	.015	.24	.1	<.01	1.1	<.1	<.05	1	<.5
4266	.3	25.2	1.8	33	<.1	5.6	8.7	472	2.00	<.5	.8	.6	1.8	88	<.1	.1	<.1	46	2.92	.073	8	8	.53	150	.016	2	.80	.025	.21	.2	.01	2.7	<.1	<.05	3	<.5
RE 4266	.3	25.8	1.7	33	<.1	5.6	8.9	477	2.02	.5	.8	.7	2.0	86	<.1	.1	<.1	44	2.96	.078	8	7	.54	156	.015	2	.81	.026	.20	.2	.01	2.6	<.1	<.05	3	<.5
RRE 4266	.4	23.8	1.7	34	<.1	5.8	8.2	475	2.06	<.5	.8	.8	1.8	88	<.1	.1	<.1	49	2.97	.074	9	8	.54	158	.016	2	.84	.026	.21	.2	.01	2.7	<.1	<.05	3	<.5
4267	.3	22.2	3.3	19	<.1	.6	3.5	615	1.07	<.5	.4	<.5	1.1	202	.1	.3	<.1	14	2.33	.050	7	5	.23	416	.001	2	.48	.028	.25	<.1	<.01	1.3	<.1	<.05	1	<.5
4268	.8	8.0	1.3	33	<.1	4.1	6.5	296	1.60	1.3	.6	<.5	1.5	70	<.1	.3	.1	35	1.45	.057	7	6	.49	273	.023	2	.73	.039	.14	.3	<.01	2.0	<.1	<.05	3	<.5
4269	1.5	115.0	2.0	30	<.1	5.8	5.7	347	1.52	.8	.7	1.0	1.3	91	<.1	.5	.2	27	2.13	.049	7	5	.45	81	.001	2	.69	.025	.18	.9	<.01	2.2	<.1	<.05	2	<.5
4270	1.1	7.1	2.3	32	<.1	4.1	7.0	373	1.70	1.3	1.1	<.5	2.0	93	<.1	.7	.4	35	2.26	.064	8	5	.47	75	.002	1	.92	.031	.14	.7	<.01	2.5	<.1	<.05	3	<.5
4271	1.5	21.0	2.5	28	<.1	3.7	7.2	338	1.64	.6	1.0	<.5	2.0	85	<.1	.2	<.1	36	2.13	.055	7	5	.42	168	.010	3	.68	.037	.18	3.1	<.01	2.2	<.1	<.05	2	.6
4272	.5	28.1	2.9	47	<.1	4.4	7.0	571	1.46	<.5	.8	.5	2.0	120	.1	.2	.1	23	3.09	.073	9	3	.46	90	.003	2	.61	.014	.27	.4	.01	2.4	.1	<.05	1	<.5
4273	.4	145.8	2.0	33	<.1	5.3	9.0	406	1.97	.7	1.3	2.1	2.6	121	<.1	.1	.1	49	2.09	.068	8	5	.63	118	.023	2	.88	.032	.18	.4	<.01	2.8	<.1	<.05	3	<.5
4274	.4	111.6	2.6	42	<.1	4.7	7.9	459	2.17	.6	1.1	2.2	2.8	91	.1	.1	<.1	45	2.41	.062	7	5	.49	111	.019	2	.83	.028	.22	.3	<.01	2.9	<.1	<.05	3	<.5
4275	.5	104.4	2.9	69	<.1	5.5	10.1	1033	2.29	.8	1.2	.9	2.6	119	.2	.2	.1	46	3.19	.061	8	5	.93	179	.037	3	.71	.030	.27	.2	<.01	2.7	<.1	<.05	3	.6
4276	.5	79.8	2.6	39	<.1	5.3	8.6	652	1.94	<.5	1.1	1.8	2.3	98	<.1	.2	.1	37	3.06	.063	8	5	.63	86	.004	2	.81	.028	.22	.2	<.01	2.9	<.1	<.05	3	<.5
4277	.4	89.6	1.7	42	<.1	8.1	10.9	474	2.26	2.1	1.5	1.0	2.9	150	<.1	.3	.1	62	2.03	.056	8	6	.96	182	.042	2	1.44	.103	.17	.2	<.01	4.9	<.1	<.05	6	<.5
STANDARD DS	21.1	107.5	70.6	420	.9	57.6	9.8	636	2.46	48.9	5.1	72.4	4.6	73	6.4	5.9	4.5	84	.95	.079	13	260	1.06	384	.122	40	1.01	.070	.46	3.9	.20	2.5	4.3	.21	5	3.4

Standard is STANDARD DS7.

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.

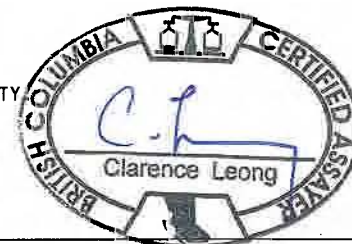
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY

- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

12-20-06 11:59 AM

Data FA \_\_\_\_\_ DATE RECEIVED: NOV 1 2006 DATE REPORT MAILED: \_\_\_\_\_

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.





SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	.1	2.5	2.8	44	<.1	2.9	3.7	496	1.70	<.5	3.0	1.4	4.5	59	<.1	<.1	.1	35	.54	.070	8	6	.56	195	.107	1	1.09	.074	.47	.1	<.01	2.5	.3	<.05	5	<.5
4278	.3	90.3	1.1	33	<.1	6.4	8.6	379	2.08	.9	1.4	1.3	3.0	96	<.1	.1	.1	63	1.46	.052	7	8	.76	125	.065	1	1.04	.056	.21	.1	<.01	3.5	<.1	<.05	5	<.5
RE 4278	.2	91.6	1.2	32	<.1	6.7	8.5	376	2.07	.9	1.3	1.0	3.0	97	<.1	.1	.1	63	1.45	.052	7	8	.77	128	.068	1	1.05	.062	.19	.2	<.01	3.5	<.1	<.05	5	<.5
RRE 4278	.4	94.2	1.2	33	<.1	6.8	8.8	375	2.21	.9	1.3	1.4	2.9	87	<.1	.1	.1	67	1.35	.049	7	9	.75	122	.067	1	1.06	.070	.21	.2	<.01	3.4	<.1	<.05	5	<.5
4279	.4	539.2	1.8	35	.3	6.0	8.3	527	2.04	1.0	1.0	1.7	2.6	101	<.1	.1	.3	50	2.18	.055	7	6	.85	76	.012	2	.88	.038	.19	.2	<.01	3.4	<.1	<.05	3	<.5
4280	1.4	95.1	2.7	38	<.1	5.2	8.2	599	1.82	.7	.6	1.1	2.2	125	.1	.2	.1	37	3.16	.055	7	5	.64	81	.002	2	.86	.020	.23	.3	<.01	3.1	<.1	<.05	2	<.5
4281	.3	46.1	2.1	41	<.1	6.7	9.2	478	2.14	.8	.6	<.5	1.8	103	<.1	.1	<.1	52	2.23	.055	7	6	.57	86	.006	1	1.07	.055	.19	.2	<.01	4.0	<.1	<.05	4	<.5
4542	.3	9.2	3.3	30	<.1	1.6	4.2	396	1.35	1.4	.4	<.5	1.4	74	<.1	.3	<.1	33	1.86	.052	5	4	.39	105	.001	2	.49	.030	.13	.1	<.01	2.7	<.1	<.05	2	<.5
4543	.2	4.2	2.0	32	<.1	1.5	3.8	317	1.35	2.0	.6	.5	1.5	68	<.1	.3	<.1	30	1.40	.050	6	4	.28	72	.004	3	.91	.059	.14	.1	<.01	2.4	<.1	<.05	3	<.5
4544	.5	14.4	1.9	23	<.1	1.3	3.9	339	1.27	1.4	.5	.8	1.5	80	<.1	.2	<.1	32	1.71	.036	4	4	.31	38	.001	2	.48	.031	.12	.1	<.01	2.1	<.1	<.05	1	<.5
4545	.3	27.8	2.1	25	<.1	1.6	3.3	317	1.37	1.0	.4	.7	1.5	78	<.1	.1	<.1	32	1.55	.032	4	3	.31	44	.001	3	.53	.027	.12	.1	<.01	1.8	<.1	<.05	2	<.5
4546	.5	37.4	3.5	19	<.1	1.0	2.2	331	.95	.8	.7	.7	2.2	74	<.1	.1	<.1	20	1.90	.024	6	4	.21	205	.001	2	.51	.053	.15	.1	<.01	1.5	<.1	<.05	2	<.5
4547	.3	23.9	2.9	11	<.1	.5	1.0	254	.52	.5	.8	.5	2.3	54	<.1	.1	<.1	9	1.55	.005	4	2	.15	75	<.001	2	.33	.020	.12	.1	<.01	.8	<.1	<.05	1	<.5
4548	.5	139.4	2.7	21	.1	1.2	2.5	300	.95	.7	.5	1.5	1.9	60	<.1	.1	.1	16	1.53	.019	6	5	.23	95	.001	3	.62	.058	.17	.1	<.01	1.2	<.1	<.05	2	<.5
4549	.7	4.0	2.9	31	<.1	1.5	3.5	330	1.07	1.2	.5	.6	1.5	74	<.1	.2	<.1	21	1.70	.031	5	4	.30	135	.001	2	.43	.037	.11	.1	<.01	1.6	<.1	<.05	2	.5
4550	.8	8.6	1.7	28	<.1	1.3	3.2	347	1.25	1.7	.5	.6	1.5	70	<.1	.2	<.1	31	1.40	.037	7	4	.31	286	.003	1	.46	.040	.10	.1	<.01	2.3	<.1	<.05	2	<.5
4564	.8	2.8	3.9	28	<.1	.9	3.0	466	1.04	1.2	.5	<.5	1.4	82	<.1	.5	<.1	21	2.16	.032	5	3	.31	68	.001	2	.48	.035	.12	.1	<.01	1.8	<.1	<.05	2	<.5
4565	.7	13.4	1.9	17	<.1	.7	2.3	409	.91	.9	.4	.6	1.5	72	<.1	.5	<.1	15	2.68	.032	5	3	.16	48	.001	1	.45	.027	.11	.1	<.01	1.4	<.1	<.05	1	<.5
4566	.5	18.8	2.2	21	<.1	1.2	2.9	475	.92	2.0	.8	<.5	1.7	79	<.1	1.4	.1	19	2.47	.037	7	5	.29	48	.002	3	.64	.048	.10	.1	<.01	1.7	<.1	<.05	2	<.5
4567 (pulp)	314.8	1602.2	119.3	134	29.3	69.7	35.0	1000	6.78	246.4	1.9	5491.1	3.1	103	1.2	62.6	167.7	48	9.45	.077	11	66	.37	70	.134	25	1.67	.028	.16	32.1	10.93	4.4	.2	2.25	7	1.3
4568 (rock)	.7	32.1	2.5	40	<.1	4.8	9.4	496	2.49	.7	.8	1.3	3.8	54	.1	.3	.1	63	.77	.045	7	8	.85	66	.150	1	1.54	.134	.10	.3	<.01	3.8	<.1	<.05	5	<.5
4569	.3	21.3	1.7	38	<.1	1.8	4.3	435	1.53	.5	.6	.5	1.2	87	<.1	.2	<.1	39	1.09	.045	5	8	.45	295	.046	1	.93	.069	.11	.1	<.01	2.5	<.1	<.05	4	<.5
4570	.8	13.3	1.7	37	<.1	2.3	4.5	453	1.47	.5	.5	.5	1.2	96	<.1	.2	<.1	31	1.39	.046	6	7	.38	233	.006	1	.94	.076	.17	.1	.01	2.0	<.1	<.05	4	<.5
4571	.3	29.7	2.0	48	<.1	1.9	4.5	528	1.26	<.5	.6	1.9	1.1	89	<.1	.4	.1	27	1.43	.046	5	7	.44	424	.006	2	.90	.041	.13	.1	<.01	1.6	<.1	<.05	4	<.5
4572	.5	24.3	1.5	43	<.1	1.8	4.5	535	1.46	.5	.5	1.1	1.2	79	<.1	.2	<.1	32	1.40	.047	6	7	.42	288	.005	2	.81	.059	.14	<.1	<.01	1.9	<.1	<.05	4	<.5
4573	.2	31.5	2.0	43	<.1	1.7	4.6	510	1.35	.6	.7	1.9	1.1	128	<.1	.2	<.1	24	1.75	.049	6	5	.37	109	.001	1	.81	.032	.15	<.1	.01	1.5	<.1	<.05	3	<.5
4574	.7	36.4	2.7	37	<.1	1.2	3.7	662	1.03	<.5	.6	.8	1.1	133	.1	.1	<.1	12	2.77	.048	6	3	.16	81	.001	2	.55	.017	.20	.1	<.01	.9	<.1	<.05	1	<.5
4575	.4	34.4	3.1	10	<.1	.5	.9	283	.39	<.5	1.1	1.0	2.9	115	.1	.1	<.1	3	1.68	.013	8	4	.11	198	<.001	3	.55	.024	.19	.1	<.01	.6	<.1	<.05	1	<.5
4576	.6	35.0	3.3	21	<.1	.7	.9	205	.53	<.5	1.1	1.5	3.3	82	<.1	.5	.1	7	1.32	.015	7	5	10	92	.001	2	.42	.034	.15	<.1	<.01	.7	<.1	<.05	1	<.5
4577	.8	75.6	2.2	35	<.1	1.7	3.7	324	1.25	1.4	1.2	1.5	2.3	148	<.1	.2	.1	30	1.08	.037	6	5	.28	192	.014	1	.93	.070	.10	<.1	<.01	2.4	<.1	<.05	4	<.5
4578	3.1	241.5	2.4	28	.2	.9	3.1	490	1.08	.5	.6	1.0	1.8	167	<.1	.2	.1	21	1.71	.038	8	4	.33	353	.002	1	.76	.043	.16	.1	<.01	2.0	<.1	<.05	3	<.5
4579	.9	48.7	2.9	32	<.1	1.6	3.3	337	1.19	.6	.8	<.5	2.0	157	<.1	.2	.1	26	1.26	.037	6	5	.26	135	.009	1	.83	.060	.13	<.1	<.01	2.0	<.1	<.05	4	<.5
4580	1.2	52.5	2.2	19	<.1	1.1	2.2	389	1.06	.5	.5	<.5	1.5	136	<.1	.3	<.1	22	1.72	.038	6	4	.15	93	.001	1	.60	.043	.14	<.1	<.01	1.7	<.1	<.05	2	<.5
4581	2.3	42.2	2.2	30	<.1	1.8	3.9	483	1.27	.8	.6	<.5	1.6	108	<.1	.3	<.1	26	1.51	.047	7	5	.29	162	.001	1	.67	.053	.12	<.1	<.01	2.1	<.1	<.05	3	<.5
4582	2.2	39.8	3.0	32	<.1	1.1	3.5	534	1.14	<.5	.5	<.5	1.2	224	<.1	.3	<.1	19	2.21	.039	7	4	.33	216	.003	1	1.17	.047	.17	<.1	<.01	2.5	<.1	<.05	4	<.5
STANDARD DS7	20.4	103.6	65.0	392	.8	54.4	9.2	622	2.36	46.5	4.8	62.4	5.0	81	6.1	5.9	4.3	82	.96	.075	15	252	1.03	376	.121	36	1.11	.110	.47	3.7	.19	3.1	4.0	.17	5	3.3

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm
G-1	.6	2.0	2.7	41	<.1	3.8	4.3	512	1.81	<.5	2.7	<.5	4.2	54	<.1	.1	<.1	37	.48	.078	7	8	.60	199	.119	1	.87	.060	.48	.1	<.01	1.9	.3	<.05	5	<.5
4583	2.1	196.8	2.0	34	.1	1.5	4.7	525	1.22	<.5	.6	2.2	1.5	132	<.1	.2	.2	22	1.87	.049	8	4	.38	112	.002	2	.70	.033	.12	<.1	<.01	1.8	<.1	<.05	3	<.5
STANDARD DS7	20.6	106.8	70.2	409	.9	57.2	9.9	632	2.43	48.4	5.0	66.6	4.4	72	6.5	6.0	4.6	82	.93	.079	14	270	1.05	380	.125	39	1.00	.077	.46	3.9	.20	2.5	4.1	.20	4	3.5

Sample type: DRILL CORE R150.



GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608164 Page 1

2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.3	3.8	3.2	45	<.1	10.8	5.1	535	1.95	<.5	3.2	1.2	4.3	54	<.1	<.1	.1	40	.54	.076	8	15	.70	198	.115	2	.97	.058	.44	.1	<.01	1.9	.3	<.05	5	<.5	-
4131	.3	187.9	2.6	33	.1	1.7	4.6	636	1.31	<.5	.4	.8	1.0	81	<.1	.1	<.1	22	2.20	.054	6	6	.27	328	.004	1	.55	.029	.18	<.1	<.01	1.1	<.1	<.05	2	<.5	3.7
4132	.3	76.0	2.2	32	<.1	2.4	4.7	480	1.48	<.5	.4	.5	1.0	72	<.1	.1	<.1	33	1.38	.051	5	6	.41	237	.012	2	.61	.046	.12	<.1	<.01	1.4	<.1	<.05	3	<.5	3.9
4133	.7	568.1	2.0	26	.3	1.9	4.9	536	1.44	<.5	.4	.6	1.0	70	<.1	.1	<.1	30	1.40	.049	6	6	.39	161	.010	1	.65	.036	.13	.1	.01	1.1	<.1	<.05	3	<.5	4.1
4134	.4	118.5	1.9	26	<.1	2.0	4.3	470	1.37	.6	.5	.5	1.1	75	<.1	.2	<.1	33	1.26	.049	5	7	.37	315	.033	1	.60	.041	.13	<.1	.01	1.3	<.1	<.05	3	<.5	4.2
4135	.5	122.3	5.7	41	<.1	.7	1.8	1917	.71	<.5	.7	<.5	2.1	107	.1	.1	<.1	8	4.36	.046	8	5	.16	174	.001	2	.33	.011	.22	.2	<.01	.5	<.1	<.05	1	<.5	2.1
4136	.9	228.8	11.1	63	<.1	.8	2.1	834	.75	<.5	.7	<.5	1.6	75	.1	.1	<.1	8	2.46	.045	7	4	.14	296	<.001	1	.31	.011	.20	.1	<.01	.6	<.1	<.05	1	<.5	3.7
4137	2.7	684.7	40.6	21	.3	.9	2.1	1043	.80	<.5	.7	<.5	1.7	76	.1	.1	.1	7	2.88	.047	8	5	.13	273	<.001	2	.32	.010	.22	<.1	<.01	.6	<.1	<.05	1	<.5	3.6
4138	1.5	362.4	9.6	29	.2	1.7	3.8	722	1.01	.8	.9	1.5	1.6	76	.1	.2	.1	13	2.14	.048	8	3	.22	200	.001	1	.44	.020	.18	.1	<.01	.8	.1	<.05	2	<.5	3.5
4139	.3	115.9	3.0	21	<.1	1.1	2.6	441	.88	<.5	.6	2.3	1.8	61	<.1	.1	.1	8	1.82	.030	7	4	.14	121	<.001	2	.45	.025	.18	<.1	<.01	.7	<.1	<.05	2	<.5	3.8
4140	2.0	138.5	2.2	13	.1	.7	1.2	410	.48	<.5	.6	1.7	2.0	53	<.1	.1	.1	5	1.82	.019	7	5	.08	166	.001	1	.28	.021	.15	<.1	<.01	.4	<.1	<.05	1	<.5	5.1
4141	34.7	218.8	2.9	5	.2	.5	.4	376	.27	<.5	.7	1.3	2.2	51	.1	.1	.1	1	1.65	.010	6	6	.03	402	<.001	1	.25	.022	.16	<.1	<.01	.2	<.1	<.05	1	<.5	3.3
4142	.3	102.1	3.6	14	<.1	.5	1.7	673	.64	<.5	.6	1.0	1.7	73	.1	.1	<.1	5	2.61	.035	8	4	.11	196	<.001	1	.37	.011	.22	<.1	<.01	.6	<.1	<.05	1	<.5	3.5
4143	.4	79.6	2.6	12	<.1	.6	1.1	520	.53	<.5	.7	.7	2.1	58	<.1	.1	<.1	4	1.98	.019	7	5	.08	101	<.001	2	.34	.016	.19	<.1	<.01	.4	<.1	<.05	1	<.5	3.7
4144	.3	49.4	1.4	10	<.1	.8	1.3	497	.54	<.5	1.0	<.5	2.6	50	<.1	.1	<.1	4	1.72	.015	7	6	.09	73	<.001	1	.33	.024	.16	<.1	<.01	.4	<.1	<.05	1	<.5	4.5
4145	.2	81.5	1.7	10	<.1	.9	.9	626	.49	<.5	.8	.7	2.4	53	<.1	.1	<.1	2	1.82	.016	7	6	.09	172	<.001	2	.36	.024	.20	<.1	<.01	.3	<.1	<.05	1	<.5	6.3
RE 4145	.2	79.8	1.8	10	<.1	1.0	.9	601	.47	<.5	.7	<.5	2.3	50	<.1	.1	<.1	3	1.78	.016	7	6	.09	168	.001	1	.35	.024	.20	.1	<.01	.3	<.1	<.05	1	<.5	-
RRE 4145	.3	68.5	1.6	9	<.1	.7	1.0	604	.51	<.5	.7	.5	1.2	49	<.1	.1	<.1	2	1.75	.016	7	6	.09	137	<.001	1	.34	.026	.19	<.1	<.01	.3	<.1	<.05	1	<.5	-
4146	.6	110.6	1.9	9	.1	.5	.7	716	.43	<.5	.7	.5	1.9	86	.1	.1	<.1	1	2.36	.014	9	5	.09	1815	<.001	1	.31	.027	.17	.1	<.01	.2	<.1	<.05	1	<.5	2.4
4147	.2	38.4	2.9	16	<.1	1.0	1.4	495	.58	<.5	1.0	<.5	2.2	64	<.1	.2	<.1	6	1.69	.019	7	5	.13	261	.001	2	.39	.030	.16	<.1	<.01	.5	<.1	<.05	2	<.5	3.7
4148	.4	40.9	2.9	15	<.1	.9	1.5	456	.60	<.5	.9	1.7	2.2	62	<.1	.2	<.1	6	1.55	.018	7	5	.13	245	.001	2	.41	.035	.17	<.1	<.01	.5	<.1	<.05	2	<.5	3.9
4149	.2	34.8	2.9	14	<.1	1.0	1.5	374	.59	<.5	1.1	<.5	2.9	61	<.1	.3	<.1	5	1.31	.017	10	6	.14	188	.002	2	.40	.036	.15	<.1	<.01	.5	<.1	<.05	2	<.5	3.6
4150	.4	48.4	2.3	6	<.1	.6	.7	508	.43	<.5	.8	<.5	2.2	55	<.1	.2	<.1	3	1.70	.013	7	5	.06	113	<.001	1	.29	.028	.17	<.1	<.01	.4	<.1	<.05	1	<.5	3.9
4151	.4	48.0	1.9	4	<.1	.5	.4	431	.29	<.5	1.2	<.5	2.5	61	<.1	.1	<.1	<1	1.76	.012	7	5	.04	96	<.001	2	.26	.024	.17	<.1	<.01	.3	<.1	<.05	1	<.5	4.6
4152 (pulp)	342.5	1721.6	131.0	135	32.5	74.6	36.9	1110	7.50	261.2	2.3	6054.6	3.3	98	1.0	67.6	180.3	52	9.75	.082	13	70	.38	56	.146	29	1.79	.035	.16	34.4	12.07	3.5	.2	2.65	7	1.7	-
4153	.7	21.5	1.2	29	<.1	3.7	8.4	455	2.43	<.5	.9	<.5	3.3	53	<.1	.1	<.1	68	.90	.043	6	10	.76	81	.149	1	1.50	.177	.11	.4	<.01	2.8	<.1	<.05	5	<.5	1.0
4154	.2	147.1	2.5	18	.1	.5	1.4	693	.57	<.5	1.0	<.5	2.0	77	.1	.1	<.1	4	2.18	.027	8	4	.10	257	<.001	1	.27	.016	.17	<.1	<.01	.4	<.1	<.05	1	<.5	4.7
4155	.4	33.4	3.0	26	<.1	1.1	2.9	684	1.08	<.5	.9	1.7	1.2	78	<.1	.1	<.1	15	2.04	.044	8	4	.17	425	.001	2	.41	.031	.20	<.1	<.01	1.1	.1	<.05	1	<.5	3.9
4156	.2	58.3	4.1	33	<.1	.9	2.1	504	.71	.5	1.1	1.7	1.8	71	.1	.1	<.1	8	1.76	.029	7	4	.14	322	.001	2	.31	.025	.17	<.1	<.01	.6	<.1	<.05	1	<.5	4.5
4157	.8	155.9	4.4	23	.1	.5	2.4	685	.87	.5	1.2	1.9	1.5	92	.1	.1	<.1	12	2.51	.046	7	5	.13	351	.001	2	.37	.018	.22	<.1	<.01	1.0	<.1	<.05	1	<.5	4.3
4158	.9	6.9	4.5	11	<.1	.6	1.5	831	.65	.7	.8	.9	1.3	117	.1	.1	<.1	7	3.69	.047	7	4	.10	266	.001	3	.35	.007	.24	.1	<.01	1.0	<.1	<.05	1	<.5	4.1
4159	3.4	22.7	3.0	27	<.1	1.2	3.3	641	1.15	.5	1.1	1.1	1.6	104	<.1	.1	<.1	18	2.22	.049	7	4	.24	381	.001	2	.51	.024	.20	.1	<.01	1.1	<.1	<.05	2	<.5	4.3
4160	1.4	11.9	4.2	17	<.1	.8	2.2	822	.83	.5	.9	<.5	1.3	113	.1	.1	<.1	11	3.15	.045	7	4	.11	198	<.001	2	.33	.013	.20	<.1	<.01	1.1	<.1	<.05	1	<.5	4.5
4161	1.0	21.9	4.1	27	<.1	1.0	3.0	573	1.15	<.5	.9	.8	1.7	87	<.1	.1	<.1	17	2.15	.045	8	6	.18	341	.001	1	.45	.027	.21	<.1	<.01	1.0	<.1	<.05	2	<.5	4.9
4162	.5	31.2	2.7	13	<.1	1.0	1.8	318	.74	.5	.9	<.5	2.0	67	<.1	.1	<.1	9	1.39	.022	6	6	.11	326	.001	1	.37	.041	.18	.1	<.01	.5	<.1	<.05	2	<.5	6.1
STANDARD DS7	21.6	112.0	70.8	401	.9	58.6																															





ACME ANALYTICAL

## Happy Creek Minerals Ltd. PROJECT RATERIA FILE # A608164

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ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	2.3	2.8	46	<.1	4.6	4.2	511	1.83	<.5	3.0	1.3	4.3	52	<.1	<.1	.1	36	.52	.077	6	10	.58	203	.119	1	.95	.072	.47	<.3	.01	1.8	<.3	<.05	4	<.5	-
4163	.4	103.9	2.2	8	<.1	5.9	1.3	709	.44	1.0	.8	.6	2.1	87	.1	<.1	<.1	4	2.63	.019	6	7	.13	93	<.001	1	.26	.015	.19	<.1	<.01	.4	<.1	<.05	1	<.5	4.80
4164	.4	6.2	5.7	22	<.1	29.8	3.1	884	1.06	.5	.8	1.0	1.7	171	.1	.2	<.1	17	3.38	.047	8	194	.35	1263	.004	2	.42	.021	.23	<.1	<.01	1.5	<.1	<.05	1	<.5	4.40
4507	1.0	35.9	2.4	47	<.1	2.5	3.4	914	.90	<.5	1.0	1.4	1.7	61	.1	.1	.1	12	2.31	.040	7	3	.29	87	.001	1	.56	.025	.16	<.1	<.01	.9	<.2	<.05	2	<.5	3.00
4508	.2	3.8	2.0	91	<.1	4.2	4.5	703	1.39	<.5	.7	1.0	1.5	47	.2	.1	<.1	28	1.45	.048	7	20	.43	126	.006	1	.65	.051	.14	<.1	<.01	1.6	<.1	<.05	3	<.5	3.10
4509	.4	8.5	2.5	38	<.1	2.3	3.2	625	1.01	.5	.8	<.5	2.2	39	<.1	.1	<.1	19	1.27	.032	5	6	.30	56	.008	1	.57	.051	.12	<.1	<.01	1.1	<.1	<.05	3	<.5	2.90
4510	.2	24.7	3.0	45	<.1	2.5	4.0	675	1.16	<.5	1.0	.5	2.2	63	.1	.1	<.1	20	1.81	.040	7	8	.28	147	.001	1	.62	.039	.18	<.1	<.01	1.4	<.1	<.05	2	<.5	3.20
4511	1.0	80.3	2.5	36	<.1	1.3	2.7	581	.86	<.5	.7	<.5	1.9	63	<.1	.1	<.1	12	2.14	.024	6	3	.24	42	.001	<.1	.57	.033	.15	<.1	<.01	.9	<.1	<.05	2	<.5	2.60
4512	.3	34.1	2.8	44	<.1	1.9	4.2	657	1.31	.5	.6	<.5	1.5	133	<.1	.1	<.1	29	1.98	.044	5	6	.37	93	.022	1	1.05	.042	.13	<.1	<.01	1.5	<.1	<.05	4	<.5	5.80
4513	.2	9.8	2.6	45	<.1	1.7	4.4	651	1.23	<.5	.6	<.5	1.2	92	<.1	.1	<.1	28	1.69	.044	4	5	.39	82	.050	1	1.07	.051	.13	<.1	<.01	1.7	<.1	<.05	4	<.5	4.50
4514	.6	6.3	1.7	57	<.1	2.0	4.6	736	1.47	3.3	.5	1.2	1.0	78	<.1	.1	<.1	37	1.29	.048	4	6	.43	49	.059	1	.88	.046	.12	<.1	<.01	1.9	<.1	<.05	4	<.5	4.30
4515	1.2	62.9	1.9	81	<.1	1.9	4.5	804	1.40	1.4	.7	<.5	1.1	63	.1	.1	<.1	30	1.52	.047	4	5	.38	62	.038	1	.96	.050	.15	<.1	<.01	1.7	<.1	<.05	4	<.5	3.80
4516	2.3	139.7	1.5	61	<.1	1.7	5.4	845	1.35	.5	.6	<.5	1.1	68	<.1	.2	.1	27	1.47	.047	4	6	.39	56	.034	1	.86	.042	.15	.1	.01	1.5	<.1	<.05	3	<.5	3.60
4517	.3	23.8	1.2	52	<.1	1.6	5.1	1038	1.24	<.5	.6	<.5	.9	92	<.1	.2	<.1	22	1.85	.047	3	5	.39	637	.042	1	.82	.033	.16	<.1	<.01	1.1	<.1	<.05	3	<.5	2.50
4518	.2	209.9	1.7	690	<.1	2.5	5.1	988	1.53	<.5	.5	<.5	.9	186	2.2	.1	.1	36	1.37	.048	4	5	.51	39	.046	1	.94	.029	.11	.2	.01	1.7	<.1	.06	4	<.5	2.90
4519	.9	100.0	3.0	183	<.1	1.9	4.4	877	1.34	.5	.9	<.5	1.7	104	.6	.2	.1	27	1.42	.045	4	5	.37	41	.038	<.1	.78	.031	.15	.2	.02	1.2	<.1	<.05	3	<.5	3.50
4520	.2	27.3	1.4	54	<.1	2.3	5.2	927	1.43	<.5	.8	<.5	2.1	112	<.1	.2	<.1	28	1.32	.046	4	5	.45	85	.044	<.1	.79	.033	.12	<.2	<.01	1.3	<.1	<.05	3	<.5	3.80
4521	.4	98.3	1.5	44	<.1	1.7	4.3	927	1.20	<.5	.7	<.5	1.4	81	<.1	.2	<.1	18	1.57	.046	5	4	.39	86	.016	<.1	.67	.035	.14	<.1	<.01	1.0	<.1	<.05	3	<.5	2.40
4522	4.5	220.1	2.0	29	.1	.8	2.6	1102	.63	<.5	1.0	<.5	2.1	97	<.1	.1	.1	4	2.52	.039	8	4	.18	223	.001	1	.43	.025	.18	<.2	<.01	.5	<.1	<.05	1	<.5	2.10
4523	.6	241.9	3.3	25	<.1	.8	2.7	668	.84	<.5	.8	<.5	1.9	90	<.1	.1	<.1	10	1.97	.031	7	4	.10	576	.001	1	.39	.028	.20	<.1	<.01	.7	<.1	<.05	1	<.5	2.90
4524	1.7	894.7	5.6	32	.2	1.1	3.2	895	1.04	<.5	.9	<.5	1.8	109	<.1	.1	.1	10	2.95	.034	7	4	.23	1455	.001	2	.33	.023	.22	<.1	<.01	.6	<.1	.08	1	<.5	3.10
RE 4524	1.8	924.6	5.7	32	.2	.5	3.6	920	1.07	<.5	.9	<.5	1.8	110	<.1	.2	.1	9	2.99	.034	7	4	.23	1400	.001	2	.32	.024	.22	.1	.01	.7	<.1	.08	1	<.5	-
RRE 4524	1.7	979.8	5.3	28	.2	.7	3.3	926	1.03	<.5	.8	<.5	1.8	105	.1	.1	.1	8	3.05	.034	6	4	.21	1381	.001	1	.35	.025	.22	.1	.01	.6	<.1	.08	1	<.5	-
4525	3.1	1086.1	3.5	35	.2	1.3	4.5	719	1.38	<.5	.9	<.5	1.7	62	.1	.2	.1	18	1.55	.043	7	5	.23	361	.003	1	.42	.029	.20	.1	.01	.9	<.1	.07	2	<.5	1.30
4526	2.3	1869.9	4.5	38	.6	1.3	4.6	640	1.34	<.5	.8	<.5	1.7	55	.1	.1	.3	16	1.44	.046	7	4	.18	234	.001	<.1	.35	.032	.19	.1	.01	.9	<.1	.07	1	<.5	1.50
4527	1.7	455.5	3.3	31	.1	1.1	3.2	711	1.12	<.5	.7	<.5	1.9	62	<.1	.1	.1	14	1.78	.040	8	4	.15	247	.001	1	.41	.029	.23	<.1	<.01	1.0	<.1	<.05	1	<.5	3.50
4528	.6	66.3	3.7	12	<.1	.5	1.4	360	.46	<.5	.8	<.5	2.7	43	<.1	.1	<.1	4	1.17	.012	7	4	.07	134	.001	2	.25	.032	.15	<.2	<.01	.5	<.1	<.05	1	<.5	3.70
4529	1.5	282.9	5.0	10	<.1	.3	.6	310	.38	<.5	1.2	<.5	3.3	44	<.1	.1	.1	2	1.27	.012	8	4	.06	57	<.001	1	.27	.037	.19	<.1	<.01	.4	<.1	<.05	1	<.5	3.90
4530	1.1	164.5	1.8	7	<.1	.3	.4	321	.28	<.5	1.2	<.5	3.3	69	<.1	.1	<.1	<.1	1.52	.012	10	4	.05	216	<.001	1	.26	.026	.19	.1	.01	.3	<.1	<.05	1	<.5	1.60
4531	.4	243.4	3.2	10	<.1	.9	1.0	173	.50	<.5	1.4	<.5	3.8	37	<.1	.2	.1	5	.79	.010	9	5	.06	53	.001	1	.27	.044	.15	.1	.01	.4	<.1	<.05	1	<.5	3.90
4532	.2	157.8	2.6	19	<.1	1.3	1.9	248	.81	<.5	1.6	<.5	3.8	50	<.1	.2	.1	13	.63	.016	8	5	.13	57	.008	1	.35	.051	.10	<.1	<.01	1.0	<.1	<.05	2	<.5	2.10
4533	.3	102.6	2.3	11	<.1	.7	1.3	195	.50	.5	1.3	<.5	3.0	40	<.1	.1	<.1	6	.61	.011	7	6	.08	48	.003	1	.26	.045	.11	<.1	<.01	.6	<.1	<.05	1	<.5	4.20
4534	.5	239.4	1.4	17	<.1	1.2	2.1	212	.70	.6	.7	1.8	2.6	37	<.1	.1	.1	12	.45	.014	6	5	.17	95	.020	<.1	.29	.047	.11	<.1	<.01	.9	<.1	<.05	2	<.5	2.30
4535	.3	104.1	1.6	30	<.1	1.8	3.3	387	1.09	<.5	1.0	<.5	2.6	45	<.1	.1	.1	24	.59	.024	5	5	.29	440	.049	<.1	.48	.057	.13	<.1	.01	1.1	<.1	<.05	3	<.5	2.90
4536	.2	116.9	1.6	31	<.1	1.7	3.5	389	1.12	<.5	1.0	2.2	2.7	47	<.1	.1	.1	26	.62	.026	6	6	.30	492	.053	1	.51	.061	.14	<.1	.01	1.1	<.1	<.05	3	<.5	3.20
STANDARD DS7	21.2	107.2	72.1	419	.9	56.4	9.8	634	2.46	47.8	5.1	67.4	4.8	73	6.3	6.2	4.5	87	.96	.077	13	262	1.07	382	.129	38	1.04	.105	.45	3.9	.20	2.6	4.2	.21	5	3.7	-

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	3.9	2.9	45	<.1	8.4	4.6	519	1.79	<.5	3.1	<.5	4.8	61	<.1	<.1	.1	37	.56	.074	9	11	.63	199	.125	1	.91	.058	.46	.1	<.01	1.9	.3	<.05	5	<.5	-
4537	.2	124.5	1.7	31	<.1	1.7	3.7	382	1.29	.5	1.0	<.5	2.2	72	<.1	.1	<.1	34	.68	.038	6	7	.29	315	.058	1	.57	.059	.11	<.1	<.01	1.3	<.1	<.05	3	<.5	5.80
4538	.3	104.5	1.3	33	<.1	3.1	4.6	465	1.37	.5	.9	<.5	1.5	100	<.1	.1	<.1	37	.93	.040	6	10	.40	217	.040	2	.53	.048	.09	.1	<.01	1.7	<.1	<.05	2	<.5	4.10
4539 (pulp)	362.4	1752.3	117.9	145	34.0	77.1	38.8	984	7.03	266.3	2.2	6482.8	4.1	115	.8	73.8	186.3	48	9.50	.083	15	65	.40	53	.151	27	1.62	.032	.18	38.8	12.75	3.9	.2	2.71	6	1.6	-
4540	.7	24.1	1.2	31	<.1	3.5	8.2	429	2.34	.7	1.0	1.6	4.0	57	<.1	.2	.1	63	.78	.042	8	9	.72	91	.156	1	1.36	.144	.14	.2	.01	2.7	<.1	<.05	5	<.5	.40
4541	.3	438.3	1.9	32	.3	1.8	4.0	330	1.38	1.9	.8	5.2	2.0	115	<.1	.2	.4	36	.91	.046	7	5	.24	74	.010	2	.51	.051	.09	<.1	.01	2.4	<.1	<.05	3	<.5	2.20
STANDARD DS7	21.5	107.5	72.1	399	.9	59.3	10.0	651	2.49	47.2	5.3	69.8	5.5	81	6.6	6.0	4.7	84	.97	.077	16	258	1.06	388	.133	40	1.04	.090	.46	3.9	.21	2.6	4.3	.21	5	3.5	-

Sample type: DRILL CORE R150.



GEOCHEMICAL ANALYSIS CERTIFICATE

Happy Creek Minerals Ltd. PROJECT RATERIA File # A607847 Page 1  
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: N/ A

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg % ppm	Ba ppm	Ti % ppm	B %	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.8	2.0	2.6	43	<.1	3.6	3.9	490	1.74	<.5	2.5	1.1	3.7	54	<.1	<.1	.1	34	.49	.071	8	8	.55	185	.111	2	.91	.066	.44	.2	<.01	1.8	.3	<.05	5	<.5	-
4037	.3	30.2	1.2	16	<.1	1.0	1.5	269	.67	.5	.4	.7	1.7	44	<.1	.1	<.1	10	1.64	.028	7	6	.10	204	.003	1	.36	.029	.15	<.1	<.01	.5	<.1	<.05	1	<.5	2.1
4038	.6	48.8	1.4	33	<.1	1.5	3.9	372	1.42	.5	.5	<.5	1.3	105	<.1	.1	.1	33	1.35	.047	5	6	.35	482	.043	2	.93	.040	.13	.1	<.01	1.1	<.1	<.05	4	<.5	2.5
4039	.3	23.0	2.1	35	<.1	1.5	4.0	405	.95	.6	.4	<.5	.9	155	<.1	.1	<.1	22	1.60	.048	5	5	.37	59	.040	1	1.12	.033	.14	<.1	<.01	1.5	<.1	<.05	4	<.5	2.0
4040	.9	8.2	1.8	48	<.1	1.7	4.2	416	1.38	.5	.4	<.5	1.2	91	<.1	.1	<.1	32	1.58	.050	6	9	.34	200	.013	2	.61	.040	.15	.1	<.01	1.5	<.1	<.05	3	<.5	2.2
4041	.3	6.3	2.4	38	<.1	2.2	3.9	385	1.16	.7	.5	<.5	1.3	92	<.1	.1	<.1	22	1.81	.047	5	5	.29	206	.007	2	.79	.045	.19	<.1	<.01	1.2	<.1	<.05	3	<.5	3.0
4042	1.1	11.4	2.1	42	<.1	2.9	4.2	506	1.19	.5	.5	<.5	1.2	120	<.1	.2	<.1	21	1.75	.052	5	8	.33	74	.003	1	.78	.030	.18	.1	<.01	1.1	<.1	<.05	3	<.5	1.2
4043	.4	21.7	2.8	30	<.1	1.2	3.3	474	1.24	.5	.4	<.5	.9	178	.1	.2	<.1	20	2.33	.046	7	3	.19	97	.002	2	.72	.033	.20	.1	<.01	1.2	<.1	<.05	2	<.5	3.8
4044	.6	42.2	2.1	33	<.1	1.3	4.0	382	1.21	.8	.5	.8	.9	128	<.1	.1	<.1	18	1.75	.046	7	6	.23	149	.002	2	.60	.033	.16	.1	<.01	1.3	<.1	<.05	2	<.5	2.4
4045	.4	12.4	1.5	35	<.1	1.8	4.1	426	1.50	.5	.6	<.5	1.2	162	<.1	.1	<.1	36	1.31	.048	6	5	.39	245	.041	1	.78	.048	.13	<.1	<.01	1.3	<.1	<.05	4	<.5	5.0
4046	.5	9.2	1.7	32	<.1	1.4	3.9	382	1.35	.6	.7	<.5	1.7	166	<.1	.1	<.1	29	1.44	.046	6	6	.35	462	.012	1	.70	.039	.13	.1	<.01	1.4	<.1	<.05	3	<.5	2.0
4047	.4	40.3	.8	34	<.1	2.0	3.7	316	1.44	<.5	.5	<.5	1.1	34	<.1	.1	<.1	38	.45	.044	4	9	.34	124	.084	1	.58	.058	.14	<.1	<.01	.7	<.1	<.05	3	<.5	2.6
4048 (pulp)	679.5	7046.2	124.5	66	72.3	5.3	1.6	233	.85	57.1	.9	26.8	.7	138	.5	140.1	6.0	8	1.04	.037	4	222	.11	118	.005	<.1	.30	.021	.16	.1	.40	.4	<.1	.82	1	1.2	-
4049 (rock)	1.5	22.8	1.1	30	<.1	2.1	4.9	374	1.84	.5	1.0	<.5	3.2	38	<.1	.1	<.1	46	.52	.041	7	8	.49	79	.132	<.1	1.04	.103	.21	.2	<.01	1.6	.1	<.05	4	<.5	1.4
4051	.7	140.3	1.5	36	<.1	1.9	4.4	472	1.50	.5	.6	<.5	1.1	121	<.1	.2	<.1	31	1.07	.049	6	7	.41	257	.017	1	.80	.074	.14	.1	<.01	1.8	<.1	<.05	4	<.5	5.5
4052	.6	3.6	2.5	29	<.1	1.5	3.6	313	1.29	.5	.5	<.5	1.3	103	<.1	.1	<.1	27	1.34	.046	6	6	.25	246	.013	1	.54	.044	.12	.1	<.01	1.3	<.1	<.05	2	<.5	2.7
4053	.5	5.5	2.5	20	<.1	1.0	2.4	442	.95	<.5	.4	<.5	1.4	139	<.1	.1	<.1	16	2.36	.047	7	4	.11	80	.001	2	.53	.036	.21	<.1	<.01	1.0	<.1	<.05	2	<.5	2.2
4054	1.4	11.2	2.1	32	<.1	1.7	3.7	302	1.37	.9	.7	<.5	1.5	184	<.1	.1	<.1	26	1.36	.047	5	6	.21	785	.003	2	.69	.057	.13	.1	<.01	1.2	<.1	<.05	3	<.5	1.4
4055	.2	8.0	2.3	27	<.1	1.0	3.0	366	1.12	.8	.6	<.5	1.7	189	.1	.1	<.1	19	2.07	.047	7	2	.14	353	.001	1	.59	.038	.17	<.1	<.01	1.1	<.1	<.05	2	<.5	2.1
4056	.6	6.5	2.4	39	<.1	1.5	4.0	401	1.31	<.5	.5	<.5	1.1	217	.1	.1	<.1	22	1.87	.047	6	5	.24	154	.001	2	.76	.036	.16	<.1	<.01	1.2	<.1	<.05	2	<.5	2.9
RE 4056	.5	6.2	2.4	38	<.1	1.5	4.0	391	1.28	<.5	.5	<.5	1.1	213	<.1	.1	<.1	23	1.83	.045	6	5	.24	152	.001	1	.78	.035	.17	.1	<.01	1.2	<.1	<.05	3	<.5	-
RRE 4056	.5	8.1	2.5	37	<.1	1.5	4.1	408	1.35	<.5	.5	<.5	1.1	211	.1	.1	<.1	24	1.89	.046	6	3	.23	155	.001	2	.75	.036	.16	<.1	<.01	1.3	<.1	<.05	3	<.5	-
4057	.7	2.3	1.7	27	<.1	1.2	3.4	359	1.19	.5	.3	<.5	1.0	116	<.1	.1	<.1	23	1.90	.045	6	5	.20	110	.003	1	.57	.039	.16	.1	<.01	1.2	<.1	<.05	2	<.5	1.6
4058	.2	6.0	1.9	27	<.1	.9	3.5	504	1.11	<.5	.6	<.5	1.0	206	<.1	.1	<.1	16	2.53	.043	5	2	.16	83	.001	1	.58	.031	.17	<.1	<.01	1.0	<.1	<.05	2	<.5	2.0
4059	.4	4.3	2.1	34	<.1	1.1	3.0	716	1.06	.8	.4	<.5	1.0	323	.1	.1	<.1	17	3.20	.040	7	2	.26	137	.002	1	.79	.031	.15	<.1	<.01	.9	<.1	<.05	2	<.5	2.7
4060	.3	7.7	3.7	28	<.1	1.3	3.3	237	.98	2.0	.3	<.5	1.0	159	<.1	.5	<.1	20	1.61	.050	7	5	.13	86	.001	2	.52	.037	.14	<.1	<.01	1.6	<.1	<.05	3	<.5	2.4
4061	.5	6.1	1.6	37	<.1	1.6	3.9	356	1.38	.9	.7	<.5	1.6	84	<.1	.1	<.1	37	1.09	.048	5	8	.36	172	.055	1	.69	.046	.11	.1	<.01	1.4	<.1	<.05	4	<.5	7.1
4062	.3	4.1	1.4	34	<.1	1.8	4.1	353	1.46	.5	.5	<.5	.9	63	<.1	.1	<.1	38	1.01	.051	5	9	.37	157	.063	1	.76	.057	.10	<.1	<.01	1.2	<.1	<.05	4	<.5	7.0
4063	.5	3.5	2.0	35	<.1	1.6	4.2	404	1.34	.9	.5	<.5	1.2	99	<.1	.1	<.1	30	1.48	.051	6	7	.32	152	.021	1	.68	.047	.12	.1	<.01	1.5	<.1	<.05	3	<.5	4.4
4064	.4	133.1	2.6	19	.2	.6	1.5	370	.49	<.5	.9	<.5	2.2	43	.1	.2	<.1	6	1.55	.019	6	6	.11	239	.001	2	.40	.026	.20	<.1	.01	.5	<.1	<.05	1	<.5	4.1
4065	.7	90.8	2.5	30	.2	1.1	2.7	385	.74	<.5	.7	<.5	2.1	42	<.1	.3	<.1	10	1.45	.028	8	8	.17	289	.003	3	.50	.024	.23	.1	<.01	.8	<.1	<.05	2	<.5	4.4
4066	.3	99.4	2.6	31	.1	1.2	2.7	394	.88	<.5	.6	<.5	1.8	36	<.1	.2	<.1	15	1.27	.026	7	6	.23	119	.008	1	.49	.035	.18	<.1	<.01	1.0	<.1	<.05	2	<.5	2.6
4067	.8	181.4	2.3	15	.2	.6	1.3	354	.50	<.5	.8	<.5	2.1	47	<.1	.3	<.1	6	1.29	.021	6	10	.09	319	.001	1	.41	.033	.22	.1	<.01	.5	<.1	<.05	1	<.5	4.7
4068	.1	204.8	2.0	19	.3	.8	1.9	461	.54	<.5	1.0	1.0	2.0	38	<.1	.2	<.1	9	1.47	.023	6	6	.14	216	.003	1	.33	.023	.15	<.1	<.01	.7	<.1	<.05	1	<.5	4.5
4069	.6	459.9	2.4	20	.7	.8	1.8	401	.57	.5	.9	.7	2.2	45	<.1	.2	<.1	9	1.46	.030	6	9	.14	270	.003	2	.46	.021	.23	.1	.01	.8	<.1	<.05	2	<.5	4.8
STANDARD DS7	20.7	107.7	67.5	408	.9	55.5	9.8	646	2.43	49.5	4.8	65.9	4.5	73	6.5	6.0	4.5	85	.97	.083	13	177	1.09	384	.121	40	1.02	.078	.45	3.9	.20	2.6	4.3	.20	5	3.6	-

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Data    FA    DATE RECEIVED: OCT 16 2006 DATE REPORT MAILED:.....

12-20-06 10:51 OUT

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.4	3.2	2.6	48	<.1	4.9	4.3	532	1.93	<.5	2.6	.8	4.2	50	<.1	<.1	.1	38	.49	.081	6	12	.62	200	.115	2	.95	.066	.51	1.3	<.01	1.9	.4	<.05	5	<.5	-
4070	.2	44.9	3.8	39	<.1	5.2	3.8	564	1.20	.6	.5	.7	1.3	75	.1	.4	<.1	21	1.82	.047	6	6	.31	717	.021	3	.60	.028	.19	.2	.01	1.3	<.1	<.05	3	<.5	4.5
4071	.5	34.3	2.3	41	<.1	2.0	4.1	443	1.30	<.5	.6	<.5	1.8	48	<.1	.2	<.1	29	1.09	.045	5	10	.37	244	.042	2	.64	.043	.13	1.6	.01	1.7	<.1	<.05	3	<.5	4.6
RE 4071	.5	32.8	2.2	41	<.1	2.1	4.1	441	1.30	.5	.6	<.5	1.8	48	<.1	.2	<.1	30	1.08	.045	5	10	.37	242	.041	2	.63	.042	.13	1.5	<.01	1.7	<.1	<.05	3	<.5	-
RRE 4071	.2	41.3	2.4	41	<.1	2.4	4.4	453	1.43	.5	.7	.8	1.6	49	<.1	.2	<.1	31	1.12	.046	5	8	.39	256	.043	2	.65	.042	.13	.1	.01	1.7	<.1	<.05	3	<.5	-
4072	.4	119.1	2.6	36	<.1	1.5	3.7	505	1.18	.7	.5	2.9	1.2	53	<.1	.3	<.1	22	1.51	.043	6	7	.31	218	.020	2	.58	.034	.17	1.2	.01	1.3	<.1	<.05	3	<.5	4.8
4073	.1	18.2	5.3	41	<.1	1.5	4.0	457	1.29	.6	.5	.5	1.6	52	<.1	.1	<.1	25	1.29	.046	6	7	.35	288	.022	2	.58	.035	.15	.1	.01	1.4	<.1	<.05	3	<.5	4.0
4074	.4	44.4	2.4	40	<.1	1.9	4.4	548	1.35	<.5	.5	<.5	1.6	50	<.1	.1	<.1	24	1.47	.049	7	8	.35	207	.014	2	.58	.041	.15	1.4	.01	1.2	<.1	<.05	3	<.5	4.7
4075	.3	3361.0	3.2	45	3.8	1.3	3.9	782	1.20	<.5	.5	1.4	1.4	51	.1	.2	.3	13	1.87	.046	7	6	.30	252	.002	1	.60	.018	.21	.1	.07	1.0	<.1	.08	2	<.5	4.2
4076 (pulp)	330.5	1743.9	126.5	145	31.3	78.5	37.1	976	6.86	263.0	2.1	5809.6	3.6	111	1.3	71.7	193.9	45	9.59	.083	12	58	.40	89	.130	30	1.61	.035	.18	35.5	11.70	3.6	.2	2.53	6	1.7	.2
4077 (rock)	1.2	12.3	1.2	31	<.1	2.2	5.1	397	1.90	<.5	.9	1.5	3.4	49	<.1	.1	.1	48	.59	.043	7	10	.51	111	.151	<.1	1.22	.148	.33	1.6	.01	2.3	.1	<.05	4	<.5	1.2
4078	.5	397.5	2.1	37	.4	1.4	4.4	642	1.38	<.5	.5	<.5	1.5	52	.1	.2	<.1	22	1.43	.048	6	4	.35	391	.018	2	.66	.027	.18	.1	<.01	1.3	<.1	<.05	2	<.5	.8
4079	.6	2655.5	1.8	38	3.7	1.0	4.1	753	1.13	<.5	.5	.7	1.4	44	.2	.1	.2	12	1.63	.049	7	6	.26	212	.003	1	.58	.013	.22	1.5	.03	.9	<.1	.07	2	<.5	4.1
4080	.2	771.6	2.6	40	1.1	1.2	4.1	717	1.26	.5	.6	.6	1.3	70	.1	.3	.1	18	1.85	.050	7	5	.36	316	.008	1	.68	.028	.18	.1	.02	1.3	<.1	<.05	3	<.5	4.6
4081	.5	976.6	2.4	30	.8	.8	3.6	809	1.09	<.5	1.0	2.4	2.4	55	.1	.1	.1	16	2.06	.049	8	6	.25	198	.001	1	.55	.022	.21	1.2	<.01	1.1	<.1	<.05	2	<.5	3.5
4082	.1	193.3	2.4	35	.3	.8	3.5	708	1.05	<.5	.6	.9	1.6	66	.1	.1	<.1	15	1.97	.047	7	3	.27	228	.002	2	.55	.019	.20	.1	.01	1.0	<.1	<.05	2	<.5	3.6
4083	.4	396.1	2.3	30	.5	.6	2.8	556	.90	<.5	.5	1.2	1.6	60	<.1	.1	<.1	10	1.76	.043	7	6	.23	598	.001	2	.49	.020	.21	1.1	<.01	.9	<.1	<.05	2	<.5	3.5
4084	.1	108.1	3.3	46	.2	1.2	3.9	546	1.17	<.5	.6	<.5	1.4	60	.1	.2	<.1	20	1.78	.051	6	3	.35	160	.002	1	.62	.023	.16	.1	.01	1.4	<.1	<.05	2	<.5	1.7
4085	.6	283.1	3.0	39	.3	1.2	3.6	546	1.20	.5	.6	1.6	1.4	73	.1	.2	.1	19	1.71	.049	7	6	.31	358	.006	2	.57	.030	.19	1.1	.01	1.3	<.1	<.05	2	<.5	4.0
4086	.2	123.3	2.9	40	.1	1.2	3.9	637	1.23	<.5	.7	<.5	1.3	89	.1	.1	<.1	18	2.05	.047	7	5	.28	404	.002	2	.51	.026	.20	.1	.01	1.2	<.1	<.05	2	<.5	4.5
4087	.5	129.5	3.1	36	.2	1.1	3.4	475	1.13	<.5	.6	<.5	1.7	76	.1	.1	<.1	16	1.71	.048	8	7	.26	283	.001	2	.46	.031	.20	1.4	.01	1.2	<.1	<.05	2	<.5	4.5
4088	.1	18.3	3.1	32	<.1	.7	3.1	542	1.16	<.5	.6	<.5	1.2	102	.1	.2	<.1	13	2.09	.050	7	4	.29	321	.001	1	.39	.028	.16	.1	<.01	1.3	<.1	<.05	1	<.5	3.0
4089	.5	338.6	2.7	30	.6	.9	3.3	619	1.02	<.5	.5	<.5	1.2	84	.1	.2	<.1	13	2.08	.049	7	6	.25	387	.001	2	.42	.026	.19	1.1	.01	1.1	<.1	<.05	1	<.5	4.5
4090	.2	6.4	4.1	38	<.1	.8	3.6	460	1.28	.5	.8	.7	1.3	85	.1	.1	<.1	18	1.94	.046	8	4	.19	468	.002	2	.44	.030	.17	.1	.01	1.4	<.1	<.05	1	<.5	4.8
4091	.5	1218.5	2.7	39	1.4	1.1	4.2	405	1.35	<.5	.7	<.5	1.3	77	.1	.2	.1	20	1.63	.044	6	5	.24	274	.001	1	.54	.029	.14	1.1	.01	1.4	<.1	<.05	2	<.5	4.7
4092	.2	187.5	2.7	25	.3	.5	2.8	426	.91	.5	1.3	<.5	1.8	75	.1	.2	<.1	10	1.70	.044	7	3	.13	377	.001	1	.36	.019	.20	.1	<.01	1.0	<.1	<.05	1	<.5	3.9
4093	.4	15.8	2.6	16	<.1	<.1	1.6	834	.61	<.5	.7	<.5	1.2	102	.2	.1	<.1	4	3.50	.040	7	6	.13	329	<.001	2	.26	.008	.19	1.6	.01	.7	<.1	<.05	1	<.5	4.6
4094	.2	192.5	6.7	48	.2	1.1	3.3	680	1.15	<.5	.7	<.5	1.3	90	.1	.1	<.1	15	2.42	.049	7	5	.20	237	.002	2	.45	.026	.17	.1	.01	1.1	<.1	<.05	2	<.5	4.2
4095	.4	48.2	3.1	45	<.1	1.4	4.5	508	1.28	<.5	.7	<.5	1.1	83	.1	.3	<.1	18	1.94	.050	7	8	.33	288	.002	2	.64	.034	.18	.9	<.01	1.3	<.1	<.05	3	<.5	3.5
4096	.3	701.2	14.0	49	.9	.9	4.5	703	1.42	<.5	.6	.9	1.2	127	.2	.2	.2	16	2.80	.050	7	5	.35	590	.004	2	.68	.029	.20	.1	.01	1.2	<.1	<.05	3	<.5	4.0
4097	.5	178.9	3.2	43	.2	1.5	4.5	599	1.39	<.5	.9	.7	1.9	67	.1	.2	<.1	23	1.53	.046	5	8	.38	232	.015	2	.67	.032	.16	1.4	.01	1.5	<.1	<.05	3	<.5	5.0
4098	.2	89.2	6.4	41	.1	1.0	3.8	636	1.26	<.5	.7	<.5	1.7	105	.1	.2	<.1	20	2.40	.050	6	5	.29	546	.013	2	.56	.026	.19	.1	.03	1.4	<.1	<.05	2	<.5	4.1
4099	.5	57.1	3.1	47	<.1	1.7	4.5	515	1.45	<.5	.8	<.5	1.3	89	<.1	.2	<.1	32	1.43	.047	5	10	.42	145	.042	1	.71	.040	.14	1.4	.01	1.8	<.1	<.05	3	<.5	4.1
4100	.2	442.9	2.6	41	.6	1.6	4.4	515	1.51	.5	.6	.9	1.3	75	<.1	.3	<.1	31	1.29	.049	5	5	.40	146	.043	2	.71	.035	.14	.1	.01	1.6	<.1	<.05	3	<.5	4.7
4101 (pulp)	659.4	7520.7	122.1	64	71.1	5.5	1.6	244	.87	58.2	.9	26.8	.7	146	.4	137.2	6.1	8	1.08	.036	4	229	.12	127	.006	<.1	.32	.023	.17	.1	.37	.6	<.1	.84	1	1.2	-
STANDARD DS7	20.3	107.0	67.8	395	.9	53.9	9.4	622	2.35	48.2	4.8	58.7	4.3	72	6.5	6.0	4.4	82	.93	.079	12	167	1.04	373	.119	37	.97	.079	.44	3.8	.19	2.4	4.2	.19			



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B %	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.5	3.0	2.7	47	<.1	3.6	4.1	516	1.82	<.5	3.0	1.3	4.4	53	<.1	.1	.1	38	.46	.074	7	13	.57	199	.119	2	.90	.063	.47	1.3	<.01	1.9	.4	<.05	5	<.5	-
4102 (rock)	.5	29.3	1.5	29	<.1	1.8	4.6	365	1.77	<.5	1.0	.7	3.3	35	<.1	<.1	<.1	41	.43	.035	6	7	.45	84	.136	1	.96	.104	.25	.1	<.01	2.2	.1	<.05	3	<.5	1.6
4103	.5	571.8	5.1	62	.9	1.2	3.7	702	1.10	<.5	.6	1.0	1.3	126	.1	.3	.1	17	2.15	.042	7	7	.34	267	.007	2	.63	.020	.16	1.2	.01	1.3	<.1	<.05	2	<.5	4.5
4104	.6	685.1	2.9	43	1.1	1.8	4.1	597	1.24	<.5	.5	1.7	1.4	97	.1	.2	.1	21	1.75	.046	6	9	.35	413	.010	2	.64	.027	.17	1.5	.01	1.4	<.1	<.05	2	<.5	4.6
4105	.2	318.9	3.1	39	.7	1.5	3.4	505	1.18	<.5	.6	.8	1.2	83	<.1	.2	<.1	18	1.59	.049	6	6	.30	242	.015	3	.58	.024	.18	.1	.02	1.3	<.1	<.05	2	<.5	4.5
4106	.2	104.2	2.0	38	.2	1.6	4.0	407	1.40	.6	.5	<.5	1.0	54	<.1	.2	<.1	34	.99	.046	4	8	.35	203	.059	2	.65	.040	.12	.1	<.01	1.2	<.1	<.05	3	<.5	4.5
4107	.5	103.4	2.1	36	.1	1.7	3.7	373	1.25	<.5	.4	.5	1.0	48	<.1	.1	<.1	30	.87	.041	4	7	.35	169	.052	1	.62	.044	.10	1.5	<.01	1.2	<.1	<.05	3	<.5	5.0
4108	.2	18.5	2.0	38	<.1	1.7	4.2	361	1.44	.6	.5	<.5	1.1	64	<.1	.1	<.1	36	1.03	.043	4	6	.38	327	.058	1	.84	.045	.07	.1	<.01	1.2	<.1	<.05	4	<.5	5.0
4109	.5	157.6	1.8	37	.3	1.4	3.7	391	1.32	.5	.5	.9	1.2	62	<.1	.1	<.1	30	1.03	.044	4	9	.35	247	.041	2	.63	.038	.13	1.5	<.01	1.2	<.1	<.05	3	<.5	4.0
STANDARD DS7	20.3	105.9	69.0	415	.8	54.4	9.6	619	2.35	47.3	4.9	60.3	4.4	67	6.4	5.9	4.6	81	.91	.078	12	165	1.04	362	.118	37	.95	.072	.43	3.7	.19	2.4	4.1	.19	5	3.5	-

Sample type: DRILL CORE R150.

GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A607709

Box 1852 38151 Clarke Dri, Squamish BC V0N 3G0 Submitted by: JN A

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.8	2.3	2.8	46	<.1	3.6	3.9	532	1.80	.5	2.6	.6	3.9	56	<.1	<.1	.1	35	.51	.076	7	11	.57	203	.117	1	.99	.085	.52	.2	<.01	2.3	.4	<.05	5	<.5	-
4110	.3	81.3	6.1	37	.2	1.2	3.8	363	1.14	.9	.5	15.9	1.1	63	<.1	.1	.1	27	1.08	.044	4	9	.33	212	.039	2	.58	.034	.10	.1	.01	1.1	<.1	<.05	3	<.5	6.77
4111	.8	37.3	3.9	39	<.1	1.9	4.2	447	1.37	.7	.8	2.3	1.7	92	<.1	.3	<.1	32	1.28	.047	5	10	.40	279	.046	2	.84	.062	.14	.1	<.01	1.6	<.1	<.05	4	<.5	3.14
4112	.3	28.6	2.4	40	<.1	2.0	4.4	416	1.62	.5	1.1	<.5	2.5	65	<.1	.1	.1	42	.85	.053	5	13	.42	257	.081	1	.70	.079	.10	.1	.01	1.3	<.1	<.05	4	<.5	4.00
4113	1.0	90.2	2.3	37	.2	1.3	3.9	417	1.31	.7	.8	<.5	1.9	71	<.1	.1	<.1	30	1.04	.045	5	10	.36	264	.046	2	.66	.048	.15	.2	.01	1.3	.1	<.05	4	<.5	4.53
4114	.1	43.4	1.9	35	<.1	1.4	4.1	516	1.17	<.5	.6	<.5	1.4	71	<.1	.1	<.1	27	1.33	.046	4	8	.36	137	.033	1	.52	.029	.08	<.1	.01	1.2	<.1	<.05	3	<.5	4.69
4115	.9	1582.2	2.1	31	3.3	.9	3.5	774	1.08	<.5	.5	4.1	1.5	97	<.1	.1	.1	14	2.20	.047	8	7	.26	170	.002	2	.55	.027	.22	.1	.01	1.0	<.1	<.05	2	<.5	4.16
4116	.3	300.3	3.2	45	1.0	1.4	4.0	545	1.28	1.4	.4	<.5	1.4	141	.1	.3	<.1	20	1.43	.051	7	6	.40	201	.002	2	.67	.032	.19	<.1	<.01	1.4	<.1	<.05	3	<.5	4.80
4117	.5	388.7	4.8	43	1.1	1.6	3.7	748	1.01	.5	.5	<.5	1.3	124	.1	.3	<.1	6	2.47	.045	7	7	.23	234	.001	3	.54	.011	.25	.2	.01	.8	<.1	<.05	1	<.5	4.70
4118	.2	14.3	5.4	34	<.1	.9	3.4	641	1.11	<.5	.4	<.5	1.3	106	.1	.1	<.1	13	2.29	.050	6	7	.26	211	.001	2	.64	.031	.28	.1	.01	1.1	<.1	<.05	2	<.5	4.33
RE 4118	.3	14.9	5.1	35	<.1	1.0	3.5	647	1.08	<.5	.5	<.5	1.3	110	.1	.1	<.1	13	2.29	.047	6	7	.26	208	.001	1	.64	.029	.27	<.1	<.01	1.2	<.1	<.05	2	<.5	-
RRE 4118	.9	16.8	5.1	33	<.1	1.2	3.4	638	1.14	<.5	.5	<.5	1.2	105	.1	.1	<.1	13	2.27	.048	6	9	.26	213	.001	2	.70	.032	.31	.1	<.01	1.1	<.1	<.05	2	<.5	-
4119	.2	43.2	2.4	40	<.1	1.4	4.2	525	1.26	<.5	.5	<.5	1.1	100	<.1	.1	<.1	20	1.58	.047	6	7	.34	221	.007	2	.61	.040	.18	<.1	<.01	1.3	<.1	<.05	2	<.5	4.52
4120	.7	29.2	2.8	40	<.1	1.4	3.9	570	1.22	<.5	.6	<.5	1.3	115	<.1	.1	<.1	19	2.01	.047	6	8	.30	187	.002	2	.62	.044	.19	.1	.01	1.2	<.1	<.05	2	<.5	4.82
4121	.3	462.1	3.1	36	.8	1.6	4.4	594	1.40	<.5	.4	<.5	1.0	104	.1	.1	.1	25	1.77	.050	6	10	.34	497	.009	3	.73	.050	.27	<.1	<.01	1.5	<.1	<.05	3	<.5	3.21
4122	.7	68.3	2.5	39	<.1	1.8	4.4	513	1.46	<.5	.5	<.5	.9	93	<.1	.1	<.1	32	1.34	.049	5	11	.37	422	.032	2	.68	.059	.16	.1	<.01	1.4	<.1	<.05	3	<.5	4.64
4123	.4	68.3	2.5	39	<.1	2.1	4.3	522	1.56	<.5	.5	<.5	.9	101	<.1	.1	<.1	33	1.35	.049	6	10	.37	442	.036	2	.78	.081	.21	<.1	<.01	1.4	<.1	<.05	3	<.5	4.23
4124	.7	83.4	3.6	41	.2	1.2	4.2	536	1.34	.6	.5	<.5	1.1	124	<.1	.1	<.1	24	1.60	.049	6	7	.35	300	.017	2	.68	.048	.17	.1	<.01	1.5	<.1	<.05	3	<.5	3.50
4125	.3	6.7	3.7	53	<.1	2.1	4.7	512	1.64	.8	.5	<.5	1.0	144	<.1	.2	<.1	38	1.44	.053	5	7	.52	238	.059	2	.86	.064	.13	<.1	<.01	2.0	<.1	<.05	4	<.5	3.94
4126	.7	6.3	2.9	41	<.1	1.8	4.3	386	1.51	.9	.5	<.5	1.1	86	<.1	.2	<.1	38	1.18	.048	5	12	.42	348	.075	3	.79	.067	.13	.1	<.01	1.7	<.1	<.05	4	<.5	4.10
4127(puip)	652.5	7785.5	128.6	67	78.7	5.4	1.5	240	.88	59.9	1.0	28.3	.8	159	1.1	152.1	6.5	8	1.11	.038	4	225	.11	136	.006	<.1	.30	.023	.18	.2	.42	.4	<.1	.76	2	1.3	-
4128(rock)	.7	21.4	2.4	33	<.1	3.1	6.6	468	2.19	.6	1.0	<.5	3.5	46	<.1	.1	<.1	53	.64	.042	6	10	.66	84	.149	1	1.30	.153	.20	.1	<.01	3.2	<.1	<.05	4	<.5	2.18
4129	1.1	5.5	2.8	40	<.1	1.6	4.4	438	1.71	.7	.5	<.5	1.1	97	<.1	.2	<.1	40	1.08	.050	6	13	.43	300	.060	2	.82	.091	.16	.1	<.01	1.5	<.1	<.05	4	<.5	3.69
4130	.2	26.3	3.0	40	<.1	.9	3.8	568	1.23	<.5	.4	<.5	1.0	99	<.1	.1	<.1	21	2.00	.049	6	7	.26	784	.006	1	.57	.034	.19	<.1	<.01	1.3	<.1	<.05	2	<.5	3.68
4501	.7	35.7	2.7	34	<.1	1.7	4.0	354	1.30	.8	.9	<.5	1.5	162	<.1	.1	<.1	28	1.24	.045	5	8	.37	168	.027	2	1.15	.070	.15	.1	<.01	2.4	<.1	<.05	4	<.5	5.10
4502	.5	108.1	2.2	39	<.1	2.8	4.6	401	1.53	.7	.8	<.5	1.5	148	<.1	.1	.1	35	1.28	.049	5	8	.42	173	.051	1	1.07	.096	.15	<.1	<.01	2.3	.1	<.05	5	<.5	5.75
4503	.5	78.0	2.5	39	<.1	1.0	4.0	292	1.36	1.7	.4	1.7	1.1	296	<.1	.1	.1	24	1.96	.046	6	5	.25	128	.002	1	1.03	.060	.10	<.1	<.01	1.5	<.1	<.05	4	<.5	2.19
4504	.4	92.0	1.9	32	<.1	1.4	4.1	521	1.26	.5	.5	1.3	1.1	131	<.1	.1	.1	26	2.04	.047	5	6	.35	595	.027	2	.88	.065	.15	<.1	<.01	2.1	<.1	<.05	4	<.5	4.56
4505	.5	16.1	1.7	36	<.1	1.8	4.6	441	1.59	.7	.6	<.5	.9	98	<.1	.1	<.1	34	1.41	.051	5	8	.43	933	.047	1	.88	.066	.09	.1	<.01	1.6	<.1	<.05	4	<.5	3.20
4506	.3	11.7	2.2	31	<.1	1.4	4.7	431	1.49	.8	.5	<.5	1.2	126	<.1	.2	<.1	34	1.50	.051	5	6	.43	120	.045	1	1.08	.066	.10	<.1	<.01	2.0	<.1	<.05	4	<.5	3.25
STANDARD DS7	20.6	109.2	67.6	395	.9	55.5	9.4	638	2.44	49.1	4.8	63.1	4.4	70	6.6	5.9	4.5	88	.95	.080	11	167	1.07	366	.118	39	.98	.079	.44	3.9	.20	2.4	4.2	.20	5	3.5	-

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA \_\_\_\_\_ DATE RECEIVED: OCT 20 2006 DATE REPORT MAILED:.....

11-17-06 11:52:00



GEOCHEMICAL ANALYSIS CERTIFICATE

Happy Creek Minerals Ltd. File # A608653 Page 1
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann



Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Hg, Sc, Tl, S, Ga, Se, Sample kg. Rows include samples G-1, 4809, 4810, 4811, 4812, 4813, 4814, 4815, 4816, 4817, 4818, 4819, 4820, 4821, 4822, 4823, RE 4823, RRE 4823, 4824, 4825, 4826, 4827, 4828, 4829, 4830, 4831, 4832, 4833, 4834, 4835, 4836, 4837, 4838, 4839, 4840, and STANDARD DS7.

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Date 1 FA DATE RECEIVED: NOV 17 2006 DATE REPORT MAILED: 12-20-06 P04:04 OUT

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.6	2.0	3.2	46	<.1	5.7	4.7	529	1.78	<.5	2.4	<.5	3.9	46	<.1	<.1	.1	35	.44	.087	7	63	.62	214	.118	1	.92	.045	.54	.2	<.01	1.9	.4	<.05	5	.6	-
4841	.8	1666.6	2.5	40	1.0	.5	4.9	1367	.99	<.5	.4	<.5	1.2	118	.1	.2	.2	7	2.83	.059	7	4	.25	381	.001	3	.31	.009	.21	.1	.01	.9	<.1	<.05	1	<.5	5.87
4842	.2	271.5	2.2	39	.2	1.5	4.9	763	1.15	<.5	.6	<.5	1.2	120	<.1	.2	.1	17	2.21	.055	6	3	.31	158	.001	1	.39	.021	.12	<.1	.02	1.2	<.1	<.05	1	<.5	5.95
4843	.8	259.0	1.9	31	.2	1.3	4.8	842	1.32	<.5	.5	<.5	.8	132	<.1	.1	.1	22	2.48	.051	6	4	.40	331	.003	1	.40	.020	.11	<.1	.01	1.5	<.1	<.05	2	<.5	6.32
4844	10.6	484.3	1.8	28	.3	1.2	4.0	645	1.27	<.5	.8	<.5	2.2	104	<.1	.1	.1	25	1.93	.048	6	4	.32	296	.005	1	.42	.021	.13	.1	<.01	1.5	<.1	<.05	2	.7	6.36
4845	2.0	314.7	2.7	57	.2	2.4	8.7	1676	1.79	.7	.8	<.5	1.7	179	<.1	.3	.1	22	3.77	.060	11	5	.63	248	.002	2	.32	.014	.19	.1	<.01	1.8	.1	<.05	1	<.5	3.09
4846	.2	556.9	1.9	23	.3	1.7	7.6	610	1.37	<.5	.5	<.5	1.1	100	<.1	.8	.2	14	1.71	.050	7	3	.42	33	.001	2	.69	.019	.13	.1	<.01	1.4	<.1	<.05	3	<.5	5.00
4847	.7	383.8	1.8	23	.2	1.4	7.6	737	1.46	<.5	.5	<.5	1.1	124	<.1	.7	.3	14	2.13	.052	8	5	.42	41	.001	2	.71	.020	.15	.1	<.01	1.3	<.1	<.05	3	<.5	3.86
4848	.4	105.0	2.9	23	<.1	.9	3.0	784	.97	<.5	.5	<.5	1.1	203	.1	.1	<.1	9	3.02	.046	7	3	.30	589	.001	2	.29	.014	.17	.1	<.01	1.1	<.1	<.05	1	<.5	6.27
4849 (rock)	1.2	137.9	3.1	32	<.1	11.7	8.8	217	2.20	1.7	2.0	<.5	5.8	17	.1	.1	<.1	85	1.05	.060	8	17	.64	57	.173	4	1.05	.033	.20	.1	<.01	1.0	<.1	<.05	6	<.5	.67
4850 (pulp)	328.0	1704.1	125.5	139	33.5	72.3	35.5	952	6.37	261.7	1.9	6131.1	3.3	99	1.6	67.6	185.1	43	8.37	.086	13	61	.37	36	.127	31	1.47	.027	.18	36.6	11.61	3.9	.2	2.78	6	2.1	-
STANDARD DS7	20.8	107.5	70.6	397	.9	56.7	9.6	634	2.46	48.8	4.9	75.5	4.6	74	6.4	6.1	4.6	84	.97	.078	14	269	1.06	381	.129	37	1.03	.090	.46	3.9	.20	2.6	4.1	.21	5	3.9	-

Sample type: DRILL CORE R150.





GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608657 Page 1

2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B %	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.6	2.0	2.5	45	<.1	6.1	4.2	517	1.73	<.5	2.0	1.6	3.6	41	<.1	<.1	.1	33	.39	.081	6	59	.61	195	.108	1	.88	.046	.53	.2	<.01	1.7	.4	<.05	5	<.5	-
4333	.2	17.2	2.2	17	<.1	.8	2.6	550	.91	.9	.4	1.6	1.1	153	<.1	.1	<.1	14	2.07	.046	6	2	.17	633	.002	2	.33	.019	.17	<.1	<.01	1.1	<.1	<.05	1	<.5	2.60
4334	1.0	34.7	2.3	29	<.1	1.5	4.0	377	1.25	1.2	.6	1.1	1.2	132	<.1	.2	<.1	26	1.15	.043	5	7	.35	235	.022	1	.62	.033	.11	<.1	<.01	1.2	<.1	<.05	3	<.5	6.70
4335	.5	29.3	1.7	31	<.1	1.7	4.1	336	1.29	.8	.7	1.0	1.2	89	<.1	.1	<.1	34	.87	.040	4	7	.37	208	.057	1	.67	.039	.11	<.1	<.01	.9	<.1	<.05	4	<.5	5.65
4630	.8	6.4	1.5	21	<.1	1.5	3.9	381	1.10	1.6	.5	.7	1.0	117	<.1	.5	<.1	25	2.72	.056	6	4	.46	58	.001	1	.35	.024	.06	<.1	.01	2.3	<.1	<.05	1	<.5	2.10
4631	.6	6.1	2.2	40	<.1	2.5	5.4	499	1.39	.8	.4	.6	.9	135	<.1	.4	<.1	25	2.27	.058	5	4	.60	113	.013	1	.99	.024	.09	.1	.01	1.7	<.1	<.05	4	<.5	6.40
4632	84.6	6.3	8.9	32	.1	2.2	5.1	330	1.25	1.7	.4	.5	1.0	273	.1	.5	<.1	25	2.13	.058	5	3	.39	99	.001	1	1.00	.022	.09	.7	.03	1.6	.2	<.05	4	<.5	5.40
4633	1.1	11.0	2.0	42	<.1	2.7	6.1	486	1.48	.9	.4	.5	.9	170	<.1	.4	<.1	34	1.97	.061	5	4	.71	91	.036	2	1.15	.037	.07	.1	<.01	2.4	<.1	<.05	5	<.5	5.65
4634	.3	7.4	2.4	12	<.1	1.2	2.1	526	.88	2.1	.5	.6	1.3	195	<.1	2.0	<.1	18	3.33	.057	6	3	.26	88	.003	2	.68	.015	.09	.1	<.01	1.6	<.1	<.05	3	<.5	3.40
4635	1.1	2.5	1.2	26	<.1	2.3	4.9	331	1.13	1.4	.4	.7	1.3	112	<.1	.6	<.1	22	1.59	.051	5	5	.45	61	.003	1	.69	.032	.05	.1	<.01	1.9	<.1	<.05	3	<.5	3.10
4636	.2	4.7	1.8	25	<.1	2.0	4.6	296	1.33	3.5	.4	.7	1.3	138	<.1	.7	<.1	29	1.61	.057	7	3	.37	46	.001	2	.44	.031	.05	.1	<.01	2.5	<.1	<.05	2	<.5	3.00
4637	.9	5.3	2.5	27	<.1	1.9	4.8	435	1.34	2.1	.5	1.6	1.5	163	<.1	.6	<.1	27	2.40	.046	7	3	.59	56	.001	1	.47	.030	.07	.1	.01	1.9	.1	<.05	2	<.5	6.30
4638	.2	4.4	2.7	37	<.1	2.4	7.4	531	1.82	1.2	.5	1.0	.9	202	<.1	.2	<.1	35	3.15	.048	4	2	.62	79	.001	1	.53	.026	.05	.1	<.01	2.4	<.1	<.05	2	<.5	3.20
4639	.6	8.9	2.2	28	<.1	1.9	5.7	359	1.44	2.0	.7	.5	1.2	165	<.1	.3	<.1	38	1.96	.047	5	4	.54	119	.003	2	.46	.033	.07	.1	<.01	3.0	<.1	<.05	2	<.5	3.30
4640	.3	7.7	2.0	22	<.1	2.0	4.3	415	1.06	2.4	.7	.5	1.3	128	<.1	1.2	<.1	24	2.18	.076	6	3	.38	106	.003	2	.47	.022	.08	.2	<.01	1.7	<.1	<.05	2	<.5	2.80
4641	.4	8.2	1.8	21	<.1	1.2	4.4	359	1.18	.9	.8	.9	1.7	128	<.1	.2	<.1	16	2.25	.042	5	3	.35	166	.001	2	.51	.028	.13	.1	<.01	1.3	<.1	<.05	2	<.5	6.40
4642	.3	5.0	2.3	22	<.1	1.4	4.1	362	1.20	.9	.7	.5	1.6	94	<.1	.2	<.1	23	1.91	.041	5	3	.38	261	.001	2	.36	.028	.09	.1	<.01	1.8	<.1	<.05	1	<.5	4.70
4643	.5	45.9	2.4	23	<.1	1.3	3.9	370	1.20	.6	1.4	<.5	1.6	112	<.1	.1	<.1	22	1.91	.038	5	4	.31	242	.001	2	.39	.027	.13	.1	<.01	1.5	<.1	<.05	1	<.5	5.50
4644	.3	15.5	2.4	21	<.1	1.1	3.5	412	1.07	.6	1.3	<.5	1.6	101	<.1	.1	<.1	20	2.31	.040	5	3	.36	355	.001	2	.28	.023	.11	<.1	<.01	1.7	<.1	<.05	1	<.5	5.25
4645	.5	6.7	2.4	28	<.1	1.4	4.4	342	1.30	1.0	1.5	<.5	1.2	121	<.1	.1	<.1	25	1.81	.046	6	4	.30	117	.003	2	.57	.029	.10	.1	<.01	1.7	<.1	<.05	2	<.5	3.60
4646	.2	29.0	2.0	10	<.1	.6	1.8	292	.59	<.5	1.0	.9	2.3	95	<.1	.1	<.1	8	1.96	.025	5	3	.15	118	<.001	2	.29	.025	.13	.1	<.01	.6	<.1	<.05	1	<.5	5.40
4647 (rock)	1.0	102.7	3.2	34	<.1	11.8	9.0	219	2.21	1.5	2.2	1.4	6.4	18	.1	.1	<.1	91	.85	.061	8	19	.63	75	.188	4	1.00	.049	.30	.2	<.01	1.2	<.1	<.05	6	<.5	1.10
4648	.2	222.1	2.4	4	.1	.3	.7	148	.29	.5	.9	.6	2.5	69	<.1	.1	<.1	3	1.27	.009	5	3	.04	48	<.001	1	.21	.020	.12	.1	.01	.3	<.1	<.05	1	<.5	7.30
4649	.5	1052.7	2.5	6	.6	.2	.7	215	.38	.7	.6	2.6	2.1	72	<.1	.1	.1	4	1.51	.014	4	4	.07	52	.001	1	.24	.020	.15	.2	.01	.3	<.1	<.05	1	<.5	7.45
4650	.2	144.6	2.7	8	.2	.1	.7	193	.36	<.5	.8	.7	2.4	85	<.1	.1	<.1	3	1.49	.005	4	1	.12	137	<.001	1	.22	.013	.11	.3	.01	.3	<.1	<.05	1	<.5	7.80
4651	.7	63.6	3.4	7	<.1	<.1	.8	211	.34	<.5	.6	.8	3.2	87	<.1	<.1	<.1	5	1.70	.007	6	3	.08	285	<.001	2	.25	.019	.14	.1	<.01	.3	<.1	<.05	1	<.5	7.00
RE 4651	.7	61.7	3.2	7	<.1	<.1	.8	211	.34	<.5	.7	.7	3.0	80	<.1	<.1	<.1	4	1.71	.007	6	3	.08	270	<.001	2	.24	.019	.12	.1	<.01	.3	<.1	<.05	1	<.5	-
RRE 4651	.5	61.4	3.2	7	<.1	.1	.7	209	.36	<.5	.6	1.1	3.0	82	<.1	<.1	<.1	5	1.69	.006	6	2	.07	257	<.001	2	.23	.019	.13	.1	<.01	.3	<.1	<.05	1	<.5	-
4652	1.0	136.8	2.7	4	.1	<.1	.5	166	.25	<.5	.5	.9	3.1	77	.1	.1	<.1	1	1.54	.004	6	4	.04	126	<.001	2	.22	.017	.13	.1	<.01	.3	<.1	<.05	1	<.5	7.30
4653	.4	34.5	2.3	15	<.1	.4	1.3	195	.57	.6	1.0	.8	2.3	68	<.1	.1	<.1	7	1.15	.011	4	3	.11	123	<.001	2	.29	.024	.10	.1	.01	.7	<.1	<.05	1	<.5	6.70
4654	.7	35.4	2.6	12	<.1	.4	1.5	191	.48	1.0	1.4	1.3	2.2	85	<.1	.1	<.1	5	1.37	.014	4	3	.11	142	<.001	1	.24	.024	.16	.2	<.01	.7	.1	<.05	1	<.5	7.60
4655	.3	97.2	2.8	18	<.1	.8	2.3	207	.70	1.2	1.2	2.3	2.4	71	<.1	.1	.1	11	1.13	.026	6	3	.14	97	.005	1	.38	.029	.13	.1	.01	.9	<.1	<.05	2	<.5	6.60
4656 (pulp)	690.7	7269.2	122.5	60	70.6	5.2	1.5	233	.83	53.4	.9	25.5	.7	127	.2	138.9	6.3	7	1.03	.033	4	232	.11	120	.005	<.1	.30	.019	.15	.2	.41	.5	<.1	.82	1	1.1	-
4657	.5	86.1	3.5	20	<.1	.5	1.7	182	.63	1.3	.8	.7	2.0	92	<.1	.2	.1	9	1.21	.036	9	3	.07	77	.001	<.1	.29	.023	.15	.2	<.01	.9	<.1	<.05	1	<.5	4.90
4658	.3	89.9	3.0	17	<.1	.6	1.8	263	.61	<.5	.6	.7	1.6	89	<.1	.2	<.1	10	1.68	.035	7	2	.14	93	.001	<.1	.30	.025	.16	.2	<.01	.9	<.1	<.05	1	<.5	4.65
STANDARD DS7	21.3	106.0	67.5	413	.9	56.4	9.3	641	2.44	48.1	4.9	65.3	4.6	74	6.4	5.8	4.4	85	.97	.078	13	264	1.07	380	.125	40	1.08	.104	.46	3.9	.19	2.5	4.2	.21	5	3.7	-

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA \_\_\_\_\_ DATE RECEIVED: NOV 14 2006 DATE REPORT MAILED: 12-20-06 11:05 OUT



All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B %	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	2.5	3.2	49	<.1	4.2	4.5	559	1.93	<.5	2.9	2.5	4.3	59	<.1	<.1	.1	43	.57	.081	8	13	.61	222	.125	1	1.09	.099	.52	.1	.01	2.0	.4	<.05	5	<.5	-
4659	.7	62.7	2.4	30	<.1	1.5	3.6	325	1.02	.9	.8	.6	1.5	108	<.1	.1	<.1	24	1.48	.037	6	5	.27	219	.019	1	.73	.050	.15	.1	.02	1.5	<.1	<.05	3	<.5	6.45
4660	.2	8.8	1.6	32	<.1	1.0	3.1	380	1.04	1.2	.7	.9	1.4	109	<.1	.2	<.1	27	1.84	.041	6	4	.26	154	.019	1	.55	.040	.08	.1	<.01	1.3	<.1	<.05	3	<.5	5.80
4661	.5	7.0	1.9	34	<.1	1.3	3.8	436	1.25	.9	.8	<.5	1.3	206	<.1	.1	<.1	32	2.02	.042	5	4	.37	167	.028	1	.72	.044	.07	.1	.02	1.2	<.1	<.05	4	<.5	7.90
4662	.1	3.2	2.2	23	<.1	.9	2.9	447	.77	.7	.7	.6	1.7	176	<.1	.5	<.1	15	2.39	.050	6	4	.28	121	.007	2	.73	.030	.14	.1	.01	1.0	<.1	<.05	3	<.5	7.30
4663	.7	253.3	2.0	32	.1	1.3	4.0	431	1.02	.5	.8	<.5	1.7	173	<.1	.2	.1	17	1.82	.040	7	4	.33	122	.002	1	.63	.039	.10	.1	<.01	1.1	<.1	<.05	2	<.5	6.75
4664	.1	45.0	2.6	36	<.1	1.6	3.8	384	1.10	1.1	.7	1.0	1.4	130	<.1	.2	<.1	24	1.56	.041	5	4	.34	186	.015	2	.82	.044	.09	<.1	<.01	1.7	<.1	<.05	3	<.5	7.50
4665	.6	43.5	1.8	35	<.1	1.5	4.4	445	1.18	.9	.5	.6	1.5	101	<.1	.1	<.1	24	1.65	.044	5	6	.37	163	.021	2	.77	.047	.12	<.1	<.01	1.3	<.1	<.05	3	<.5	7.10
4666	.1	16.6	2.5	36	<.1	1.6	4.3	356	1.01	<.5	.7	.9	1.6	137	<.1	.2	<.1	21	1.56	.043	5	4	.38	226	.028	2	.88	.044	.12	.1	<.01	1.4	<.1	<.05	4	<.5	7.35
4751	5.9	15.4	1.6	43	<.1	1.4	3.5	826	.93	.5	.6	.8	2.1	35	<.1	.3	.1	17	1.60	.040	6	5	.31	59	.004	1	.52	.028	.15	.1	<.01	.8	<.1	<.05	2	<.5	4.60
4752	1.7	12.9	1.4	40	<.1	1.6	3.7	632	1.07	.5	.5	.9	1.5	46	<.1	.1	<.1	23	1.53	.037	5	3	.34	74	.017	<.1	.59	.028	.08	.1	.01	1.2	<.1	<.05	3	<.5	6.00
4753	1.1	11.4	1.3	44	<.1	1.3	4.2	627	1.21	.6	.6	1.3	1.8	66	<.1	.1	<.1	24	1.66	.041	7	4	.36	78	.006	1	.67	.032	.11	<.1	<.01	1.3	<.1	<.05	3	<.5	3.35
4754	.1	20.8	1.8	42	<.1	1.5	4.2	548	1.29	<.5	.7	1.2	1.3	64	<.1	.1	<.1	33	1.10	.040	4	5	.41	236	.045	1	.76	.037	.08	.1	<.01	1.6	<.1	<.05	4	<.5	4.70
4755	.5	10.9	2.3	39	<.1	1.6	4.4	510	1.33	.6	.6	1.5	1.4	135	<.1	.1	<.1	34	1.55	.042	5	5	.35	182	.035	1	.88	.043	.10	<.1	<.01	1.8	<.1	<.05	4	<.5	2.40
4756	.2	7.3	2.0	40	<.1	1.7	4.0	493	1.20	.5	.7	.7	1.2	67	<.1	.1	<.1	31	1.10	.041	5	4	.36	119	.040	1	.73	.043	.11	.1	.01	1.6	<.1	<.05	4	<.5	3.10
RE 4756	.1	7.0	1.9	39	<.1	1.7	4.0	479	1.18	.6	.7	<.5	1.2	63	<.1	.1	<.1	30	1.08	.042	5	5	.35	113	.039	1	.72	.043	.10	.1	<.01	1.6	<.1	<.05	4	<.5	-
RRE 4756	.3	8.1	2.0	40	<.1	1.3	4.1	506	1.21	.6	.7	<.5	1.2	68	<.1	.1	<.1	30	1.20	.043	4	6	.37	139	.031	1	.68	.034	.09	.1	<.01	1.5	<.1	<.05	3	<.5	-
4757	.1	12.1	1.7	44	<.1	1.7	4.3	605	1.32	.6	.7	1.4	1.2	72	<.1	.1	<.1	34	1.09	.044	4	4	.41	154	.056	1	.78	.049	.09	.1	<.01	1.4	<.1	<.05	4	<.5	3.60
4758	.5	9.9	1.6	42	<.1	1.4	4.2	508	1.32	.5	.6	.9	1.2	52	<.1	.1	<.1	36	.96	.042	4	7	.38	103	.068	1	.78	.046	.08	.1	<.01	1.4	<.1	<.05	4	<.5	4.50
4759	.2	12.5	2.1	46	<.1	1.7	4.8	681	1.34	<.5	.5	1.1	1.0	86	<.1	.1	<.1	35	1.13	.047	4	4	.46	455	.057	1	.80	.037	.08	.1	<.01	1.4	<.1	<.05	4	<.5	4.40
4760	.4	13.7	1.3	45	<.1	1.5	4.8	607	1.28	<.5	.4	.9	1.0	84	<.1	.1	<.1	31	1.04	.046	4	5	.41	114	.032	<.1	.68	.032	.07	.1	<.01	1.4	<.1	<.05	3	<.5	3.90
4761	.2	11.1	1.4	59	<.1	1.7	4.6	722	1.38	.5	.5	1.5	.9	111	<.1	.1	<.1	35	1.24	.047	4	4	.45	101	.059	1	.79	.040	.09	.1	<.01	1.6	<.1	<.05	4	<.5	4.40
4762	.7	67.5	1.8	61	<.1	1.8	5.3	830	1.27	.5	.5	<.5	1.0	83	<.1	.1	.1	29	1.45	.046	4	5	.43	43	.043	2	.77	.037	.12	.1	<.01	1.4	<.1	<.05	4	<.5	3.20
4763	.2	238.5	1.4	32	<.1	1.6	4.4	510	1.39	.6	.9	.6	1.5	97	<.1	.1	.1	34	1.12	.045	6	3	.33	101	.010	1	.46	.040	.11	<.1	<.01	1.8	.1	<.05	2	<.5	3.90
4764	1.3	213.2	2.0	29	<.1	1.4	3.7	684	1.21	<.5	.7	<.5	1.5	95	<.1	.2	.1	26	1.49	.046	7	6	.26	83	.004	2	.52	.049	.19	<.1	<.01	1.6	<.1	<.05	2	<.5	2.90
STANDARD DS7	20.9	106.3	67.4	392	1.0	57.1	9.8	634	2.43	47.3	4.6	51.5	4.3	77	6.4	6.0	4.5	84	.94	.081	13	278	1.05	378	.117	40	1.01	.094	.46	3.9	.19	2.4	4.2	.21	5	3.7	-

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608752 Page 1  
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

Table with columns: SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Hg, Sc, Tl, S, Ga, Se, Sample kg. Rows include sample numbers 4336-4339, 4340-4344, 4345-4347, 4348-4369, 4670-4674, 4675-4679, 4680-4681, 4765-4767, and STANDARD DS7.

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

12-20-06 P01:53 OUT

Data: FA DATE RECEIVED: NOV 16 2006 DATE REPORT MAILED:.....

All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of the analysis only.





SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	3.4	21.5	61	<.1	3.6	4.1	513	1.72	<.5	2.5	1.1	3.4	51	.2	.1	.1	38	.47	.078	6	8	.53	184	.111	<.1	.87	.056	.45	.1	<.01	1.8	.3	<.05	5	<.5	-
4768	.9	2.2	.8	17	<.1	2.1	2.6	184	.54	.5	.6	<.5	1.7	82	<.1	.3	<.1	14	1.01	.058	4	6	.45	31	.036	<.1	.79	.047	.01	.1	<.01	1.5	<.1	<.05	3	<.5	6.3
4769	.5	3.3	.8	19	<.1	3.0	5.2	345	1.17	.5	.6	<.5	1.7	94	<.1	.4	<.1	35	1.70	.074	6	4	.67	71	.052	<.1	.87	.025	.05	.1	<.01	2.2	<.1	<.05	3	<.5	8.8
4770	9.9	1.5	2.0	14	<.1	2.2	3.9	228	1.04	.5	.7	1.0	1.2	146	<.1	.3	<.1	32	2.04	.059	6	7	.57	69	.033	1	1.34	.040	.04	1.2	<.01	2.3	<.1	<.05	5	<.5	4.4
4771	.3	8.3	1.8	32	<.1	2.1	6.1	378	1.63	<.5	.5	<.5	.8	167	<.1	.1	<.1	33	3.03	.071	7	3	.32	156	.002	1	.67	.028	.08	.1	<.01	2.2	<.1	<.05	3	<.5	3.2
4772	.5	1.9	2.0	24	<.1	1.8	4.2	396	1.27	.8	.4	<.5	.8	222	<.1	.4	<.1	30	3.36	.072	8	4	.31	105	.001	<.1	.72	.029	.06	.1	<.01	2.2	<.1	<.05	3	<.5	5.4
4773	.7	1.5	2.6	29	<.1	1.8	5.3	637	1.38	1.1	.5	<.5	.8	237	<.1	.7	<.1	31	3.76	.069	7	2	.38	60	.001	<.1	.66	.026	.06	.2	.01	2.3	<.1	<.05	2	<.5	5.7
4774	.6	55.6	2.9	43	<.1	2.1	6.4	593	1.47	.7	.4	<.5	1.0	253	<.1	.3	<.1	27	2.63	.065	6	2	.40	71	.001	1	.69	.025	.08	.1	.01	2.0	<.1	<.05	2	<.5	3.1
4775	.4	5.1	2.3	34	<.1	1.8	5.5	395	1.42	.8	.3	<.5	1.0	120	<.1	.1	<.1	31	1.98	.065	6	3	.39	70	.001	1	.47	.031	.08	.1	.01	2.2	<.1	<.05	2	<.5	6.3
4776	.8	5.2	2.8	40	<.1	2.3	6.4	427	1.65	1.1	.3	<.5	1.0	132	.1	.2	<.1	36	2.36	.070	7	6	.39	59	.002	1	.56	.041	.10	<.1	.01	2.4	<.1	<.05	2	<.5	6.5
4777	.3	10.0	2.4	32	<.1	1.8	5.3	440	1.33	1.0	.3	<.5	1.4	123	.1	.1	<.1	24	2.27	.057	7	4	.39	62	.001	1	.46	.030	.10	<.1	.01	1.8	<.1	<.05	2	<.5	6.3
4778	.8	6.9	2.3	34	<.1	2.4	5.8	377	1.50	.9	.3	<.5	.7	106	<.1	.1	<.1	31	1.78	.061	6	5	.41	76	.002	1	.51	.040	.09	.1	<.01	2.1	<.1	<.05	2	<.5	6.3
4779	.5	14.3	2.6	39	<.1	2.2	5.9	444	1.55	.8	.3	<.5	.7	155	.1	.2	<.1	33	2.32	.067	7	4	.42	136	.001	1	.54	.035	.10	.1	.01	2.1	<.1	<.05	2	<.5	5.3
4780	.5	13.9	1.9	30	<.1	1.6	5.3	554	1.23	.8	.3	<.5	.6	123	<.1	.1	<.1	20	2.57	.066	6	3	.43	59	.001	1	.41	.031	.11	<.1	.01	1.6	<.1	<.05	1	<.5	6.7
4781	.4	5.7	2.8	41	<.1	2.3	6.9	553	1.60	1.1	.3	<.5	.6	175	.1	.1	<.1	28	3.28	.064	5	3	.67	63	.001	1	.51	.031	.09	<.1	.01	2.1	<.1	<.05	2	<.5	6.4
4782	.7	45.1	2.3	34	<.1	1.6	5.2	576	1.38	.9	.3	<.5	.5	160	.1	.1	<.1	23	3.34	.063	5	3	.53	58	.001	1	.46	.025	.10	.1	.01	1.9	<.1	<.05	1	<.5	5.5
4783	.3	87.2	2.1	31	<.1	2.1	5.8	426	1.44	.5	.2	<.5	.7	146	<.1	.4	<.1	25	2.11	.070	6	3	.38	74	.001	<.1	.56	.038	.08	.1	<.01	2.1	<.1	<.05	2	<.5	2.1
4784	.6	24.9	2.0	31	<.1	1.8	5.6	566	1.36	1.4	.3	<.5	.7	175	<.1	.2	<.1	22	2.88	.069	6	4	.50	73	.001	<.1	.56	.031	.10	.1	<.01	1.7	<.1	<.05	2	<.5	6.9
4785	.3	17.6	2.1	32	<.1	1.9	5.3	519	1.39	1.6	.3	<.5	.8	144	<.1	.2	<.1	26	2.83	.068	7	3	.38	66	.002	1	.50	.033	.11	.1	.01	1.8	<.1	<.05	1	<.5	6.9
4786	.7	153.9	2.0	33	<.1	1.7	5.4	497	1.30	1.1	.4	<.5	1.2	174	<.1	.2	<.1	26	2.49	.063	6	4	.37	95	.001	1	.52	.035	.09	.1	.01	1.9	<.1	<.05	2	<.5	3.6
4787	.3	98.6	1.9	27	<.1	2.2	5.6	544	1.27	1.3	.4	<.5	1.0	172	<.1	.2	<.1	19	2.77	.065	7	3	.38	65	.001	1	.51	.032	.13	.1	<.01	1.5	<.1	<.05	1	<.5	3.6
4788	.9	21.6	2.2	29	<.1	2.0	6.4	461	1.53	1.6	.4	<.5	.9	183	<.1	.5	<.1	31	2.37	.070	6	4	.41	69	.001	1	.57	.041	.08	.1	.01	2.6	<.1	<.05	2	<.5	6.3
4789	.9	16.9	2.7	24	<.1	1.6	5.3	699	1.31	2.7	.3	<.5	1.0	226	<.1	1.0	<.1	29	3.50	.052	5	2	.45	73	.002	1	.56	.026	.10	.1	.01	2.4	<.1	<.05	2	<.5	6.9
4790	1.0	3.3	1.7	4	<.1	<.1	.8	498	.37	1.9	.3	<.5	1.7	144	<.1	.6	<.1	7	3.93	.010	3	4	.08	55	<.001	1	.29	.016	.11	.1	.02	1.0	<.1	<.05	1	<.5	7.6
4791	.9	17.9	1.6	7	<.1	.7	1.7	292	.57	2.7	.5	<.5	2.0	126	<.1	.7	<.1	14	2.06	.021	4	2	.15	57	.001	1	.36	.036	.05	.1	.01	1.3	<.1	<.05	1	<.5	6.3
4792	1.3	12.1	2.1	23	<.1	1.5	5.2	379	1.47	3.5	.4	<.5	1.1	176	<.1	.7	<.1	43	2.22	.055	6	4	.42	62	.001	3	.54	.039	.09	.1	<.01	3.3	<.1	<.05	2	<.5	5.6
4793	1.2	73.4	2.1	27	<.1	2.5	6.1	442	1.58	3.3	.5	<.5	1.8	155	<.1	.9	<.1	45	2.34	.048	6	3	.55	64	.005	2	.66	.035	.06	.1	.01	3.7	<.1	<.05	3	<.5	7.0
RE 4793	1.3	69.0	2.1	27	<.1	2.2	6.1	427	1.55	3.4	.5	<.5	1.8	156	<.1	.9	<.1	44	2.24	.048	6	3	.52	66	.006	2	.64	.034	.06	.1	.01	3.5	<.1	<.05	3	<.5	-
RRE 4794	1.9	5.4	2.6	30	<.1	2.1	5.9	469	1.58	3.7	.4	<.5	.8	191	<.1	1.1	<.1	48	2.82	.050	5	3	.57	43	.002	3	.49	.039	.06	.1	<.01	3.2	<.1	<.05	2	<.5	-
4794	1.7	5.8	2.4	30	<.1	2.2	6.1	495	1.64	3.7	.4	<.5	.9	206	<.1	1.0	<.1	47	3.03	.055	6	2	.62	45	.002	2	.49	.038	.06	.1	.01	3.4	<.1	<.05	2	<.5	6.0
4795	2.7	61.0	2.0	27	<.1	1.3	4.8	471	1.61	4.7	.3	<.5	.8	194	<.1	1.5	<.1	43	2.68	.040	4	3	.33	60	.002	2	.58	.030	.08	.2	.01	3.2	<.1	<.05	2	<.5	8.0
4796	2.1	7.4	2.0	31	<.1	1.9	6.2	487	1.65	3.7	.3	<.5	1.0	192	<.1	.6	<.1	47	2.73	.043	5	2	.75	48	.001	2	.44	.037	.06	.1	.01	3.7	<.1	<.05	2	<.5	6.1
4797	1.2	51.4	1.8	22	<.1	1.6	4.7	722	1.25	2.9	.4	<.5	.9	235	<.1	.7	<.1	25	4.60	.051	5	3	.20	105	.001	2	.62	.026	.12	.2	.01	2.5	<.1	<.05	2	<.5	7.0
4798	1.3	63.5	2.4	31	<.1	2.1	5.7	551	1.66	3.4	.5	<.5	1.3	190	<.1	1.2	<.1	47	3.28	.049	6	2	.63	54	.002	2	.51	.033	.08	.2	.01	3.5	<.1	<.05	2	<.5	6.5
4799	.8	52.9	1.9	26	<.1	1.9	5.2	428	1.50	2.2	.3	<.5	1.2	132	<.1	.4	<.1	41	1.74	.056	6	4	.41	87	.011	1	.59	.037	.07	.1	<.01	2.8	<.1	<.05	2	<.5	6.8
STANDARD DS7	21.6	109.9	68.5	408	.9	58.5	10.5	647	2.48	48.6	5.0	63.7	4.6	82	6.4	6.1	4.5	86	.97	.086	15	281	1.06	387	.128	39	1.08	.107	.47	3.8	.20	2.7	4.3	.18	6	3.3	-

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	2.2	2.7	46	<.1	3.6	4.0	526	1.81	<.5	2.5	2.2	3.8	50	<.1	<.1	.1	36	.49	.076	7	8	.56	191	.114	1	.93	.059	.47	.1	<.01	1.9	.3	<.05	5	<.5	-
4800	.7	8.1	2.1	28	<.1	2.2	5.2	372	1.59	2.9	.3	.9	1.0	140	<.1	.5	<.1	37	1.94	.056	6	4	.35	104	.004	2	.66	.047	.07	.1	<.01	2.8	<.1	<.05	3	<.5	5.3
4801	.7	40.2	2.4	17	<.1	.5	2.0	474	.73	1.6	1.1	.8	1.9	187	<.1	.3	<.1	16	2.77	.026	6	2	.11	115	.001	2	.47	.032	.13	.1	.01	1.1	<.1	<.05	1	<.5	9.2
4802	1.8	38.0	3.1	6	<.1	<.1	.4	208	.22	<.5	1.2	.9	2.9	87	<.1	.1	<.1	1	1.52	.008	6	4	.03	49	<.001	2	.25	.036	.16	.1	.02	.2	<.1	<.05	1	<.5	3.9
4803	.8	76.7	1.7	4	<.1	.1	.4	253	.21	.6	1.1	1.1	3.0	91	.1	.1	<.1	1	1.67	.012	7	3	.03	51	<.001	3	.26	.028	.16	.1	.01	.3	<.1	<.05	1	<.5	5.6
4804	.9	46.0	2.9	9	<.1	<.1	1.2	382	.47	.6	1.3	<.5	2.3	251	.1	.2	<.1	5	2.43	.023	9	2	.13	93	<.001	1	.60	.030	.17	.1	<.01	.5	<.1	<.05	1	<.5	7.5
4805	.2	31.5	2.1	23	<.1	.7	3.6	449	.90	<.5	.6	.7	1.2	267	<.1	.1	<.1	13	2.40	.046	8	2	.35	122	.001	1	.78	.039	.15	<.1	<.01	.9	<.1	<.05	2	<.5	6.2
4806	.5	34.2	3.3	33	<.1	1.2	4.7	541	1.37	<.5	.6	1.5	1.2	339	<.1	.1	<.1	30	2.35	.050	8	4	.50	153	.009	1	1.20	.063	.14	<.1	<.01	2.3	.1	<.05	4	<.5	2.8
4807(rock)	1.0	127.7	3.2	37	<.1	12.2	9.3	230	2.43	1.6	2.2	.7	6.3	25	<.1	.2	<.1	99	.81	.067	9	18	.65	86	.195	4	1.00	.065	.35	.2	<.01	1.4	.1	<.05	6	<.5	.6
4808(pulp)	668.9	7418.1	125.6	67	76.7	5.4	1.7	233	.87	60.4	1.0	24.5	.7	141	1.0	143.0	6.3	8	1.05	.038	4	239	.10	133	.006	1	.34	.021	.17	.1	.41	.5	.1	.78	2	1.4	-
STANDARD DS7	20.4	104.7	67.9	400	.8	55.5	9.6	637	2.43	47.9	4.9	79.5	4.6	75	6.3	5.9	4.4	84	.97	.080	15	254	1.05	370	.131	39	1.03	.101	.46	3.8	.19	2.6	4.0	.20	5	3.7	-

Sample type: DRILL CORE R150.



GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608608 Page 1

2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.1	1.6	2.4	41	<.1	3.2	3.4	508	1.72	<.5	2.5	3.4	3.6	45	<.1	<.1	.1	31	.55	.082	5	6	.58	177	.102	1	.88	.048	.43	.1	.01	1.6	.3	<.05	5	<.5	-
4282	.4	68.1	1.7	55	<.1	7.4	10.8	951	2.31	<.5	.7	1.7	1.8	117	<.1	.2	.1	53	3.56	.077	11	6	1.15	67	.003	2	1.35	.041	.16	.1	<.01	3.5	<.1	<.05	6	<.5	2.86
4283	.7	195.4	2.3	47	<.1	8.1	9.8	1030	2.15	1.9	1.1	1.4	2.0	310	<.1	.4	.5	51	5.34	.100	18	5	1.23	117	.002	2	1.51	.042	.09	.3	.01	3.6	<.1	.06	6	<.5	4.12
4284	.5	30.6	1.7	48	<.1	7.0	9.6	603	2.52	1.4	.8	2.4	1.7	144	<.1	.1	<.1	76	1.56	.076	8	7	1.35	115	.061	2	1.70	.100	.11	.1	<.01	5.5	<.1	<.05	8	<.5	3.96
4285	.3	26.7	1.4	44	<.1	7.9	9.7	639	2.27	1.0	.6	1.9	1.9	320	<.1	.1	<.1	57	3.01	.067	11	6	1.23	143	.003	<.1	1.48	.046	.06	.2	<.01	3.3	<.1	<.05	7	<.5	7.75
4286	.1	150.0	1.6	47	<.1	6.8	9.8	598	2.38	.9	.6	3.2	1.9	246	<.1	.1	.1	62	2.57	.070	9	5	1.19	125	.005	1	1.68	.057	.08	.1	<.01	3.7	<.1	<.05	7	<.5	4.93
4287	.5	91.7	1.3	42	<.1	7.5	9.3	449	2.25	.8	.8	1.9	1.5	138	<.1	.1	<.1	71	1.57	.076	7	6	.94	157	.071	1	1.27	.052	.12	.2	<.01	3.3	<.1	<.05	7	<.5	4.62
4288	.3	627.9	1.5	35	.3	5.9	8.3	372	2.28	<.5	1.2	15.0	1.9	97	<.1	.1	.2	79	1.28	.084	6	7	.77	128	.117	<.1	1.14	.084	.16	.1	.01	3.0	<.1	<.05	5	.5	2.68
4289	.4	140.1	1.6	36	<.1	6.8	8.3	508	1.78	.6	.7	1.8	2.3	268	<.1	.1	.1	52	3.39	.076	10	6	.70	217	.015	1	1.59	.057	.13	.1	<.01	3.0	<.1	<.05	6	<.5	6.95
4290	.2	99.7	1.6	40	<.1	8.7	10.7	505	2.35	.5	.6	2.8	2.2	94	<.1	.1	<.1	63	2.25	.068	7	8	.86	136	.016	1	1.13	.056	.16	.1	<.01	4.1	<.1	<.05	5	<.5	4.98
4291	.5	83.7	2.2	43	.5	10.6	10.0	543	2.15	.8	.6	2.5	1.7	158	<.1	.3	<.1	56	2.80	.073	9	8	.79	134	.010	1	1.00	.032	.10	1.0	.01	3.9	<.1	<.05	5	<.5	7.02
4292	.4	202.6	2.0	49	.2	7.9	11.5	715	2.38	1.4	.5	.8	1.6	125	<.1	.1	.1	51	4.22	.059	7	5	1.47	121	.003	1	.68	.039	.10	.2	.01	4.2	<.1	<.05	2	<.5	2.44
4293	.6	368.4	2.4	43	.2	5.6	9.0	772	2.23	.9	.7	1.3	1.6	123	<.1	.2	.2	45	4.84	.099	9	6	.38	78	.001	1	.58	.023	.15	1.0	<.01	3.0	<.1	.06	3	<.5	6.35
4294	.3	68.1	1.4	31	<.1	5.7	8.3	411	1.96	2.5	.8	.8	1.9	136	<.1	.1	.1	57	1.97	.062	7	5	.69	153	.022	2	.66	.060	.10	.2	.02	3.5	<.1	<.05	3	<.5	4.07
4295	2.3	252.9	1.8	41	<.1	6.9	9.6	465	1.91	3.1	.8	1.7	2.1	144	<.1	.1	.1	62	2.51	.064	7	7	.91	80	.011	1	.52	.039	.08	.7	.02	6.5	.1	<.05	3	<.5	6.83
4296	18.1	1065.8	2.5	50	.7	6.3	9.3	397	1.97	2.9	2.3	3.2	2.6	140	<.1	.1	.1	59	2.08	.064	7	5	.77	135	.012	1	.62	.049	.11	.2	.03	4.4	<.1	.06	3	<.5	5.88
4297	1.1	509.6	1.6	34	.3	5.9	8.6	389	1.87	6.9	1.4	2.9	2.6	159	<.1	.1	.2	55	1.52	.061	6	7	.63	319	.032	1	.63	.038	.12	1.0	.06	3.2	<.1	.06	3	<.5	5.47
4298	.4	302.7	1.6	44	.1	4.3	8.9	510	2.27	2.1	.7	.5	2.1	130	<.1	.4	.1	57	2.02	.075	8	3	.79	74	.002	1	.68	.056	.09	.4	.01	5.1	<.1	<.05	2	<.5	4.05
4299	.7	276.5	1.9	42	.1	6.5	8.6	748	1.77	1.4	.8	1.6	1.9	164	<.1	.3	.1	28	3.65	.069	8	5	.91	74	.001	2	.56	.031	.11	1.1	.01	2.8	<.1	<.05	2	.5	6.08
4300 (rock)	.7	95.7	3.0	33	<.1	11.5	8.8	217	2.22	1.4	2.1	<.5	6.3	22	.1	.1	<.1	91	.84	.068	8	18	.59	64	.186	3	1.03	.049	.25	.1	<.01	1.3	<.1	<.05	5	<.5	.78
4301 (pulp)	327.0	1770.7	131.6	157	32.1	84.6	41.1	819	5.93	283.6	1.8	5916.4	3.3	106	1.4	75.1	181.5	41	8.09	.089	12	58	.37	41	.123	23	1.32	.033	.18	35.9	11.67	3.5	.2	2.61	6	2.1	-
4302	2.9	28.9	1.7	39	<.1	7.8	10.0	536	2.04	3.4	.7	.8	2.1	133	<.1	.2	.1	65	2.86	.053	6	9	1.00	59	.013	1	.46	.039	.08	1.2	.01	6.2	.1	<.05	2	<.5	7.49
4303	1.4	21.2	1.6	36	<.1	8.7	10.3	470	2.07	3.8	.9	.5	2.6	150	<.1	.1	<.1	61	2.47	.058	6	6	.93	126	.017	2	.56	.052	.11	.1	.02	5.5	<.1	<.05	2	<.5	5.56
4304	2.2	83.4	2.1	53	<.1	8.5	12.9	868	2.33	1.9	.7	.7	1.9	207	<.1	.4	<.1	62	5.12	.040	6	5	1.76	74	.008	<.1	.49	.038	.07	.9	.03	5.3	<.1	<.05	2	<.5	6.54
4305	2.0	18.3	2.4	50	<.1	6.4	10.2	778	2.08	2.7	.6	.7	2.0	202	<.1	.3	<.1	67	4.39	.041	6	3	1.39	53	.004	2	.52	.043	.05	.1	.03	6.1	<.1	<.05	2	<.5	7.39
4306	2.5	24.7	1.9	45	<.1	7.6	10.9	576	2.05	2.9	.6	.5	2.2	176	<.1	.4	<.1	58	2.86	.059	6	7	1.06	70	.009	<.1	.52	.042	.08	1.2	.01	5.3	<.1	<.05	2	<.5	5.53
4307	1.5	28.8	3.4	58	<.1	6.6	9.2	498	1.92	2.9	.6	<.5	1.7	148	<.1	.2	<.1	54	2.53	.054	6	4	1.07	148	.015	1	.51	.048	.09	.2	.01	4.5	<.1	<.05	2	<.5	5.68
4308	167.3	91.0	1.6	33	<.1	6.1	8.1	499	1.69	2.5	.4	.7	1.1	138	<.1	.8	.3	53	3.26	.038	4	7	1.17	39	.002	1	.33	.032	.03	5.3	.03	5.0	<.1	<.05	1	<.5	1.85
4309	1.5	12.1	1.3	29	<.1	4.2	7.7	412	1.83	4.4	.6	<.5	1.2	156	<.1	.4	.1	52	2.22	.059	5	4	.74	64	.003	1	.48	.058	.05	.1	.01	4.5	<.1	<.05	2	<.5	4.78
4310	3.1	158.7	2.3	58	<.1	5.5	11.8	791	2.53	3.4	.5	.7	1.4	168	<.1	.6	<.1	69	3.22	.089	8	5	.96	57	.007	1	.40	.034	.08	1.1	.01	6.6	<.1	<.05	2	<.5	6.38
RE 4310	3.3	159.8	2.2	57	<.1	5.1	11.5	782	2.52	3.6	.5	.7	1.3	173	<.1	.6	<.1	69	3.16	.083	7	5	.95	57	.007	2	.41	.031	.08	1.1	<.01	6.5	<.1	<.05	2	<.5	-
RRE 4310	2.3	142.2	2.6	59	<.1	5.0	12.2	797	2.69	3.9	.5	.8	1.4	180	<.1	.8	<.1	72	3.25	.092	8	4	.98	61	.008	2	.44	.037	.09	.3	<.01	6.7	<.1	<.05	2	<.5	-
4311	1.5	257.1	2.2	36	<.1	3.1	7.5	468	1.72	2.4	.5	1.1	1.6	129	<.1	.8	.1	44	1.88	.071	7	7	.61	120	.006	3	.64	.056	.08	1.0	<.01	3.1	<.1	<.05	3	<.5	6.11
4312	2.6	50.0	2.8	27	<.1	2.0	5.1	343	1.41	4.6	.5	<.5	1.7	102	<.1	2.6	<.1	39	1.47	.064	6	3	.34	66	.002	2	.37	.037	.09	.3	.01	3.5	<.1	<.05	2	<.5	4.75
4313	1.0	17.3	1.5	31	<.1	3.7	7.8	407	1.97	2.7	.7	<.5	1.6	133	<.1	.7	<.1	53	1.66	.058	6	6	.65	135	.033	2	.60	.049	.11	.9	.01	3.5	<.1	<.05	3	<.5	6.58
STANDARD DS7	20.2	108.7	67.9	406	.8	56.6	9.6	637	2.43	49.1	4.7	58.3	4.3	72	6.3	5.9	4.4	85	.95	.081	12	239	1.05	380	.123	38	1.02	.087	.46	3.8	.20	2.4	4.0	.21	5	3.6	-

GROUP 10X - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data  FA \_\_\_\_\_ DATE RECEIVED: NOV 8 2006 DATE REPORT MAILED: 12-20-06 11:04 OUT





SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.2	2.0	2.9	47	<.1	3.6	4.4	551	2.00	<.5	2.2	.5	3.6	62	<.1	<.1	.1	42	.59	.085	7	8	.59	208	.127	1	.99	.086	.49	.1	<.01	2.1	.3	<.05	5	<.5	-
4314	2.5	52.3	1.8	28	<.1	4.6	7.4	439	1.83	4.0	.6	.8	2.3	118	<.1	.8	.1	52	2.27	.052	7	4	.69	56	.005	2	.47	.042	.08	.3	.01	4.7	<.1	<.05	2	<.5	5.81
4315	1.3	87.2	4.3	66	<.1	7.3	10.2	668	1.88	.8	.5	<.5	1.7	135	<.1	.1	<.1	42	3.38	.056	6	7	.93	65	.001	2	.55	.036	.12	.9	.01	3.7	<.1	<.05	2	<.5	5.98
4316	.7	11.6	1.8	48	<.1	6.9	9.8	674	1.73	.6	.5	.6	1.9	136	<.1	.1	<.1	32	3.98	.055	6	4	1.01	62	.001	1	.37	.031	.12	.2	.02	2.7	<.1	<.05	1	<.5	6.33
4317	1.1	13.2	2.5	38	<.1	8.8	10.8	483	2.17	2.3	.8	<.5	2.3	142	<.1	.3	<.1	51	3.47	.059	7	8	1.06	62	.002	3	.61	.047	.10	.9	.01	4.1	<.1	<.05	2	<.5	2.29
4318	.7	22.3	2.9	40	<.1	7.4	9.5	477	1.95	2.0	.5	<.5	1.6	107	<.1	.2	<.1	52	3.23	.036	5	5	1.12	37	.002	2	.35	.036	.08	.1	<.01	4.6	<.1	<.05	1	<.5	2.26
4319	.5	10.7	1.8	49	<.1	8.3	12.4	498	2.17	2.5	1.2	<.5	2.3	142	<.1	.2	<.1	53	2.54	.065	7	8	.90	58	.035	1	1.25	.043	.07	.6	.01	3.8	<.1	<.05	6	<.5	.96
4320	.3	62.0	1.8	47	<.1	8.0	10.6	449	2.10	1.1	1.8	.9	1.9	158	<.1	.2	<.1	58	1.86	.068	6	5	1.10	65	.062	3	1.41	.045	.08	.1	.02	3.3	<.1	<.05	7	<.5	6.53
4321	.6	11.7	2.8	47	<.1	8.0	10.1	485	1.90	1.3	1.0	<.5	2.0	212	<.1	.3	<.1	54	2.27	.063	6	8	1.00	58	.075	3	1.50	.047	.08	1.2	<.01	3.5	<.1	<.05	7	<.5	6.68
4322	.3	7.2	4.2	28	<.1	.9	3.1	556	1.01	<.5	1.0	<.5	1.9	126	.1	.1	<.1	15	2.35	.038	7	5	.22	2107	.004	1	.37	.029	.16	<.1	<.01	.9	<.1	.07	2	<.5	8.27
4323	.6	47.1	2.1	5	<.1	.8	.7	369	.32	1.1	1.0	<.5	2.7	86	<.1	.1	<.1	2	1.94	.013	6	9	.07	208	<.001	2	.23	.022	.17	2.0	<.01	.3	<.1	<.05	1	<.5	1.96
4324	.2	11.4	2.7	25	<.1	.7	3.1	540	1.13	.8	.7	<.5	1.7	101	<.1	.1	<.1	17	1.95	.045	7	5	.21	368	.003	3	.36	.031	.16	<.1	<.01	1.3	<.1	<.05	2	<.5	4.58
4325	.4	14.3	1.8	30	<.1	1.9	3.8	434	1.36	.8	1.1	<.5	2.0	84	<.1	.1	<.1	31	1.10	.040	6	10	.34	249	.042	2	.52	.050	.13	.9	<.01	1.4	<.1	<.05	3	<.5	7.13
4326	.1	8.8	2.5	13	<.1	.3	1.9	420	.75	<.5	1.6	<.5	2.3	97	<.1	.2	<.1	11	1.81	.033	6	6	.13	385	.004	2	.29	.026	.16	<.1	<.01	.6	<.1	<.05	1	<.5	6.47
4327	.4	6.3	2.2	32	<.1	1.9	4.0	396	1.26	1.3	.5	1.3	1.2	152	<.1	.2	<.1	28	1.24	.051	6	9	.31	392	.014	3	.52	.047	.12	.9	<.01	1.9	.1	<.05	3	<.5	5.18
4328	.1	15.2	1.8	33	<.1	1.6	4.5	406	1.38	.9	.6	.6	1.5	112	<.1	.2	<.1	30	1.19	.054	6	5	.36	227	.021	1	.52	.039	.10	<.1	<.01	1.8	<.1	<.05	3	<.5	5.76
4329	.5	12.2	2.3	33	<.1	2.2	4.3	377	1.34	.8	.6	<.5	1.2	100	<.1	.2	<.1	32	.97	.047	5	9	.36	227	.045	1	.60	.047	.10	1.2	<.01	1.3	<.1	<.05	3	<.5	6.72
4330	.1	9.5	2.3	22	<.1	.7	2.7	375	1.00	.5	.5	<.5	1.1	168	.1	.1	<.1	15	1.87	.052	6	3	.14	250	.001	2	.35	.021	.17	<.1	<.01	1.5	<.1	<.05	1	<.5	1.48
RE 4330	.2	9.8	2.3	21	<.1	.5	3.0	387	1.03	.5	.5	<.5	1.0	166	<.1	.1	<.1	15	1.92	.053	6	2	.15	255	.001	1	.37	.022	.17	<.1	<.01	1.5	<.1	<.05	1	<.5	-
RRE 4330	.6	11.1	2.9	23	<.1	1.2	3.2	401	.99	.7	.6	<.5	1.2	193	<.1	.1	<.1	16	1.97	.057	6	6	.15	277	.001	3	.38	.021	.18	1.2	<.01	1.7	<.1	<.05	1	<.5	-
4331	.1	5.5	2.9	26	<.1	.8	3.5	438	1.15	.8	.4	<.5	1.1	127	<.1	.3	<.1	18	1.78	.053	7	5	.17	307	.001	3	.39	.035	.20	.1	<.01	1.6	<.1	<.05	2	<.5	4.91
4332	.5	42.3	2.0	33	<.1	1.8	4.0	374	1.31	1.0	.7	<.5	1.1	245	<.1	.2	<.1	29	1.07	.053	5	7	.33	489	.018	2	.56	.035	.08	1.1	<.01	1.3	<.1	<.05	3	<.5	3.15
4584	.2	114.7	2.6	35	<.1	1.4	4.5	526	1.39	.5	.8	.5	1.8	122	<.1	.1	.1	31	1.69	.044	6	6	.38	145	.031	2	.96	.056	.12	<.1	<.01	2.3	<.1	<.05	4	<.5	6.85
4585	.7	152.3	1.7	34	.2	2.1	4.1	682	1.23	<.5	.7	1.2	1.6	62	<.1	.1	.1	26	1.46	.044	5	9	.34	84	.018	2	.62	.035	.11	1.4	<.01	1.3	<.1	<.05	3	<.5	7.32
4586	1.5	195.0	2.0	23	.1	1.1	3.9	471	1.07	<.5	.7	<.5	1.9	88	<.1	.1	.1	18	1.90	.045	7	6	.28	101	.015	2	.70	.042	.19	<.1	<.01	1.4	<.1	<.05	3	<.5	5.41
4587	.7	213.5	3.7	25	.2	1.3	3.4	426	.76	.5	.5	<.5	1.4	200	<.1	.1	.1	10	2.71	.041	7	6	.25	248	.005	1	.97	.035	.16	1.5	<.01	.9	<.1	<.05	3	<.5	5.56
4588	.2	148.5	1.8	35	.1	1.6	4.2	448	1.39	<.5	.7	<.5	1.7	88	<.1	.1	.1	31	1.23	.043	6	7	.34	194	.032	2	.72	.054	.11	<.1	<.01	1.6	<.1	<.05	4	<.5	6.38
4589	.6	169.8	1.4	32	.2	2.2	4.6	461	1.44	<.5	.9	<.5	1.8	54	<.1	.1	.1	33	.76	.050	5	9	.37	727	.052	1	.62	.044	.08	1.5	<.01	1.2	.1	<.05	3	<.5	5.85
4590	.2	102.2	1.7	27	<.1	1.6	4.0	359	1.44	<.5	.7	<.5	1.6	73	<.1	.2	<.1	39	.85	.048	5	9	.35	453	.081	1	.80	.065	.08	.1	<.01	1.5	<.1	<.05	4	<.5	7.55
4591	.6	37.0	2.0	30	<.1	2.0	4.4	399	1.33	<.5	.8	<.5	1.5	88	<.1	.1	<.1	36	1.12	.044	5	8	.37	130	.067	1	.89	.048	.09	1.2	<.01	1.9	<.1	<.05	4	<.5	3.22
4592	.1	52.5	1.7	29	<.1	1.7	4.4	401	1.47	<.5	.8	<.5	1.6	69	<.1	.1	<.1	39	.93	.048	5	8	.37	135	.070	1	.81	.066	.09	<.1	<.01	1.7	<.1	<.05	4	<.5	6.95
4593	1.1	523.5	1.5	28	.3	1.9	4.4	981	1.12	<.5	.5	<.5	1.2	42	<.1	.7	.1	18	2.14	.053	7	7	.26	89	.001	1	.44	.022	.14	1.4	<.01	1.1	<.1	<.05	2	<.5	5.68
4594	.5	492.0	1.8	30	.3	1.1	4.6	719	1.46	<.5	.6	<.5	1.9	47	<.1	.1	<.1	22	1.96	.052	8	6	.29	134	.002	1	.57	.034	.18	<.1	.01	1.2	<.1	<.05	2	<.5	5.25
4595	.6	1328.9	3.2	29	.8	1.7	4.3	906	1.17	<.5	.5	<.5	1.4	40	<.1	.2	<.1	17	2.18	.051	8	8	.25	178	.002	1	.50	.021	.19	1.2	.01	1.0	<.1	<.05	2	<.5	5.73
4596	.1	201.9	1.6	34	.1	1.5	4.8	655	1.40	<.5	.6	<.5	1.4	54	<.1	.2	<.1	32	1.23	.054	6	8	.39	266	.020	<.1	.59	.049	.14	<.1	<.01	1.5	<.1	<.05	3	<.5	6.26
STANDARD DS7	21.7	107.9	67.7	417	.9	57.8	10.0	641	2.45	50.2	4.9	58.8	4.5	78	6.4	5.8	4.5	86	.97	.083	13	275	1.06	389	.130	39	1.04	.099	.46	3.9	.20	2.4	4.2	.20	5	3.5	-

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.3	5.7	3.5	41	<.1	5.9	4.1	540	1.91	<.5	2.4	4.3	3.5	58	<.1	<.1	.1	37	.51	.074	7	11	.57	199	.120	<.1	.95	.081	.47	.1	.01	1.8	.3	<.05	5	<.5	-
4597	.3	626.1	2.0	29	.4	2.5	4.7	642	1.27	.6	.5	3.0	1.4	54	<.1	.2	<.1	24	1.72	.050	7	5	.31	349	.008	1	.52	.036	.16	<.1	.01	1.4	<.1	<.05	3	<.5	6.38
4598	.5	451.7	2.0	27	.3	2.5	4.2	766	1.17	.5	.6	1.0	1.5	58	<.1	.1	<.1	20	2.07	.052	7	4	.28	237	.002	<.1	.39	.031	.15	<.1	.01	1.4	<.1	<.05	2	<.5	6.41
4599	.5	511.8	1.9	25	.3	1.7	4.4	822	1.15	<.5	.7	.9	1.5	68	<.1	.2	.1	18	2.45	.054	8	5	.20	203	.001	<.1	.36	.032	.20	.1	<.01	1.2	.1	<.05	1	<.5	7.38
4600	.6	396.7	2.4	35	.3	1.9	4.7	1004	1.23	<.5	.5	.9	1.1	63	.1	.1	<.1	17	2.51	.054	8	4	.32	126	.001	1	.55	.027	.18	<.1	.02	1.0	<.1	<.05	2	<.5	4.11
4601	.4	648.0	2.0	29	.6	1.4	4.7	802	1.10	.8	.9	1.5	1.5	65	.1	.1	<.1	16	2.22	.055	8	4	.20	191	.001	<.1	.39	.024	.17	<.1	<.01	1.2	<.1	<.05	1	<.5	5.82
4602	1.6	3799.5	2.6	39	2.3	2.2	6.5	888	1.19	<.5	.5	1.2	1.3	74	.1	.2	.2	7	2.17	.062	6	3	.34	850	.002	1	.61	.024	.20	.3	.01	.6	<.1	.11	2	<.5	2.19
4603	.3	378.7	2.0	36	.4	1.9	4.7	607	1.17	<.5	.7	<.5	1.5	69	.1	.2	<.1	18	1.73	.049	5	4	.38	296	.010	1	.60	.031	.14	.1	.01	1.0	<.1	<.05	3	<.5	4.95
4604 (pulp)	323.3	1719.8	118.7	144	31.5	76.0	37.4	811	5.86	274.7	1.8	5672.9	3.3	105	1.5	72.9	186.6	40	7.81	.088	12	56	.36	28	.120	23	1.35	.032	.17	35.0	11.75	3.4	.2	2.55	6	2.0	-
4605 (rock)	.9	124.1	3.5	31	<.1	11.2	9.0	227	2.42	1.5	1.9	2.8	6.1	20	<.1	.2	.1	100	.74	.065	8	18	.60	85	.182	2	.90	.060	.32	.2	.01	1.1	<.1	<.05	5	<.5	.75
4606	.3	828.4	2.2	38	1.1	1.6	4.3	571	1.19	.6	.6	.7	2.0	62	.1	.2	.1	21	1.50	.052	5	5	.32	298	.011	1	.58	.031	.17	<.1	.01	1.3	<.1	<.05	3	<.5	5.98
4607	.2	1587.8	2.5	35	2.1	1.3	3.8	659	1.04	<.5	.9	.8	2.4	59	<.1	.1	.1	19	1.67	.049	6	3	.29	226	.009	1	.48	.019	.16	<.1	.01	1.3	<.1	<.05	2	<.5	7.35
RE 4607	.2	1591.7	2.5	35	2.2	1.1	3.8	656	1.03	<.5	.9	.9	2.4	58	.1	.2	.1	18	1.66	.049	6	3	.29	236	.009	1	.47	.021	.16	.1	.02	1.4	<.1	<.05	2	<.5	-
RRE 4607	.4	1450.5	2.5	36	2.0	1.5	4.2	666	1.17	<.5	.9	1.0	2.4	61	.1	.2	.2	20	1.71	.053	7	5	.31	292	.010	2	.54	.026	.19	.1	.02	1.3	<.1	<.05	2	<.5	-
4608	.5	433.3	3.4	46	.4	1.6	5.2	773	1.32	<.5	.6	1.6	1.2	78	.1	.2	<.1	24	2.25	.056	6	5	.37	443	.006	<.1	.61	.031	.17	<.1	.01	1.4	<.1	<.05	3	<.5	5.87
4609	.2	30.4	3.0	41	<.1	2.2	4.5	636	1.22	<.5	.8	.5	1.6	69	<.1	.3	<.1	22	1.87	.053	6	4	.33	442	.016	2	.54	.026	.17	<.1	<.01	1.4	<.1	<.05	2	<.5	6.82
4610	.5	3698.6	2.3	30	3.8	1.4	4.4	874	1.05	<.5	1.0	.5	2.6	56	.1	.1	.1	14	2.01	.041	7	5	.24	181	.004	<.1	.48	.022	.18	.1	.10	1.0	<.1	.09	2	<.5	5.89
4611	.4	1074.2	1.9	34	1.0	1.3	4.1	662	1.13	<.5	.8	.7	2.2	58	.1	.2	.1	20	1.61	.045	7	5	.28	220	.013	2	.52	.026	.21	<.1	.03	1.2	<.1	<.05	2	<.5	4.01
4612	.3	200.4	2.2	37	.2	2.3	4.8	509	1.42	<.5	.8	.9	1.6	58	<.1	.2	<.1	33	1.09	.050	5	5	.41	190	.058	<.1	.62	.039	.12	.1	.01	1.8	<.1	<.05	3	<.5	7.62
4613	1.6	793.9	4.0	25	.6	1.4	4.0	599	1.03	<.5	.7	.7	1.9	51	<.1	.1	<.1	14	1.61	.036	5	4	.22	130	.007	1	.47	.030	.17	<.1	.01	.8	<.1	<.05	2	<.5	6.54
4614	.6	83.0	2.6	33	<.1	1.7	4.2	591	1.26	<.5	.6	.5	1.2	70	<.1	.1	<.1	28	1.58	.050	5	6	.33	261	.024	<.1	.56	.032	.12	.3	<.01	1.6	<.1	<.05	3	<.5	6.17
4615	.3	128.5	4.3	30	.3	1.5	3.8	571	1.14	<.5	.7	.6	1.7	74	<.1	.1	<.1	18	1.94	.047	7	6	.24	351	.008	1	.51	.032	.18	.5	.01	1.3	<.1	<.05	2	<.5	5.93
4616	.5	522.2	2.6	20	.6	1.0	2.0	601	.60	<.5	1.0	.6	3.0	50	.1	.2	.1	5	1.61	.018	8	4	.14	196	.003	1	.35	.022	.17	.1	.01	.7	<.1	<.05	1	<.5	6.62
4617	.6	298.0	3.9	10	.3	.6	1.1	485	.42	<.5	.8	.8	2.8	57	.1	.1	<.1	1	1.57	.013	8	5	.07	670	<.001	1	.28	.032	.19	.1	.01	.3	<.1	<.05	1	<.5	6.30
4618	.4	306.9	3.0	23	.2	1.5	3.4	818	.67	<.5	1.0	<.5	3.4	58	.1	.2	.1	4	2.14	.022	11	5	.19	74	.001	1	.42	.024	.20	.2	.01	.7	<.1	<.05	1	<.5	5.72
4619	.3	1682.5	3.2	21	1.6	1.1	2.8	627	.79	<.5	.8	<.5	2.1	118	.1	.6	.2	8	2.07	.036	6	6	.18	295	.006	1	.51	.030	.17	.1	.01	.6	<.1	<.05	2	<.5	7.26
4620	.2	54.0	2.1	37	<.1	1.6	4.1	598	1.10	<.5	.8	<.5	1.7	63	<.1	.2	<.1	13	1.75	.049	6	6	.27	115	.005	1	.54	.031	.16	.2	.01	.9	<.1	<.05	2	<.5	6.31
4621	.3	29.2	4.0	36	<.1	1.5	4.3	451	1.21	<.5	.5	1.4	1.4	73	<.1	.2	<.1	21	1.66	.048	7	4	.26	254	.010	2	.53	.039	.16	.1	.01	1.3	<.1	<.05	2	<.5	6.53
4622	.3	173.0	2.6	34	.1	2.0	4.1	568	1.18	.5	.6	<.5	1.2	91	<.1	.2	.1	21	1.69	.045	7	5	.30	340	.008	1	.56	.036	.16	<.1	.01	1.2	.1	<.05	3	<.5	6.11
4623	.3	608.4	2.8	28	.4	1.5	5.0	555	1.33	<.5	.5	1.1	1.2	116	<.1	.1	<.1	24	1.61	.048	7	6	.30	293	.003	1	.61	.039	.20	<.1	.01	1.4	<.1	<.05	3	<.5	4.76
4624	.3	753.5	2.3	28	.7	1.5	3.7	1057	1.07	<.5	.6	1.2	1.2	117	.1	.1	.1	13	2.65	.053	7	4	.22	163	.002	1	.50	.019	.21	<.1	.01	1.2	<.1	<.05	2	<.5	6.42
4625	.2	59.5	2.4	30	<.1	1.3	3.7	463	1.09	<.5	.7	<.5	1.4	139	<.1	.1	<.1	18	1.66	.046	7	3	.26	488	.006	1	.53	.035	.16	.1	.01	1.3	<.1	<.05	2	<.5	6.35
4626	.3	203.4	3.1	32	.2	1.0	3.3	666	.85	<.5	.9	<.5	1.4	205	.1	.1	.1	8	2.83	.049	8	5	.17	697	.001	1	.49	.017	.20	.1	<.01	.9	<.1	<.05	1	<.5	6.41
4627	.3	66.9	2.2	32	<.1	1.5	4.2	511	1.21	.7	.7	<.5	1.5	194	<.1	.1	<.1	17	2.57	.052	7	5	.25	129	.003	1	.58	.025	.19	.1	<.01	1.0	<.1	<.05	2	<.5	5.97
4628	.3	50.9	2.7	28	<.1	1.4	3.5	531	1.18	.5	.6	<.5	1.3	158	.1	.1	<.1	19	2.73	.044	5	5	.27	160	.027	1	.57	.031	.15	.1	.01	1.2	<.1	<.05	2	<.5	7.65
STANDARD DS7	20.6	109.9	67.5	404	.9	57.2	9.7	643	2.45	49.1	4.8	81.6	4.4	72	6.6	5.9	4.4	86	.95	.081	12	244	1.06	380	.121	38	1.01	.092	.47	3.9	.20	2.5	4.1	.22	5	3.4	-

Sample type: DRILL CORE R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.





ACME ANALYTICAL



ACME ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.3	8.1	2.9	42	<.1	4.8	4.5	536	1.92	<.5	2.9	<.5	4.4	59	<.1	<.1	.1	40	.48	.068	8	10	.58	207	.127	1	.95	.075	.47	.1	<.01	1.9	.3	<.05	5	<.5	-
4629	.2	34.1	1.8	31	<.1	1.4	4.2	490	1.28	.5	.5	<.5	.9	162	<.1	.1	<.1	30	1.69	.048	4	5	.42	160	.037	1	.63	.034	.09	<.1	<.01	1.5	<.1	<.05	3	<.5	5.82
STANDARD DS7	19.9	108.6	70.9	404	.9	56.7	9.9	631	2.45	49.1	5.0	68.0	4.6	72	6.4	6.0	4.7	82	.94	.079	13	247	1.06	372	.125	39	1.00	.087	.44	3.8	.19	2.5	4.2	.20	5	3.4	-

Sample type: DRILL CORE R150.



GEOCHEMICAL ANALYSIS CERTIFICATE



Happy Creek Minerals Ltd. File # A608905  
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2 Submitted by: David Blann

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Hg ppm	Sc ppm	Tl ppm	S %	Ga ppm	Se ppm	Sample kg
G-1	.7	2.3	3.3	51	<.1	6.9	4.6	505	1.78	.5	2.3	1.2	3.9	45	.1	<.1	.1	39	.42	.084	7	75	.61	240	.121	1	1.05	.049	.53	<.1	.01	1.8	.3	<.05	5	<.5	-
4701	4.6	1042.1	1.4	15	.8	<.1	1.7	791	.60	.9	.3	<.5	.5	64	<.1	.2	.2	6	2.30	.030	7	2	.10	121	.001	2	.37	.018	.19	.1	.01	.5	<.1	<.05	1	.5	5.65
4702	.7	1790.4	1.1	10	1.1	.1	.9	736	.43	.7	.3	1.4	.7	52	<.1	.3	.3	3	1.80	.028	8	3	.06	70	.001	2	.32	.010	.20	.2	.01	.4	<.1	<.05	1	<.5	5.25
4703	.6	139.2	1.6	46	<.1	1.3	4.8	679	1.34	<.5	.7	<.5	1.4	99	<.1	.2	.1	24	1.94	.051	8	3	.38	236	.001	2	.63	.035	.12	.1	.02	1.5	<.1	<.05	2	<.5	6.69
4704	2.0	156.3	2.0	42	<.1	1.4	5.1	549	1.29	.8	.7	<.5	1.5	107	<.1	.3	.1	20	1.77	.055	8	6	.25	84	.001	1	.52	.030	.11	.1	.01	1.2	<.1	<.05	2	<.5	4.50
4705	.3	233.6	1.8	41	.1	1.0	4.7	792	1.27	<.5	.4	.5	.9	94	<.1	.2	.1	20	2.25	.053	6	4	.38	151	.001	1	.40	.029	.13	.1	.01	1.3	<.1	<.05	1	<.5	5.12
4706	.6	135.2	1.5	40	<.1	1.1	5.0	717	1.26	<.5	.4	<.5	.8	88	<.1	.1	<.1	23	2.05	.054	6	4	.33	182	.001	1	.42	.030	.13	<.1	.01	1.3	<.1	<.05	1	<.5	5.82
4707	.7	479.6	1.3	35	.3	.9	4.3	910	1.05	.7	.4	<.5	.9	111	.1	.2	.1	11	2.86	.053	7	4	.29	87	.001	2	.37	.018	.18	.1	.01	.9	<.1	<.05	1	<.5	3.38
4708	.4	155.2	1.7	41	<.1	1.1	4.7	751	1.26	<.5	.4	<.5	.9	98	<.1	.1	<.1	21	2.06	.054	6	5	.28	174	.002	1	.45	.027	.13	<.1	.01	1.4	<.1	<.05	2	<.5	4.96
4709	1.2	241.9	1.6	33	.1	1.0	4.4	703	1.16	.6	.4	.6	1.2	103	<.1	.2	.1	20	2.00	.053	7	4	.23	132	.001	1	.45	.028	.17	<.1	.01	1.2	<.1	<.05	1	<.5	6.12
RE 4709	1.1	239.4	1.7	34	.1	1.1	4.7	697	1.17	.6	.5	<.5	1.2	105	<.1	.2	.1	20	1.99	.052	7	3	.23	136	.001	1	.47	.027	.18	.1	.01	1.3	<.1	<.05	1	<.5	-
RRE 4709	1.8	256.5	1.7	35	.1	.9	4.5	714	1.15	<.5	.5	<.5	1.1	104	<.1	.2	.1	19	1.99	.049	7	4	.24	135	.001	1	.46	.027	.17	.1	.01	1.2	<.1	<.05	1	<.5	-
4710	.5	186.9	1.7	31	.1	.9	4.0	708	1.05	<.5	.4	<.5	1.0	133	<.1	.1	<.1	13	2.29	.049	6	4	.23	87	.001	2	.48	.024	.17	<.1	.01	1.0	<.1	<.05	1	<.5	5.28
4711	.6	174.2	2.1	25	<.1	.7	4.2	498	1.15	.5	.6	<.5	1.0	156	<.1	.3	<.1	19	2.08	.053	7	4	.28	226	.001	2	.54	.033	.15	.1	.01	1.3	<.1	<.05	2	<.5	2.34
4712	.4	13.8	1.8	33	<.1	1.6	4.6	398	1.37	<.5	.5	<.5	1.3	126	<.1	.2	<.1	26	1.42	.052	8	4	.39	370	.002	1	.68	.041	.12	.1	.01	1.8	<.1	<.05	3	<.5	4.36
4713	.5	74.9	1.5	30	<.1	1.6	4.8	465	1.22	<.5	.6	<.5	1.8	98	<.1	.2	<.1	22	1.47	.050	7	4	.41	396	.002	2	.64	.033	.10	<.1	.01	1.4	<.1	<.05	3	<.5	5.66
4714	1.2	75.2	2.1	29	<.1	1.0	4.1	447	1.25	<.5	.6	<.5	1.5	129	<.1	.4	<.1	19	1.82	.051	7	5	.31	282	.001	2	.54	.035	.17	.1	.01	1.3	<.1	<.05	2	<.5	5.53
4715	1.5	387.2	2.3	27	.2	.7	4.4	550	1.16	<.5	.5	<.5	1.3	138	.1	.1	<.1	15	2.31	.048	7	4	.26	422	.001	2	.39	.024	.16	.1	.01	1.0	<.1	<.05	1	<.5	4.97
4716	.4	782.2	2.5	29	.5	.7	4.7	757	1.23	<.5	.5	<.5	1.1	174	.1	.2	.1	9	2.82	.046	7	3	.35	386	.001	1	.43	.019	.19	.1	.01	.8	<.1	<.05	1	<.5	4.03
4717	1.0	402.8	3.0	23	.3	.4	3.8	685	1.05	<.5	.6	<.5	1.3	223	<.1	.1	.1	9	2.82	.051	7	3	.31	537	.001	2	.40	.018	.17	.1	.01	.9	<.1	<.05	1	<.5	3.12
4718	.3	21.9	2.7	29	<.1	1.3	4.1	412	1.28	<.5	.6	<.5	1.2	147	.1	.1	<.1	23	1.57	.048	7	4	.29	405	.003	1	.56	.037	.13	<.1	.01	1.5	.1	<.05	2	<.5	2.42
STANDARD DS7	21.4	107.5	67.5	401	.9	57.9	9.7	650	2.48	48.5	4.8	62.8	4.7	77	6.4	6.0	4.4	86	1.00	.079	16	271	1.08	385	.134	39	1.19	.099	.47	4.0	.20	2.6	4.3	.20	5	3.5	-

GROUP 1DX - 15.0 GM SAMPLE LEACHED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 300 ML, ANALYSED BY ICP-MS.  
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.  
- SAMPLE TYPE: DRILL CORE R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

12-20-06 11:13 OUT

Data FA \_\_\_\_\_ DATE RECEIVED: NOV 28 2006 DATE REPORT MAILED:.....



ASSAY CERTIFICATE



Happy Creek Minerals Ltd. File # A606030R  
2304 - 1066 W. Hastings S, Vancouver BC V6E 3A2

SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag** gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %	Au** gm/mt
184314	<.001	.107	<.01	.01	3<.001	.001	.03	1.50	<.01	.002	<.001	<.001	<.01	.57	.037	.001	.41	.78	.04	.11	.040	<.001	.09	
184315	<.001	.139	.01	.01	5<.001	.002	.12	3.06	<.01	.005	<.001	.002	<.01	.81	.070	.001	1.27	2.16	.11	.23	<.001	<.001	.08	
185468	.004	.019	<.01	<.01	5<.001	.001	.01	4.98	<.01	.003	<.001	<.001	<.01	.10	.046	.001	.13	.55	.04	.18	<.001	<.001	.49	
185475	.001	.020	.06	.02	365<.001	<.001	<.01	6.25	.01	.001	<.001	.001	<.01	.01	.027	.001	.06	.36	.05	.22	.001	<.001	53.18	
185476	.004	.001	<.01	<.01	2<.001	<.001	<.01	.58	<.01	<.001	<.001	.001	<.01	<.01	.003	.001	<.01	.03	<.01	.02	<.001	<.001	.42	
185479	.172	<.001	<.01	<.01	3<.001	<.001	<.01	.23	<.01	<.001	<.001	.001	<.01	<.01	<.001	.002	<.01	.01	<.01	<.01	<.001	<.001	.42	
185480	.159	.001	<.01	<.01	<2<.001	<.001	<.01	.33	<.01	<.001	<.001	.001	<.01	.01	<.001	.002	<.01	<.01	<.01	<.01	<.001	<.001	.02	
185483	.637	.004	<.01	<.01	<2<.001	.001	.05	2.19	<.01	.006	<.001	.001	.01	.76	.043	.001	.68	1.25	.13	.40	.010	<.001	.03	
185484	.103	.064	<.01	.02	<2	.018	.002	.12	5.77	<.01	.003	<.001	.002	<.01	1.16	.079	.018	2.72	2.49	.08	1.86	.036	<.001	.01
185485	8.683	.022	<.01	<.01	<2	.005	.002	.05	3.08	<.01	.002	.001	.022	<.01	1.14	.047	.011	1.67	1.99	.11	1.12	.004	<.001	.03
185486	.351	.003	<.01	<.01	<2<.001	<.001	.01	.69	<.01	<.001	<.001	.001	<.01	.33	.009	.001	.05	.28	.03	.12	<.001	<.001	.01	
185487	.192	.005	<.01	<.01	<2<.001	<.001	.03	1.89	<.01	.001	<.001	.001	<.01	.19	.055	.002	.27	.71	.07	.39	<.001	<.001	.01	
185488	1.292	.007	<.01	<.01	<2	.001	.001	.04	1.67	<.01	.002	<.001	.003	.01	.30	.060	.003	.64	1.09	.09	.52	<.001	<.001	<.01
RE 185488	1.296	.007	<.01	<.01	<2	.001	<.001	.04	1.69	<.01	.002	<.001	.003	.01	.29	.060	.003	.63	1.08	.09	.52	.001	<.001	.02
185489	1.244	.001	<.01	<.01	<2<.001	<.001	<.01	.37	<.01	<.001	<.001	.003	<.01	.01	.002	.001	.02	.06	.01	.04	<.001	<.001	<.01	
STANDARD R-3/SL20	.075	.807	1.92	4.12	194	.530	.059	.07	29.77	.04	.003	.023	.038	<.01	1.29	.047	.012	1.03	1.11	.04	.44	.002	.002	6.23

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.  
AG\*\* & AU\*\* BY FIRE ASSAY FROM 1 A.T. SAMPLE.  
- SAMPLE TYPE: ROCK PULP Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data 1 FA \_\_\_\_\_ DATE RECEIVED: DEC 22 2006 DATE REPORT MAILED:.....**JAN. 0.4. 2007**





ASSAY CERTIFICATE



Happy Creek Minerals Ltd. PROJECT RATERIA File # A608905R

2304 - 1066 W. Hastings S, Vancouver BC V6E 3X2 Submitted by: David Blann

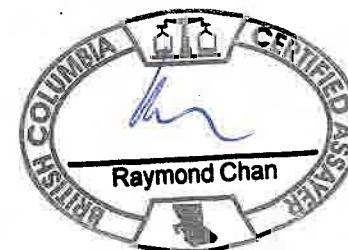
SAMPLE#	Mo %	Cu %	Pb %	Zn %	Ag gm/mt	Ni %	Co %	Mn %	Fe %	As %	Sr %	Cd %	Sb %	Bi %	Ca %	P %	Cr %	Mg %	Al %	Na %	K %	W %	Hg %
4701	<.001	.104	<.01	<.01	<2	<.001	<.001	.08	.61	<.01	.008	<.001	<.001	<.01	2.45	.025	<.001	.10	.59	.05	.33	<.001	<.001
4702	<.001	.188	<.01	<.01	<2	<.001	<.001	.08	.47	<.01	.007	<.001	.001	<.01	1.89	.028	.001	.06	.49	.02	.35	<.001	<.001
STANDARD R-3	.073	.812	1.98	4.05	194	.527	.061	.07	31.02	.04	.003	.023	.038	<.01	1.34	.047	.013	1.08	1.14	.04	.44	<.001	.002

GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.  
- SAMPLE TYPE: CORE PULP

JAN 16 2007

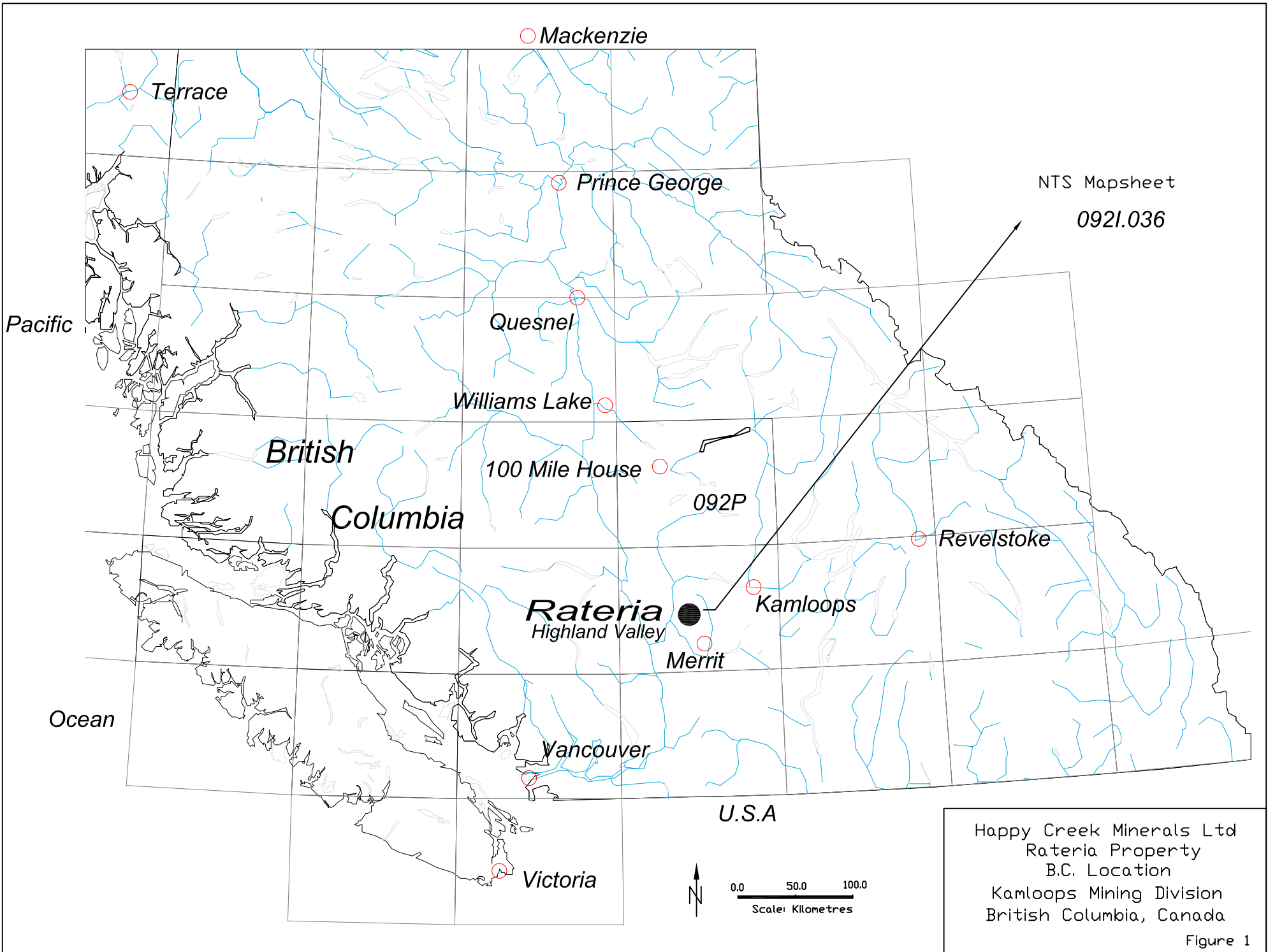
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DATE RECEIVED: JAN 8 2007 DATE REPORT MAILED: .....



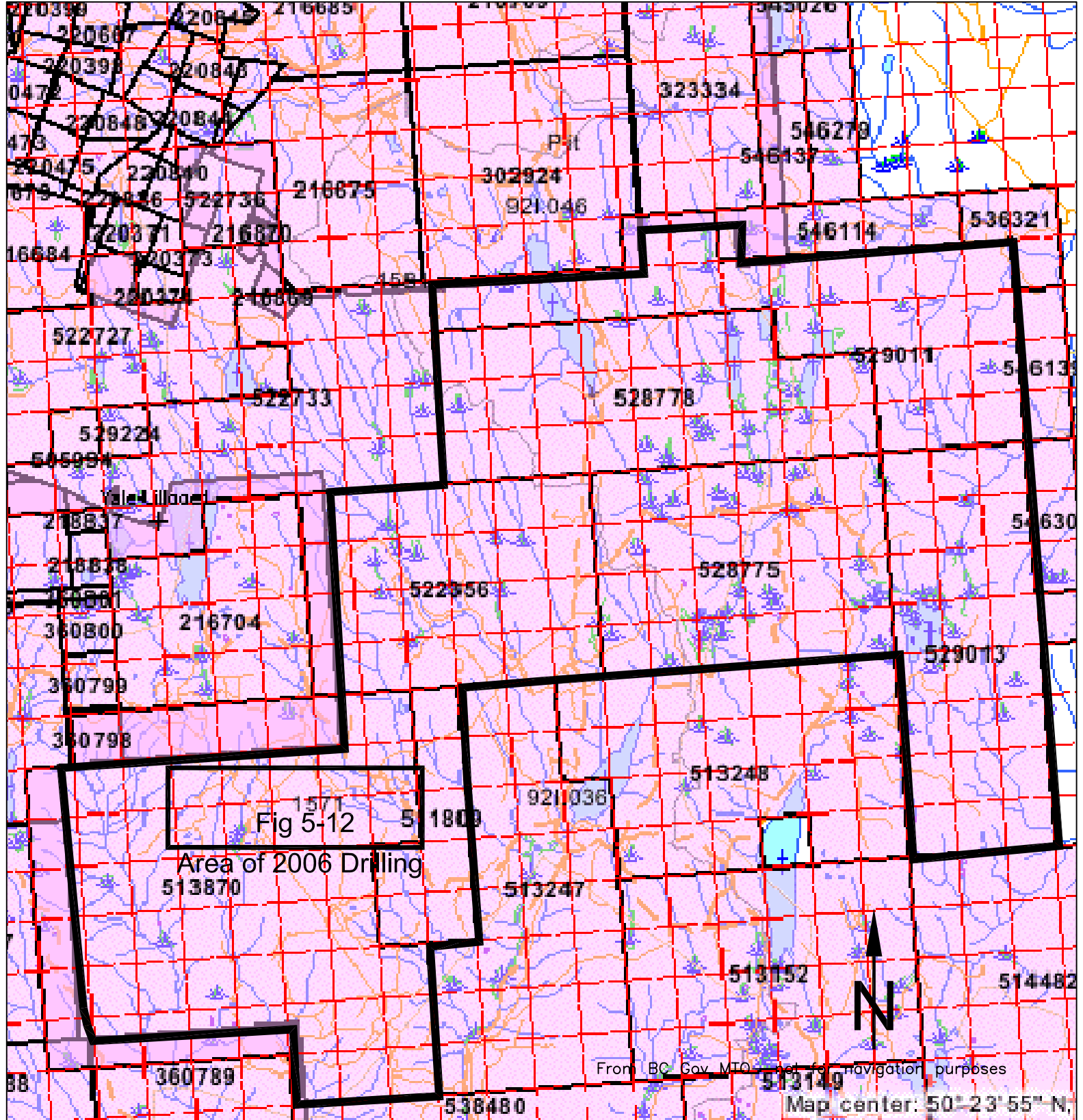
# Appendix 3

## Figures

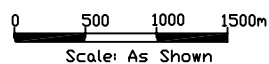


Happy Creek Minerals Ltd  
 Rateria Property  
 B.C. Location  
 Kamloops Mining Division  
 British Columbia, Canada

Figure 1



# Mineral Tenure



Happy Creek Minerals Ltd

Rateria Property  
Highland Valley, B.C.

Mining Division Kamloops

SIZE British Columbia  
A1 Canada

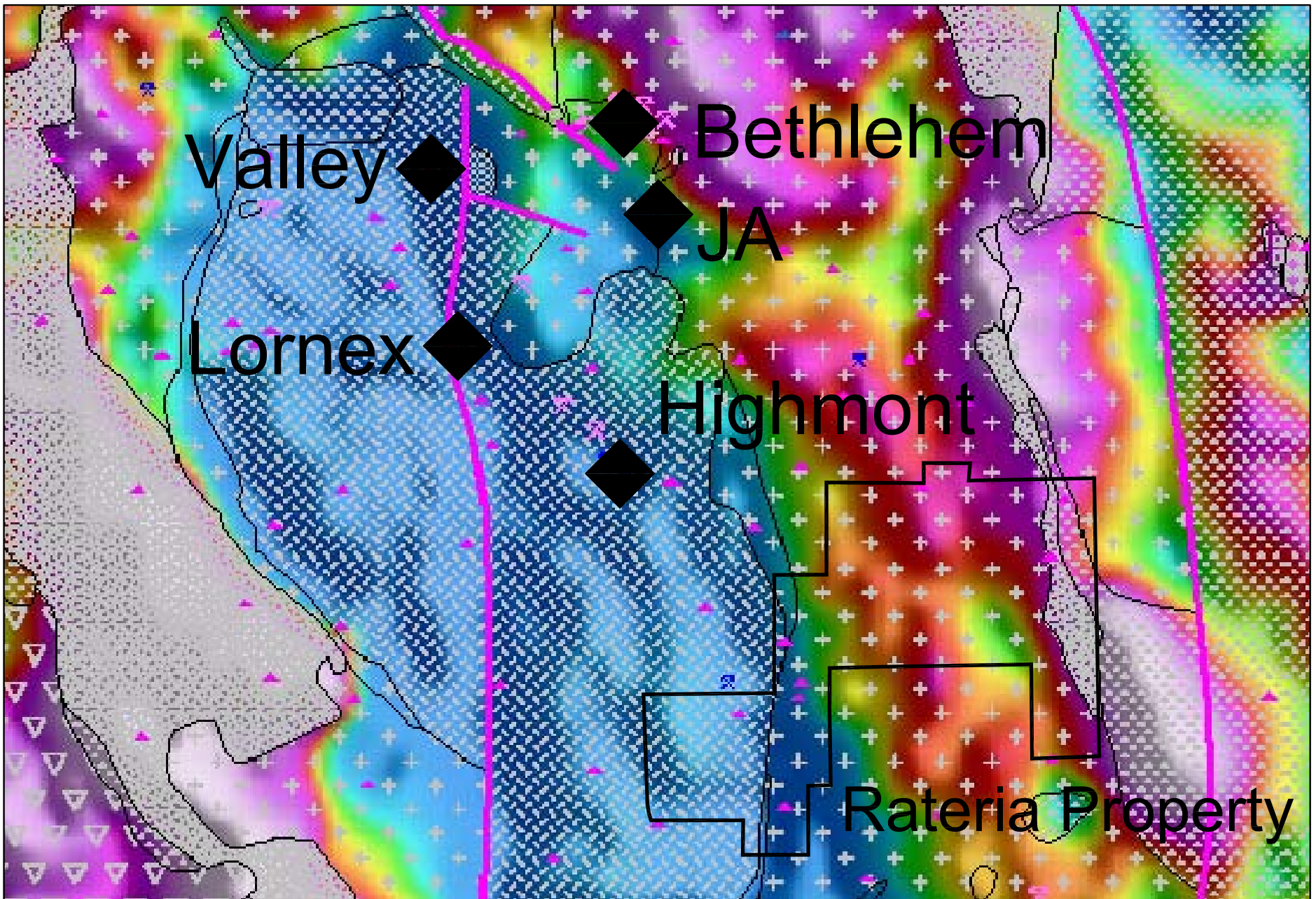
By: D. Blann, P.Eng.

Revised  
07/02/2007

NTS Mapsheet 0921.036

SCALE

Figure 2



Legend

-  Tertiary
-  Spences Bridge Group
-  Nicola Group
-  Bethsaida
-  Highland Valley Phase
-  Border Phase



◆ Major Copper Deposit

Happy Creek Minerals Ltd

Rateria Property  
Highland Valley, B.C.

Airborne Magnetics  
Regional Geology







Mapsheet 0921036 NAD83 UTM, Zone 10  
Figure 3

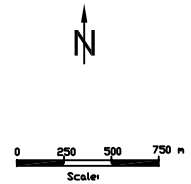


Rateria Claim Boundary

See Figure 4a

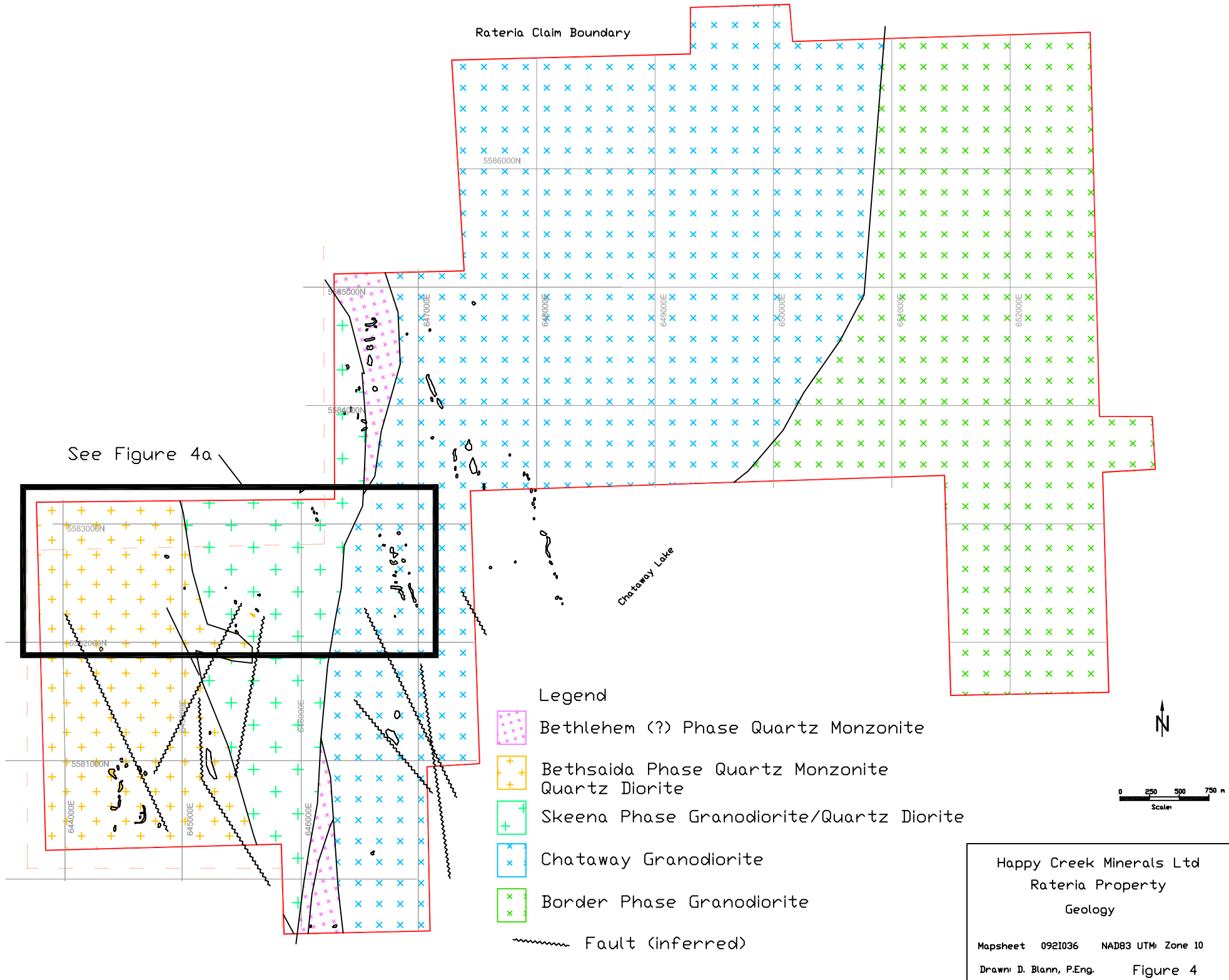
Legend

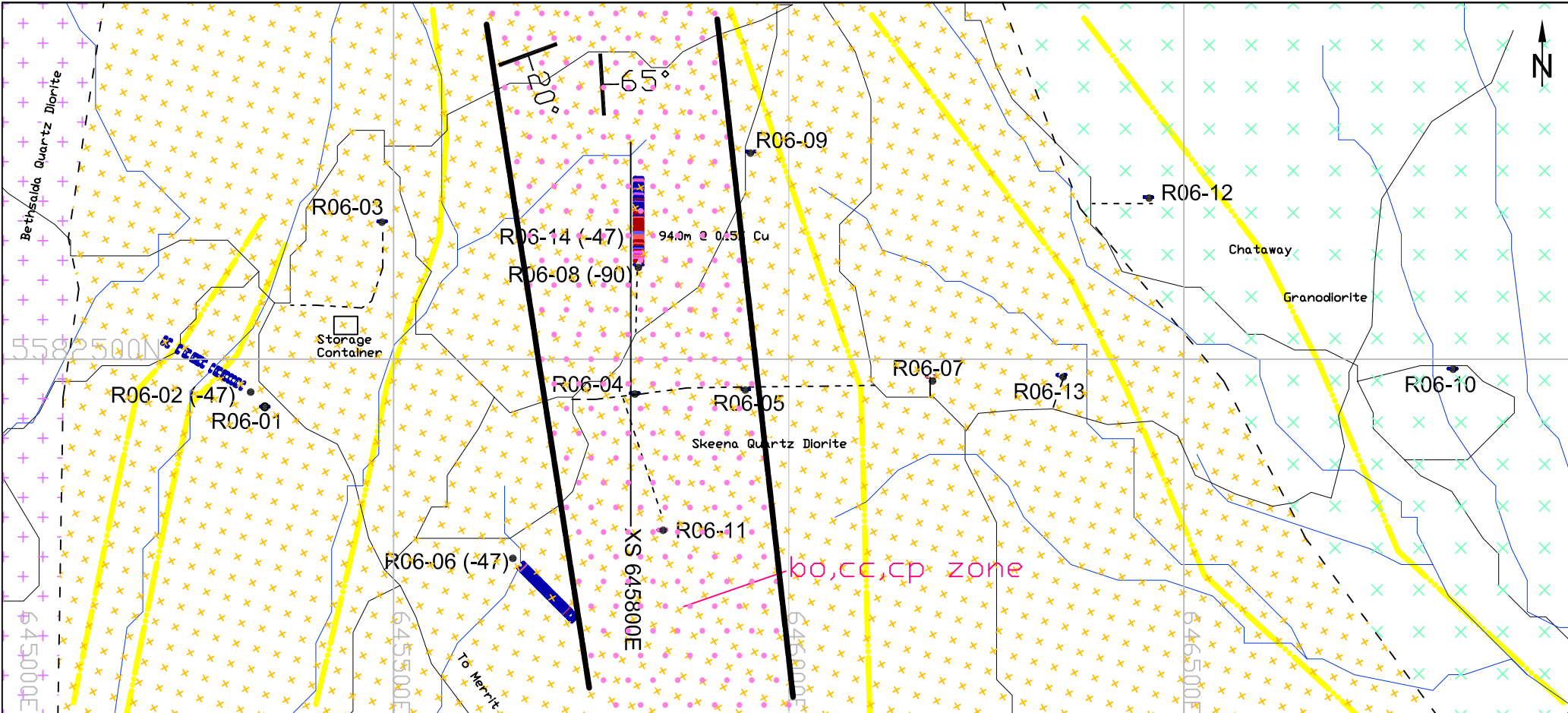
-  Bethlehem (?) Phase Quartz Monzonite
-  Bethsaida Phase Quartz Monzonite  
Quartz Diorite
-  Skeena Phase Granodiorite/Quartz Diorite
-  Chataway Granodiorite
-  Border Phase Granodiorite
-  Fault (inferred)



Happy Creek Minerals Ltd  
 Rateria Property  
 Geology

Mapsheet 0921036 NAD83 UTM: Zone 10  
 Drawn: D. Blann, P.Eng. Figure 4





cp	chalcopyrite	Gd	Granodiorite
bo	bornite	Qmz	Quartz Monzonite
cc	chalcopyrite	Qd	Quartz Diorite
ca	carbonate		
ser	sericite		
Qvn	Quartz vein(s)		
chl	chlorite		
ep	epidote		
hem	hematite		
K	K-Feldspar		
ka	kaolin/clay		

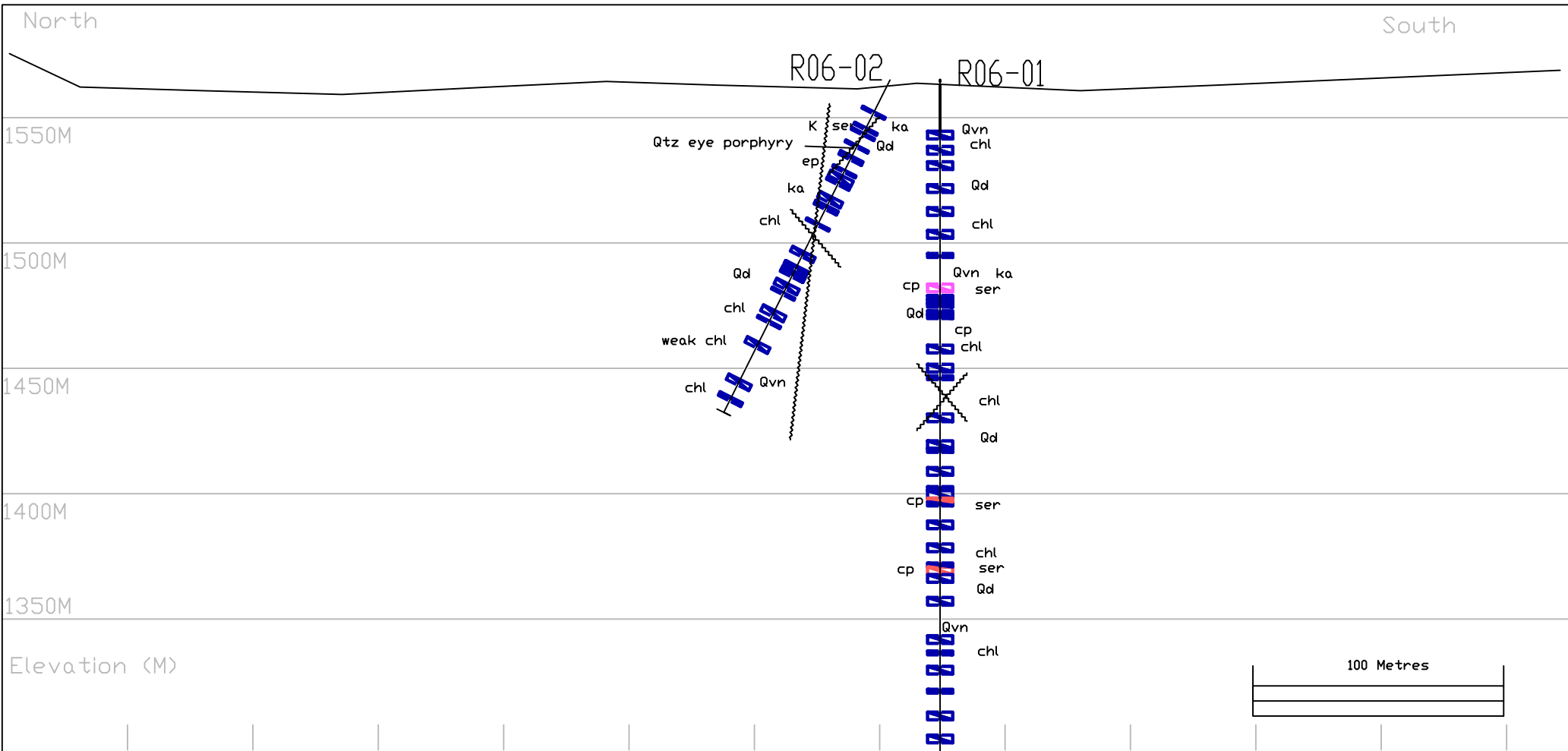
Legend	
[Red Box]	>999 ppm Cu
[Orange Box]	548-999 ppm Cu
[Yellow Box]	387-548 ppm Cu
[Light Blue Box]	273-387 ppm Cu
[Dark Blue Box]	0-273ppm Cu
[Black Line]	Fault
[Dashed Line]	Contact
[Pink Dot]	R06-11 06 Diamond Drillhole Collar and Label
[Yellow Line]	Moderate pervasive sericite, kaolin

Scale: 1:0M @ 3.88  
Length(metre)@ % Copper

Scale: As Shown  
0 100 200 300 Metres

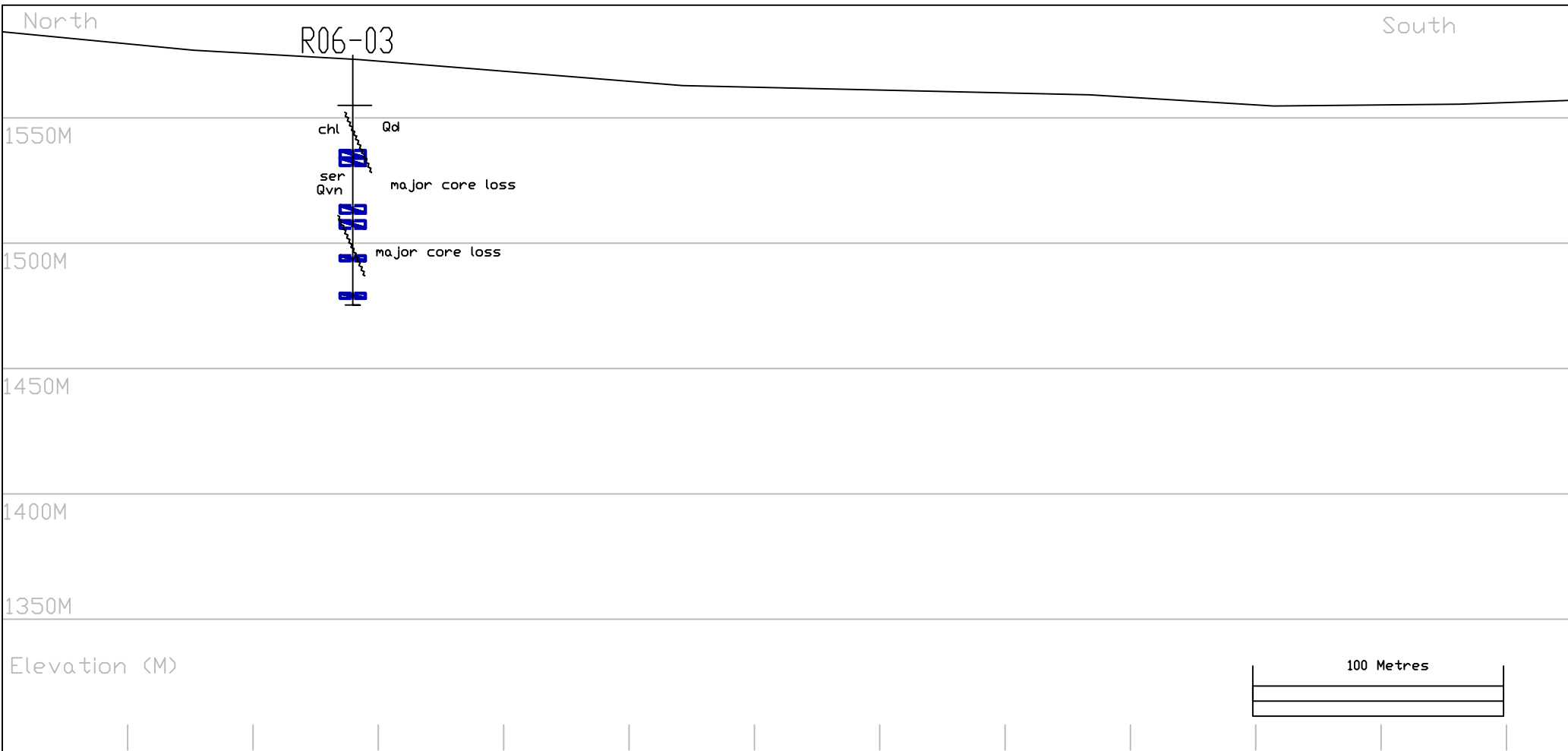
- [Orange 'x'] Bethsaida Quartz Diorite
- [Yellow 'x'] Skeena Quartz Diorite
- [Green 'x'] Chataway Granodiorite

Happy Creek Minerals Ltd			
Rateria Property Geology & 2006 Drillhole Plan			
Mining Division	Kamloops	SIZE	A1
NTS Mapsheet	092L036 NAD 83 UTM	British Columbia Canada	By: D. Blann, P.Eng.
SCALE			Revised 07/02/2007
			Figure 4a



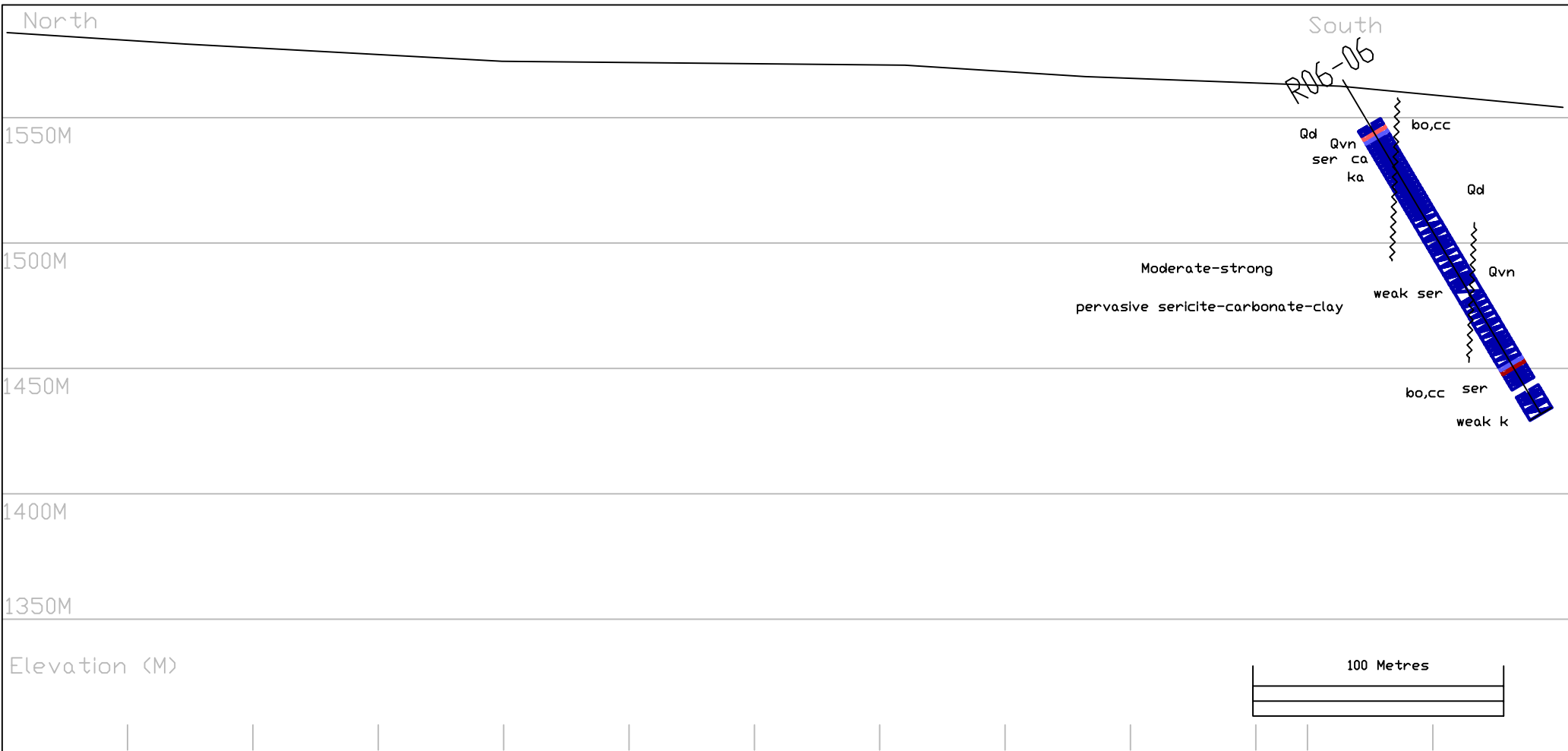
cp	chalcopyrite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="display:inline-block; width:10px; height:10px; background-color:red; border:1px solid black;"></span> >999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:orange; border:1px solid black;"></span> 548-999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:yellow; border:1px solid black;"></span> 387-548 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:lightblue; border:1px solid black;"></span> 273-387 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:blue; border:1px solid black;"></span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf)-----		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
Rateria Property Cross Section 645300E					
Mining Division	Kamloops	SIZE A1	British Columbia Canada	By: D. Blann, P.Eng.	Revised 07/02/2007
NTS Mapsheet	0921.036 NAD 83 UTM	SCALE	1:20,000	Figure 5	



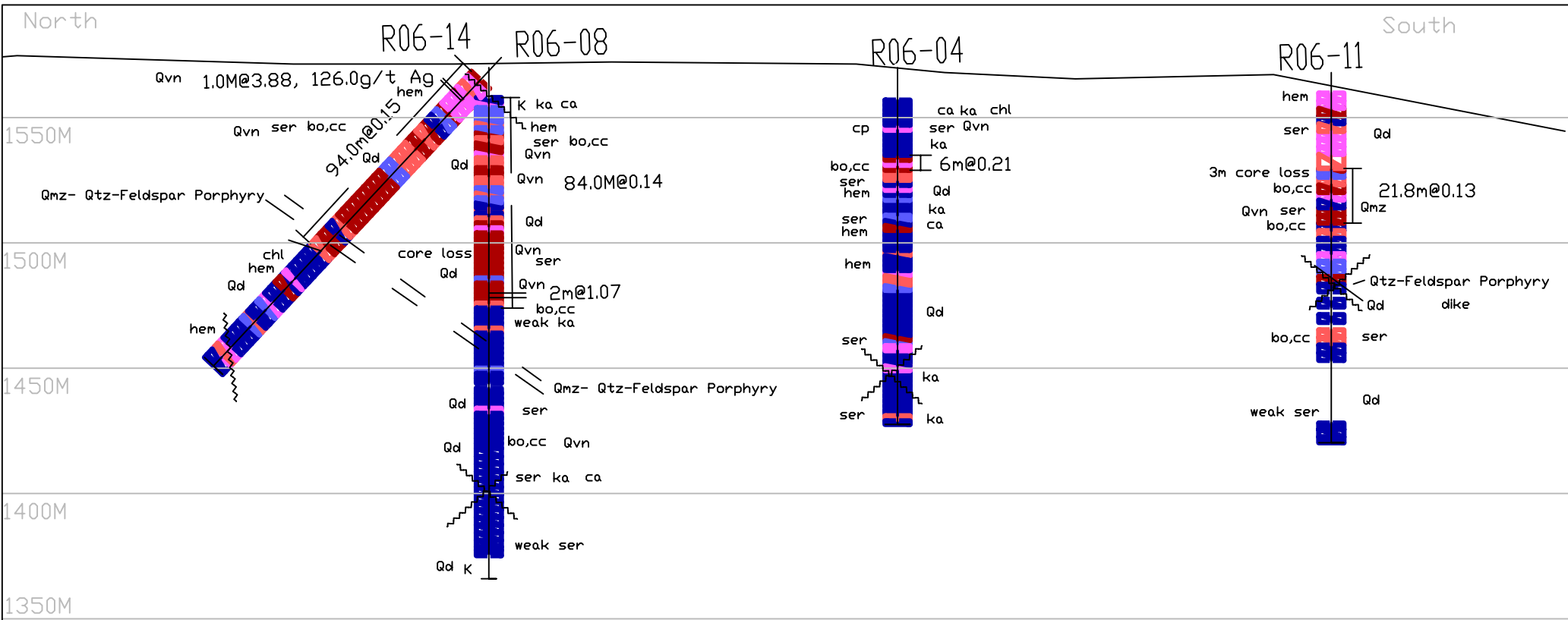
cp	chalcopyrite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="display: inline-block; width: 15px; height: 15px; background-color: red; border: 1px solid black;"></span> >999 ppm Cu <span style="display: inline-block; width: 15px; height: 15px; background-color: orange; border: 1px solid black;"></span> 548-999 ppm Cu <span style="display: inline-block; width: 15px; height: 15px; background-color: yellow; border: 1px solid black;"></span> 387-548 ppm Cu <span style="display: inline-block; width: 15px; height: 15px; background-color: lightblue; border: 1px solid black;"></span> 273-387 ppm Cu <span style="display: inline-block; width: 15px; height: 15px; background-color: blue; border: 1px solid black;"></span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf)- - - -		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 645500E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
NTS Mapsheet	0921.036 NAD 83 UTM	A1	Canada		07/02/2007
		SCALE	1:20,000		Figure 6



cp	chalcopyrite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="display:inline-block; width:10px; height:10px; background-color:red; border:1px solid black;"></span> >999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:orange; border:1px solid black;"></span> 548-999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:pink; border:1px solid black;"></span> 387-548 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:lightblue; border:1px solid black;"></span> 273-387 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:darkblue; border:1px solid black;"></span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf)- - - -		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 645700E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
		A1	Canada		07/02/2007
NTS Mapsheet	0921.036	SCALE			Figure
	NAD 83 UTM				7



cp	chalcopryrite	Gd	Granodiorite	
bo	bornite	Qmz	Quartz Monzonite	1.0M @3.88
cc	chalcocite	Qd	Quartz Diorite	Length(metre>@ % Copper
ca	carbonate			
ser	sericite			
Qvn	Quartz vein(s)		Fault ~ ~ ~	
chl	chlorite		Contact(Inf) - - - -	
ep	epidote			
hem	hematite			
K	K-Feldspar			
ka	kaolin/clay			

<span style="display:inline-block; width:15px; height:15px; background-color:darkred;"></span>	>999 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:orange;"></span>	548-999 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	387-548 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue;"></span>	273-387 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>	0-273ppm Cu

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 645800E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
		A1	Canada		07/02/2007
NTS Mapsheet	0921.036	SCALE	1:20,000		Figure 8
	NAD 83 UTM				

North

South

R06-05

1550M

6 metres lost core  
50% recovery

ser

Qd

ka

K chl

Qd

ka

1500M

ser

ka

cp

cp,bo

K

1450M

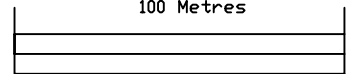
cp

1400M

1350M

Elevation (M)

100 Metres



cp chalcopryrite Gd Granodiorite  
 bo bornite Qmz Quartz Monzonite  
 cc chalcocite Qd Quartz Diorite  
 ca carbonate  
 ser sericite  
 ser Quartz vein(s)  
 Qvn chlorite  
 ep epidote  
 hem hematite  
 K K-Feldspar  
 ka kaolin/clay

Fault ~ ~ ~  
 Contact(Inf) - - - -

1.0M @3.88  
 Length(metre>@ % Copper

Copper Grades (ppm)  
 >999 ppm Cu  
 548-999 ppm Cu  
 387-548 ppm Cu  
 273-387 ppm Cu  
 0-273ppm Cu

Facing East

Happy Creek Minerals Ltd

Rateria Property  
Cross Section 654900E

Mining Division Kamloops

SIZE  
A1

British Columbia  
Canada

By: D. Blann, P.Eng.

Revised  
07/02/2007

NTS Mapsheet 0921.036  
NAD 83 UTM

SCALE 1:20,000

Figure 9



cp	chalcopryite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="color: red;">■</span> >999 ppm Cu <span style="color: orange;">■</span> 548-999 ppm Cu <span style="color: magenta;">■</span> 387-548 ppm Cu <span style="color: blue;">■</span> 273-387 ppm Cu <span style="color: darkblue;">■</span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf) - - - -		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 646000E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
		A1	Canada		07/02/2007
NTS Mapsheet	0921.036 NAD 83 UTM	SCALE	1:20,000		Figure 10



North

South

R06-07

1550M

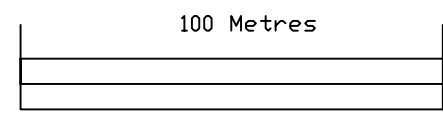
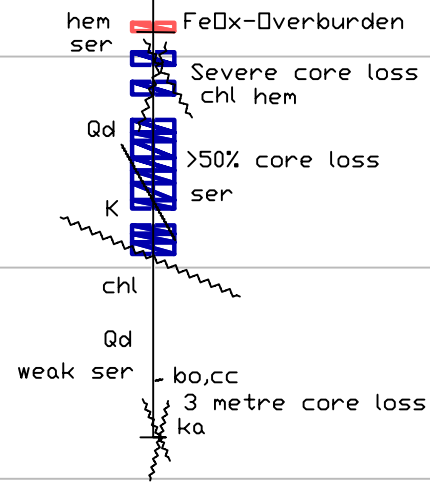
1500M

1450M

1400M

1350M

Elevation (M)



cp	chalcopyrite	Gd	Granodiorite
bo	bornite	Qmz	Quartz Monzonite
cc	chalcocite	Qd	Quartz Diorite
ca	carbonate		
ser	sericite		
Qvn	Quartz vein(s)		Fault ~ ~ ~
chl	chlorite		Contact(inf) - - - -
ep	epidote		
hem	hematite		
K	K-Feldspar		
ka	kaolin/clay		

1.0M @3.88  
Length(metre)@ % Copper

Copper Grades (ppm)

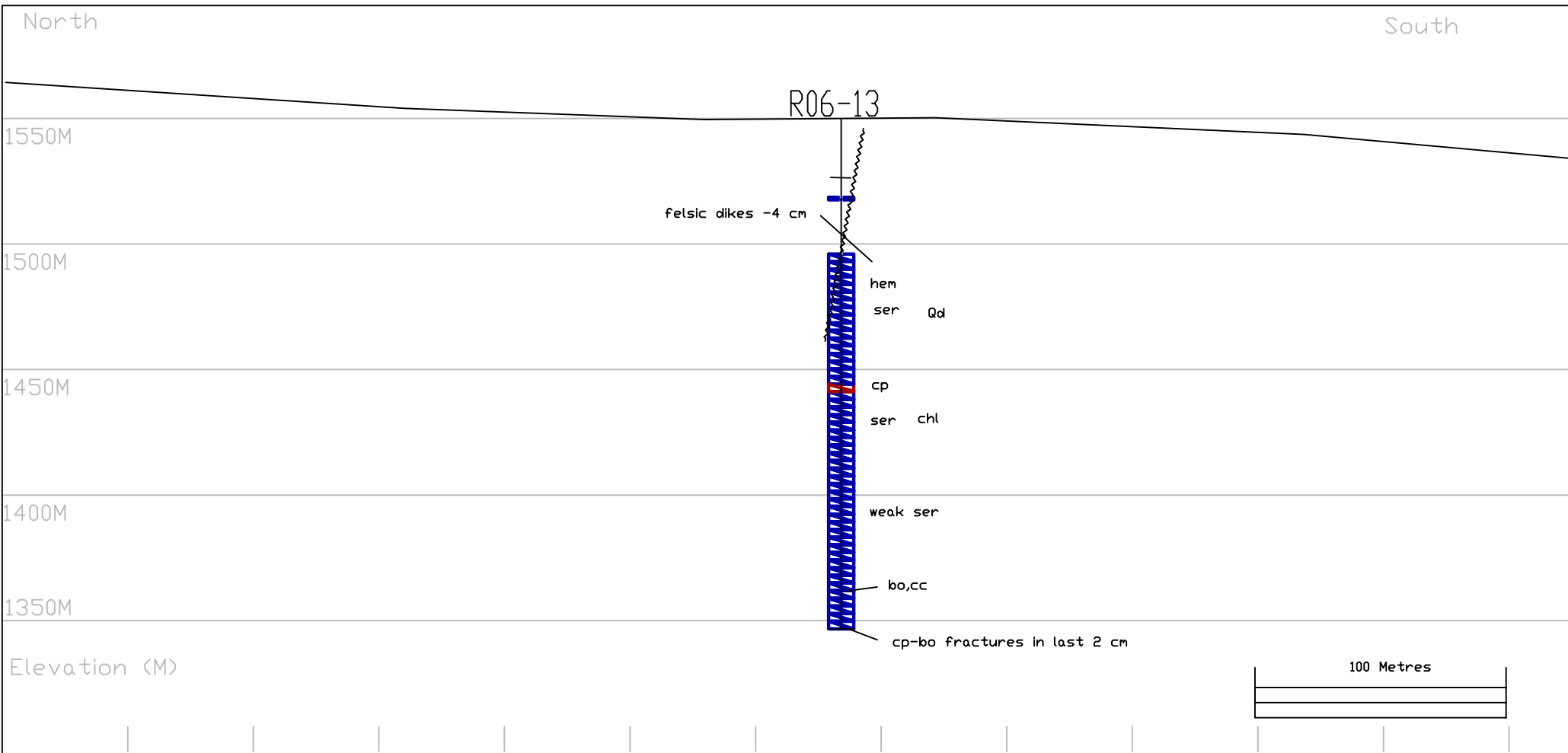
	>999 ppm Cu
	548-999 ppm Cu
	387-548 ppm Cu
	273-387 ppm Cu
	0-273ppm Cu

Facing East

Happy Creek Minerals Ltd

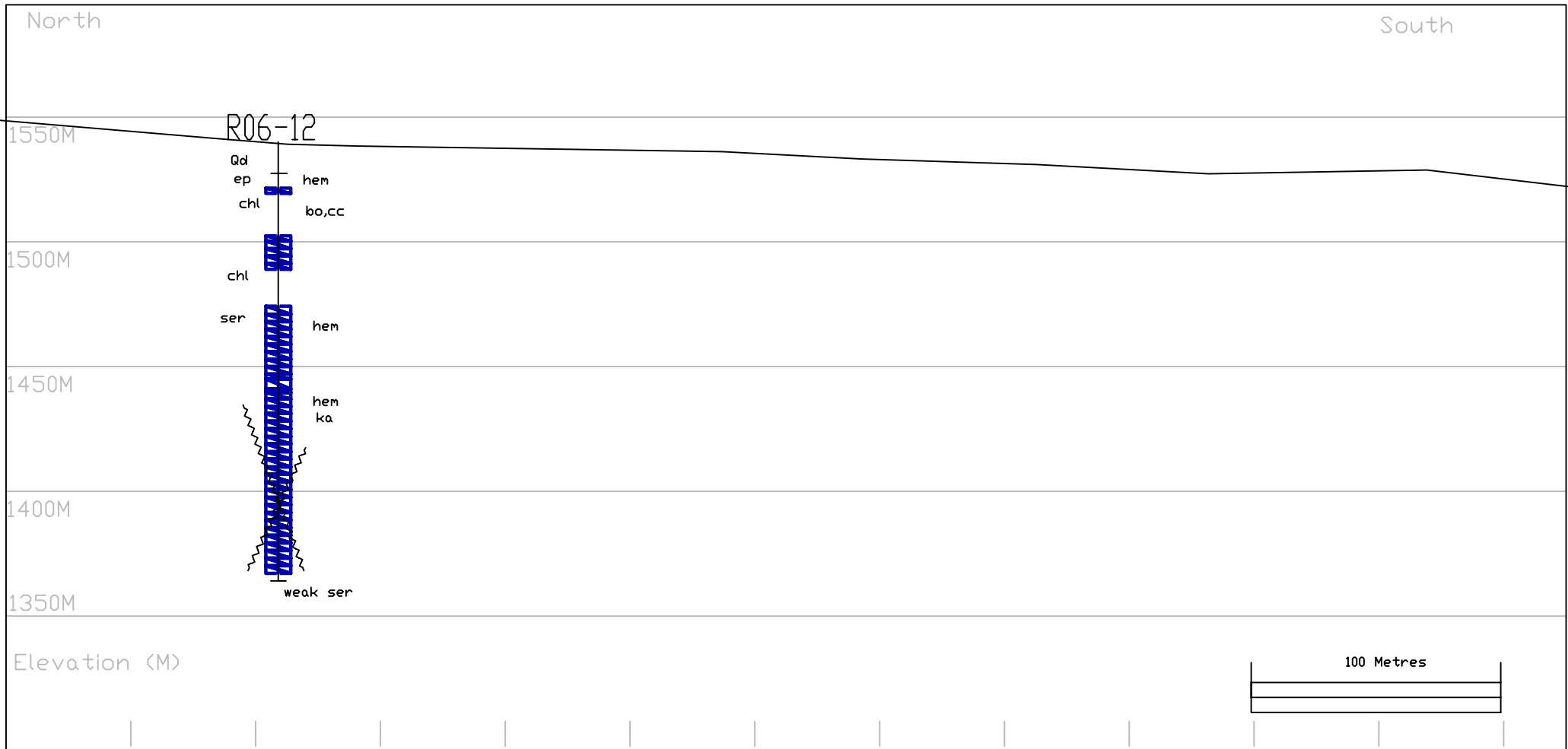
Rateria Property  
Cross Section 646200E

Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
NTS Mapsheet	0921.036	A1	Canada		07/02/2007
	NAD 83 UTM	SCALE	1:20,000		Figure 11



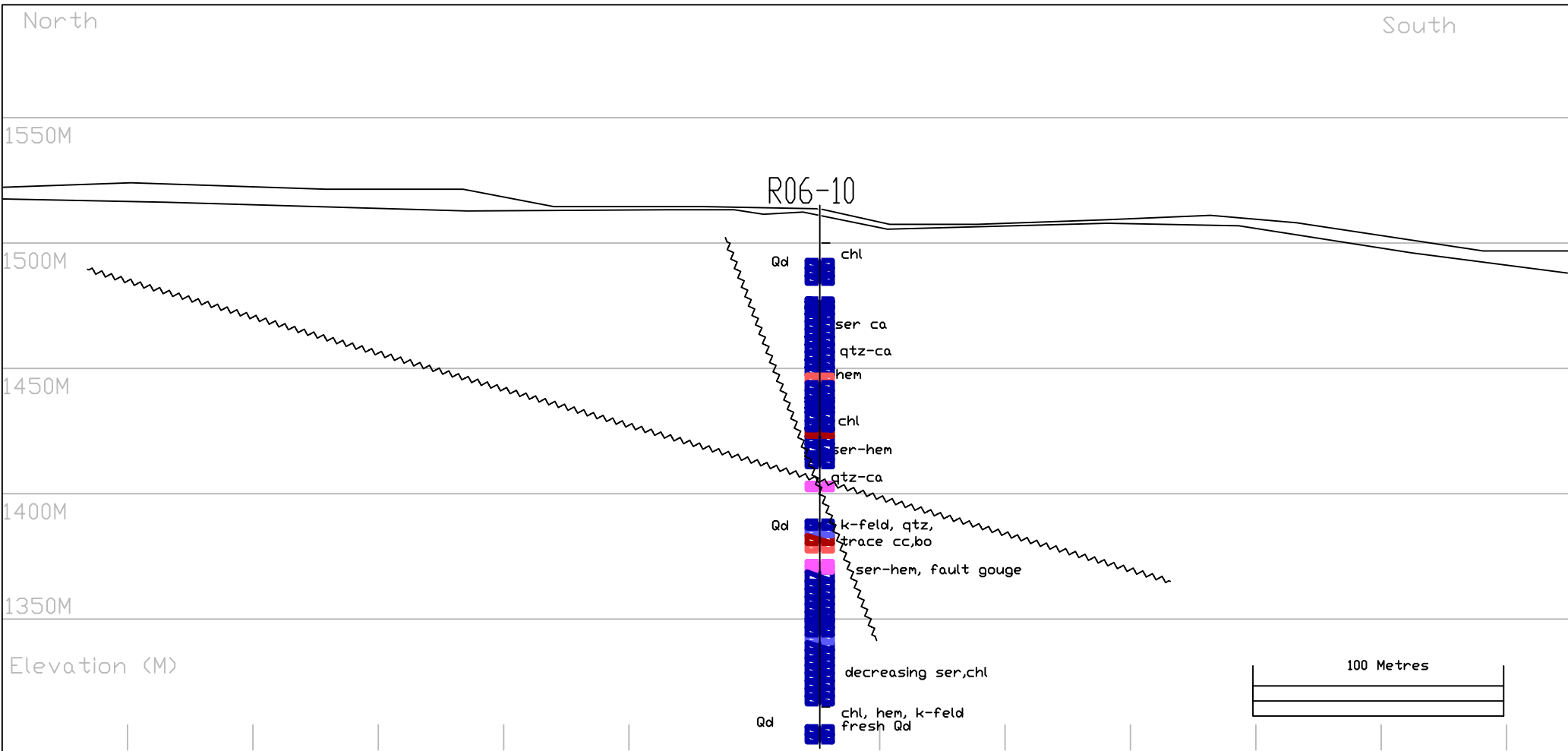
cp	chalcopyrite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="display:inline-block; width:10px; height:10px; background-color:darkred; border:1px solid black;"></span> >999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:orange; border:1px solid black;"></span> 548-999 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:yellow; border:1px solid black;"></span> 387-548 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:lightblue; border:1px solid black;"></span> 273-387 ppm Cu <span style="display:inline-block; width:10px; height:10px; background-color:blue; border:1px solid black;"></span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf) - - - -		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 646300E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
		A1	Canada		07/02/2007
NTS Mapsheet	092L036 NAD 83 UTM	SCALE	1:20,000		Figure 12



cp	chalcopyrite	Gd	Granodiorite	1.0M @3.88 Length(metre)@ % Copper	<b>Copper Grades (ppm)</b> <span style="color: red;">■</span> >999 ppm Cu <span style="color: orange;">■</span> 548-999 ppm Cu <span style="color: magenta;">■</span> 387-548 ppm Cu <span style="color: blue;">■</span> 273-387 ppm Cu <span style="color: darkblue;">■</span> 0-273ppm Cu
bo	bornite	Qmz	Quartz Monzonite		
cc	chalcocite	Qd	Quartz Diorite		
ca	carbonate				
ser	sericite				
Qvn	Quartz vein(s)		Fault ~ ~ ~		
chl	chlorite		Contact(Inf) - - - -		
ep	epidote				
hem	hematite				
K	K-Feldspar				
ka	kaolin/clay				

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 646400E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
		A1	Canada		07/02/2007
NTS Mapsheet	0921.036 NAD 83 UTM	SCALE	1:20,000		Figure 13



cp	chalcopyrite	Gd	Granodiorite
bo	bornite	Qmz	Quartz Monzonite
cc	chalcocite	Qd	Quartz Diorite
ca	carbonate		
ser	sericite		
chl	chlorite		
ep	epidote		
hem	hematite		
K	K-Feldspar		
Fault	~ ~ ~		
Contact(Inf)	- - - -		

Copper Grades (ppm)	
<span style="display:inline-block; width:15px; height:15px; background-color:darkred;"></span>	>999 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:orange;"></span>	548-999 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:yellow;"></span>	387-548 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue;"></span>	273-387 ppm Cu
<span style="display:inline-block; width:15px; height:15px; background-color:blue;"></span>	0-273ppm Cu

Facing East		Happy Creek Minerals Ltd			
		Rateria Property Cross Section 6466000E			
Mining Division	Kamloops	SIZE	British Columbia	By: D. Blann, P.Eng.	Revised
NTS Mapsheet	0921.036 NAD 83 UTM	A1	Canada		07/02/2007
SCALE			as shown	Figure 14	