



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: A GEOLOGICAL AND GEOCHEMICAL REPORT ON THE ART-DL PROPERTY

TOTAL COST: \$74,000

AUTHOR(S): Bob Lane

SIGNATURE(S): 

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-4-452

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PROPERTY NAME: ART-DL

CLAIM NAME(S) (on which work was done): 507151, 526703, 518932

COMMODITIES SOUGHT: gold, silver

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Cariboo and Clinton

NTS / BCGS: **092P.097, 093A.006 & 093A.007**

LATITUDE: **52° 01' 04" N**

LONGITUDE: **120° 36' 30" W** (at centre of work)

UTM Zone: 10 EASTING: 0665000 NORTHING: 5766000

OWNER(S): Happy Creek Minerals Ltd.
FMC 203169

MAILING ADDRESS:

2300-1066 West Hastings street
Vancouver, B.C.
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OPERATOR(S) [who paid for the work]: Same

MAILING ADDRESS: Same

REPORT KEYWORDS: The Art-DL property is underlain by sedimentary and mafic volcanic rocks of the Upper Triassic-Lower Jurassic Nicola Group. Intrusive rocks consist of small stocks and dykes of intermediate to felsic composition. Strong shearing and faulting occurs in proximity to the Eureka Thrust that underlies the property. Pyrite, pyrrhotite and arsenopyrite, occur in sedimentary rocks and in quartz veins that cut volcanic rocks. Gold and silver values are associated with pyrite, pyrrhotite, chalcopyrite, sphalerite, galena, tetrahedrite, and are associated with copper, zinc, lead and antimony values. Anomalous gold, silver and antimony occur in soil, silt and rock samples.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:
25800, 27753, 26019, 22460, 26821, 23201, 26607

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	4 Square KM	507151, 526703, 518932	15000
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Seismic			
Other			
Airborne			
GEOCHEMICAL			
Soil	313 ICP-MS	507151, 526703, 518932	24127
Silt	33	507151, 526703, 518932	10000
Rock	40	507151, 526703, 518932	10000
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core	Re-log and sample 270 metres		10000
Non-core			
RELATED TECHNICAL			5000
Sampling / Assaying	83 drill core		
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other			
		Total Cost	\$74,127

A GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

ART-DL PROPERTY

CARIBOO AND CLINTON MINING DIVISIONS

BRITISH COLUMBIA

BCGS MAPSHEETS: 092P.097, 093A.006 & 093A.007

**52° 01' 04" N
120° 36' 30" W**

**BC Geological Survey
Assessment Report
31184**

PREPARED FOR

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1. SUMMARY

The Art-DL property is located approximately 75 km northeast of 100 Mile House in the south-central Cariboo region of British Columbia. The property is comprised of 7 contiguous MTO cell claims that cover 2626 ha of land in the Cariboo and Clinton Mining Divisions. Access to the property is provided by paved and well-maintained gravel roads.

The property is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group. A north-trending and west-dipping thrust fault divides an upper volcanic-dominated sequence in the west half of the property from a metasedimentary sequence in the east half of the property.

Two known gold prospects, the Art and DL, have been the target of several phases of exploration. The DL prospect includes an historic 12 metre adit and several narrow trenches that were excavated to assess a number of quartz-sulphide veins hosted by a sequence of phyllitic metasedimentary rocks. Results from that work are not available. Sampling of quartz-pyrite vein material at the adit in 1992 produced encouraging results including a 1.0 metre chip sample that averaged 42.9 g/t Au (Ridley, 1992). The Art prospect, discovered in 1997, is comprised of mineralized shears hosted in rhyodacite (Adamec, 1999). In 2001, three diamond drill holes were drilled in the vicinity of the Art prospect and three diamond drill holes were drilled in the vicinity of the DL prospect. Selective sampling of core from the drilling program produced mixed results. Results from the three Art holes included low but anomalous values including a 12 m interval in hole 01-AD-02 that averaged 167 ppb Au and 3500 ppm As. The only encouraging result from selective sampling of core from the three DL holes came from a 1.5 metre interval of vein material in hole 01-AD-04 which assayed 1094 ppb Au.

In 2008, re-logging and systematic sampling of core from the three DL holes was conducted because of renewed activity and exploration success at two nearby bulk-tonnage gold prospects hosted in the 'basal black clastic' succession of the Nicola Group, namely Spanish Mountain and Frasergold. Property-scale bedrock mapping and rock, silt and soil geochemical sampling were also conducted over areas of the property with a focus on the basal black clastic succession.

The diamond drill core logging program was carried out in May of 2008. The three holes that were re-logged and sampled, 01-AD-04, -05 and -06, encountered 'knotty' phyllitic argillite, siltstone and sandstone cut by narrow quartz+-pyrite veins and stockworks. Pyrite also occurred as porphyroblasts accounting for up to 2% of the rock mass locally. A total of 83 core samples were analyzed, but gold values did not exceed 1.9 ppb Au in any of the samples.

Bedrock mapping of the property further identified the distribution of the upper volcanic sequence, dominated by intermediate augite-phyric flows and tuffs, volcanic-derived conglomerates and sandstones, and the 'basal black clastic' succession, characterized by knotty phyllitic argillites. The field work also defined the arcuate north-trending contact that separates the volcanic sequence in the west from the sedimentary sequence in the east. The contact has been mapped regionally as a west-dipping thrust fault, although evidence in support of this conclusion was not observed on the property. Dramatic changes in bedding and/or foliation attitudes across the map area do suggest that numerous structurally rotated blocks exist.

Intrusive rocks are not well represented on the property, but narrow felsic dykes or small plugs occur at or near both the Art and DL mineral occurrences.

A soil geochemical sampling program centred north-northwest of the DL showing in an area underlain by the basal black clastic succession identified several gold, gold-silver and/or silver anomalies. One north-trending gold anomaly is coincident with a 2008 silt sample that produced a value of 882.7 ppb Au. Rock samples collected during the bedrock mapping and geochemical sampling programs did not yield any significant anomalous values.

The 2008 exploration program generated additional geochemical anomalies that require follow-up. A program of infill soil sampling, detailed grid-based geological mapping of select areas and track-mounted excavator trenching of priority targets is recommended.

2. INTRODUCTION AND TERMS OF REFERENCE

Happy Creek Minerals Ltd (Happy Creek) contracted Allnorth Consultants Limited (Allnorth) to complete an exploration program on the Art-DL property that consisted of: re-logging and sampling of core from three holes drilled in 2001, bedrock mapping of the central part of the claim group, and to compilation of all data collected during the exploration season to create a report for assessment purposes.

It is understood that this report may be required for material disclosure. Prior to the field visit the author acquired and reviewed available historical information including published and unpublished reports and personal files summarizing previous exploration work on the property. This report is supplemented by published and available studies that document bedrock mapping and geological fieldwork conducted by the Geological Survey Branch of the BC Ministry of Energy, Mines and Petroleum Resources.

3. PROPERTY DESCRIPTION AND LOCATION

3.1 Access and Infrastructure

The Art-DL property is located approximately 75 km northeast of the town of 100 Mile House and approximately 80 km southeast of Williams Lake in the south Cariboo region of central British Columbia (Figure 1). Access to the property is provided by paved and well-maintained gravel roads. Access from 100 Mile House is via the Canim-Hendrix road, which leaves Highway 97 two km north of the town centre, and heads northeast for 50 km to service the small communities of Forest Grove and Eagle Creek. At the Eagle Creek bridge the pavement ends and the Hendrix Lake (6000) gravel road continues in a northeasterly direction for 16 km to its junction with the 7000 road. The 7000 road is followed for 6 km to its junction with the Art Creek road. The Art area is accessible from about the 5 km marker on the north trending Art Creek road. The DL area is accessible via the Deception Creek road which departs the 7000 road at the 11 km marker. The driveable portion of the Deception Creek road ends at about the 6 km marker where it has been washed out by Ledge Creek. The DL adit is located on the north side of the creek, approximately 150 m west of the washout.

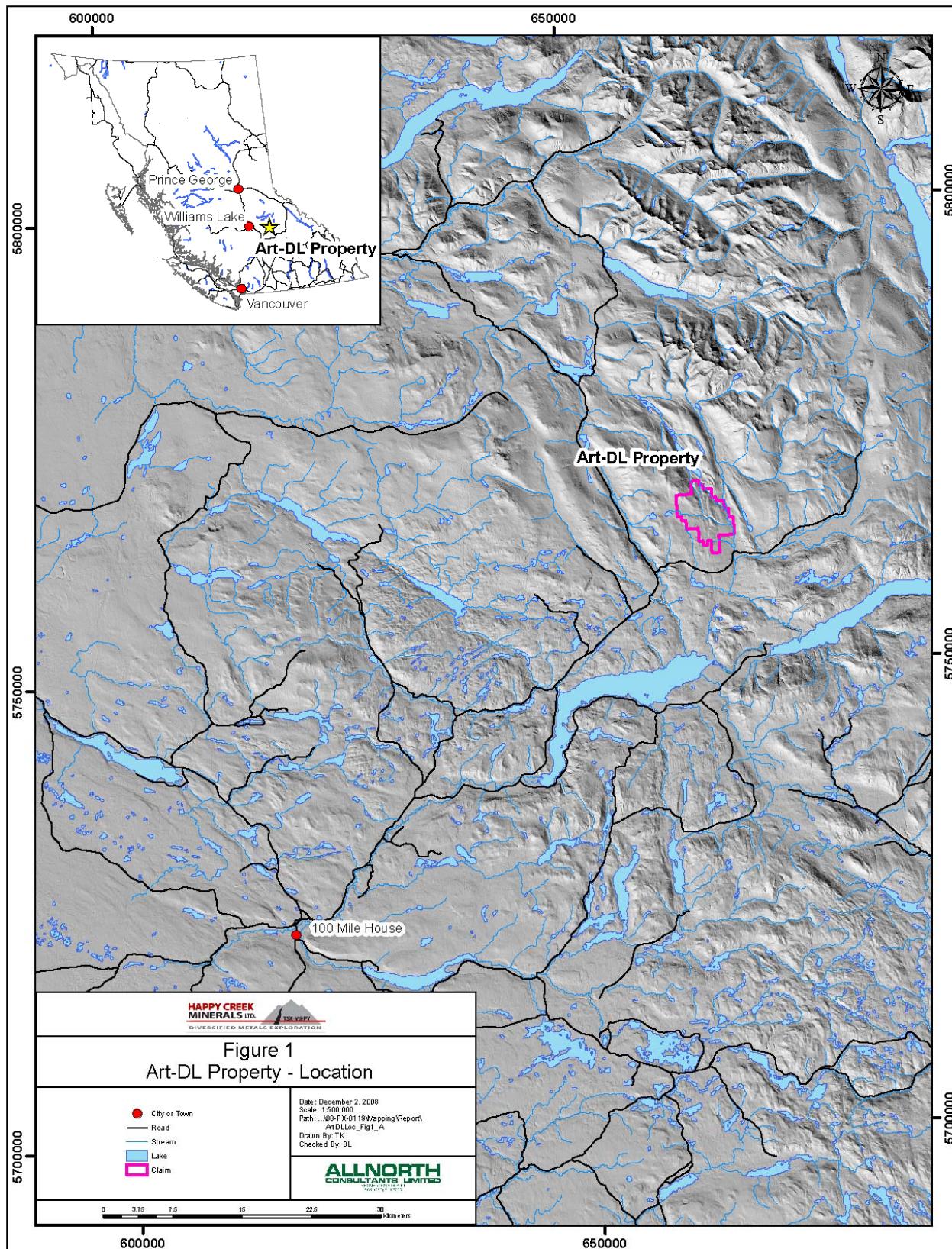


Figure 1: Art-DL Property Location.

3.2 Mineral Tenure Information

The Art-DL property is comprised of 7 contiguous MTO cell claims that cover 2625.9 ha of land in the Cariboo and Clinton mining divisions (Figure 2). The property is located between latitudes 52°03'14"N and 51°58'59"N and longitudes 120°39'05"W and 120°33'49"W and covers parts of 1:20,000 scale TRIM map sheets 093A.006, 093A.007 and 092P.097. The approximate centre of the claim block is located at latitude 52°01'04"N and longitude 120°36'30"W. All of the individual tenures are 100%-owned by Happy Creek Minerals Ltd (Table 1).

Table 1: List of Mineral Tenures (as of October 31, 2008)

Tenure Number	Tenure Type	Claim Name	Owner	NTS Map Number	Good To Date	Area (ha)
507151	Mineral	Art 8	203169 (100%)	093A	2008/dec/31	497.1
510705	Mineral	LEDGE 2	203169 (100%)	093A	2009/jan/31	497.31
518932	Mineral		203169 (100%)	093A	2009/dec/31	815.68
526703	Mineral	LEDGE EAST	203169 (100%)	093A	2008/dec/31	497.27
526708	Mineral		203169 (100%)	092P	2009/jan/31	79.645
532108	Mineral	LEDGE	203169 (100%)	093A	2008/dec/31	79.599
533315	Mineral	NEW ART	203169 (100%)	092P	2008/dec/31	159.32
					TOTAL	2625.906

3.1 Physiography and Climate

The Art-DL property is located within the Interior Wet Belt biogeoclimatic zone of the Quesnel Highlands physiographic region. Elevations range from 1000 m asl in the east to 1300 m asl in the west. The property borders Deception Creek Valley in the east and straddles Ledge Creek canyon to the north and south.

Part of the claim group has been logged, but most is covered by a mixture of mature and juvenile stands of lodgepole pine, douglas fir, paper birch and aspen; and small areas of western red cedar and white spruce. The ground cover is dominated by alder and willow saplings as well as wild rose, thimbleberry shrubs and fireweed. The property contains several small swamps, lakes and water courses.

The climate is typical of the northern interior of British Columbia. Summer temperatures average a daytime high in the 20°C range with occasional temperatures reaching the low 30°C range. October through April sees average sub-zero temperatures with extreme lows reaching -30°C from November through March. The annual precipitation is an average of 50 cm including winter snowfall. Mineral exploration may be conducted from mid-April to early December, although winter drilling is possible with a suitable water source.

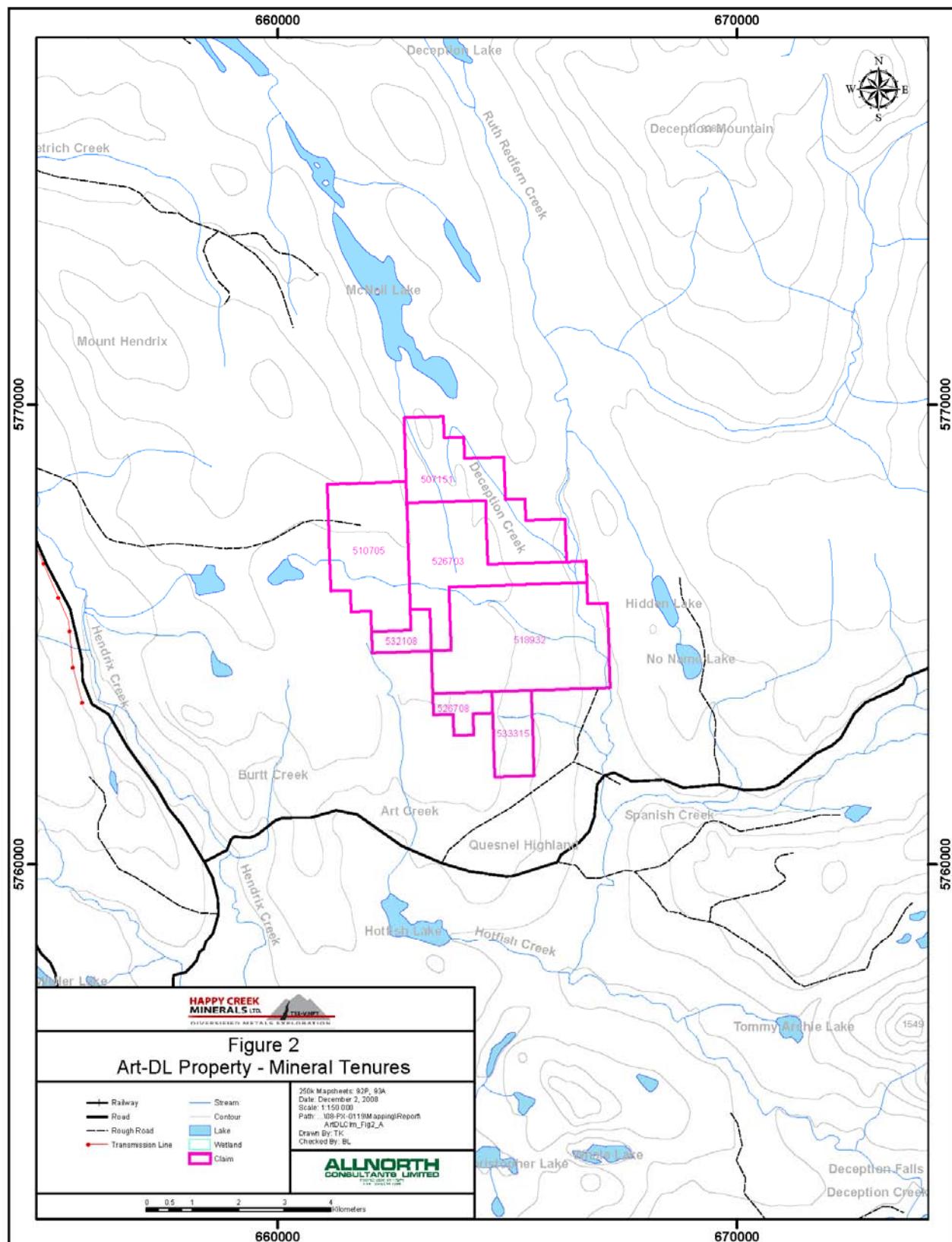


Figure 2: Art-DL Property Mineral Tenure.

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4. HISTORY

Exploration in the project area dates back to as early as 1886 with the discovery of gold-bearing veins above Ledge Creek. Shortly thereafter, a 12 m long adit and several blasted trenches were excavated to further evaluate the discovery; this work extended to 1903.

No further work is documented until 1987 when E. Scholtes staked 2 claims to cover the old workings. The claims lapsed in 1990 and were staked by David Ridley. The claims were optioned by Ridley to several junior exploration companies through the 1990s and early 2000s who conducted a range of activities including geological mapping, geochemical and geophysical survey, and diamond drilling. A summary of previous work is listed in Table 2.

Table 2: Summary of Previous Work

Year	Exploration Activities (summarized from Blann et al., 2006)
1886 to 1903	Auriferous quartz veins discovered on Ledge Creek and 12 m adit plus several trenches are excavated. Last known report refers to prospectors coming out of Hendrix Lake region with minor amounts of gold.
1987	E. Sholtes stakes 2 claims to cover the old adit workings and conducts a small work program, but claims are later allowed to lapse.
1990	D. Ridley picks up lapsed claims and stakes additional tenures to include part of Ledge Creek canyon.
1993	Pioneer Metals Corporation options DL claims from Ridley and conducts detailed geological mapping and rock sampling in the vicinity of the adit.
1995	Pioneer drops the DL option and the claims revert back to Ridley.
1997	Ridley extends the claims to include mineralized rhyodacite outcrop exposed alongside new logging road approximately 2 km west-southwest of DL adit called the Art showing.
1998	Mandalay Resources options the property and conducts a program consisting of geological mapping, soil and rock sampling, and geophysical surveys. Several anomalous zones are identified.
2001	Mandalay drills 6 NQ core holes totalling 481.52 m, but doesn't complete core logging or assay work. The core is sampled by Ridley and D. Blann and one hole returns anomalous gold-arsenic values.
2005	Happy Creek Minerals Ltd establish 6 line-km of grid and collect 182 soil samples. Fifty three (53) rock samples and 3 reconnaissance soil samples are also collected.

5. GEOLOGICAL SETTING

5.1 Regional Setting

The Art-DL property is located along the eastern margin of the Quesnel Terrane, a fault bounded component of the Intermontane Tectonic Belt. The linear, northwest-trending Quesnel Terrane is comprised of Mesozoic volcanic and sedimentary rocks that are intruded by Triassic to Cretaceous granitic rocks. Quesnel Terrane is bounded on the west by Paleozoic rocks of the Cache Creek Terrane and on the west by Paleozoic rocks of the Slide Mountain Terrane and Barkerville Terrane (Figure 3). The Eureka thrust, a northwest-trending, southwest-dipping arcuate structure that regionally places Triassic-Jurassic rocks of the Quesnel Terrane on Paleozoic rocks of the Barkerville Terrane (Figure 3) occurs just east of the property.

Quesnel Terrane in the Art-DL property area is dominated by metasedimentary, volcanic and volcaniclastic rocks of the Middle Triassic to Middle Jurassic Nicola Group, as well as stocks, dykes and sills of monzonite, diorite and syenite composition that are coeval with the development of the Nicola Group. A basal unit of the Quesnel Terrane informally referred to as the 'basal black clastic' succession (Panteleyev et al., 1996), consists of phyllitic argillite with minor siltstone and fine-grained sandstone interbeds. The basal unit is separated from the overlying volcanic-dominated succession by a fault that is believed to be a west-dipping thrust that may be sympathetic with the regional Eureka thrust that is located further east.

The Late Triassic to Early Jurassic Takomkane batholith, a large intrusive body dominated by granodiorite, lies to the west of the property. Cretaceous granitic stocks occur in close proximity to the west and to the east boundary of the claim group.

Overlap Assemblage rocks consist of Eocene volcanic and sedimentary rocks, as well as Quaternary basalt (Schiarizza et al., 2006).

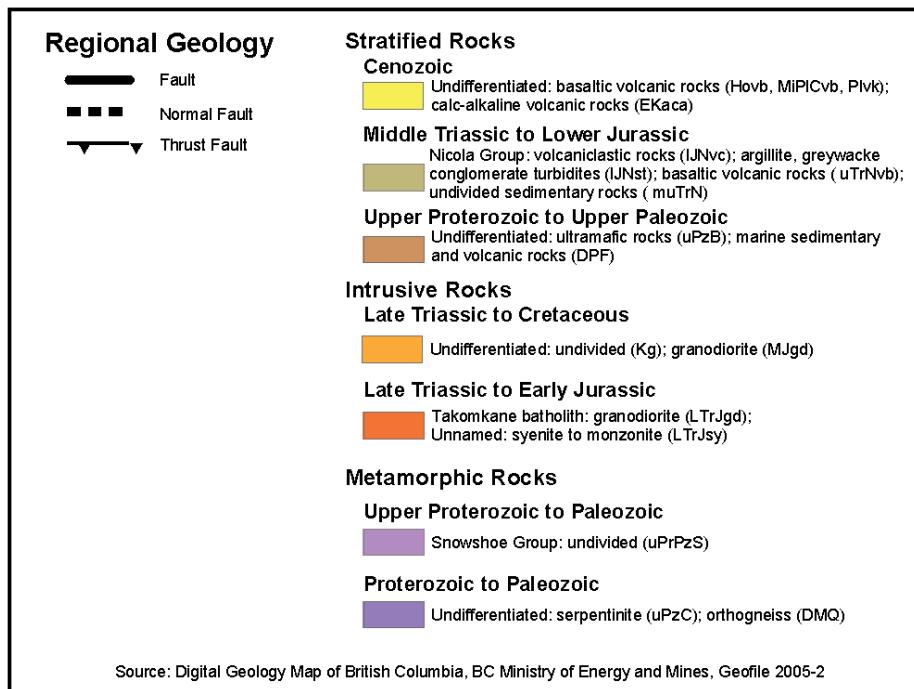
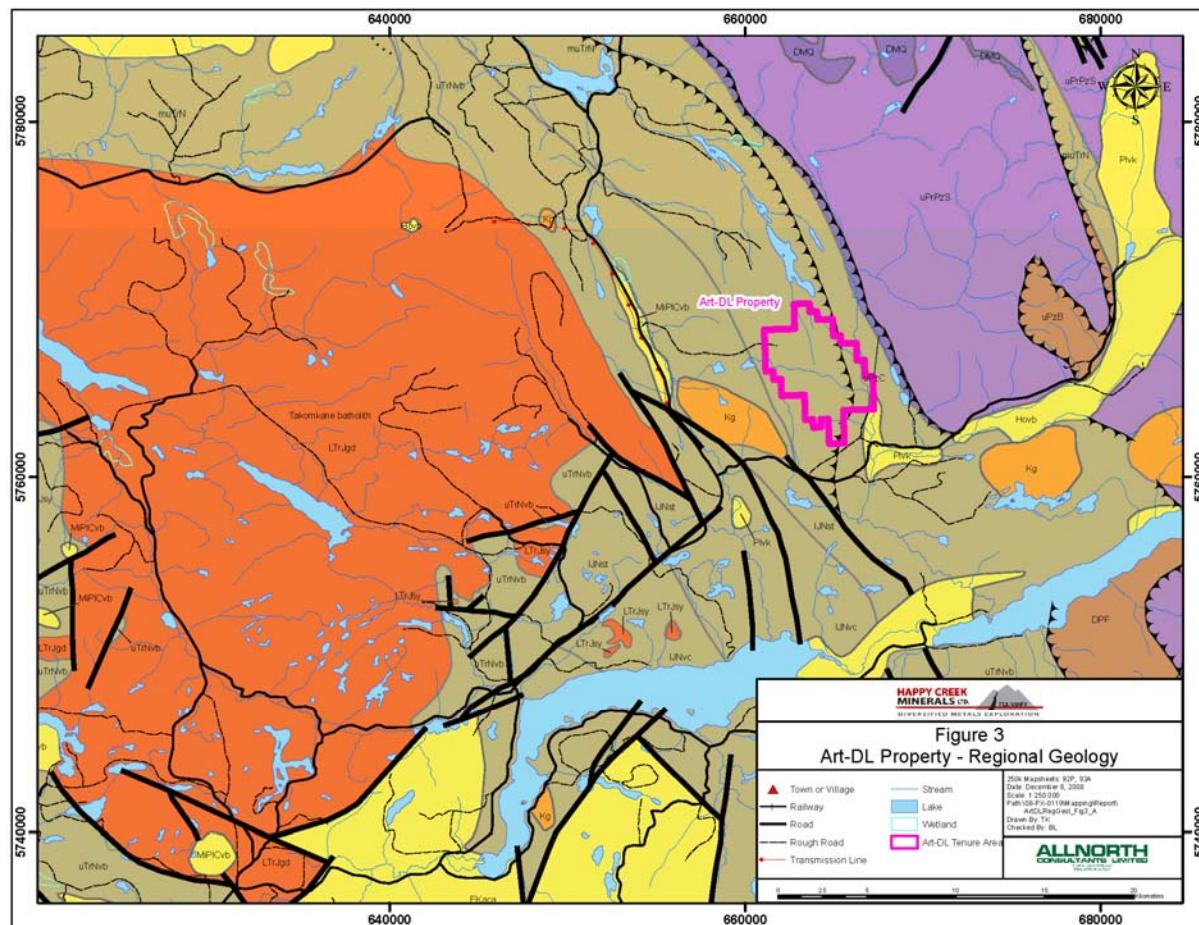


Figure 3: Regional Geology.

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5.2 Property Geology

The Art-DL property is underlain primarily by volcanic and weakly metamorphosed clastic sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group (Figure 4, in pocket). A north-trending arcuate fault, mapped regionally as a west-dipping thrust, divides the Art-DL property roughly in half. The volcanic-dominated package of the upper plate lies west of the fault and clastic sedimentary rock package of the lower plate lies east of the fault.

The volcanic-dominated package is composed primarily of a crudely to well-bedded sequence of intermediate flows, tuffs and volcanic conglomerates and/or breccias with lesser argillite, siltstone and limestone. The volcanic sequence typically strikes northwest and dips moderately to steeply to the southwest. The weakly metamorphosed clastic sedimentary package is composed primarily of 'knotty' phyllitic argillite or 'knotty phyllite'. The phyllite is characteristically dark grey to black and includes thin beds of siltstone and/or fine-grained sandstone. The finer-grained units are characterized by a well-developed planar slaty to phyllitic foliation that is observed regionally.

Intrusive rocks are not well-represented on the property, but narrow dykes and/or sills occur at or near both known showings (Art and DL). Felsic to intermediate dykes crop out in Ledge Creek just upstream of the DL adit, and a quartz diorite to diorite plug(?) is exposed near the Art showing.

5.3 Mineralization and Alteration

The Art-DL property is host to two known gold prospects, namely Art and DL.

The DL adit/showing (Minfile: 093A.089) is located in the eastern part of the property approximately 500 metres west of the confluence of Deception and Ledge creeks. It lies east of the Eureka thrust fault and west of the contact between the basal black clastic assemblage and the structurally overlying volcanic-dominated sequence. It is underlain predominantly by black slaty to phyllitic argillite that is interbedded with thin layers of grey siltstone and fine-grained sandstone. The rocks are tightly to isoclinally folded along a northwesterly trend with 30-85° east-dipping foliation that is particularly penetrative in the argillaceous rocks. Structural thickening occurs near fold hinges, and hinge zones are commonly broken and are host to massive, milky white to clear quartz veins that are between 0.5 and 2 m in width. Ledge Creek canyon, to the west of the adit, is underlain predominately by black phyllite. Narrow west-northwest trending felsic to intermediate dykes cut the phyllite in the creek canyon and contain traces of arsenopyrite and stibnite (Blann and Ridley, 2005).

The DL showing consists of several sugary to vuggy quartz-sulphide veins and 'bull' quartz veins in close proximity to the 1880s adit (Figure picture). The 'main' vein, which trends 090 degrees and dips moderately to the north, is exposed above the adit. A 1.0 metre chip sample across it assayed 42,906 ppb Au (Ridley, 1992). A 0.5 metre chip sample of the eastern hanging wall of the 'main' vein assayed 10,242 ppb Au, 17.2 ppm Ag, 713 As and 964 Pb (Blann, 2005). Sampling of vein material west of the adit also produced encouraging results, including 4.12 g/t Au over 2.0 metres, and 4.57 g/t Au over 1.6 metres (Ridley and Dunne, 1993). In general, the highest gold values are associated with vuggy quartz veins that contain pyrite and elevated levels of arsenic and lead (Blann et al., 2006; Christopher, 1999).

The Art showing consists of mineralized rhyodacite that was discovered in 1997 along a newly built logging road by D. Ridley. It is situated approximately 2 km west-southwest of the DL adit in the southern part of the property. Mineralization at the Art showing consists of 2-10% pyrrhotite-pyrite and trace to 5% arsenopyrite in association with strongly sheared and quartz-sericite-carbonate altered host rocks. Drilling of the Art showing in 2001 by Mandalay Resources encountered anomalous gold values including a 12-m intersection in hole DDH 01-2 that averaged 167 ppb Au and 3500 ppm As, but the drilling is believed to have missed its target (Ridley, 1992). While the Art showing itself is regarded as a gold target, the enclosing country rock is prospective for bulk tonnage porphyry copper+/-gold+/-molybdenum mineralization.

6. 2008 EXPLORATION PROGRAM

The 2008 exploration program consisted of:

- re-logging and sampling core from three holes of a six-hole program completed in 2001 by Mandalay Resources on the DL prospect;
- property-scale bedrock mapping over the central portion of the property to cover both the upper plate and lower plate rocks, and;
- rock, silt and soil geochemical sampling and prospecting.
- The program began in May and was completed between June and September, 2008.

6.1 Logging of 2001 Drill Core

Core from three of six holes drilled in 2001 on the Art-DL property were logged and sampled over their entirety. The three holes were collared in the vicinity of the DL showing where historical work discovered, and more recent exploration confirmed, high-grade gold mineralization in quartz+/-sulphide veins. The holes had previously been logged, but because the exploration target was a high grade gold vein system, sampling was confined to vein and/or stockwork zones. Results from the previous sampling were disappointing with the exception of a 1.5 m interval of vein material from 51.2 to 52.7 m in hole 01-AD-04 that assayed 1094 ppb Au (Ronyecz, 2001). A summary of drill hole locations, orientations and lengths are listed in Table 3.

The re-logging and sampling program was intended to evaluate the DL prospect for its prospectivity for sediment-hosted bulk-tonnage gold mineralization similar to the nearby Spanish Mountain and Frasergold deposits.

The core logging program was carried out in May of 2008. The core had been stored since 2001 on private property with core from other Happy Creek projects. The core was geotechnically logged, but core recovery and RQD had to be estimated for sections that were previously sampled. The three holes, namely 01-AD-04, -05 and -06, encountered 'knotty' phyllite, siltstone and sandstone cut by narrow quartz-carbonate+/-pyrite veins and stockworks. Pyrite also occurred as porphyroblasts, accounting for trace to 1-2% of the rock mass locally. A total of 83 core samples were analyzed, but gold values did not exceed 1.9 ppb Au in any of the samples.

Table 3: Drill Hole Collar Locations

DDH Name	UTM Easting	UTM Northing	Elevation (m)	Azimuth	Dip	Length Drilled (m)
01-AD-04	666713	5764554	1010	015°	-45°	90.22
01-AD-05	666494	5764978	1010	215°	-50	90.22
01-AD-06	666494	5764978	1010	245°	-45	90.22

6.1.1 Summary Descriptions

DDH 01-AD-04

Diamond drill hole 01-AD-04 was collared approximately 450 m south of the DL adit on grid line L2+00W, near station 2+75S. It was drilled at an azimuth of 215 degrees and dip of -45 degrees to intersect the main vein. The hole was drilled to a depth of 90.22 m. Core recovery and RQD were estimated for the following previously sampled intervals: 12.19-13.19m, 39.93-40.93m, 45.50-47.50m, 55.08-56.08m and 70.93-71.93m.

The hole intersected 'knotty' phyllitic argillite with interbeds of sandstone and siltstone throughout its entire length. The 'knotty' texture is caused by the presence of ovoid metacrysts (of Fe-carbonate - possibly siderite?) that distort the otherwise planar phyllitic fabric of the rock. The metacrysts persist at an approximate abundance of 2% throughout the hole and are typically 2 to 3 mm in diameter. However, the features account for 15 – 20% of the rock mass from 44.15 - 54.76m. Thicker interbeds of fine-grained sandstone occur from 35.35 - 41.12m, 44.15 - 54.76m and 75.38 - 83.75m. Soft sediment deformation is common from 75.30m to the end of the hole. Between 15.35 and 35.35m, sandstone layers are pinched and stretched into boudins, whereas the remainder of the hole intersects planar bedding and foliation at 20 degrees to the core axis. An interval of fault gouge and brecciated rock extends from 35.35 to 41.12m.

Pyrite is present throughout the entire length of the hole occurring locally as subhedral porphyroblasts, primarily in the sedimentary units, and as anhedral aggregates in quartz+-carbonate veins. The average abundance of pyrite is about 1%.

Veining occurs throughout the hole at 1 to 2% of the total core volume. The veins are predominately quartz (90-95%) with minor amounts of calcite (5-10%) and trace amounts of pyrite.

DDH 01-AD-05

Diamond drill hole 01-AD-05 was collared just east of the DL adit on grid line L2+00W near station 1+75N. It was drilled at an azimuth of 215 degrees and dip of -50 degrees. The hole collared in bedrock at a depth of 3.05m and was drilled to a depth of 90.22m targeting the possible extensions to auriferous quartz-sulphide veins. Core recovery and RQD were estimated for the following previously sampled intervals: 5.41-6.41m, 31.80-32.80m, 34.00-35.00m, 44.50-46.00m, 54.50-55.50m,

68.00-69.00m, 82.31-83.31m, 84.60-85.60m, 86.39-87.39m, 87.39-88.39m and 88.39-89.39m.

The hole intersected 'knotty' phyllite with interbeds of sandstone and siltstone. The 'knots' or metacrysts locally account for up to 10% of the rock. The lithology of the hole alternates every 0.02 m to 0.30 m between 80% 'knotty' phyllite/20% sandstone-siltstone and 70% sandstone/30% phyllite-siltstone from the top of the hole to 50.06 m. From 50.06 to the end of the hole is an intercalated 70% sandstone-siltstone/ 30% 'knotty' phyllite unit. The 'knotty' phyllite foliation is mainly planar at 75 degrees to the core axis. The sandstone units are primarily pinched and stretched into boudins.

Pyrite (trace to 1%) is typically associated with sandstone layers and quartz veins. The pyrite occurs throughout the hole and varies from amorphous to euhedral porphyroblasts.

Quartz-carbonate veins that occur between 3.05m and 30.50m, contain 1-2% pyrite and trace amounts of pyrrhotite. The veins from 30.50m to the end of the hole contain trace amounts of pyrite. Veins typically crosscut bedding/foliation at 10 degrees to core axis and rare larger (15 mm) veins coincide with bedding at 75 degrees to core axis for the length of the hole. Sections of larger quartz veins occur every 1 to 3 metres from 6.40m to 63.37m and typically follow foliation at 75 degrees to the core axis. The veins are comprised predominately of white quartz with 2 to 20% ankerite.

DDH 01-AD-06

Diamond drill hole 01-AD-06 was drilled from the same setup as hole 01-AD-05, but was drilled at an azimuth of 245 degrees and dip of -45 degrees. The hole collared in bedrock at a depth of 3.05m and was drilled to a depth of 90.22m. Core recovery and RQD were estimated for the following previously sampled intervals: 7.62-8.62m, 37.20-38.50m, 42.76-43.76m, 54.60-55.60m and 79.34-80.50m.

The hole intersected 80% 'knotty' phyllite with 20% thin sandstone/siltstone interbeds at 60 degrees to the core axis. Iron carbonate clasts occur in phyllite and sandstone accounting locally for up to 20% of the rock mass. Pyrite accounts for up to about 1% of the rock mass, occurring in both the knotty phyllite and the sandstone/siltstone. It occurs as anhedral to euhedral porphyroblasts up to 10mm across and as finer grained aggregates. Pressure shadows around the pyrite are common. Less than 1% of the pyrite is weakly magnetic and may be intergrown with pyrrhotite (e.g. 27.80-29.00m).

A distinctive pale green sandstone layer was intersected at 76.88 to 77.32 m. Interbedded knotty phyllite - sandstone/siltstone unit extends from 77.32 m to the end of the hole except for two pyritic lamprophyre (?) dykes that occur from 77.73 - 77.95 m and from 78.67 - 83.38 m.

Narrow veins and veinlets of quartz+/-ankerite+/-pyrite account for about 1% of the total core volume. The veins are typically 1-2 mm in width and occur at 50 to 20 degrees to the core axis. Less than 1% sub-mm pyrite is present, mainly along the selvages of the veins.

6.1.2 Geochemical Results

A total of 83 core samples were submitted for multi-element analysis. Gold geochemical results ranged from below detection limit (<0.05 ppb Au) to a maximum of 1.9 ppb Au. No anomalous gold values were found in any of the samples. Appendix H contains the drill core results and lab certificates.

6.1.3 Methodology and Data Verification

Drill holes were logged for geological and geotechnical properties. All core samples were selected by Allnorth Consultants' site geologists. Each section of core to be sampled was clearly identified and then marked with a centre line and halved using a water-cooled diamond saw. One-half of the core was returned to the core box to be stored as a reference and the other half was shipped to the Acme Analytical Laboratories (Acme) in Vancouver for chemical analysis. Eighty-eight (83) core samples were labelled, cut and bagged. Fourteen (14) quality control samples (blanks, duplicates and standards) were inserted into the sample stream at regular intervals following a prescribed sequence. Included in each batch of twenty core samples was one certified reference standard, one blank sample comprised of sterile pulp and one duplicate core sample. Individual samples were labeled, placed in plastic sample bags, sealed and stored at a secure facility in Forest Grove, BC, prior to shipment. Groups of samples were then placed into durable rice bags and secured for shipping.

All samples were crushed, pulverized and the resulting sample pulps were analyzed. The drill core was jaw crushed until 70% passed through a 10 mesh (2 mm) screen. The sample was split and a 250 g riffle split sample was then pulverized in a mild-steel ring-and-puck mill until 95% passed through a 150 mesh (100 µm) screen. The remaining coarse reject portions of the samples remain in storage at Acme. The samples were analyzed using Acme's assay procedure 1DX-15; a 1:1:1 Aqua Regia Digestion with an ICP-MS finish. The reader is referred to <http://www.acmelab.com> for details of these analytical procedures. The assay certificates are located in Appendix E: Core Sample Acme Lab Results and Certificates of Analysis.

Rock Quality Designation (RQD) was conducted on the recovered core greater than 100 mm in length. Core pieces that were not hard and sound were not counted even though they were 100 mm in length (Deere, 1964).

RQD is defined as the quotient: $RQD = (\text{Sum of } 10)/\text{Ltot} * 100\%$

Where: (Sum of 10) = sum of length of core pieces equal to or longer than 100 mm; and Ltot = total length of core run.

RQD index is classified using the following table:

Table 4: RQD Classification Table

RQD	Rock mass quality
< 25%	Very poor
25-50%	Poor
50-75%	Fair
75-90%	Good
90-100%	Excellent

6.2 Bedrock Mapping

Bedrock mapping of the Art-DL property took place between June 16 and July 19, 2008, by a 4-person team including Mark Ralph and Sheri Burt (PGeo) and assistants Jason Delaney and Brian Kornichuk. Exposed bedrock on the property is scarce and accounts for less than 5% of the claim area. Outcrops are generally limited in size and are restricted to drainages, ridges and road cuts.

The property is underlain by volcanic and sedimentary rocks of the Upper Triassic to Lower Jurassic Nicola Group (Figure 4, in pocket). A north-trending arcuate, west-dipping thrust fault divides the Art-DL property roughly in half. The volcanic-dominated package of the upper plate lies west of the fault and clastic sedimentary rocks of the lower plate lie east of the fault.

The volcanic-dominated package of the upper plate is composed primarily of a crudely to well-bedded sequence of augite-phyric andesite flows, andesitic tuff and crystal tuff, volcanic conglomerate/breccia, argillite, siltstone and limestone. The most common rocks in the package are augite-phyric andesite flows (map unit Ap). The flows are medium to dark grey and greenish-grey, and are characterized by phenocrysts of augite, 1 to 20 mm across, that locally comprise up to 15% of the total rock volume.

Layers of well-bedded andesitic tuff and crystal tuff (map unit At) are interbedded with the other volcanic and sedimentary units of the upper plate. The tuffaceous units are typically medium to dark grey and greenish-grey, fine-grained with occasional mm-sized phenocrysts of augite. Locally, augite phenocrysts account for up to 10% of the total rock volume. The unit is calcareous where it is in close proximity to limestone and in areas is finely laminated suggesting that it was waterlain.

Volcanic conglomerate/breccia (map unit Vc) is intercalated with andesite tuff. It is medium to dark grey or greenish-grey and is comprised of unsorted to poorly sorted subrounded to subangular polymictic pebbles, cobbles and boulders of primarily volcanic material up to about 0.5 metres across. The matrix is composed primarily of tuffaceous material. Pebbles of quartz or chert were observed in one locality.

The volcanic units locally display diffuse, discontinuous zones of secondary epidote and chlorite, and locally calcite veining, that are regarded to represent weak localized propylitic alteration. Less common are narrow zones of silica-flooding. Disseminated pyrite may or may not accompany the alteration.

Argillite (map unit Ar), siltstone (map unit SI) and limestone (map unit Lm) form minor components of the volcanic sequence of the upper plate. The limestone unit contains 2-3 mm 'quartz eyes' and about 1% pyrite as disseminations and fine stockworks with trace amounts of chalcopyrite.

The clastic sedimentary package is composed primarily of 'knotty' phyllitic argillite or 'knotty phyllite' (map unit Kp). The unit is characteristically dark grey to black with a silvery sheen and is very fine grained with a strongly developed foliation. It is locally graphitic. The phyllite is commonly intercalated with thin beds of siltstone and/or fine-grained sandstone. The 'knotty' fabric commonly observed in the phyllite is due to the development of metacrysts of a Fe-carbonate (?) that can form up to several percent of the rock. Weathering of these features produces vuggy cavities and iron staining. Quartz veins and veinlets are common and typically contain from trace amounts to 10% pyrite. Silicification of wallrock can occur where vein or stockwork zones are well-developed, but the alteration envelopes are generally narrow. Porphyroblasts of cubic pyrite occur locally as a minor constituent of the clastic sedimentary package.

Intrusive rocks are not well represented on the property. A small swarm of narrow felsic to intermediate dykes were observed in the Ledge Creek canyon west of the DL adit. The dykes are typically less than 0.5 metres in width and both cross-cut and follow the northwest-trending fabric of the host clastic rocks. Near the Art occurrence, a small altered granodiorite dyke is associated with a mineralized shear zone. The close proximity of dykes to mineralized showings suggests a possible genetic link, although this is yet to be proven.

6.3 Geochemical Surveying

6.3.1 Soil Geochemical Survey

A total of 313 soil samples were collected in 2008. A 1.2 km by 2.0 km grid was established approximately 2.6 km north-northwest of the DL showing. The grid consists of seven east-west lines spaced 200 m apart. Two other soil lines were also sampled; one 600 m line to the south of the grid and one 1200 m line to the southwest of the grid. Each flagged grid line was located using GPS, compass and tight chain. The grid lines are plotted in Figure 4 (in pocket). Samples were collected at 50 m intervals on all of the lines. Samples were taken from the 'C' soil horizon using either a mattock or tree planting shovel and collected in kraft paper bags, tied closed and hung to dry outdoors for a period of about two weeks. The dried soil samples were then shipped via Greyhound to Acme Analytical Laboratories of Vancouver, BC for multi-element analysis.

All samples were dried at 60°C, sieved through 80 mesh and the resulting 100 g samples were dried again at 60°C and analyzed. The remaining coarse reject portions of the samples remain in storage at Acme. The samples were analyzed using Acme's assay procedure 1DX-15; a 1:1:1 Aqua Regia Digestion with an ICP-MS finish. The reader is referred to <http://www.acmelab.com> for details of these analytical procedures. The assay certificates are located in Appendix I: Acme Lab Results and Certificates of Analysis.

Figures 5 through 8 illustrate the distribution of gold, silver, copper and antimony in soils. Full analytical results area presented in Appendix H and I.

Table 5: Statistical Results for 2008 Soil Samples

# of Samples = 313				Percentiles		
	Min	Max	Mean	80%	90%	95%
Gold (Au ppb)	0.5	282.7	7.31	6.4	10.1	17.2
Silver (Ag ppm)	0.1	5.4	0.7	1.0	1.5	1.8
Copper (Cu ppm)	6.9	284.9	40.3	51.6	71.7	107.1
Antimony (Sb ppm)	0.1	52.3	1.54	1.6	2.3	3.4

*For statistical purposes the below detection limit values are equal to ½ the detection limit based on the detection limit for each element.

Most of the grid is underlain by rocks of the basal black clastic succession and several interesting gold and silver anomalies were identified. A narrow north-trending gold anomaly, defined by values up 110.9 ppb Au, extends across five lines (from L66200 to L67000) near the western edge of the grid. Also, there are several small gold+-silver anomalies on the south-central and north-central areas of the grid. Two north-northeast trending silver anomalies cut across the central part of the grid. These linear anomalies are defined by silver values greater than 1 ppm Ag with individual values reaching 5.4 ppm Ag.

The two individual soil lines are underlain by propylitically-altered andesitic tuff and volcanic conglomerate. The highest gold value (282.7 ppb Au) came from the portion of soil line L65000 located southwest of the main grid.

6.3.2 Silt Geochemical Survey

A total of 33 silt samples were collected from the Art-DL property in 2008. Silt samples were collected in standard kraft bags, tied closed and air dried at room temperature for 2 to 3 weeks before being shipped to Acme Analytical Laboratories in Vancouver, BC, for multi-element analysis.

All samples were dried at 60°C, sieved through 80 mesh and the resulting 100 g samples were dried again at 60°C and analyzed. The remaining coarse reject portions of the samples remain in storage at Acme. The samples were analyzed using Acme's assay procedure 1DX-15; a 1:1:1 Aqua Regia Digestion with an ICP-MS finish. The reader is referred to <http://www.acmelab.com> for details of these analytical procedures. The assay certificates are located in Appendix I: Acme Lab Results and Certificates of Analysis.

Sample locations are shown on Figure 4 and selected results are presented in figures 5 through 8. Full analytical results are presented in Appendix H and I.

Results for gold ranged from a low of <0.5 ppb Au to a high of 882.7 ppb Au. The location of the high value is between lines L66800N and L67000N and about 250 m west-northwest a 110.9 ppb Au soil sample that in part defines an interesting north-trending gold soil geochemical anomaly.

6.3.3 Rock Geochemical Survey

A total of 40 rock samples were collected from across the Art-DL property in 2008 and submitted for geochemical analysis. Samples were secured in labelled polyethylene bags and shipped to Acme Analytical Laboratories in Vancouver for multi-element analysis.

All rock samples were crushed, pulverized and the resulting sample pulps were analyzed. The rock samples were jaw crushed until 70% passed through a 10 mesh (2 mm) screen. The sample was split and a 250 g riffle split sample was then pulverized in a mild-steel ring-and-puck mill until 95% passed through a 150 mesh (100 µm) screen. The remaining coarse reject portions of the samples remain in storage at Acme. The samples were analyzed using Acme's assay procedure 1DX-15; a 1:1:1 Aqua Regia Digestion with an ICP-MS finish. The reader is referred to <http://www.acmelab.com> for details of these analytical procedures. The assay certificates are located in Appendix I: Acme Lab Results and Certificates of Analysis.

Sample locations are shown on Figure 4 and results for selected elements are shown on figures 5 through 8. Full analytical results area presented in Appendix H and I.

Analytical results for gold for all of the rock samples were low with the highest value being only 28.5 ppb Au. Analytical results for arsenic produced two anomalous values, 151.3 ppm As (sample # 853902 along the western edge of the mapped area) and 261.8 ppm As (sample # 493380 located about 100m west of the DL adit), with the later sample corresponding with 28.7 ppm Sb. Analytical results for copper, lead and zinc are regarded to be about at or below background levels. Two samples (493374 and 493384) returned anomalous molybdenum values of 48.5 and 46.1 ppm, respectively.

7. INTERPRETATION AND CONCLUSIONS

The 2008 exploration program consisted of logging and sampling core from three 2001 diamond drill holes, property-scale bedrock mapping and soil, silt and rock geochemical sampling.

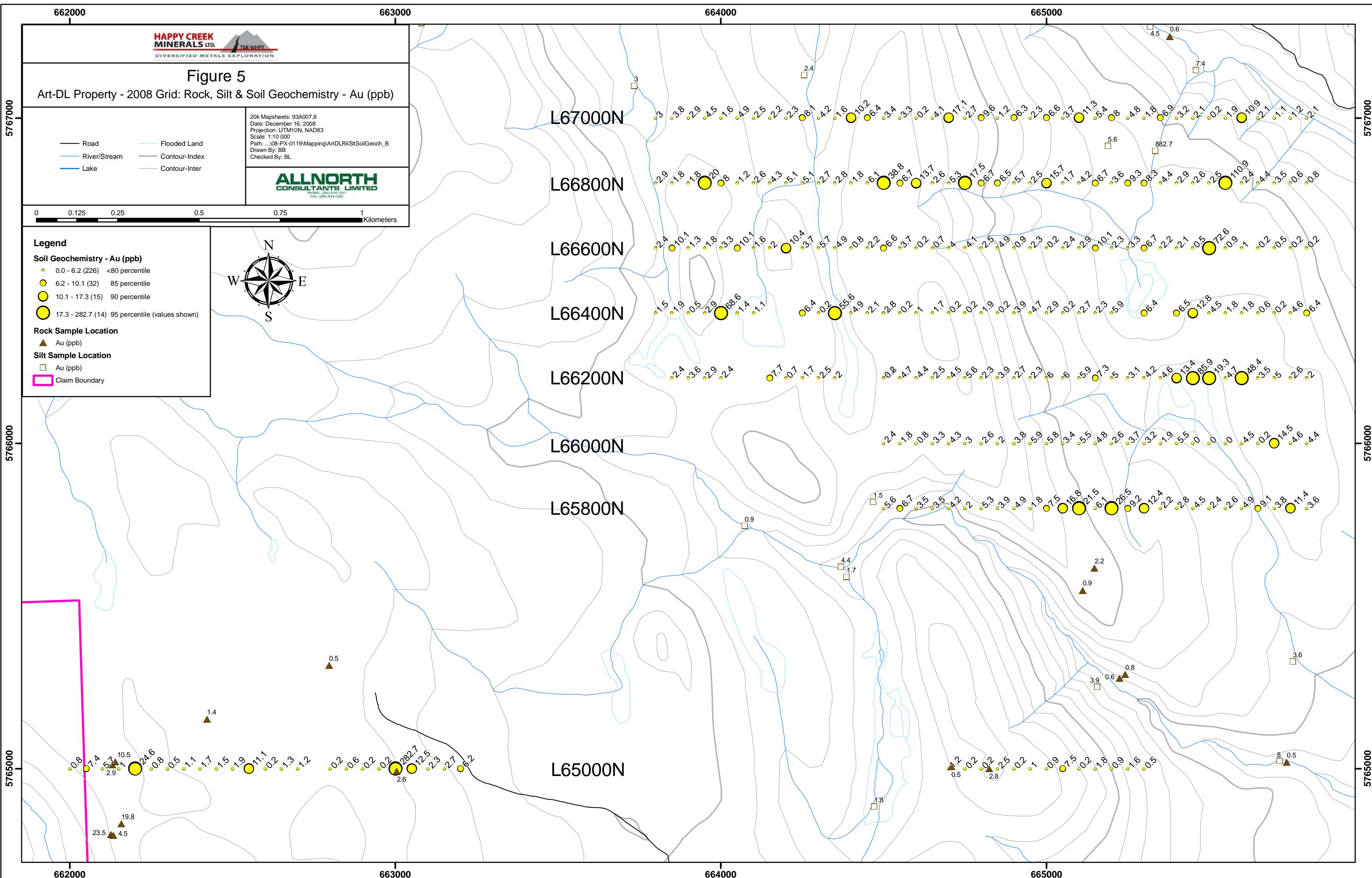
Logging and sampling of core from three 2001 diamond drill holes was carried out in May of 2008 to re-evaluate the DL area for its potential to contain a sediment-hosted bulk tonnage gold deposit. The three holes, 01-AD-04, 01-AD-05 and 01-AD-06, encountered knotty phyllitic argillite interbedded with fine-grained sandstone and siltstone layers – lithologies typical of the 'basal black clastic' succession of the Nicola Group. Holes 01-AD-05 and 01-AD-06, drilled near the DL adit, failed to intersect the 'main' vein. Reasons for this are not certain, but the drill may have been sited too far to the west of the target and each of the holes was drilled on an azimuth that would not have compensated for the collar location. However, the two holes did cut numerous quartz+-carbonate+-pyrite veins, veinlets and stockwork zones. Hole 01-AD-04, drilled approximately 450 m south of the DL adit, intersected one auriferous vein that assayed 1094 ppb Au over a 1.5 m sample interval, previously reported by Ronyez (2001). Geochemical sampling of the entire length of each hole in 2008 did not encounter any bonanza grade gold veins, nor any bulk mineable gold grade mineralization. A total of 83 core samples were analyzed, but gold values did not exceed 1.9 ppb Au in any of the samples.

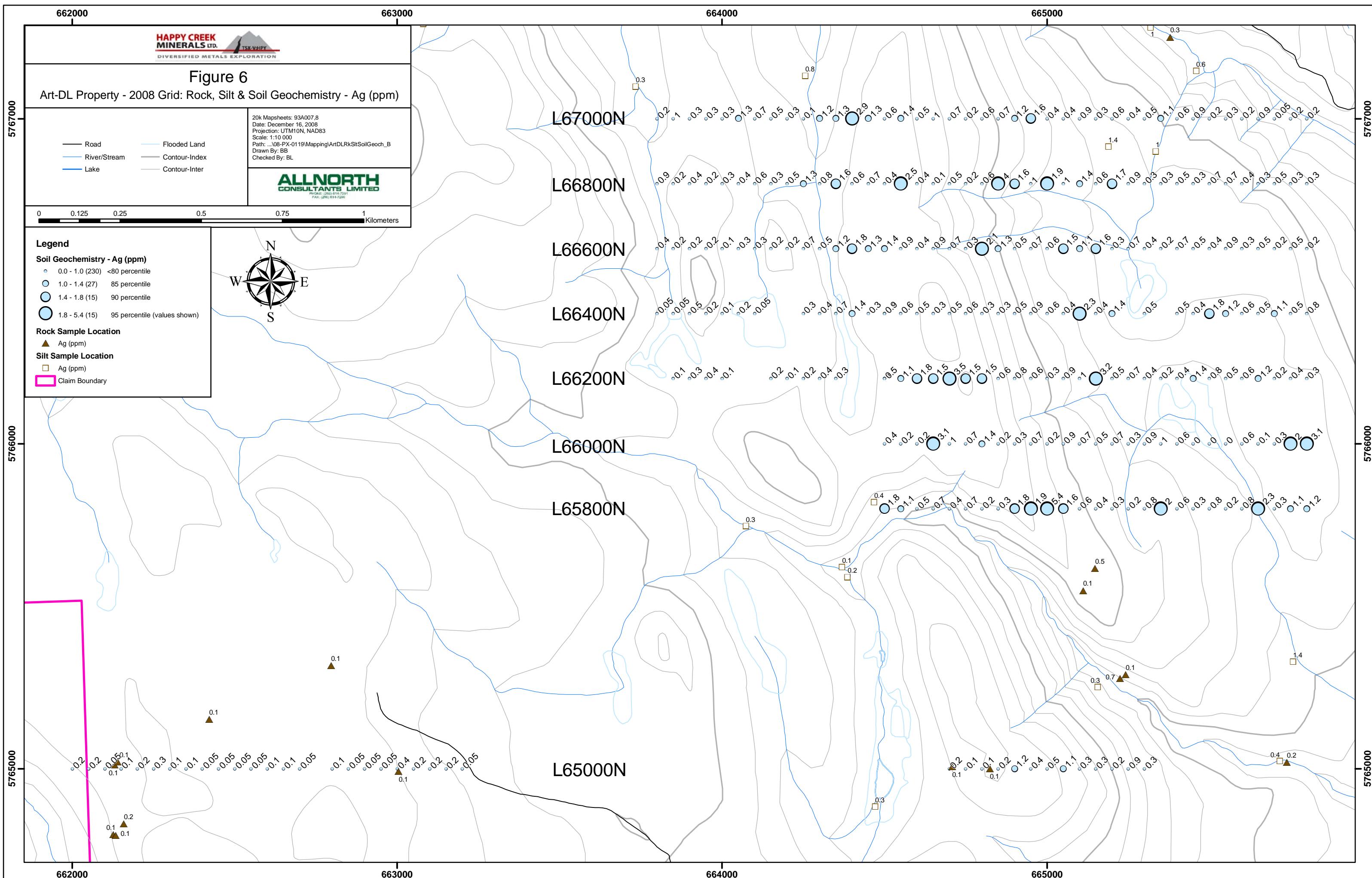
Bedrock mapping of the property in 2008 further identified the distribution of the upper volcanic sequence, dominated by intermediate augite-phyric flows and tuffs, volcanic-derived conglomerates and sandstones, and the 'basal black clastic' succession, a metasedimentary sequence characterized by knotty phyllitic argillites. The field work also defined the arcuate north-trending contact that separates the two distinct sequences. The contact is mapped regionally as a west-dipping thrust fault, although evidence in support of this conclusion is not evident on the property. However, dramatic changes in bedding attitudes in the volcanic-dominated sequence west of the thrust fault suggest that numerous rotated structural blocks exist while the metasedimentary sequence east of the thrust has been subjected to higher a degree of stress and strain as evidenced by the development of penetrative fabric in the fine-grained rocks.

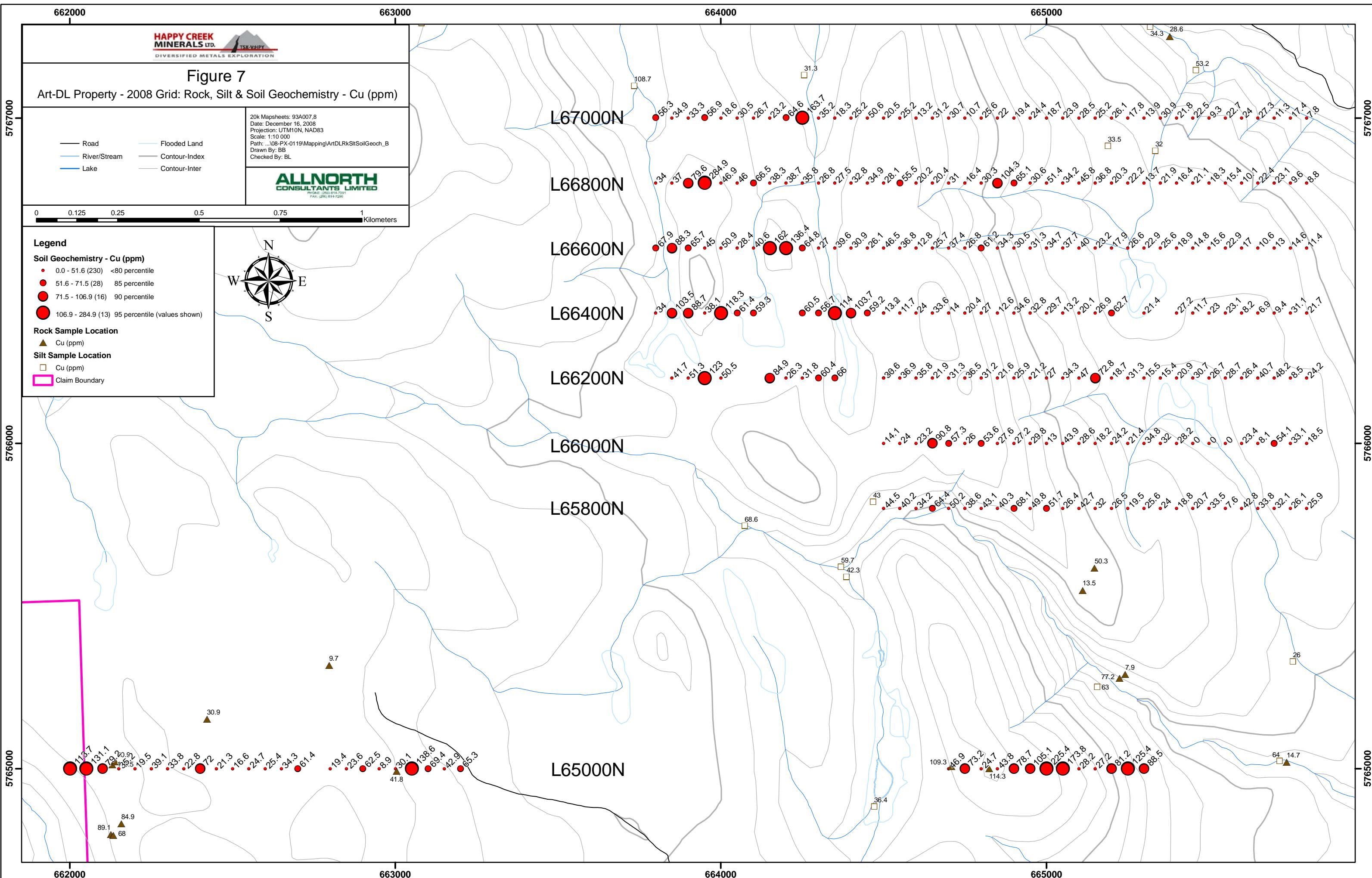
A soil geochemical sampling program centred north-northwest of the DL showing in an area underlain by the basal black clastic succession, identified several gold, gold-silver and/or silver anomalies. One north-trending gold anomaly is coincident with a 2008 silt sample that produced a value of 882.7 ppb Au.

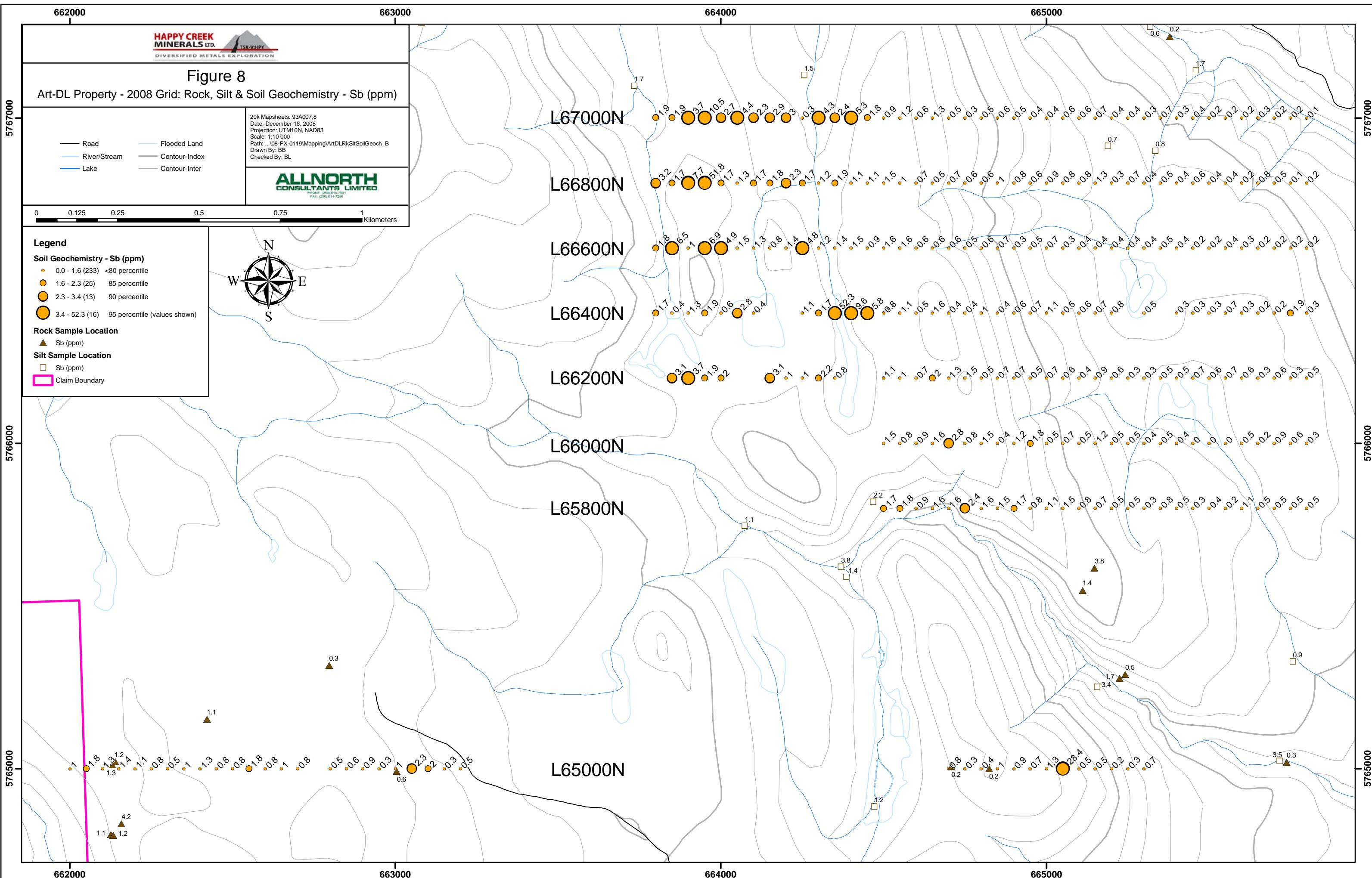
The Art-DL property has the potential to host both bonanza-grade gold vein mineralization and sediment hosted, bulk tonnage gold mineralization. The east half of the property has a geological setting that is similar to two nearby sediment-hosted gold deposits, namely Spanish Mountain and Frasergold. The Spanish Mountain property is host to a NI 43-101 compliant resource of 67.06 million tonnes grading 0.81 g/t Au (Peatfield and Giroux, 2008), while the Frasergold property is host to a 'historic resource' of 3.4 million tons grading 0.05 oz Au/t (Campbell et al., 1991).

Exploration should continue to focus on both bonanza-grade gold vein mineralization and low-grade bulk tonnage gold mineralization on the east side of the property, particularly north of the DL adit where encouraging soil and silt anomalies have been identified.









8. RECOMMENDATIONS

The Art-DL property is split by a north-trending structure that separates two different two geologic environments. The western half of the property is comprised of volcanic sequence of intermediate flows, tuffs and related fragmental and sedimentary rocks while the eastern half of the property is underlain by a marine clastic metasedimentary sequence dominated by phyllitic argillite, siltstone and sandstone.

The western half of the property has the potential to host a number of deposit types related to porphyry systems. Auriferous shear-hosted sulphide mineralization occurs at the Art prospect and has not been adequately evaluated. While little time was spent on the prospect in 2008, it is recommended that the further work, consisting of mechanical trenching, mapping and sampling, be conducted to further define the controls on mineralization.

The eastern half of the property has the potential to host economic deposits of both bonanza-grade gold vein mineralization and low-grade bulk tonnage gold mineralization. Bonanza-grade gold vein mineralization exists at the DL adit/showing. It is recommended that detailed prospecting for this style of mineralization continue. The gold, gold-silver and silver soil anomalies that were identified during the 2008 exploration program, particularly upstream from the highly anomalous silt sample location (282.7 ppb Au) should be followed up. Infill grid lines, at 100-metre spacing should be established and soil geochemical sampling completed. Detailed, grid based geological mapping should also be completed across the grid area and, where warranted, follow-up excavator trenching and sampling should ensue. Estimated cost of the proposed program is \$116,500.

9. STATEMENT OF 2008 PROJECT COSTS

Period April 1 2008- December 05 2008

	#		
Wages	days	\$/day	Totals
D. Blann, P.Eng	1	\$ 650.00	\$650.00
D Black- Prospector	20	\$ 325.00	\$6,500.00
T. Ridley - Field Tech	19.5	\$ 160.00	\$3,120.00
D. Ridley, Prospector	<u>12</u>	\$ 400.00	<u>\$4,800.00</u>
	<u>51.5</u>		<u>\$15,070.00</u>

Disbursements

Truck - Black	18	\$ 100.00	\$1,800.00
Truck - Ridley	6	\$ 100.00	\$600.00
ATV - Black	14	\$ 75.00	\$1,050.00
ATV - Ridley		\$ 75.00	\$0.00
 Room/Board sat and cell phone, radios -	51.5	\$ 100.00	\$5,150.00
Communications	51.5	\$ 5.00	\$257.50
Field Supplies- saws, tools, safety, camp construction items, geological field equip			\$100.00

Analyses

Acme Analytical Laboratories \$8,672.99

Contractors

Allnorth Consultants Limited \$15,528.64

Hendex Exploration etc	\$12,481.13
Shipping (Bus, Courier)	\$175.00
Drafting & Reproductions	\$1,800.00
Report	\$3,500.00
	<hr/>
	\$51,115.26

Wages and Disbursements	\$66,185.26
12% Management Fee	<u>\$7,942.23</u>
Total	\$74,127.49

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10. COST OF PROPOSED PROGRAM

Exploration Work type					Totals
Personnel (Name)* / Position		Days	Rate	Subtotal*	
Geologist (PGeo)	trench layout, mapping	21	\$550.00	\$11,550.00	
Geological assistant	sampling	21	\$250.00	\$5,250.00	
Prospector	prospecting, sampling	28	\$450.00	\$12,600.00	
Assistant	sampling	28	\$250.00	\$7,000.00	
				\$36,400.00	\$36,400.00
Office Studies					
Project Preparation	Research & preparation for field	3.00	\$500.00	\$1,500.00	
				\$1,500.00	\$1,500.00
Geochemical Surveying		No.	Rate	Subtotal	
Soil Samples		500.0	25	\$12,500.00	
Rock Samples		200.0	35	\$7,000.00	
				\$19,500.00	\$19,500.00
Mechanical Trenching		No.	Rate	Subtotal	
small track mounted excavator	layout, mob/demob, trenching, rehab	10.0	\$2,000.00	\$20,000.00	
				\$20,000.00	\$20,000.00
Transportation		No.	Rate	Subtotal	
4x4 pickup 1	100/day	21.00	\$100.00	\$2,100.00	
4x4 pickup 2	100/day	28.00	\$100.00	\$2,800.00	
Fuel	100/day	28.00	\$100.00	\$2,800.00	
				\$7,700.00	\$7,700.00
Accommodation & Food	Rates per day				
108 person-days	120 person days, camp lodging and meals	108.00	\$120.00	\$12,960.00	
				\$12,960.00	\$12,960.00
Miscellaneous					
Field Supplies (consumables)	Bags, tags, etc, misc equipment	1.00	\$1,000.00	\$1,000.00	
Maps		1.00	\$500.00	\$500.00	
Assessment Report		1.00	\$5,000.00	\$5,000.00	
				\$6,500.00	\$6,500.00
SUBTOTAL					\$104,560.00
Contingency (10%)					\$7,930.00
GST (5%)					\$3,965.00
TOTAL					\$116,455.00

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11. REFERENCES

- Adamec, J. (1999): Report on the Art Property, Cariboo Mining Division, British Columbia; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 25800.
- Blann, D. and Ridley, D. (2005): Geological Report on the Art-DL Mineral Claims, Cariboo and Clinton Mining Division; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 27753.
- Campbell, K.V., Gruenwald, W., Walters, L. and Schatten, M. (1991): Results of the 1991 Exploration Program, prepared for Asarco Inc. and Eureka Resources Inc.
- Christopher, P. (1999): Assessment Report on the DL Claims, Ledge Property, Canim Lake Area, Mandalay Resources Corporation; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 26019.
- Deere, D. U., 1964: Technical Description of Rock Cores for Engineering Purposes. In Rock Mechanics (ed. Fairhurst, C.), American Institute of Mining, Metallurgical and Petroleum Engineers, pp. 237-302.
- Panteleyev, A., Bailey, D.G., Bloodgood, M.A. and Hancock, K.D. (1996): Geology and mineral deposits of the Quesnel River – Horsefly map area, central Quesnel Trough, British Columbia; *British Columbia Ministry of Employment and Investment*, Bulletin 97, 155 pages.
- Peatfield, G.R. and Giroux, G.H. (2008): Resources Estimate Report on the Spanish Mountain Sediment-Hosted Vein Gold Deposit, Cariboo Mining Division, British Columbia, Canada; Report for Skygold Ventures Ltd., 67 pages.
- Ridley, D. (1992): Prospecting Report on the Deception Ledge Property; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 22460.
- Ridley, D. (2001): Diamond drilling report on the Art 1-4 Mineral Claims, Cariboo Mining Division, British Columbia; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 26821.
- Ridley, D. and Dunn, D. (1993): Geological and Geochemical Report on the Deception Ledge Property; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 23201.
- Ronyecz, E. (2001): Report on the Ledge Property, Cariboo Mining Division, British Columbia; *British Columbia Ministry of Energy Mines and Petroleum Resources*, Assessment Report 26607.
- Schiarizza, P. and Boulton, A. (2006): Geology of the Canim Lake Area NTS 92/P. BCMEMPR Open File 2006-8.

12. STATEMENT OF QUALIFICATIONS

I, Robert (Bob) A. Lane, of 2606 Carlisle Way, Prince George, B.C., do hereby certify that:

1. I visited the Art-DL property on May 7 and on July 17, 2008.
2. I authored the assessment report with the assistance of Diana Benz.
3. I graduated from the University of British Columbia in 1990 with a M.Sc. in Geology.
4. I am a Professional Geoscientist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of British Columbia, license #18993, and have been a member in good standing since 1992.
5. From 1990 until present I have been continuously employed as a geologist in mining and mineral exploration sector.

Dated at: Prince George the 19th day of December 2008.



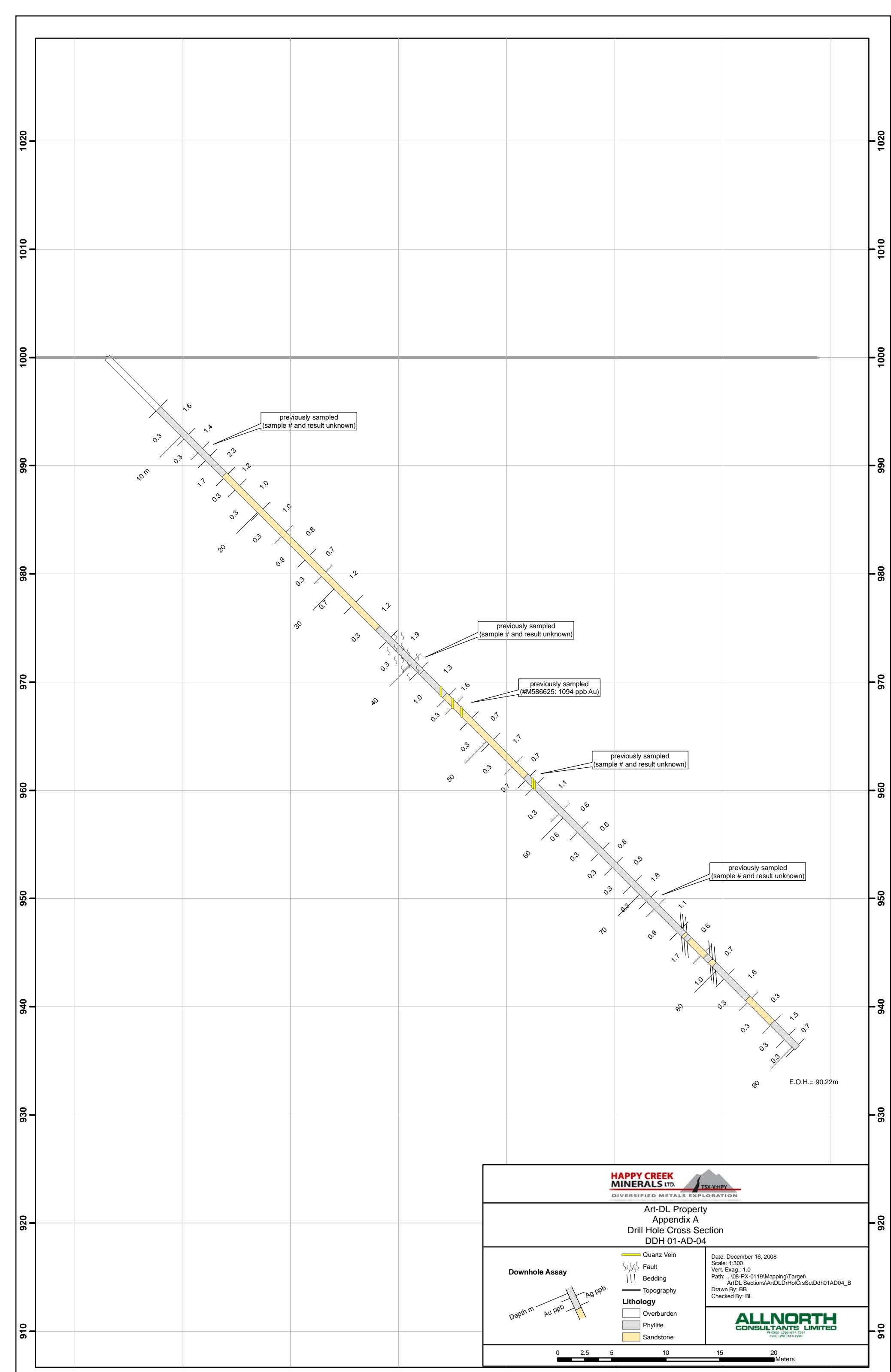
A handwritten signature of "R. A. Lane" is written over a circular professional seal. The seal has a double-line border and contains the following text:
PROFESSIONAL
PROVINCE OF
R. A. LANE
BRITISH COLUMBIA
GEOLOGIST

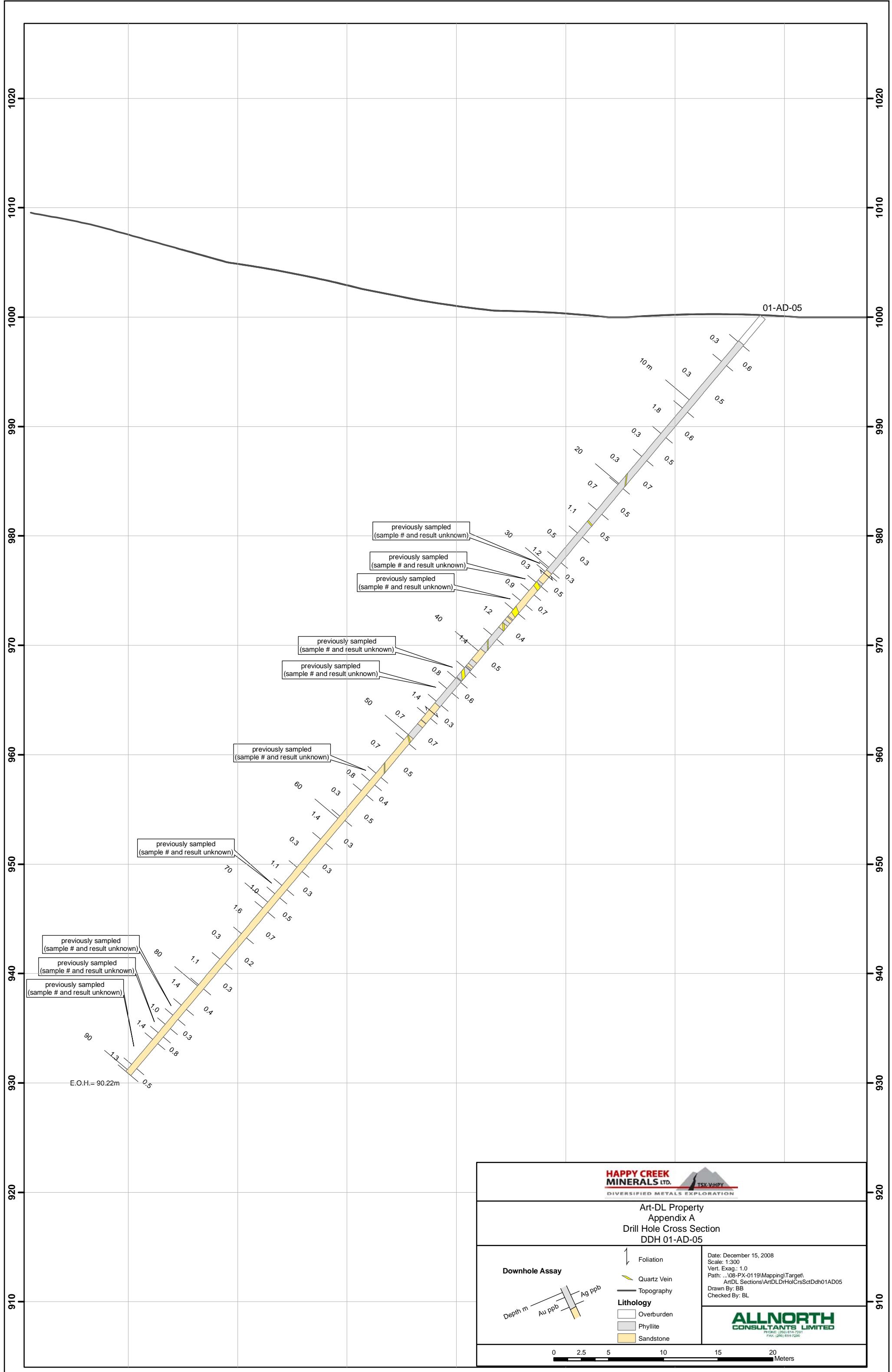
APPENDIX A

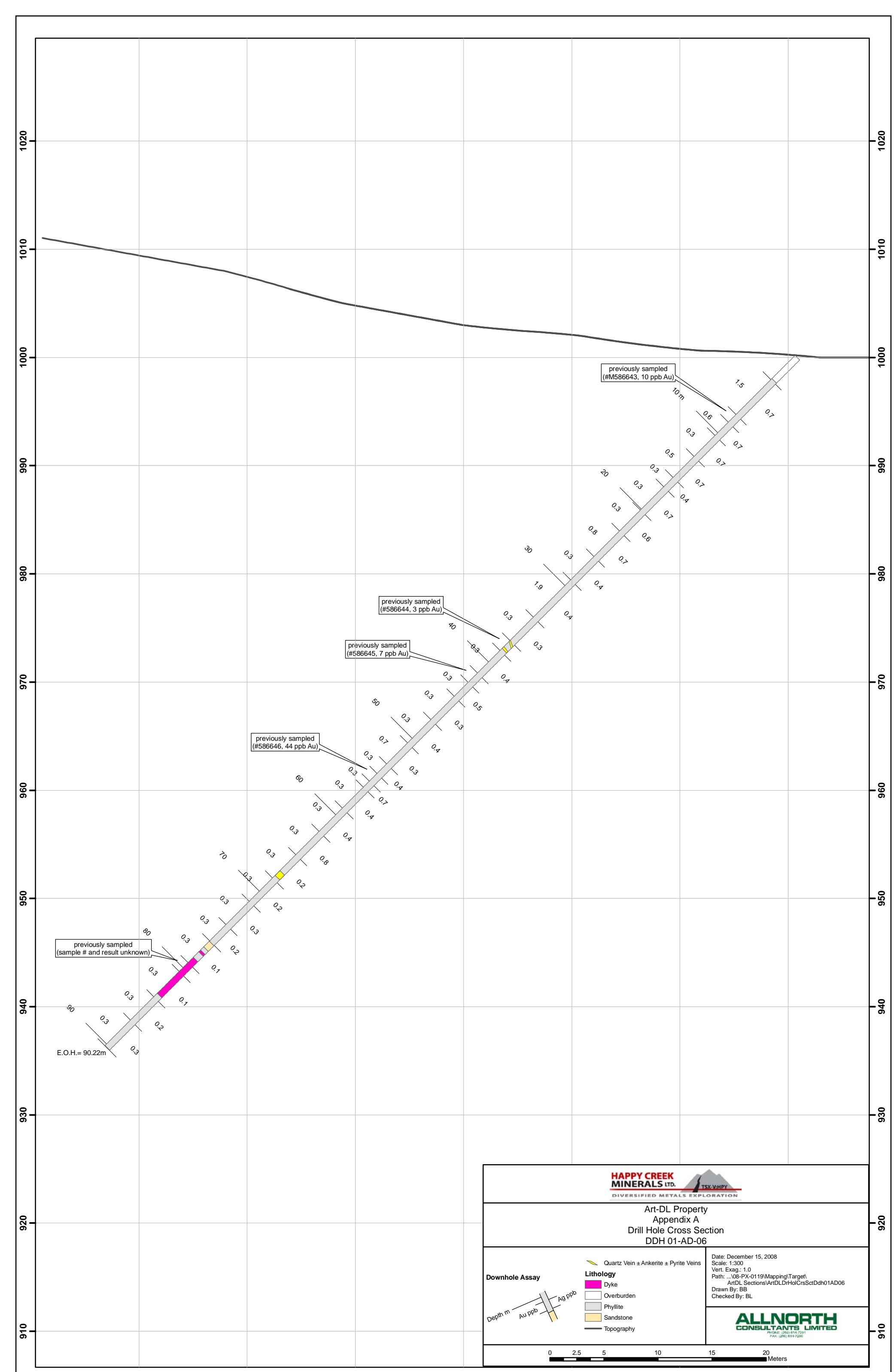
DIAMOND DRILL CROSS SECTIONS

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Art-DL 2008 Assessment Report 081211_Final.doc







APPENDIX B

CORE PHOTOGRAPHS

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Art-DL 2008 Assessment Report 081211_Final.doc



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2011 PG Pulp Mill Road, Prince George, BC, V2L 4V1

Phone (250) 614-7291 / Fax (250) 614-7290

PHOTO SHEET

JOB NUMBER: 08PX0119

CLIENT: Happy Creek Minerals Limited

PROJECT: Exploration & Project Management - Hen

DESCRIPTION: 2001 Art-DL Core Photographs



ART-DL DDH 01-AD-04 Interval 3.05 to 14.53 m.jpg



ART-DL DDH 01-AD-04 Interval 6.71 to 19.06 m.jpg



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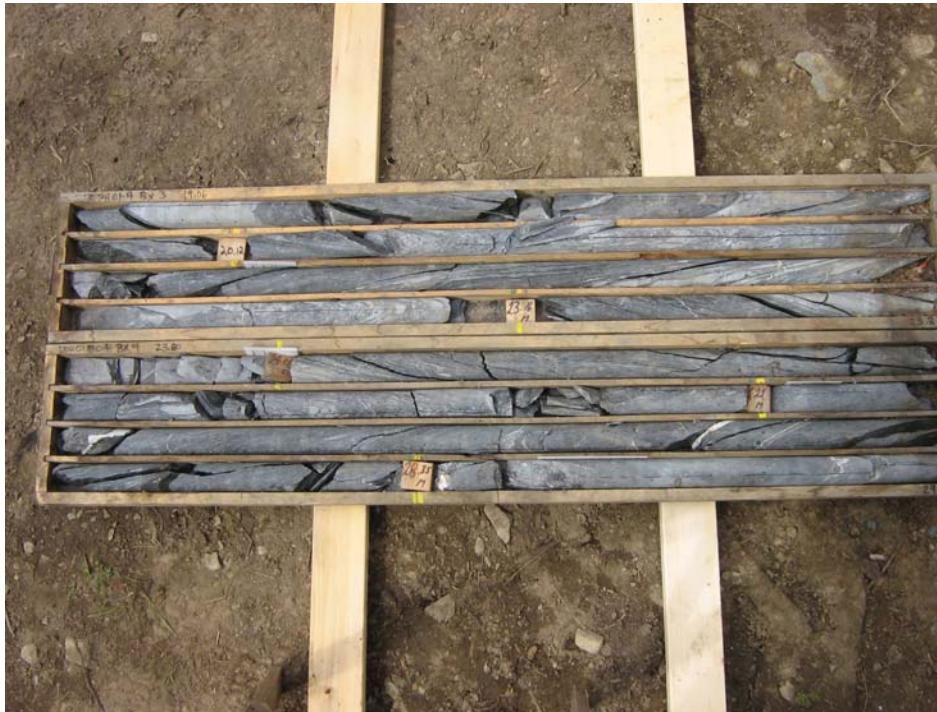
PHOTO SHEET

JOB NUMBER: 08PX0119

CLIENT: Happy Creek Minerals Limited

PROJECT: Exploration & Project Management - Hen

DESCRIPTION: 2001 Art-DL Core Photographs



ART-DL DDH 01-AD-04 Interval 19.06 to 29.16 m.jpg



ART-DL DDH 01-AD-04 Interval 29.16 to 41.89 m.jpg



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Phone (250) 614-7291 / Fax (250) 614-7290

PHOTO SHEET

JOB NUMBER: 08PX0119

CLIENT: Happy Creek Minerals Limited

PROJECT: Exploration & Project Management - Hen

DESCRIPTION: 2001 Art-DL Core Photographs



ART-DL DDH 01-AD-04 Interval 41.89 to 53.71 m.jpg



ART-DL DDH 01-AD-04 Interval 53.71 to 65.00 m.jpg



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ART-DL DDH 01-AD-04 Interval 65.00 to 75.50 m.jpg



ART-DL DDH 01-AD-04 Interval 75.50 to 90.22 m; EOH.jpg



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ART-DL DDH 01-AD-05 Interval 3.05 to 14.83 m.jpg



ART-DL DDH 01-AD-05 Interval 14.83 to 26.00 m.jpg



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ART-DL DDH 01-AD-05 Interval 26.00 to 37.23 m.jpg



ART-DL DDH 01-AD-05 Interval 37.23 to 49.38 m.jpg



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ART-DL DDH 01-AD-05 Interval 49.38 to 66.67 m.jpg



ART-DL DDH 01-AD-05 Interval 66.67 to 77.77 m.jpg



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ART-DL DDH 01-AD-05 Interval 77.77 to 90.22 m; EOH.jpg



ART-DL DDH 01-AD-06 Interval 3.05 to 15.00 m.jpg



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ART-DL DDH 01-AD-06 Interval 15.00 to 31.96 m.jpg



ART-DL DDH 01-AD-06 Interval 31.96 to 43.37 m.jpg



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ART-DL DDH 01-AD-06 Interval 43.37 to 50.58 m.jpg



ART-DL DDH 01-AD-06 Interval 50.58 to 65.84 m.jpg



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CLIENT: Happy Creek Minerals Limited

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DESCRIPTION: 2001 Art-DL Core Photographs



ART-DL DDH 01-AD-06 Interval 65.84 to 77.55 m.jpg



ART-DL DDH 01-AD-06 Interval 77.55 to 90.22 m; EOH.jpg

APPENDIX C

DIAMOND DRILL HOLE LOG

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
0	6.71	Overburden						
6.71	15.30	Phyllite	Fine grained	Medium Gray	Foliation			
<i>Notes: Knotty</i>								

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
7.71	15.30	Foliation	Shape - Planar	20	S	Knotty texture defined by siderite porphyroblasts

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
6.81	6.82			20	100				1 Chlorite		Trace of Fe carbonate; chlorite selvages and drusy cavities
6.82	11.29										Locally subhedral pyrite or aggregates of fine grained pyrite form boudins with quartz +/- Fe carbonates as pressure shadows
11.29	11.30				100						Trace Fe carbonate
12.60	12.61										Sandy grey bands

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
6.71	15.30			Pyrite					Siderite - 13 % Quartz	Ankerite		Siderite knot; 6mm in length; locally subhedral pyrite or aggregates of fine grained pyrite form boudins with quartz +/- Fe-carbonate; pressure shadows

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
15.30	35.35	Sandstone	Medium Sand	Medium Gray	Bedding	Siderite	Quartz	

Notes: Thin bands of sandstone and/or sandstone clasts deformed into losenge-shaped features or elongate-stretched-boudins; 19.16 m layer of grey sandstone with subedral pyrite to 3 mm; 22.4 m small lenses of grey sandstone "boudinaged"; 23.60 m sandstone to 24.16 m; percent of sandstone vs. overall is low, up to 15% but individual blebs can reach 16 cm; typically fine layers

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
15.30	35.35	Foliation		10		Sandy layers and clasts stretched into thin bands, boudins			

VEINS											
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
26.50	28.35	2	3	30	93	5	1				
30.36	32.86	4	16	50	90	8	2				Veins also occur at 30 and 10 degrees to the core axis

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
35.35	41.12	Sediment	Fine grained	Black		Argillaceous		

Notes: Clay gouge with semi-coherent pieces of black phyllite; graphitic fissile minor quartz - Fe-carbonate stringers mm scale and trace pyrite and stockwork

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
35.35	35.70	Fault				Breccia; healed wih clay gouge			
35.70	41.12	Fault				Rubble zone with clay gouge			

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
41.12	44.15	Phyllite	Very fine grained	Medium Gray	Foliation	Siderite		

Notes: Pyrite in very narrow sandy layer; very little siderite, 5%; pyrite as cm subhedral cubes with pressure shadows

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
41.12	44.15	Foliation		10		Fissile			

VEINS											
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
43.30	47.40	20	10	70	95						

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
44.15	54.76	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: Section dominated by sandstone, pale grey with 3-4% pyrite porphyroblasts; common interbeds of mudstone/siltstone laminae of phyllitic mudstone/argillite and siltstone; siderite porphyroblasts in phyllite to 10-15%

VEINS											Notes
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
43.30	47.40	20	10	70	95						
44.15	47.55	2	10	70	95	5	0				Pyrite locally forms fabric parallel bands
44.15	44.68				0						Sandstone cut by parallel quartz veinlets; 2-3% porphyroblasts
50.39	50.49	5		20	45	5	50				Pyrite-quartz veins 8 mm in fabric with several quartz only veins at 70 to 80 degrees to core axis

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
54.76	75.38	Phyllite	Fine grained	Medium Gray	Foliation			

Notes: Dominately dark grey to black phyllite with 0.8 cm knots of siderite in phyllite layers; local narrow interbeds of siltstone and sandstone with porphyroblasts of pyrite; locally interbeds are strips and framing clasts

STRUCTURE										
From	To	Structure	Discontinuity Condition			TCA	Strain	Notes		
60.10	60.95	Bedding				25	W	1 mm siltstone and 3 mm to 80 mm sandstone layered bedding knotted and stretched; 60.62 to 60.69 m = 1 mm siltstone and 35 mm sandstone with undulating layers		
70.15	90.22	Bedding				15	W			

VEINS											Notes
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
56.08	56.68	30	8	20	95			5	0		
59.44	59.75	2	16	30	95	0	5	0			Squiggly 1-2 mm veins
59.75	60.69	1	7	20	95	5	0				
65.40	90.22	1	2	15	95	5	0				At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
75.38	75.62	Sandstone	Medium Sand	Medium Gray	Bedding			
<i>Notes: Soft sediment contact undulating at 20 degrees to core axis</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								
From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
75.62	76.12	Phyllite	Fine grained	Medium Gray	Foliation			
<i>Notes: Soft sediment contact undulating at 90 degrees to the core axis</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								
From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
76.12	78.23	Sandstone	Medium Sand	Medium Gray	Bedding			
<i>Notes: Sandstone and phyllite; soft sediment contact undulating at 40 degrees to core axis; graded</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
78.23	78.87	Phyllite	Fine grained	Medium Gray	Foliation			
<i>Notes: Knotty; soft sediment contact undulating at 25 degrees to core axis</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								
From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
78.87	79.36	Sandstone	Medium Sand	Medium Gray	Bedding			
<i>Notes: Soft sediment contact undulating at 50 degrees to core axis</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								
From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
79.36	83.75	Phyllite	Fine grained	Medium Gray	Foliation			
<i>Notes: Soft sediment contact undulating at 20 degrees to core axis</i>								
STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			
VEINS								
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages								

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-04

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
83.75	86.93	Sandstone	Medium Sand	Medium Gray	Bedding			

Notes: Soft sediment contact undulating at 20 degrees to core axis

STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			

VEINS								
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
								At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages

MINERALIZATION									Gangue Minerals		Notes			
From	To	Style 1	Style 2	Economic Minerals					Mineral 1	Mineral 2	Mineral 3			
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3			
83.75	86.93			Pyrite - 5 %										
												Porphyroblasts with pressure shadows at 83.69 m; 5 mm blasts		

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
86.93	90.22	Phyllite	Fine grained	Medium Gray	Foliation			
<i>Notes: Soft sediment contact undulating at 30 degrees to core axis</i>								

STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
70.15	90.22	Bedding		15	W			

VEINS								
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %
65.40	90.22	1	2	15	95		5	0
								At 83.23 m nodule 30% pyrite; 81.30 to 87.47 m Fe-carbonate staining selvages

MINERALIZATION									Gangue Minerals		Notes			
From	To	Style 1	Style 2	Economic Minerals					Mineral 1	Mineral 2	Mineral 3			
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3			
86.93	90.22			Pyrite - 1 %										
												Porphyroblasts with pressure shadows at 89.07 m (10 mm blasts) and 89.30 (6 mm blasts)		



DRILL LOG DETAILS

*The content of this report was filtered as follows:
Project ref #: 08PX0120*

01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
0	3.05	Overburden						

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
3.05	30.39	Phyllite	Fine grained	Medium Gray	Bedding			

Notes: 80% knotty phyllite and 20% sandstone/siltstone layering; fine layers mainly phyllite with 1 mm to 15 mm sandstone/siltstone bedding. 5.41 to 6.41 m was sampled in 2001 (not split, whole sections were randomly taken from the core). 3.05 to 30.51 m: Phyllite argillite with laminae and thin interbeds of siltstone and fine grained sandstone. Argillite has 15% porphyroblasts resulting in knotty appearance and a wavy foliation. Siltstone/sandstone has up to 3-5% subhedral-euhedral pyrite porphyroblasts and no siderite; both lithologies react weakly to 10% dilute HCl and can be considered limy. Siltstone/sandstone beds up to 30 cm width, but typically form laminae within the phyllitic argillite dominated sequence. Deformation locally "strings" out siltstone/sandstone layers into elongate "clasts" or boudins. Foliation often is subparallel to foliation. Quartz-Fe carbonate veins up to 19 cm wide (+/- pyrite) and mostly follow foliation. Some mm scale pygmy veinlets are parallel to core axis; others are orthogonal to foliation.

STRUCTURE								
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes		
3.05	16.86	Foliation	Shape - Planar	75	W	Planar bedding; rare (1%) sandstone boudins. 3.05 to 30.51 m foliation (80 to 65 degrees to core axis). 10.87 to 10.88 m boudins (65 degrees to core axis). 11.30 to 11.45 m tension vein (0 degrees to core axis and vuggy). 22.89 m s-fabric.		
16.86	16.94	Bedding	Shape - Undulating	70	W	Sandstone boudins		
16.94	23.77	Foliation	Shape - Planar	70	W	Planar bedding; rare (1%) sandstone boudins		
23.77	24.10	Bedding	Shape - Undulating	80	W	Sandstone boudins		
24.10	30.34	Foliation	Shape - Planar	70	W	Planar bedding; rare (1%) sandstone boudins. 30.51 to 36.91 m is foliated (70-80 degrees to core axis). 38.25 to 38.55 m is a fault (90 degrees to core axis)		
30.34	30.77	Bedding	Shape - Undulating	80	W	Sandstone boudins		

ALTERATION											Assemblages							Minerals							Notes	
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser						
3.05	90.22																									Possible graphite alteration of phyllite; pervasive throughout core.

VEINS													Notes										
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes												
4.47	4.49	100	1	80	99				0 Ankerite	- 1 %	Large quartz vein (?); contains 1% rusty brown weathered Ankerite; Trace amounts of disseminated pyrite associated with rusty brown mineral (weathered ankerite?).												
6.40	7.63	1	4	10	98				0 Ankerite	- 2 %	Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite												
7.63	7.73	100	1	85	90				Ankerite	- 10 %	Ankerite is 10% of vein; trace amounts of pyrite within vein												
7.73	15.72	1	4	10	98				Ankerite	- 2 %	Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite												
15.72	16.06	5	40	10	98				0 Ankerite	- 2 %	Increase veining both cross cutting (10 degrees to core axis) and following bedding (80 degrees to core axis); 2 mm to 10 mm; trace amounts of pyrite												
16.06	17.60	1	4	10	98				0 Ankerite	- 2 %	Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite												

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

VEINS											
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
17.60	17.71	100	1	85	95				0 Ankerite - 5 %		Large quartz vein (?); contains 2% ankerite; Trace amounts of disseminated pyrite associated with the ankerite
17.71	19.09	1	4	10	98				Ankerite - 2 %		Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite
19.09	19.19	100	40	85	98				0 Ankerite - 2 %		Large quartz vein (?); contains 2% ankerite; Trace amounts of disseminated pyrite associated with the ankerite
19.19	24.87	1	4	10	98				0 Ankerite - 2 %		Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite
24.87	24.98	100	40	85	98				0 Ankerite - 2 %		Large quartz vein (?); contains 2% ankerite; trace amounts of disseminated pyrite associated with the ankerite
24.98	31.08	1	4	10	98				0 Ankerite - 2 %		Veins crosscut bedding at 10 degrees to core axis; rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite

MINERALIZATION				Economic Minerals					Gangue Minerals			Notes
From	To	Style 1	Style 2	Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
3.05	30.51	Veinlets							Quartz - 3 %	Cassiterite - 3 %		Pyrite 1-2%; pyrrhotite trace
3.05	90.22	Massive		Pyrite								Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3																																																								
30.39	31.60	Sandstone	Fine Sand	Medium Gray	Bedding																																																											
<i>Notes: 70-80% sandstone and 20-30% phyllite</i>																																																																
STRUCTURE																																																																
<table border="1"> <thead> <tr> <th>From</th><th>To</th><th>Structure</th><th>Discontinuity Condition</th><th>TCA</th><th>Strain</th><th>Notes</th><th></th><th></th></tr> </thead> <tbody> <tr> <td>30.34</td><td>30.77</td><td>Bedding</td><td>Shape - Undulating</td><td>80</td><td>W</td><td>Sandstone boudins</td><td></td><td></td></tr> <tr> <td>30.77</td><td>31.24</td><td>Bedding</td><td>Shape - Undulating</td><td>60</td><td>W</td><td>Undulating and smeared sandstone bedding</td><td></td><td></td></tr> <tr> <td>31.24</td><td>31.55</td><td>Bedding</td><td>Shape - Undulating</td><td>70</td><td>W</td><td>Sandstone boudins</td><td></td><td></td></tr> <tr> <td>31.55</td><td>31.81</td><td>Foliation</td><td>Shape - Planar</td><td>75</td><td>W</td><td>Planar bedding; rare (1%) sandstone boudins</td><td></td><td></td></tr> </tbody> </table>									From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			30.34	30.77	Bedding	Shape - Undulating	80	W	Sandstone boudins			30.77	31.24	Bedding	Shape - Undulating	60	W	Undulating and smeared sandstone bedding			31.24	31.55	Bedding	Shape - Undulating	70	W	Sandstone boudins			31.55	31.81	Foliation	Shape - Planar	75	W	Planar bedding; rare (1%) sandstone boudins													
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes																																																										
30.34	30.77	Bedding	Shape - Undulating	80	W	Sandstone boudins																																																										
30.77	31.24	Bedding	Shape - Undulating	60	W	Undulating and smeared sandstone bedding																																																										
31.24	31.55	Bedding	Shape - Undulating	70	W	Sandstone boudins																																																										
31.55	31.81	Foliation	Shape - Planar	75	W	Planar bedding; rare (1%) sandstone boudins																																																										
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DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
31.60	31.85	Phyllite	Fine grained	Medium Gray	Bedding			

Notes: 80% knotty phyllite and 20% sandstone/siltstone layering; fine layers mainly phyllite with 1 mm to 15 mm sandstone/siltstone bedding. 30.51 to 40.20 m: Clastic appearance of top section with abundant soft sediment deformation extending for 81 cm then 26 cm bed of deformed siltstone cut by 2 cm quartz veins; then silty argillite (mudstone) with 10 to 15% siderite and "orphaned" quartz/Fe-carbonate veins and siltstone segments that have been translated along foliation parallel to faults. Ptygmatic quartz-carbonate vein at 36.7 m has pyrite and pyrrhotite as euhedral cubic replacement of the siderite porphyroblasts - pics at 36.70 m. Ptygmatic vein of pyrrhotite after pyrite cube and siderite porphyroblasts at 35.66 m. At 32.48 m vein previously sampled ~ 15 cm in length. At 34.37 to 35.05 m section with quartz calcite veins and argillite previously sampled. Locally pyrite replaces siderite at 34.95 m -> soft sediment deformation section at end of interval also ending in pyrrhotite (minor).

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
31.55	31.81	Foliation	Shape - Planar	75	W	Planar bedding: rare (1%) sandstone boudins
31.81	31.84	Bedding	Shape - Undulating	70	W	Sandstone boudins
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding: rare (1%) sandstone boudins

ALTERATION

From	To	Assemblages										Minerals							Notes	
		Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	
3.05	90.22																			Possible graphite alteration of phyllite; pervasive throughout core.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
31.08	32.07	100	1	40	75				0 Ankerite - 25 %		Large quartz vein (?); contains 25% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
3.05	90.22	Massive		Pyrite								Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.

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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
31.85	35.88	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70% sandstone and 30% phyllite. 31.80 to 32.80 m was sampled in 2001: the core was not split but whole core was randomly taken as samples. 34.00 to 35.00 m was sampled in 2001.

STRUCTURE										
From	To	Structure	Discontinuity Condition			TCA	Strain	Notes		
31.84	50.96	Foliation	Shape - Planar			50	W	Planar bedding; rare (1%) sandstone boudins		

ALTERATION										Assemblages										Minerals									
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	Notes								
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VEINS											
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
31.08	32.07	100	1	40	75				0 Ankerite	- 25 %	Large quartz vein (?); contains 25% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite
32.07	32.49	1	1	10	25				0 Ankerite	- 75 %	Veins crosscut bedding at 10 degrees to core axis; 2 mm pyrite shows pressure shadow within the small 4 mm vein
32.49	32.62	100	1	80	90				0 Ankerite	- 10 %	Large quartz vein (?); contains 10% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite. 32.48 to 32.60 m "stylites" (drusy cavities).
32.62	33.90	1	2	20	75				0 Ankerite	- 25 %	Veins crosscut bedding at 20 degrees to core axis; (<1%) rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite
33.90	35.10	99	1	80	98				Ankerite	- 2 %	Large quartz vein (?); contains 2% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite
35.10	36.70	1	4	10	90				0 Ankerite	- 10 %	Veins crosscut bedding at 10 degrees to core axis; (<1%) rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite



DRILL LOG DETAILS

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MINERALIZATION		Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
From	To			Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
3.05	90.22	Massive		Pyrite								Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.

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From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3																																																								
35.88	35.97	Phyllite	Fine grained	Medium Gray	Bedding																																																											
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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
35.97	36.31	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70% sandstone and 30% phyllite

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins

ALTERATION

Assemblages											Minerals										
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	Notes
3.05	90.22																				Possible graphite alteration of phyllite; pervasive throughout core.

VEINS

From To Vn % V / M TCA Qz % Feld % CC % Py % Mineral 1 Mineral 2 Notes
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MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
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DRILL LOG DETAILS

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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
36.65	37.19	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70% sandstone and 30% phyllite

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins			

ALTERATION										Assemblages										Minerals									
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	Notes								
3.05	90.22																				Possible graphite alteration of phyllite; pervasive throughout core.								

VEINS										Notes	
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
35.10	36.70	1	4	10	90				0 Ankerite	- 10 %	Veins crosscut bedding at 10 degrees to core axis; (<1%) rare larger (15 mm) veins coincide with bedding 75 degrees to core axis; trace amounts of pyrite
36.70	37.15	80	2	50	90				0 Ankerite	- 10 %	Large quartz veins; contains 10% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite
37.15	37.43	1	1	50	90				Ankerite	- 10 %	Veins crosscut bedding at 10 degrees to core axis; trace amounts of pyrite

MINERALIZATION										Economic Minerals					Gangue Minerals		
From	To	Style 1			Style 2			Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	Notes	
3.05	90.22	Massive			Pyrite											Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.	

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From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
37.19	39.79	Phyllite	Fine grained	Medium Gray	Bedding			

Notes: 70-80% knotty phyllite and 20-30% sandstone/siltstone layering; fine layers mainly phyllite with 1 mm to 5 mm sandstone/siltstone bedding

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins			

ALTERATION										Assemblages										Minerals										Notes	
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser											
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VEINS										Notes	
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
37.15	37.43	1	1	50	90				Ankerite	- 10 %	Veins crosscut bedding at 10 degrees to core axis; trace amounts of pyrite
37.43	37.50	90	1	40	98				0 Ankerite	- 2 %	Large quartz vein (?); contains 2% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite
37.50	38.75	1	2	10	80				0 Ankerite	- 20 %	Veins crosscut bedding at 10 degrees to core axis; trace amounts of pyrite
38.75	39.00	90	1	40	98				0 Ankerite	- 2 %	Large quartz vein (?); contains 2% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite
39.00	41.99	1	1	30	95				0 Ankerite	- 5 %	Veins crosscut bedding at 30 degrees to core axis; rare larger (5 mm) veins coincide with bedding 60 degrees to core axis; trace amounts of pyrite

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From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
39.79	41.05	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70% sandstone and 30% phyllite

STRUCTURE									
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes			
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins			

ALTERATION										Assemblages										Minerals									
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	Notes								
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From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
39.00	41.99	1	1	30	95				0 Ankerite	- 5 %	Veins crosscut bedding at 30 degrees to core axis; rare larger (5 mm) veins coincide with bedding 60 degrees to core axis; trace amounts of pyrite

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From	To	Style 1		Style 2		Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	Notes					
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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
41.05	41.53	Phyllite	Fine grained	Medium Gray	Bedding			

Notes: 80% knotty phyllite and 20% sandstone/siltstone layering; fine layers mainly phyllite with 1 mm to 15 mm sandstone/siltstone bedding. 40.20 to 50.21 m phyllitic argillite with minor siltstone. Siderite knots account for 10 to 15% of rock. At 41.05 m 3 minor siltstone/fine grained sandstone layers. At 42.05 to 43.25 m section previously sampled.

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins

ALTERATION

From	To	Assemblages										Minerals							Notes
		Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr
3.05	90.22																		Possible graphite alteration of phyllite; pervasive throughout core.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
39.00	41.99	1	1	30	95				0 Ankerite - 5 %		Veins crosscut bedding at 30 degrees to core axis; rare larger (5 mm) veins coincide with bedding 60 degrees to core axis; trace amounts of pyrite

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
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43.18	43.25	Sandstone	Fine Sand	Moderate Greenish Yellow	Bedding																																																											
<i>Notes: 95% sandstone and 5% siltstone/knotty phyllite</i>																																																																
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43.25	46.27	Phyllite	Fine grained	Medium Gray	Bedding																																																															
<i>Notes: 70-80% knotty phyllite and 20-30% sandstone/siltstone layering; fine layers mainly phyllite with 1 mm to 15 mm sandstone/siltstone bedding; core is weathered due to storage from 43.28 to 43.60 m. 44.50 to 46.00 m was sampled in 2001.</i>																																																																				
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DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
46.27	48.23	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70% sandstone and 30% phyllite

STRUCTURE									
From	To	Structure	Discontinuity	Condition	TCA	Strain	Notes		
31.84	50.96	Foliation	Shape - Planar		50	W	Planar bedding; rare (1%) sandstone boudins		

ALTERATION										Assemblages										Minerals									
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	Notes								
3.05	90.22																				Possible graphite alteration of phyllite; pervasive throughout core.								

VEINS											
From	To	Vn %	V / M	TCA	Oz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
43.68	60.19	1	3	70	80				0 Ankerite	- 20 %	Veins coincide with bedding at 70 degrees to core axis with rare larger (5 mm) veins; trace amounts of pyrite

MINERALIZATION														
From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals					Notes
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3			
3.05	90.22	Massive		Pyrite										Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.

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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3																																																								
48.23	48.27	Phyllite	Fine grained	Medium Gray	Bedding																																																											
<i>Notes: 70% knotty phyllite and 30% sandstone/siltstone; core is weathered due to storage from 48.23 to 48.27 m</i>																																																																
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DRILL LOG DETAILS

The content of this report was filtered as follows:
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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
48.27	48.73	Sandstone	Fine Sand	Medium Gray	Bedding			

Notes: 70-90% sandstone/siltstone and 10-30% knotty phyllite; core is weathered due to storage from 48.27 to 48.35 m

STRUCTURE						
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins

ALTERATION		Assemblages										Minerals						Notes			
From	To	Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	Ser	
3.05	90.22																				Possible graphite alteration of phyllite; pervasive throughout core.

VEINS	From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
	43.68	60.19	1	3	70	80				0 Ankerite - 20 %		Veins coincide with bedding at 70 degrees to core axis with rare larger (5 mm) veins; trace amounts of pyrite

MINERALIZATION				Economic Minerals					Gangue Minerals			Notes
From	To	Style 1	Style 2	Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
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48.73	50.06	Phyllite	Fine grained	Medium Gray	Bedding																																																											
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DRILL LOG DETAILS

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01-AD-05

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
50.06	90.22	Sandstone	Fine grained	Medium Gray	Bedding			

Notes: 70% sandstone/siltstone and 30% knotty phyllite; EOH. 54.50 to 55.50 m, 68.00 to 69.00 m, 82.31 to 83.51 m, 84.60 to 85.60m 86.39 to 87.39 m, 87.39 to 88.39 m, 88.39 to 89.39 m was sampled in 2001. 50.21 to 90.22 m silty argillite (is limy) -> phyllitic mudstone with common soft sediment deformation, rip up clasts; locally are coherent layers of siltstone/fine grained sandstone; Siderite porphyroblasts through 10 to 15%: locally replaced by pyrite. Pyrite also occurs as cubic porphyroblasts in fine grained sandstone layers; locally corroded and ~ = to pyrrhotite. Locally pyrite and pyrrhotite.

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
31.84	50.96	Foliation	Shape - Planar	50	W	Planar bedding; rare (1%) sandstone boudins
50.96	51.42	Bedding	Shape - Undulating	70	W	Sandstone boudins
51.42	90.22	Foliation	Shape - Planar	70	W	Planar bedding; rare (1%) sandstone boudins

ALTERATION

From	To	Assemblages										Minerals							Notes	
		Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	
3.05	90.22																			Possible graphite alteration of phyllite; pervasive throughout core.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
43.68	60.19	1	3	70	80				0 Ankerite	- 20 %	Veins coincide with bedding at 70 degrees to core axis with rare larger (5 mm) veins; trace amounts of pyrite
60.19	60.39	100	1	40	98				0 Ankerite	- 2 %	Large quartz vein (?); contains 2% ankerite; trace amounts of disseminated pyrite associated with the vein selvages with host rock and the ankerite and in small 2 mm holes within the quartz
60.39	63.12	5	7	65	95				0 Ankerite	- 5 %	Veins crosscut bedding (30 degrees) and coincide with bedding (70 degrees) at
63.12	63.37	85	2	40	95				0 Ankerite	- 5 %	Large veins (3.5 cm) coincide with bedding; trace amounts of pyrite along selvages with host rock and ankerite
63.37	90.22	3	7	30	98				0 Ankerite	- 2 %	Veins crosscut bedding at 30 degrees to core axis; rare larger (5 mm) veins coincide with bedding 70 degrees to core axis; trace amounts of pyrite. Previously sampled veins in the intersection of 86.39 to 87.39 m show increased pyrite (2%). Large veins typically will have country rock foliation pull ups that are distorted from the foliation axis on the rest of the core.



DRILL LOG DETAILS

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MINERALIZATION			Economic Minerals					Gangue Minerals			Notes	
From	To	Style 1	Style 2	Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
3.05	90.22	Massive		Pyrite								Pyrite (0.1 to 1%) associated with sandstone layers and quartz veins. Pyrite varies from amorphous to cubic in form. Occurs mainly disseminated in mm wide showings and rarely as 5 mm porphyroblasts. Fe carbonate (10%) nodules associated with phyllite layers; Fe carbonates are sheared (appear rotated by ~5 degrees at the greatest angle) and average at approximately 2 mm.

01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
0	3.05	Overburden						

Notes: Casing

DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
3.05	76.58	Phyllite	Fine grained	Medium Gray	Foliation			

Notes: 80% knotty, argillaceous phyllite with 20% sandstone/siltstone interbedding at 60 degrees to the core axis. Sandstone layers are typically 1 to 10 mm. Knotty or wavy appearance due to Fe-carbonate minerals in phyllite forming between the phyllite layers. Sandstone is typically a fine grain sand composed mainly of quartz.

STRUCTURE						
From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
3.05	43.67	Bedding	Shape - Planar	60	W	Phyllite bedding is planar with mainly planar sandstone/siltstone beds intercalated with the phyllite. Occasionally (1%) the sandstone beds will be pinched and plumped (boudins). Soft sediment structures are common.
43.67	43.87	Bedding	Shape - Undulating	60	W	Sandstone and phyllite bedding is undulating and wavy in this section. Folds and possible minor faults plus shears interrupted bedding causing it to look disjointed, smeared and wavy with little to no relation to the core axis.
43.87	77.73	Bedding	Shape - Planar	60	W	Phyllite bedding is planar with mainly planar sandstone/siltstone beds intercalated with the phyllite. Occasionally (1%) the sandstone beds will be pinched and plumped (boudins). Soft sediment structures are common.

VEINS											Notes
From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
3.05	4.32	1	2	50	90				0 Ankerite - 10 %		Few small (1-2 mm) quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
4.32	4.39	100	1	80	90				Ankerite - 10 %		One large quartz vein with ~1% pyrite in small (1 mm) sized euhedral crystals.
4.39	25.95	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
25.95	26.04	100	1	80	90				Ankerite - 10 %		One large quartz vein with ~1% pyrite in small (1 mm) sized euhedral crystals.
26.04	28.73	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
28.73	28.79	100	1	80	90				Ankerite - 10 %		One large quartz vein with ~1% pyrite in small (1 mm) sized euhedral crystals.
28.79	29.26	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
29.26	29.30	100	1	80	90				Ankerite - 10 %		One large quartz vein with ~1% pyrite in small (1 mm) sized euhedral crystals.
29.30	37.49	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
37.49	38.40	90	2	80	90				Ankerite - 10 %		Two large quartz veins with ~1% pyrite in small (1 mm) sized euhedral crystals.
38.40	76.43	2	2	50	90				Ankerite - 10 %		Small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.
76.43	77.38	40	4	80	90				Ankerite - 10 %		Large quartz veins with ~1% pyrite in small (1 mm) sized euhedral crystals. Surrounding a light green altered sandstone unit.



DRILL LOG DETAILS

The content of this report was filtered as follows:
Project ref #: 08PX0120

MINERALIZATION		Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
From	To			Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
3.05	77.73	Medium grained		Pyrite - 1 %								20% Fe-carbonate clasts within the phyllite and sandstone layers. Rounded, 2 to 4 mm grains, occasionally associated with pyrite. Grains are parallel to foliation at 60 degrees to core axis. 1% pyrite found in both phyllite and the sandstone layers. Pyrite nodules are euhedral to aggregate masses and are typically 5 to 10 mm. Pressure shadows around the pyrite are common. <1% of the pyrite nodules are weakly magnetic and may contain pyrrhotite (@ 27.80 m and 29.00 m are large, 10 mm examples).

DRILL LOG DETAILS

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01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3																																																								
76.58	77.32	Sandstone	Fine Sand	Moderate Yellowish Green	Bedding																																																											
<i>Notes: Light green sandstone layer at 80 to core axis. Layer is surrounded by thick 50 mm quartz veins at 80 degrees to the core axis.</i>																																																																
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DRILL LOG DETAILS

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01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
77.73	77.95	Dyke	Fine grained	Very Pale Green	Aphanitic			

Notes: Carbonate dyke (lamprophyre?) reacts strongly with HCl. Margins of dyke have wavy bands (like flames of a fire) that radiate off dyke of light tan coloured mineral (sericite) with 2% dark green (2 to 3 mm) anhedral minerals (chlorite?).

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
77.73	77.95	Contact	Shape - Undulating	80	W	Margins of carbonate dyke contain wavy bands (like flames of a fire) radiating out from contact at 50 degrees to the core axis.

ALTERATION

From	To	Assemblages										Minerals							Notes	
		Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	
77.73	77.95													M						Moderate sericite alteration surrounding the dyke edges in wavy radiating strings at 50 degrees to the core axis. Also associated with ~1% dark green minerals, rounded, ~ 2 to 3 mm possibly chlorite?

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
77.38	90.22	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes	
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3		
77.73	77.95	Fine grained		Pyrite - 3 %									Carbonate dyke mineralized with sub-mm sized pyrite (3%) uniformly distributed throughout dyke. Margins of dyke are mineralized with larger, 0.5 to 2 mm, sized nodules which are typically associated with Fe carbonates.

DRILL LOG DETAILS

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01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
77.95	78.67	Phyllite	Fine grained	Medium Gray	Foliation			

Notes: 80% knotty, argillaceous phyllite with 20% sandstone/siltstone interbedding at 60 degrees to the core axis. Sandstone layers are typically 1 to 3 mm. Knotty or wavy appearance due to Fe-carbonate minerals in phyllite forming between the phyllite layers. Sandstone is typically a fine grain sand composed mainly of quartz.

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
77.95	78.67	Bedding	Shape - Planar	60	W	Phyllite bedding is planar with mainly planar sandstone/siltstone beds intercalated with the phyllite. Bedding layers are fine sub-mm to 2 mm. Soft sediment structures are common.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
77.38	90.22	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
77.95	78.67	Medium grained		Pyrite - 1 %								20% Fe-carbonate clasts within the phyllite and sandstone layers. Rounded, 2 to 4 mm grains, occasionally associated with pyrite. Grains are parallel to foliation at 60 degrees to core axis. 1% pyrite found in both phyllite and the sandstone layers. Pyrite nodules are euhedral to aggregate masses and are typically 5 to 10 mm. Pressure shadows around the pyrite are common.



DRILL LOG DETAILS

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01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
78.67	83.38	Dyke	Medium Grained	Very Pale Green	Aphanitic			

Notes: Carbonate dyke (lamprophyre?) reacts strongly with HCl. Grain size is coarser than the above unit (1 mm). Margins of dyke have wavy bands (like flames of a fire) radiating off dyke of light tan coloured mineral (sericite) with 2% dark green (2 to 3 mm) anhedral minerals (chlorite?). Biotite is also present.

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
78.67	83.38	Contact	Shape - Undulating	80	W	Margins of carbonate dyke contain wavy bands (like flames of a fire) radiating out from contact at 50 degrees to the core axis.

ALTERATION

From	To	Assemblages										Minerals							Notes	
		Alb	Arg	Int	Lis	Phy	Pot	Pro	Serp	Sil	Skn	Tlc	Trm	Bio	Cal	Chl	Epi	Flp	Pyr	
78.67	83.38																		M	Moderate sericite alteration surrounding the dyke edges in wavy radiating strings at 50 degrees to the core axis.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
77.38	90.22	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.

MINERALIZATION

From	To	Style 1		Style 2		Economic Minerals					Gangue Minerals			Notes	
		Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3						
78.67	83.38	Fine grained		Pyrite - 3 %							Carbonate dyke mineralized with sub-mm sized pyrite (3%) uniformly distributed throughout dyke. Margins of dyke are mineralized with larger, 0.5 to 2 mm sized, nodules which are typically associated with Fe carbonates. Biotite is also present (<1%).				

DRILL LOG DETAILS

The content of this report was filtered as follows:
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01-AD-06

From	To	Lithology	Grain Size	Color	Texture	Mineral 1	Mineral 2	Mineral 3
83.38	90.22	Phyllite	Fine grained	Medium Gray	Foliation			

Notes: 80% knotty, argillaceous phyllite with 20% sandstone/siltstone interbedding at 60 degrees to the core axis. Sandstone layers are typically 1 to 3 mm. Knotty or wavy appearance due to Fe-carbonate minerals in phyllite forming between the phyllite layers. Sandstone is typically a fine grain sand composed mainly of quartz. EOH

STRUCTURE

From	To	Structure	Discontinuity Condition	TCA	Strain	Notes
83.38	90.22	Bedding	Shape - Planar	60	W	Phyllite bedding is planar with mainly planar sandstone/siltstone beds intercalated with the phyllite. Occasionally (1%) the sandstone beds will be pinched and plumped (boudins). Soft sediment structures are common.

VEINS

From	To	Vn %	V / M	TCA	Qz %	Feld %	CC %	Py %	Mineral 1	Mineral 2	Notes
77.38	90.22	1	2	50	90				Ankerite - 10 %		Few small quartz veins mainly at 50 degrees to the core axis, rarely at 20 degrees to the core axis. <1% pyrite sub-mm mainly along selvages of quartz to ankerite or host rock.

MINERALIZATION

From	To	Style 1	Style 2	Economic Minerals					Gangue Minerals			Notes
				Economic Mineral 1	Economic Mineral 2	Economic Mineral 3	Economic Mineral 4	Economic Mineral 5	Mineral 1	Mineral 2	Mineral 3	
83.38	90.22	Fine grained		Pyrite - 1 %								20% Fe-carbonate clasts within the phyllite and sandstone layers. Rounded, 2 to 4 mm grains, occasionally associated with pyrite. Grains are parallel to foliation at 60 degrees to core axis. 1% pyrite found in both phyllite and the sandstone layers. Pyrite nodules are euhedral to aggregate masses and are typically 4 to 7 mm. Pressure shadows around the pyrite are common.

APPENDIX D

DIAMOND DRILL HOLE GEOTECHNICAL LOG

ALLNORTH CONSULTANTS LIMITED



GEOTECHNICAL DRILL LOG

The content of this report was filtered as follows:
project ref #: 08PX0119drill hole ref # matching: 01AD

Run	From	To	Cut (m)	Core Recovered	(% Core Recovered)	RQD Recovered	(% RQD)	DOMINANT DISCONTINUITY			Condition	Angle To Core Axis	Weathering Grade	Rock Strength Grade
								Dominant Discontinuity	# of Discontinuities	Condition				
01-AD-04														
1	0.00	6.71	6.71	0.00	0.0									
2	6.71	7.62	0.91	0.44	48.4	0.17	18.7	HJ	1	RO	40	SW	R2	
3	7.62	8.84	1.22	0.74	60.7	0.62	50.8	OJ	3	RO	5	SW	R2	
4	8.84	10.36	1.52	1.44	94.7	1.35	88.8	OJ	4	RO	15	SW	R2	
5	10.36	12.19	1.83	1.70	92.9	0.24	13.1	OJ	4	RO	30	SW	R2	
6	12.19	13.19	1.00	1.00	100.0	0.90	90.0	OJ	6	RO	30	SW	R2	
7	13.19	13.72	0.53	0.40	75.5	0.12	22.6	OJ	6	RO	20	SW	R2	
8	13.72	15.54	1.82	1.78	97.8	1.48	81.3	OJ	11	RO	30	SW	R2	
9	15.54	17.07	1.53	1.48	96.7	1.41	92.2	OJ	4	RO	45	SW	R2	
10	17.07	20.12	3.05	3.05	100.0	2.68	87.9	OJ	15	RO	25	SW	R2	
11	20.12	23.16	3.04	3.04	100.0	2.82	92.8	OJ	12	RO	30	SW	R2	
12	23.16	24.08	0.92	0.85	92.4	0.51	55.4	OJ	10	RO	20	SW	R2	
13	24.08	26.21	2.13	2.01	94.4	1.84	86.4	OJ	9	RO	20	SW	R2	
14	26.21	28.35	2.14	2.07	96.7	1.70	79.4	OJ	8	RO	20	SW	R2	
15	28.35	29.26	0.91	0.95	104.4	0.69	75.8	OJ	3	RO	30	SW	R2	
16	29.26	32.31	3.05	2.89	94.8	2.57	84.3	HJ	17	RO	40	SW	R2	
17	32.31	36.88	4.57	3.43	75.1	2.48	54.3	OJ	8	RO	25	SW	R2	
18	36.88	39.83	2.95	0.39	13.2	0.00	0.0	FL	1	RO		SW	R2	
19	39.83	41.45	1.62	0.91	56.2	0.13	8.0	FL	1	RO		SW	R2	
20	41.45	42.95	1.50	1.37	91.3	0.64	42.7	OJ	4	RO	10	SW	R2	
21	42.95	44.50	1.55	1.18	76.1	0.90	58.1	OJ	3	RO	5	SW	R2	
22	44.50	47.55	3.05	1.84	60.3	0.93	30.5	FL	1	RO	40	SW	R2	
23	47.55	50.29	2.74	2.39	87.2	1.35	49.3	OJ	13	RO	30	SW	R2	
24	50.29	51.51	1.22	0.48	39.3	0.00	0.0	FL	1	RO		SW	R2	
25	51.51	53.54	2.03	0.90	44.3	0.00	0.0	OJ	21	RO	30	SW	R2	

GEOTECHNICAL DRILL LOG

The content of this report was filtered as follows:
project ref #: 08PX0119drill hole ref # matching: 01AD

Run	From	To	Cut (m)	Core Recovered	(% Core Recovered)	RQD Recovered	(% RQD)	DOMINANT DISCONTINUITY			Condition	Angle To Core Axis	Weathering Grade	Rock Strength Grade
								Dominant Discontinuity	# of Discontinuities					
01-AD-04														
26	53.54	56.08	2.54	1.16	45.7	0.99	39.0	FL	1	RO			SW	R2
27	56.08	58.22	2.14	1.77	82.7	1.01	47.2	HJ	7	RO	40		SW	R2
28	58.22	59.44	1.22	0.86	70.5	0.00	0.0	FL	1	RO			SW	R2
28	58.22	59.44	1.22	0.86	70.5	0.00	0.0	FL	1	RO				
29	59.44	61.87	2.43	2.21	90.9	1.35	55.6	OJ	11	RO	30		SW	R2
30	61.87	64.62	2.75	2.56	93.1	2.21	80.4	OJ	6	RO	30		SW	R2
31	64.62	66.45	1.83	1.81	98.9	0.68	37.2	OJ	13	RO	30		SW	R2
32	66.45	68.88	2.43	2.29	94.2	1.46	60.1	OJ	15	RO	30		SW	R2
33	68.88	71.93	3.05	2.41	79.0	1.82	59.7	OJ	9	RO	25		SW	R2
34	71.93	74.98	3.05	2.90	95.1	1.93	63.3	OJ	11	RO	15		SW	R2
35	74.98	78.03	3.05	2.94	96.4	2.08	68.2	OJ	8	RO	20		SW	R2
36	78.03	81.08	3.05	2.33	76.4	1.05	34.4	OJ	9	RO	20		SW	R2
37	81.08	84.12	3.04	2.98	98.0	2.78	91.4	HJ	10	RO	60		SW	R2
38	84.12	87.17	3.05	2.75	90.2	2.37	77.7	HJ	11	RO	10		SW	R2
39	87.17	90.22	3.05	2.50	82.0	1.48	48.5	HJ	10	RO	50		SW	R2
Total For 01-AD-04			91.44	69.06	75.5	46.74	51.1							
01-AD-05														
1	0.00	3.05	3.05	0.00	0.0	0.00	0.0							
2	3.05	6.71	3.66	2.20	60.1	0.00	0.0	OJ	95	RO	85		SW	R2
3	6.71	10.97	4.26	3.97	93.2	0.82	19.2	OJ	80	RO	80		SW	R2
4	10.97	14.02	3.05	2.62	85.9	0.35	11.5	OJ	71	RO	65		SW	R2
5	14.02	16.76	2.74	2.59	94.5	0.11	4.0	OJ	82	RO	85		SW	R2
6	16.76	20.12	3.36	2.93	87.2	0.53	15.8	OJ	75	RO	80		SW	R2
7	20.12	23.16	3.04	2.86	94.1	0.00	0.0	OJ	85	RO	75		SW	R2
8	23.16	25.91	2.75	2.33	84.7	0.26	9.5	OJ	63	RO	60		SW	R2
9	25.91	28.96	3.05	1.53	50.2	0.48	15.7	OJ	29	RO	70		SW	R2



GEOTECHNICAL DRILL LOG

The content of this report was filtered as follows:
project ref #: 08PX0119drill hole ref # matching: 01AD

Run	From	To	Cut (m)	Core Recovered	(% Core Recovered)	RQD Recovered	(% RQD)	DOMINANT DISCONTINUITY			Condition	Angle To Core Axis	Weathering Grade	Rock Strength Grade
								Dominant Discontinuity	# of Discontinuities	Condition				
01-AD-05														
10	28.96	32.00	3.04	3.92	128.9	1.45	47.7	OJ	72	RO	80	SW	R2	
11	32.00	35.05	3.05	2.24	73.4	0.69	22.6	OJ	82	RO	80	SW	R2	
12	35.05	38.10	3.05	2.78	91.1	0.80	26.2	OJ	66	RO	70	FR	R2	
13	38.10	41.45	3.35	2.91	86.9	1.37	40.9	OJ	51	RO	50	FR	R2	
14	41.45	43.28	1.83	1.23	67.2	0.11	6.0	OJ	34	RO	65	FR	R2	
15	43.28	47.55	4.27	2.27	53.2	0.48	11.2	OJ	45	RO	70	FR	R2	
16	47.55	50.60	3.05	2.61	85.6	0.57	18.7	OJ	26	RO	70	FR	R2	
17	50.60	53.64	3.04	2.96	97.4	0.59	19.4	OJ	51	RO	60	FR	R2	
18	53.64	56.69	3.05	2.62	85.9	0.79	25.9	OJ	15	RO	70	FR	R2	
19	56.69	59.74	3.05	2.47	81.0	1.70	55.7	OJ	24	RO	70	FR	R2	
20	59.74	62.48	2.74	2.53	92.3	1.74	63.5	OJ	24	RO	60	FR	R2	
21	62.48	65.84	3.36	3.13	93.2	2.06	61.3	OJ	25	RO	60	FR	R2	
22	65.84	68.00	2.16	2.21	102.3	1.88	87.0	OJ	22	RO	40	FR	R2	
23	68.00	70.71	2.71	1.93	71.2	1.35	49.8	OJ	19	RO	40	FR	R2	
24	70.71	73.76	3.05	2.90	95.1	1.55	50.8	OJ	23	RO	70	FR	R2	
25	73.76	76.80	3.04	3.10	102.0	2.52	82.9	OJ	13	RO	70	FR	R2	
26	76.80	79.86	3.06	2.96	96.7	2.41	78.8	OJ	19	RO	70	FR	R2	
27	79.86	82.31	2.45	2.45	100.0	0.84	34.3	OJ	23	RO	50	FR	R2	
28	82.31	84.60	2.29	1.66	72.5	0.10	4.4	OJ	20	RO	70	FR	R2	
29	84.60	86.39	1.79	1.75	97.8	0.58	32.4	OJ	20	RO	70	FR	R2	
30	86.39	90.22	3.83	2.26	59.0	0.10	2.6	OJ	42	RO	70	FR	R2	
Total For 01-AD-05				90.22	73.92	81.9	26.23	29.1						
01-AD-06														
1	0.00	3.05	3.05											
2	3.05	7.62	4.57	3.84	84.0	1.16	25.4	OJ	68	RO	60	SW	R2	
3	7.62	10.35	2.73	1.92	70.3	0.00	0.0	OJ	52	RO	50	SW	R2	



GEOTECHNICAL DRILL LOG

The content of this report was filtered as follows:
project ref #: 08PX0119drill hole ref # matching: 01AD

Run	From	To	Cut (m)	Core Recovered	(% Core Recovered)	RQD Recovered	(% RQD)	DOMINANT DISCONTINUITY			Condition	Angle To Core Axis	Weathering Grade	Rock Strength Grade
								Dominant Discontinuity	# of Discontinuities	Condition				
01-AD-06														
4	10.35	13.11	2.76	2.73	98.9	0.52	18.8	OJ	50	RO	60	SW	R2	
5	13.11	17.07	3.96	3.88	98.0	2.49	62.9	OJ	27	RO	60	FR	R2	
6	17.07	20.12	3.05	2.96	97.0	1.56	51.1	OJ	30	RO	60	FR	R2	
7	20.12	22.86	2.74	2.96	108.0	0.10	3.6	OJ	72	RO	70	FR	R2	
8	22.86	26.21	3.35	3.01	89.9	0.60	17.9	OJ	80	RO	60	FR	R2	
9	26.21	29.26	3.05	2.99	98.0	1.09	35.7	OJ	45	RO	60	FR	R2	
10	29.26	34.14	4.88	4.37	89.5	1.40	28.7	OJ	82	RO	60	FR	R2	
11	34.14	37.49	3.35	3.11	92.8	1.89	56.4	OJ	35	RO	70	FR	R2	
12	37.49	39.93	2.44	1.98	81.1	0.64	26.2	OJ	44	RO	70	FR	R2	
13	39.93	42.67	2.74	2.23	81.4	0.39	14.2	OJ	50	RO	60	FR	R2	
14	42.67	44.50	1.83	1.83	100.0	0.59	32.2	OJ	34	RO	70	FR	R2	
15	44.50	47.55	3.05	2.72	89.2	0.00	0.0	OJ	76	RO	60	FR	R2	
16	47.55	50.60	3.05	2.86	93.8	0.91	29.8	OJ	51	RO	80	FR	R2	
17	50.60	53.34	2.74	2.69	98.2	0.92	33.6	OJ	51	RO	60	FR	R2	
18	53.34	56.39	3.05	2.71	88.9	1.05	34.4	OJ	34	RO	50	FR	R2	
19	56.39	59.13	2.74	2.63	96.0	0.95	34.7	OJ	42	RO	60	FR	R2	
20	59.13	62.18	3.05	3.25	106.6	0.89	29.2	OJ	52	RO	70	FR	R2	
21	62.18	65.23	3.05	2.82	92.5	0.91	29.8	OJ	36	RO	70	FR	R2	
22	65.23	68.28	3.05	3.04	99.7	1.03	33.8	OJ	39	RO	70	FR	R2	
23	68.28	71.32	3.04	3.09	101.6	2.26	74.3	OJ	29	RO	70	FR	R2	
24	71.32	74.37	3.05	2.99	98.0	0.96	31.5	OJ	35	RO	80	FR	R2	
25	74.37	76.50	2.13	1.88	88.3	0.29	13.6	OJ	24	RO	70	FR	R2	
26	76.50	78.03	1.53	1.78	116.3	1.12	73.2	OJ	14	RO	70	FR	R2	
27	78.03	81.08	3.05	2.54	83.3	1.19	39.0	OJ	28	RO	70	FR	R2	
28	81.08	83.82	2.74	2.65	96.7	1.19	43.4	OJ	27	RO	60	FR	R2	



GEOTECHNICAL DRILL LOG

The content of this report was filtered as follows:
project ref #: 08PX0119drill hole ref # matching: 01AD

Run	From	To	Cut (m)	Core Recovered	(% Core Recovered)	RQD Recovered	(% RQD)	DOMINANT DISCONTINUITY			Condition	Angle To Core Axis	Weathering Grade	Rock Strength Grade
								Dominant Discontinuity	# of Discontinuities	Condition				
01-AD-06														
29	83.82	86.87	3.05	3.01	98.7	1.85	60.7	OJ	27	RO	60	FR	R2	
30	86.87	89.31	2.44	2.52	103.3	1.12	45.9	OJ	39	RO	60	FR	R2	
31	89.31	90.22	0.91	0.93	102.2	0.29	31.9	OJ	10	RO	60	FR	R2	
Total For 01-AD-06				90.22	81.92	90.8	29.36	32.5						

APPENDIX E
CORE SAMPLE ACME LABS RESULTS AND CERTIFICATES
OF ANALYSIS

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc



852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716

ACME ANALYTICAL LABORATORIES LTD.

www.acmelab.com

Client:

Happy Creek Minerals Ltd.

Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2 Canada

Submitted By:

David Blann

Receiving Lab:

Acme Analytical Laboratories (Vancouver) Ltd.

Received:

May 27, 2008

Report Date:

June 06, 2008

Page:

1 of 3

CERTIFICATE OF ANALYSIS

VAN08006092.1

CLIENT JOB INFORMATION

Project: Hen

Shipment ID:

P.O. Number

Number of Samples: 41

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage

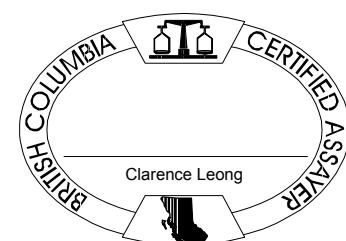
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



AcmeLabs

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ACME ANALYTICAL LABORATORIES LTD.

www.acmelab.com

Client:

Happy Creek Minerals Ltd.

Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2 Canada

Project: Hen
Report Date: June 06, 2008

Page: 2 of 3 Part 1

CERTIFICATE OF ANALYSIS

VAN08006092.1

Method	Analyte	WGHT	1DX15	V	Ca																
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi		%
		kg	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm											
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01	
659802	Drill Core	1.30	0.6	71.9	3.8	58	<0.1	202.3	29.6	198	1.10	407.9	0.2	28.0	0.4	129	0.1	16.0	0.1	36	2.26
659803	Drill Core	2.81	0.3	60.7	2.8	18	0.1	127.4	13.4	144	1.27	21.6	0.3	5.4	0.3	99	<0.1	5.4	<0.1	59	1.36
659804	Drill Core	0.99	0.5	70.5	3.6	27	0.1	138.2	16.8	165	1.50	13.3	0.3	3.1	0.5	104	<0.1	4.2	<0.1	88	2.26
659805	Drill Core	1.50	0.8	46.6	1.9	55	<0.1	24.7	17.6	429	3.35	1.2	1.3	0.6	4.5	39	<0.1	2.3	<0.1	137	1.25
659806	Core Pulp	0.08	6.0	989.5	5.6	57	0.2	11.0	6.4	577	3.28	3.5	0.4	69.7	2.0	40	0.2	1.5	0.7	35	0.91
659807	Drill Core	5.96	0.8	56.0	2.6	47	<0.1	19.5	17.5	330	3.12	10.1	1.0	1.4	2.3	35	<0.1	3.2	<0.1	149	1.15
659808	Drill Core	2.61	1.3	36.4	3.4	63	0.1	102.2	31.0	527	2.95	340.0	0.8	11.7	1.4	49	0.2	30.0	<0.1	119	2.92
659809	Drill Core	3.70	9.4	55.1	3.8	150	0.3	26.7	14.5	583	3.68	24.8	0.9	3.0	1.2	42	1.8	10.2	<0.1	172	1.67
659810	Drill Core	3.34	5.7	59.2	4.7	119	0.4	48.3	13.1	858	3.82	30.1	0.7	4.5	1.3	73	0.4	11.0	0.1	113	1.94
659811	Drill Core	2.23	0.6	70.7	3.5	71	0.1	18.2	20.3	654	3.88	71.9	0.5	22.9	1.2	46	0.1	5.5	<0.1	139	2.32
659812	Drill Core	2.06	0.6	74.8	3.6	73	0.1	19.7	22.3	715	3.96	120.7	0.5	38.6	1.3	50	0.1	6.2	<0.1	144	2.32
659813	Drill Core	1.88	0.7	125.5	4.2	58	0.7	18.2	20.7	803	3.25	4762	0.5	1908	1.3	202	0.2	52.4	0.2	105	6.25
659814	Drill Core	6.73	0.9	136.6	1.5	48	0.1	20.4	20.6	369	3.17	36.0	0.8	4.5	2.1	47	<0.1	7.3	<0.1	156	1.36
659815	Drill Core	7.01	1.0	126.5	3.5	60	0.2	19.2	21.4	449	3.75	29.9	0.8	9.4	1.8	49	0.2	6.9	<0.1	173	1.57
659816	Drill Core	4.89	3.5	152.4	3.0	57	0.6	28.2	29.3	525	3.94	300.3	0.9	23.2	1.6	43	0.1	5.6	0.1	152	1.29
659817	Drill Core	7.56	4.7	147.3	4.3	89	0.4	25.6	25.0	603	4.08	45.1	1.0	14.9	1.5	54	1.0	4.5	<0.1	208	1.75
659818	Drill Core	3.95	1.8	136.3	2.4	49	0.2	22.0	21.9	361	3.20	7.2	0.8	17.3	2.0	36	<0.1	1.8	<0.1	146	1.31
659819	Core Pulp	0.08	4.5	39.8	2.3	42	<0.1	22.3	8.7	504	3.01	4.4	0.3	3.7	1.3	40	0.1	0.6	<0.1	61	0.82
659820	Drill Core	4.43	2.0	128.0	2.8	45	0.2	15.1	15.4	316	2.46	12.4	1.4	9.9	3.0	32	0.2	2.4	<0.1	103	1.15
659821	Drill Core	2.62	10.9	115.8	5.2	47	0.2	18.9	16.4	388	2.57	14.6	1.7	11.4	4.2	27	0.1	2.1	<0.1	86	1.41
659822	Drill Core	1.13	3.3	160.8	2.9	56	0.2	18.4	19.2	366	3.48	14.1	2.2	5.4	6.0	24	<0.1	1.4	<0.1	130	0.94
659823	Drill Core	3.29	2.7	113.5	2.4	46	0.1	17.0	18.4	258	2.73	35.9	1.2	9.6	3.1	37	0.1	2.3	<0.1	127	0.95
659824	Drill Core	1.04	4.5	117.7	2.4	46	0.2	16.8	16.2	343	2.88	21.6	2.0	9.3	7.3	28	0.1	2.8	<0.1	109	1.26
659825	Drill Core	8.32	1.5	102.7	4.6	64	0.2	29.7	28.3	312	3.75	54.2	0.9	19.4	1.8	78	0.3	3.5	<0.1	197	1.63
659826	Core Pulp	0.08	6.5	1062	5.4	59	0.2	11.6	6.7	595	3.41	3.8	0.4	67.0	2.0	41	0.2	1.5	0.7	35	0.95
659827	Drill Core	7.13	10.1	128.1	4.4	39	0.4	30.8	20.7	221	3.25	27.5	4.1	8.5	10.7	32	0.2	3.4	0.1	106	1.06
659828	Drill Core	7.26	9.2	96.8	9.2	58	0.2	20.5	20.2	340	3.03	8.1	2.1	3.7	4.2	180	0.7	3.3	<0.1	119	2.16
659829	Drill Core	6.32	20.1	150.5	3.4	38	0.3	29.4	24.5	193	3.32	10.1	2.2	7.6	3.2	52	0.2	4.0	0.1	91	1.11
659830	Drill Core	4.86	63.4	141.1	3.7	34	0.5	31.1	24.5	201	4.03	4.9	2.3	2.4	1.2	197	0.2	2.8	0.3	90	2.71
659831	Drill Core	5.67	4.0	120.9	2.3	66	0.3	26.2	31.0	468	4.43	10.0	1.5	3.2	2.6	72	0.2	1.8	0.1	182	1.04

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Part 2

CERTIFICATE OF ANALYSIS

VAN08006092.1

Analyte	Method	1DX15																
		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
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
659802	Drill Core	0.081	3	98	1.10	156	0.083	7	2.57	0.090	0.22	0.1	<0.01	2.4	0.2	0.16	5	0.7
659803	Drill Core	0.099	3	159	1.84	186	0.105	2	2.20	0.176	0.21	0.2	<0.01	3.5	0.2	<0.05	4	<0.5
659804	Drill Core	0.099	4	198	2.08	238	0.148	3	3.34	0.187	0.29	0.3	<0.01	3.8	0.3	0.07	8	0.6
659805	Drill Core	0.154	19	36	1.27	382	0.403	5	1.72	0.088	0.90	0.2	<0.01	3.6	0.1	0.13	7	0.7
659806	Core Pulp	0.057	5	22	0.59	126	0.061	3	0.88	0.067	0.12	3.4	0.19	3.0	<0.1	0.48	4	2.3
659807	Drill Core	0.144	12	32	1.38	255	0.388	5	1.78	0.071	0.58	0.3	<0.01	5.3	<0.1	0.11	7	0.6
659808	Drill Core	0.118	6	122	1.58	96	0.210	5	2.30	0.038	0.21	1.0	<0.01	6.6	<0.1	0.10	9	0.9
659809	Drill Core	0.078	6	27	1.13	105	0.276	5	1.76	0.062	0.32	1.0	<0.01	10.7	0.2	0.79	7	4.4
659810	Drill Core	0.075	7	33	0.95	138	0.221	4	1.94	0.071	0.27	0.7	<0.01	10.8	0.3	1.29	7	4.9
659811	Drill Core	0.066	4	25	1.16	167	0.225	5	1.84	0.054	0.24	0.6	0.04	10.6	0.4	0.28	7	0.9
659812	Drill Core	0.070	5	25	1.13	189	0.217	5	1.75	0.059	0.25	0.7	0.06	11.3	0.4	0.32	7	1.1
659813	Drill Core	0.103	7	20	1.08	178	0.090	10	1.49	0.094	0.14	1.3	0.16	7.8	0.7	0.73	6	2.8
659814	Drill Core	0.115	7	37	1.04	282	0.281	7	1.63	0.100	0.78	0.4	<0.01	6.2	0.2	0.26	6	1.4
659815	Drill Core	0.123	7	35	1.49	223	0.284	5	2.06	0.085	0.78	1.5	<0.01	5.9	0.3	0.20	7	1.0
659816	Drill Core	0.127	6	32	1.42	144	0.227	5	1.80	0.088	0.65	0.4	<0.01	5.2	0.3	1.08	6	2.4
659817	Drill Core	0.109	7	46	1.60	217	0.304	6	2.36	0.079	0.57	0.6	<0.01	6.2	0.3	0.74	8	3.2
659818	Drill Core	0.121	8	43	0.94	279	0.313	5	1.54	0.077	0.57	0.3	<0.01	3.2	0.1	0.42	5	1.3
659819	Core Pulp	0.061	5	37	0.77	98	0.130	3	1.56	0.088	0.10	0.2	0.02	3.8	<0.1	<0.05	5	<0.5
659820	Drill Core	0.125	10	28	0.75	197	0.211	3	1.25	0.098	0.57	0.4	<0.01	3.2	0.2	0.30	5	1.1
659821	Drill Core	0.126	13	26	0.66	59	0.188	3	1.03	0.074	0.15	0.5	<0.01	3.1	<0.1	0.42	5	1.0
659822	Drill Core	0.113	12	33	1.00	227	0.295	2	1.44	0.069	0.67	0.5	<0.01	3.6	0.3	0.46	6	1.1
659823	Drill Core	0.107	8	40	0.85	248	0.281	2	1.42	0.105	0.67	0.3	<0.01	2.5	0.3	0.24	5	0.7
659824	Drill Core	0.090	12	42	0.77	206	0.237	3	1.10	0.085	0.59	0.4	0.08	4.1	0.7	0.25	4	0.8
659825	Drill Core	0.093	5	67	1.35	313	0.327	8	2.94	0.183	1.22	1.4	0.01	4.6	0.7	0.47	8	1.2
659826	Core Pulp	0.058	5	22	0.61	126	0.061	4	0.92	0.070	0.13	3.4	0.21	3.1	<0.1	0.49	4	2.0
659827	Drill Core	0.096	13	47	0.76	137	0.207	3	1.16	0.091	0.49	0.9	<0.01	2.5	0.3	1.25	5	2.4
659828	Drill Core	0.091	9	27	1.08	447	0.214	11	3.30	0.137	0.91	0.3	<0.01	3.0	0.5	0.68	8	1.0
659829	Drill Core	0.105	8	22	0.79	187	0.177	3	1.52	0.127	0.54	0.5	<0.01	2.3	0.3	1.38	4	2.0
659830	Drill Core	0.113	7	15	0.65	102	0.141	9	3.33	0.264	0.36	0.3	<0.01	1.7	0.3	2.39	7	2.6
659831	Drill Core	0.093	5	34	1.83	193	0.293	4	2.55	0.134	1.33	0.8	<0.01	5.9	1.2	1.35	7	1.1

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Part 1

CERTIFICATE OF ANALYSIS

VAN08006092.1

Analyte	Method	WGHT	1DX15																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%						
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
659832	Drill Core	1.60	3.1	10.0	4.9	17	<0.1	6.9	3.4	104	0.89	13.0	5.2	0.7	15.8	39	0.1	3.1	<0.1	21	0.41
659833	Drill Core	2.14	43.6	190.6	4.2	31	0.6	50.5	17.9	119	3.24	13.7	3.2	8.3	4.1	41	1.1	3.3	0.2	44	1.21
659834	Drill Core	2.17	39.6	182.6	3.9	29	0.5	49.4	16.7	123	3.09	14.8	3.3	14.5	3.9	42	0.9	3.0	0.2	38	1.32
659835	Drill Core	3.91	47.5	77.8	5.9	24	0.2	26.3	10.5	91	1.74	18.3	6.6	4.6	12.1	34	0.3	2.4	0.1	46	0.57
659836	Drill Core	7.28	5.3	73.4	2.1	50	0.1	19.5	18.9	357	3.19	17.7	1.8	7.0	3.6	41	<0.1	3.3	0.1	128	0.77
659837	Drill Core	7.77	3.0	114.3	2.7	54	0.1	18.8	19.9	362	3.37	14.4	1.4	6.4	3.4	19	0.2	1.1	0.1	125	0.65
659838	Drill Core	7.14	25.2	74.0	3.1	32	<0.1	21.2	13.8	195	2.09	33.3	3.5	5.2	6.6	35	0.1	3.5	0.1	83	0.96
659839	Drill Core	8.08	12.2	132.7	3.2	45	0.2	29.6	20.8	242	3.32	9.4	1.3	6.8	2.2	39	0.2	1.6	<0.1	117	0.77
659840	Drill Core	4.88	5.8	121.2	2.3	56	0.2	29.6	21.9	286	3.55	16.9	0.9	12.7	1.5	73	0.3	1.2	0.1	131	1.20
659841	Core Pulp	0.08	4.0	38.3	2.1	40	<0.1	21.8	8.3	492	3.05	4.0	0.3	4.1	1.2	40	<0.1	0.5	<0.1	57	0.79
659842	Drill Core	7.80	3.3	148.5	1.8	51	0.2	20.8	22.1	367	4.09	7.1	1.0	5.5	1.9	52	0.2	0.8	<0.1	176	0.88



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Part 2

CERTIFICATE OF ANALYSIS

VAN08006092.1

Analyte	Method	1DX15																
		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
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
659832	Drill Core	0.037	20	15	0.23	48	0.087	3	0.64	0.081	0.26	0.3	<0.01	0.7	0.2	0.13	2	<0.5
659833	Drill Core	0.121	14	15	0.19	27	0.148	5	0.33	0.092	0.08	0.6	<0.01	1.2	<0.1	1.97	2	7.0
659834	Drill Core	0.126	13	15	0.13	17	0.104	4	0.31	0.072	0.06	0.6	<0.01	0.9	<0.1	1.68	1	7.0
659835	Drill Core	0.081	20	12	0.29	88	0.082	4	0.52	0.073	0.24	0.7	<0.01	1.0	0.2	0.77	1	0.9
659836	Drill Core	0.090	9	26	1.38	413	0.218	4	1.76	0.086	1.10	0.9	<0.01	4.1	0.8	0.36	6	<0.5
659837	Drill Core	0.093	7	22	1.17	299	0.254	5	1.51	0.086	1.05	0.2	<0.01	3.1	0.5	0.43	5	1.1
659838	Drill Core	0.092	15	23	0.61	148	0.173	10	1.00	0.081	0.54	0.3	<0.01	1.6	0.3	0.42	4	1.0
659839	Drill Core	0.107	7	39	1.08	204	0.227	3	1.45	0.089	0.88	0.2	<0.01	2.0	0.3	0.80	5	1.6
659840	Drill Core	0.103	6	35	1.05	113	0.245	6	2.00	0.127	0.92	0.1	<0.01	2.5	0.4	1.06	6	1.0
659841	Core Pulp	0.061	4	36	0.77	85	0.109	2	1.48	0.079	0.11	0.2	0.02	3.4	<0.1	<0.05	5	<0.5
659842	Drill Core	0.106	6	32	1.49	371	0.329	2	2.03	0.079	1.44	0.2	<0.01	4.1	0.5	0.47	7	1.5



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Part 1

QUALITY CONTROL REPORT

VAN08006092.1

Method	WGHT	1DX15																				
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
	Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%								
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
Pulp Duplicates																						
659810	Drill Core	3.34	5.7	59.2	4.7	119	0.4	48.3	13.1	858	3.82	30.1	0.7	4.5	1.3	73	0.4	11.0	0.1	113	1.94	
REP 659810	QC		5.2	58.6	4.7	115	0.4	48.0	12.6	852	3.75	29.3	0.7	4.7	1.3	71	0.4	10.8	0.1	110	1.93	
659838	Drill Core	7.14	25.2	74.0	3.1	32	<0.1	21.2	13.8	195	2.09	33.3	3.5	5.2	6.6	35	0.1	3.5	0.1	83	0.96	
REP 659838	QC		25.9	76.2	3.2	34	0.1	22.1	13.5	204	2.09	33.6	3.5	5.0	7.1	36	0.1	4.0	0.1	88	0.97	
Core Reject Duplicates																						
659819	Core Pulp	0.08	4.5	39.8	2.3	42	<0.1	22.3	8.7	504	3.01	4.4	0.3	3.7	1.3	40	0.1	0.6	<0.1	61	0.82	
DUP 659819	QC		4.4	38.9	2.2	41	<0.1	21.6	8.7	477	2.96	4.3	0.3	3.6	1.3	40	0.1	0.6	<0.1	59	0.82	
Reference Materials																						
STD DS7	Standard		18.2	97.8	66.1	355	0.8	51.7	8.7	570	2.12	47.9	4.9	56.5	4.0	60	6.0	5.7	4.4	80	0.86	
STD DS7	Standard		21.7	104.9	67.3	383	0.8	57.0	10.2	607	2.30	50.5	5.2	88.1	4.5	65	6.9	6.3	5.0	86	0.93	
STD DS7	Standard		18.7	106.5	71.1	397	0.8	54.7	9.5	598	2.29	51.4	4.6	57.9	4.0	61	5.6	5.4	4.5	80	0.90	
STD DS7	Standard		18.4	119.8	67.9	384	0.8	59.6	9.3	615	2.29	48.9	4.5	63.9	3.8	61	5.6	5.5	4.4	83	0.89	
STD DS7 Expected			20.92	109	70.6	411	0.89	56	9.7	627	2.39	48.2	4.9	70	4.4	68.7	6.38	5.86	4.51	86	0.93	
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
Prep Wash																						
G1	Prep Blank		<0.01	0.8	8.5	3.6	49	<0.1	6.1	5.0	567	2.06	<0.5	2.6	<0.5	4.2	66	<0.1	<0.1	0.1	45	0.57
G1	Prep Blank		<0.01	0.7	7.3	3.3	52	<0.1	5.4	5.0	569	2.04	<0.5	2.8	<0.5	4.1	63	<0.1	<0.1	<0.1	45	0.54



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Part 2

QUALITY CONTROL REPORT

VAN08006092.1

Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																		
659810	Drill Core	0.075	7	33	0.95	138	0.221	4	1.94	0.071	0.27	0.7	<0.01	10.8	0.3	1.29	7	4.9
REP 659810	QC	0.074	7	33	0.91	136	0.215	4	1.91	0.071	0.27	0.6	<0.01	10.8	0.3	1.27	8	4.2
659838	Drill Core	0.092	15	23	0.61	148	0.173	10	1.00	0.081	0.54	0.3	<0.01	1.6	0.3	0.42	4	1.0
REP 659838	QC	0.097	15	22	0.61	148	0.180	10	0.99	0.083	0.56	0.3	<0.01	1.7	0.3	0.43	4	1.4
Core Reject Duplicates																		
659819	Core Pulp	0.061	5	37	0.77	98	0.130	3	1.56	0.088	0.10	0.2	0.02	3.8	<0.1	<0.05	5	<0.5
DUP 659819	QC	0.061	5	36	0.75	99	0.124	3	1.56	0.086	0.10	0.3	0.02	3.8	<0.1	<0.05	5	0.5
Reference Materials																		
STD DS7	Standard	0.072	11	161	0.97	325	0.116	36	0.92	0.069	0.39	3.5	0.19	2.1	4.0	0.18	4	3.8
STD DS7	Standard	0.078	13	176	1.05	365	0.132	42	1.00	0.076	0.40	3.7	0.18	2.4	4.1	0.19	5	3.5
STD DS7	Standard	0.074	11	173	1.04	336	0.109	40	0.94	0.065	0.42	3.9	0.21	2.1	4.3	0.19	5	3.3
STD DS7	Standard	0.068	11	178	1.04	324	0.110	40	0.94	0.066	0.41	3.3	0.20	2.1	3.7	0.19	4	3.6
STD DS7 Expected		0.08	12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8	0.2	2.5	4.19	0.21	4.6	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.089	8	11	0.63	261	0.146	1	1.12	0.099	0.56	<0.1	<0.01	2.1	0.4	<0.05	5	<0.5
G1	Prep Blank	0.084	8	11	0.63	265	0.145	1	1.09	0.087	0.55	<0.1	<0.01	2.0	0.4	<0.05	5	<0.5



852 E. Hastings St. Vancouver BC V6A 1R6 Canada
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ACME ANALYTICAL LABORATORIES LTD.

www.acmelab.com

Client:

Happy Creek Minerals Ltd.

Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2 Canada

Submitted By:

David Blann

Receiving Lab:

Acme Analytical Laboratories (Vancouver) Ltd.

Received:

May 27, 2008

Report Date:

June 13, 2008

Page:

1 of 5

CERTIFICATE OF ANALYSIS

VAN08006093.1

CLIENT JOB INFORMATION

Project: ART/DL
Shipment ID:
P.O. Number
Number of Samples: 102

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	93	Crush split and pulverize drill core to 150mesh		
1DX	102	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed

SAMPLE DISPOSAL

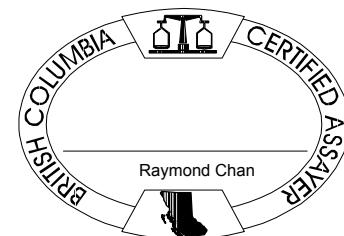
STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: D. Ridley
Bob Lane



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Vancouver BC V6E 3X2 Canada

Project: ART/DL

Report Date: June 13, 2008

Page: 2 of 5 Part 1

CERTIFICATE OF ANALYSIS

VAN08006093.1

Method	Analyte	WGHT	1DX15																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	
		Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%							
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01	
660001	Drill Core	5.01	1.8	38.5	17.6	106	1.6	41.8	16.8	440	5.24	36.3	0.6	<0.5	5.5	58	0.2	0.9	0.3	10	0.52
660002	Drill Core	3.69	1.1	39.6	15.2	96	1.4	44.2	19.4	531	4.76	42.1	0.5	<0.5	4.9	65	0.3	0.6	0.3	7	0.78
660003	Drill Core	5.04	6.3	51.3	31.0	81	2.3	40.0	26.0	547	4.65	55.8	0.6	1.7	4.2	63	0.3	1.0	0.8	8	0.92
660004	Drill Core	3.61	0.7	40.6	18.0	85	1.2	36.1	20.4	713	4.79	37.9	0.5	<0.5	4.7	65	0.3	0.5	0.3	6	1.43
660005	Core Pulp	0.08	9.6	5140	8.6	84	1.1	13.1	9.6	870	5.78	6.9	0.2	290.9	1.7	180	0.4	5.6	1.0	43	2.37
660006	Drill Core	7.41	1.3	39.6	8.6	76	1.0	35.2	14.6	508	4.03	29.1	0.6	<0.5	5.5	51	0.2	0.3	0.2	6	1.02
660007	Drill Core	7.65	1.4	31.5	11.2	95	1.0	36.9	20.0	573	4.30	36.2	0.6	<0.5	5.8	60	0.3	0.4	0.3	6	1.15
660008	Drill Core	6.59	1.3	23.7	6.3	80	0.8	30.6	15.8	511	3.73	28.9	0.7	0.9	7.1	57	0.3	0.2	0.3	6	1.06
660009	Drill Core	4.76	1.9	20.9	11.6	87	0.7	33.4	15.0	438	4.58	32.5	0.7	<0.5	6.3	50	0.2	0.4	0.2	7	0.69
660010	Drill Core	4.03	1.3	38.9	12.1	94	1.2	43.7	16.8	455	5.07	41.5	0.6	0.7	5.9	64	0.2	0.6	0.3	14	0.65
660011	Drill Core	4.81	1.1	40.0	16.0	95	1.4	40.7	20.2	427	5.00	44.4	0.6	<0.5	5.8	73	0.2	1.0	0.4	12	0.68
660012	Drill Core	7.53	3.4	42.8	20.0	120	1.2	38.6	17.2	564	4.23	34.6	0.9	<0.5	5.9	146	0.8	0.8	0.4	21	1.74
660013	Drill Core	2.82	16.6	69.2	25.1	202	1.9	60.5	16.6	621	4.01	31.2	1.2	<0.5	5.9	137	2.4	1.4	0.4	49	2.23
660014	Drill Core	6.11	1.0	41.0	20.8	85	1.3	35.6	21.4	685	4.43	34.7	0.8	1.0	5.6	80	0.5	0.7	0.4	7	2.05
660015	Drill Core	2.58	1.4	65.1	32.7	79	1.6	43.0	25.5	487	3.82	35.6	0.7	<0.5	3.9	72	0.4	0.5	0.3	11	1.38
660016	Drill Core	6.76	1.9	32.2	11.5	75	0.7	35.3	12.0	441	3.50	11.6	0.7	<0.5	6.1	73	0.4	0.4	0.2	10	1.43
660017	Drill Core	4.08	2.3	42.4	42.5	121	1.7	52.5	28.4	497	4.84	58.6	0.6	<0.5	5.3	74	0.7	1.2	0.7	15	1.37
660018	Core Pulp	0.08	4.4	41.6	2.0	42	<0.1	23.0	8.4	508	3.08	4.1	0.3	3.8	1.1	35	0.1	0.4	<0.1	57	0.83
660019	Drill Core	3.33	0.9	31.0	10.7	70	0.7	30.7	12.6	518	3.87	8.6	0.5	0.7	6.3	76	0.3	0.6	0.3	10	1.23
660020	Drill Core	6.00	1.3	46.5	16.6	129	1.1	43.1	19.1	513	5.06	17.5	0.6	<0.5	6.0	103	0.6	0.6	0.2	17	1.44
660021	Drill Core	5.29	0.7	27.6	6.2	76	0.6	35.5	13.1	292	3.95	10.0	0.8	0.6	9.0	53	0.2	0.1	0.3	14	0.52
660022	Drill Core	6.24	0.7	27.4	8.3	78	0.6	38.6	14.0	361	4.60	11.3	0.8	<0.5	9.2	47	0.2	0.3	0.3	13	0.55
660023	Drill Core	3.91	0.8	27.3	8.1	68	0.8	40.6	14.7	371	4.22	14.9	0.7	<0.5	8.6	57	0.2	0.3	0.3	23	0.77
660024	Drill Core	5.80	0.7	14.7	7.3	53	0.5	31.3	17.0	298	3.78	19.3	0.8	<0.5	9.1	51	0.1	0.3	0.2	16	0.59
660025	Core Pulp	0.08	9.7	4850	8.6	84	1.1	12.7	9.6	830	5.68	6.6	0.2	271.7	1.5	171	0.3	5.4	0.9	42	2.25
660026	Drill Core	5.10	1.0	79.6	37.6	106	1.8	41.8	18.3	504	3.80	16.1	1.1	<0.5	6.7	73	0.4	0.4	0.4	8	1.87
660027	Drill Core	7.18	4.0	35.9	16.5	70	1.1	31.6	24.9	767	4.00	26.4	0.8	0.9	7.5	95	0.4	0.4	0.3	8	2.05
660028	Drill Core	7.18	2.4	25.4	26.6	75	0.6	20.5	11.3	593	3.54	15.4	0.5	1.7	3.7	65	0.4	0.2	0.2	5	1.75
660029	Drill Core	7.66	2.4	24.6	9.7	62	0.7	27.0	12.6	297	3.17	18.8	0.9	1.0	7.9	60	0.2	0.3	0.2	10	0.79
660030	Drill Core	5.81	1.0	46.3	19.5	108	1.6	35.6	12.9	558	4.11	16.4	0.9	<0.5	6.3	80	0.4	0.2	0.3	8	1.85

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ACME ANALYTICAL LABORATORIES LTD.

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Project: ART/DL

Report Date: June 13, 2008

Page: 2 of 5 Part 2

CERTIFICATE OF ANALYSIS

VAN08006093.1

Analyte	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		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	
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
660001	Drill Core	0.056	11	11	1.08	42	0.001	2	0.73	0.076	0.15	0.1	<0.01	4.0	<0.1	0.36	2	1.9
660002	Drill Core	0.050	8	7	1.33	37	<0.001	1	0.47	0.068	0.14	<0.1	<0.01	3.9	<0.1	0.45	1	2.0
660003	Drill Core	0.050	5	7	1.11	36	<0.001	2	0.45	0.068	0.13	<0.1	<0.01	3.4	<0.1	1.13	1	3.5
660004	Drill Core	0.057	10	6	1.32	37	<0.001	<1	0.43	0.079	0.13	<0.1	<0.01	3.5	<0.1	0.39	1	2.1
660005	Core Pulp	0.076	4	22	1.00	60	0.016	4	0.81	0.053	0.25	4.8	1.00	4.6	<0.1	1.68	3	8.3
660006	Drill Core	0.062	11	6	1.13	36	<0.001	1	0.42	0.079	0.12	<0.1	<0.01	3.3	<0.1	0.18	<1	1.0
660007	Drill Core	0.057	13	6	1.27	37	<0.001	1	0.43	0.080	0.13	<0.1	<0.01	3.5	<0.1	0.15	1	0.7
660008	Drill Core	0.059	16	6	1.11	40	<0.001	1	0.47	0.084	0.13	<0.1	<0.01	3.4	<0.1	0.07	<1	0.7
660009	Drill Core	0.049	13	6	1.26	35	<0.001	1	0.45	0.077	0.13	<0.1	<0.01	3.6	<0.1	0.11	1	0.9
660010	Drill Core	0.058	14	12	1.37	36	<0.001	2	1.09	0.068	0.14	<0.1	<0.01	4.4	<0.1	0.24	2	1.0
660011	Drill Core	0.054	12	11	1.35	34	<0.001	1	1.00	0.060	0.13	<0.1	<0.01	4.2	<0.1	0.31	3	1.0
660012	Drill Core	0.058	13	13	1.21	46	<0.001	2	0.79	0.070	0.16	<0.1	<0.01	4.7	<0.1	0.47	2	1.9
660013	Drill Core	0.054	7	13	1.11	36	<0.001	1	0.91	0.049	0.13	<0.1	<0.01	4.1	<0.1	1.57	3	6.1
660014	Drill Core	0.049	7	7	0.94	36	<0.001	<1	0.66	0.067	0.14	<0.1	<0.01	3.0	<0.1	1.92	2	5.5
660015	Drill Core	0.044	5	9	0.85	26	<0.001	<1	0.75	0.049	0.11	<0.1	<0.01	2.9	<0.1	1.26	2	4.9
660016	Drill Core	0.051	12	8	1.02	33	<0.001	<1	0.66	0.055	0.13	<0.1	<0.01	3.1	<0.1	0.42	2	1.5
660017	Drill Core	0.046	7	12	1.15	32	<0.001	<1	0.98	0.050	0.12	<0.1	<0.01	3.9	<0.1	1.75	3	6.0
660018	Core Pulp	0.053	5	37	0.77	83	0.113	1	1.51	0.087	0.11	0.2	0.02	3.9	<0.1	<0.05	5	<0.5
660019	Drill Core	0.040	13	10	1.19	31	<0.001	1	0.73	0.059	0.13	<0.1	<0.01	4.0	<0.1	0.20	2	1.4
660020	Drill Core	0.052	9	13	1.62	35	<0.001	<1	1.37	0.058	0.13	<0.1	<0.01	5.1	<0.1	0.50	3	2.7
660021	Drill Core	0.050	27	13	1.13	38	0.001	<1	1.30	0.078	0.16	<0.1	<0.01	4.3	<0.1	0.05	3	0.6
660022	Drill Core	0.047	30	14	1.29	35	<0.001	1	1.20	0.070	0.15	<0.1	<0.01	4.8	<0.1	0.06	3	0.7
660023	Drill Core	0.052	30	20	1.21	37	0.001	1	1.72	0.069	0.14	<0.1	<0.01	5.3	<0.1	0.09	5	0.9
660024	Drill Core	0.054	28	16	1.02	38	0.001	2	1.30	0.083	0.15	<0.1	<0.01	4.1	<0.1	0.10	3	0.6
660025	Core Pulp	0.070	4	22	0.95	60	0.015	3	0.80	0.052	0.25	4.9	0.90	4.8	0.1	1.66	3	7.2
660026	Drill Core	0.051	8	6	1.13	31	0.001	1	0.54	0.079	0.13	<0.1	<0.01	3.5	<0.1	0.33	1	1.7
660027	Drill Core	0.061	9	6	1.25	33	<0.001	1	0.57	0.080	0.13	<0.1	<0.01	3.9	<0.1	0.06	1	<0.5
660028	Drill Core	0.046	9	6	0.95	24	<0.001	<1	0.45	0.066	0.10	<0.1	<0.01	2.3	<0.1	0.68	1	2.7
660029	Drill Core	0.054	15	9	0.80	36	0.001	1	0.88	0.096	0.15	<0.1	<0.01	3.3	<0.1	0.31	2	1.1
660030	Drill Core	0.055	7	7	1.28	31	<0.001	<1	0.62	0.085	0.13	<0.1	<0.01	4.2	<0.1	0.25	1	1.7

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Vancouver BC V6E 3X2 Canada

Project: ART/DL

Report Date: June 13, 2008

Page: 3 of 5 Part 1

CERTIFICATE OF ANALYSIS

VAN08006093.1

Method	Analyte	WGHT	1DX15																		
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%							
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01	
660031	Drill Core	7.50	1.4	11.6	12.3	26	0.3	10.9	5.9	621	2.13	15.4	0.4	<0.5	2.7	58	0.3	0.2	<0.1	3	2.06
660032	Drill Core	1.89	2.3	52.7	21.4	77	1.5	32.1	20.5	478	3.42	21.4	0.9	<0.5	7.1	101	0.3	0.7	0.3	10	1.51
660033	Drill Core	3.14	0.8	32.3	8.6	72	0.6	28.7	17.8	619	4.21	35.4	0.8	<0.5	6.7	33	0.2	1.0	0.2	7	0.65
660034	Drill Core	9.65	1.8	27.7	13.4	61	0.5	27.1	15.5	445	3.18	29.8	0.8	<0.5	5.7	54	0.2	0.9	0.2	4	1.18
660035	Drill Core	5.84	1.1	35.3	13.5	78	0.6	31.0	16.8	552	3.43	38.8	0.8	1.8	6.5	60	0.2	0.8	0.4	5	0.97
660036	Drill Core	5.89	0.6	33.2	9.9	74	0.5	29.6	18.4	577	3.74	38.4	0.6	<0.5	6.0	69	0.2	1.6	0.3	4	1.02
660037	Core Pulp	0.08	9.0	4541	8.2	82	1.1	10.5	8.8	802	5.21	6.6	0.2	333.5	1.4	187	0.3	7.0	1.1	41	2.08
660038	Drill Core	6.81	1.3	35.2	11.4	75	0.7	29.0	15.7	575	3.59	39.5	0.7	<0.5	4.8	67	0.3	1.0	0.2	6	1.15
660039	Drill Core	6.07	0.6	28.0	15.8	85	0.5	28.2	16.6	610	4.32	28.8	0.7	0.7	5.2	57	0.2	0.3	0.3	3	1.21
660040	Drill Core	5.76	0.7	38.7	14.5	78	0.5	28.6	14.9	648	4.34	31.3	0.6	1.1	4.9	74	0.3	1.3	0.3	6	1.10
660041	Drill Core	3.82	0.6	28.0	8.8	77	0.3	28.6	12.8	596	4.40	23.3	0.7	0.5	7.5	68	0.1	0.4	0.2	6	0.66
660042	Drill Core	1.69	0.8	44.4	10.8	74	0.3	25.7	12.7	578	3.84	26.6	0.8	1.2	7.2	69	0.1	0.8	0.2	6	0.80
660043	Drill Core	1.67	0.5	37.3	9.6	76	0.4	31.5	17.3	580	4.11	36.1	0.7	<0.5	6.8	69	0.1	0.8	0.3	5	0.81
660044	Drill Core	7.60	1.0	35.7	8.7	60	0.5	27.5	13.7	602	4.09	31.1	0.7	<0.5	5.5	46	0.1	2.1	0.3	11	0.62
660045	Drill Core	3.20	0.6	31.9	24.0	137	0.7	31.1	15.4	753	4.33	657.2	0.9	0.9	3.5	66	0.4	7.4	0.3	11	1.18
660046	Drill Core	6.55	0.8	29.8	7.9	44	0.4	25.8	15.8	404	3.51	84.7	0.7	1.2	6.4	60	0.1	4.6	0.2	10	0.62
660047	Drill Core	7.91	0.8	34.1	11.3	84	0.5	30.8	16.7	576	4.46	42.4	0.8	1.4	7.3	72	0.2	2.1	0.2	6	0.68
660048	Drill Core	3.07	0.9	38.4	5.8	61	0.6	35.5	20.1	553	5.22	47.1	0.8	0.8	6.0	64	0.2	4.7	0.4	14	0.59
660049	Core Pulp	0.08	4.3	40.6	2.1	42	<0.1	21.3	8.7	506	3.11	4.8	0.3	5.1	1.3	41	<0.1	0.6	<0.1	61	0.89
660050	Drill Core	1.38	1.4	35.9	5.4	64	0.3	29.1	15.2	463	3.78	43.4	0.5	1.4	5.4	66	0.2	5.3	0.2	7	0.67
660051	Drill Core	6.42	0.8	66.2	8.4	94	0.7	36.5	16.7	461	4.28	47.7	0.5	0.7	6.8	65	0.3	4.9	0.3	6	0.74
660052	Drill Core	9.61	1.3	32.1	8.8	85	0.5	28.3	15.3	547	4.59	39.1	0.5	0.7	4.9	64	0.2	4.2	0.2	5	1.06
660053	Drill Core	3.65	0.9	42.0	13.8	83	0.4	34.1	17.2	629	4.78	42.7	0.6	0.8	6.0	75	0.2	4.0	0.3	6	1.11
660054	Drill Core	7.97	0.6	37.4	6.2	82	0.5	28.0	16.7	532	4.16	36.7	0.6	<0.5	7.0	65	0.2	4.0	0.3	5	0.74
660055	Core Pulp	0.08	9.2	4597	8.2	85	1.1	9.9	9.0	770	5.35	6.7	0.2	322.2	1.5	177	0.4	7.2	1.0	42	2.09
660056	Drill Core	7.06	1.3	32.9	4.9	66	0.3	29.3	19.2	434	3.59	46.7	0.7	1.4	7.1	56	0.2	3.7	0.2	8	0.66
660057	Drill Core	8.32	0.7	21.5	11.4	69	0.3	28.0	15.1	443	3.49	86.6	0.6	<0.5	7.2	82	0.2	6.0	0.2	11	0.96
660058	Drill Core	5.90	0.6	19.2	9.3	58	0.3	32.4	14.5	576	4.16	36.1	0.7	1.1	6.9	81	0.2	5.3	0.2	13	1.29
660059	Drill Core	3.83	0.6	40.3	10.5	74	0.5	36.4	17.1	561	4.86	43.2	0.7	1.0	8.3	71	0.2	6.5	0.3	15	0.60
660060	Drill Core	6.40	1.4	42.5	23.0	96	0.7	35.3	24.6	555	4.20	53.7	0.6	1.6	9.0	72	0.3	3.8	0.8	8	1.11

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Project: ART/DL

Report Date: June 13, 2008

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Analyte	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	
		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	
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
660031	Drill Core	0.041	7	7	0.57	23	<0.001	<1	0.38	0.069	0.10	<0.1	<0.01	1.6	<0.1	0.76	<1	1.9
660032	Drill Core	0.054	9	8	0.83	33	<0.001	<1	0.79	0.085	0.14	<0.1	<0.01	3.6	<0.1	0.96	2	2.5
660033	Drill Core	0.050	19	7	0.63	35	<0.001	<1	0.53	0.086	0.14	<0.1	<0.01	3.8	<0.1	0.08	1	0.7
660034	Drill Core	0.056	14	5	0.85	25	0.002	<1	0.35	0.059	0.09	<0.1	<0.01	2.7	<0.1	0.13	<1	<0.5
660035	Drill Core	0.061	18	5	0.92	32	<0.001	2	0.43	0.077	0.13	0.2	<0.01	3.0	<0.1	0.08	1	<0.5
660036	Drill Core	0.055	19	4	1.02	27	<0.001	<1	0.35	0.065	0.12	0.1	<0.01	3.0	<0.1	<0.05	<1	<0.5
660037	Core Pulp	0.073	4	21	0.89	85	0.015	3	0.74	0.054	0.27	5.2	0.90	4.7	0.1	1.56	3	7.1
660038	Drill Core	0.066	12	5	0.94	29	<0.001	1	0.38	0.071	0.12	<0.1	<0.01	2.9	<0.1	0.27	<1	1.0
660039	Drill Core	0.055	13	4	1.10	23	<0.001	<1	0.31	0.066	0.10	<0.1	<0.01	3.2	<0.1	0.13	<1	1.0
660040	Drill Core	0.056	14	6	1.08	28	<0.001	1	0.50	0.065	0.12	0.1	<0.01	3.7	<0.1	0.31	1	0.7
660041	Drill Core	0.065	23	6	1.12	29	<0.001	2	0.41	0.072	0.12	<0.1	<0.01	3.6	<0.1	<0.05	1	<0.5
660042	Drill Core	0.057	24	6	1.04	28	<0.001	<1	0.52	0.070	0.13	<0.1	<0.01	3.6	<0.1	0.07	1	<0.5
660043	Drill Core	0.058	22	6	1.05	30	<0.001	2	0.49	0.069	0.12	<0.1	<0.01	3.6	<0.1	0.10	1	<0.5
660044	Drill Core	0.061	18	9	0.97	30	0.005	2	1.00	0.067	0.14	0.1	<0.01	3.5	<0.1	0.18	2	0.6
660045	Drill Core	0.057	6	10	1.05	31	<0.001	2	0.87	0.059	0.13	<0.1	<0.01	2.9	<0.1	2.32	2	7.2
660046	Drill Core	0.053	14	10	0.86	32	<0.001	1	1.07	0.058	0.15	<0.1	<0.01	3.1	<0.1	1.02	3	0.7
660047	Drill Core	0.061	22	7	1.13	27	<0.001	1	0.59	0.070	0.12	<0.1	<0.01	3.7	<0.1	0.06	2	0.5
660048	Drill Core	0.070	11	11	1.24	32	0.009	2	1.28	0.061	0.16	0.1	<0.01	3.7	0.1	1.03	3	1.8
660049	Core Pulp	0.059	5	35	0.76	96	0.123	3	1.64	0.100	0.12	0.2	0.03	4.0	<0.1	<0.05	6	<0.5
660050	Drill Core	0.055	15	9	0.98	29	<0.001	1	0.73	0.060	0.13	<0.1	<0.01	3.4	<0.1	0.36	2	<0.5
660051	Drill Core	0.061	22	6	1.10	29	0.002	3	0.50	0.069	0.13	<0.1	<0.01	3.4	<0.1	0.09	1	<0.5
660052	Drill Core	0.064	14	6	1.20	25	<0.001	1	0.46	0.061	0.11	<0.1	<0.01	3.5	<0.1	0.29	1	0.7
660053	Drill Core	0.058	15	6	1.25	28	<0.001	1	0.44	0.071	0.13	<0.1	<0.01	4.0	<0.1	0.18	1	0.8
660054	Drill Core	0.059	20	6	1.02	28	<0.001	1	0.43	0.071	0.13	<0.1	<0.01	3.6	<0.1	0.16	1	0.6
660055	Core Pulp	0.074	4	20	0.88	115	0.018	4	0.79	0.051	0.29	5.2	0.93	4.7	<0.1	1.57	3	6.8
660056	Drill Core	0.065	22	7	0.86	30	0.001	2	0.54	0.079	0.12	<0.1	<0.01	3.2	<0.1	0.12	1	<0.5
660057	Drill Core	0.062	17	11	0.91	32	0.002	2	0.94	0.069	0.15	<0.1	<0.01	3.5	<0.1	0.62	2	1.0
660058	Drill Core	0.060	15	11	1.03	36	0.004	2	0.96	0.056	0.15	<0.1	<0.01	3.9	<0.1	0.68	3	0.5
660059	Drill Core	0.065	22	11	1.21	35	0.005	3	1.07	0.073	0.17	0.2	<0.01	5.2	0.1	0.41	3	0.8
660060	Drill Core	0.065	28	7	1.08	29	0.005	3	0.58	0.072	0.14	<0.1	<0.01	4.1	<0.1	<0.05	2	<0.5

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Project: ART/DL

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Analyte	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
		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	
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
660061	Drill Core	0.060	29	7	1.02	33	0.006	2	0.57	0.071	0.15	<0.1	<0.01	4.2	<0.1	<0.05	1	<0.5
660062	Drill Core	0.056	28	6	1.06	33	0.002	1	0.52	0.072	0.13	<0.1	<0.01	4.2	<0.1	0.05	1	0.5
660063	Drill Core	0.055	27	7	1.04	32	0.001	2	0.54	0.074	0.14	<0.1	<0.01	3.9	<0.1	0.08	1	0.6
660064	Drill Core	0.070	25	10	1.35	32	0.003	2	1.07	0.068	0.14	<0.1	<0.01	4.8	<0.1	0.41	3	0.8
660065	Drill Core	0.056	20	7	0.88	54	<0.001	2	0.76	0.058	0.14	<0.1	<0.01	3.5	<0.1	0.24	2	<0.5
660066	Drill Core	0.064	11	12	1.17	31	0.003	2	1.39	0.060	0.14	<0.1	<0.01	4.0	<0.1	1.11	3	0.8
660067	Drill Core	0.062	24	9	1.09	33	0.003	2	0.67	0.067	0.14	<0.1	<0.01	4.3	<0.1	0.16	2	<0.5
660068	Drill Core	0.057	18	6	0.93	32	0.001	<1	0.46	0.075	0.14	<0.1	<0.01	3.2	<0.1	0.12	1	0.8
660069	Drill Core	0.049	13	6	0.97	27	<0.001	<1	0.36	0.056	0.10	<0.1	<0.01	2.7	<0.1	0.10	1	<0.5
660070	Drill Core	0.050	12	7	1.06	31	<0.001	<1	0.58	0.051	0.09	<0.1	<0.01	3.4	<0.1	0.27	2	0.6
660071	Drill Core	0.053	14	5	1.10	28	<0.001	<1	0.35	0.064	0.10	<0.1	<0.01	3.4	<0.1	0.08	<1	<0.5
660072	Core Pulp	0.071	4	22	0.91	49	0.012	3	0.72	0.050	0.22	5.4	0.91	4.4	0.1	1.57	2	6.6
660073	Drill Core	0.049	16	6	1.07	24	0.001	<1	0.38	0.059	0.09	<0.1	<0.01	3.1	<0.1	<0.05	1	<0.5
660074	Drill Core	0.055	12	5	1.04	28	<0.001	2	0.37	0.067	0.11	<0.1	<0.01	3.5	<0.1	0.21	<1	0.9
660075	Drill Core	0.048	10	5	1.14	25	<0.001	1	0.40	0.058	0.09	<0.1	<0.01	3.2	<0.1	0.28	1	1.0
660076	Drill Core	0.055	12	6	1.10	24	<0.001	1	0.41	0.060	0.10	<0.1	<0.01	3.3	<0.1	0.12	1	0.6
660077	Drill Core	0.050	13	5	0.97	25	<0.001	1	0.40	0.059	0.10	<0.1	<0.01	2.7	<0.1	0.18	<1	<0.5
660078	Drill Core	0.049	12	6	1.03	26	<0.001	<1	0.45	0.062	0.10	<0.1	<0.01	2.8	<0.1	0.27	1	<0.5
660079	Drill Core	0.058	14	5	0.91	24	<0.001	1	0.38	0.058	0.10	<0.1	<0.01	2.8	<0.1	0.15	1	0.6
660080	Drill Core	0.054	18	5	0.93	28	<0.001	1	0.40	0.077	0.12	<0.1	<0.01	3.1	<0.1	0.11	<1	0.5
660081	Drill Core	0.052	12	6	1.00	22	<0.001	<1	0.41	0.057	0.09	<0.1	<0.01	3.3	<0.1	0.28	1	0.6
660082	Drill Core	0.057	12	12	1.21	27	<0.001	2	0.98	0.059	0.12	<0.1	<0.01	4.1	<0.1	0.44	2	<0.5
660083	Drill Core	0.056	12	7	1.12	23	<0.001	2	0.65	0.054	0.11	<0.1	<0.01	4.0	<0.1	0.48	2	0.8
660084	Drill Core	0.054	15	9	0.98	32	<0.001	1	0.80	0.052	0.13	<0.1	<0.01	3.5	<0.1	0.56	2	<0.5
660085	Core Pulp	0.060	4	38	0.76	92	0.110	2	1.51	0.082	0.10	0.2	0.02	3.6	<0.1	<0.05	5	<0.5
660086	Drill Core	0.051	17	7	1.02	29	<0.001	2	0.49	0.066	0.12	<0.1	<0.01	3.5	<0.1	0.14	1	<0.5
660087	Drill Core	0.050	12	7	0.96	27	0.001	1	0.53	0.066	0.12	<0.1	<0.01	3.5	<0.1	0.48	1	1.4
660088	Drill Core	0.058	12	6	1.18	30	<0.001	2	0.51	0.071	0.12	<0.1	<0.01	4.1	<0.1	0.43	1	0.5
660089	Drill Core	0.092	16	6	0.95	28	<0.001	2	0.42	0.073	0.12	<0.1	<0.01	3.2	<0.1	0.12	<1	<0.5
660090	Drill Core	0.068	15	7	1.18	25	0.002	2	0.53	0.066	0.11	<0.1	<0.01	3.8	<0.1	0.15	2	<0.5

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Method	WGHT	1DX15																			
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%								
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
660091	Drill Core	7.27	1.3	91.6	20.8	52	0.8	32.2	16.3	412	3.70	93.4	0.6	<0.5	4.5	67	0.1	1.5	0.4	7	0.98
660092	Core Pulp	0.08	9.2	4841	8.3	82	1.0	11.2	9.4	810	5.46	7.0	0.2	280.4	1.4	170	0.3	5.6	1.0	43	2.16
660093	Drill Core	7.80	0.8	37.7	11.3	74	0.2	34.4	16.1	558	4.26	24.2	0.7	<0.5	6.5	74	0.1	0.3	0.2	9	0.84
660094	Drill Core	8.42	0.9	31.9	14.4	76	0.2	29.5	15.1	506	3.48	12.8	0.6	<0.5	6.2	69	0.1	0.2	0.2	8	0.80
660095	Drill Core	6.33	1.0	42.1	10.8	85	0.3	36.6	15.3	531	4.23	12.8	0.6	<0.5	6.4	69	0.2	0.2	0.2	7	0.72
660096	Drill Core	3.85	0.7	28.5	9.8	72	0.2	35.8	17.1	518	3.76	16.1	0.7	<0.5	6.6	235	0.2	0.3	0.2	15	0.94
660097	Drill Core	5.97	1.0	35.5	4.1	59	0.1	87.9	21.6	548	3.57	10.6	1.0	<0.5	5.4	744	<0.1	0.2	0.2	57	2.60
660098	Drill Core	6.67	2.0	56.7	12.0	55	0.1	101.1	25.2	594	3.96	12.0	1.4	<0.5	6.5	1129	<0.1	0.2	0.1	96	2.97
660099	Drill Core	3.74	0.8	39.9	11.4	90	0.2	39.5	19.3	531	4.94	24.7	0.6	<0.5	6.3	87	<0.1	0.6	0.3	12	0.89
660100	Drill Core	3.35	0.8	39.7	8.9	82	0.2	36.1	17.1	575	4.58	19.9	0.6	<0.5	6.5	89	0.1	0.5	0.2	13	0.97
659638	Drill Core	3.42	0.9	23.7	7.4	68	0.7	27.5	11.2	346	3.98	14.7	0.7	<0.5	5.6	44	0.1	0.3	0.2	6	0.43
659639	Drill Core	8.40	0.6	39.6	12.4	79	0.3	32.2	15.7	401	3.91	20.8	0.6	<0.5	7.8	54	0.1	0.5	0.3	6	0.38



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		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
		MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
660091	Drill Core	0.049	8	7	0.77	24	0.001	2	0.54	0.063	0.11	<0.1	<0.01	2.7	<0.1	1.32	1	1.8
660092	Core Pulp	0.074	4	22	0.91	67	0.018	4	0.83	0.052	0.26	5.0	0.90	4.6	0.1	1.62	3	8.2
660093	Drill Core	0.056	20	7	1.11	25	0.002	2	0.50	0.066	0.12	<0.1	<0.01	3.7	<0.1	0.07	1	<0.5
660094	Drill Core	0.052	16	7	0.98	30	<0.001	<1	0.49	0.070	0.13	<0.1	<0.01	3.4	<0.1	0.11	1	<0.5
660095	Drill Core	0.057	18	6	1.10	27	0.001	1	0.43	0.059	0.12	<0.1	<0.01	3.8	<0.1	0.08	1	0.6
660096	Drill Core	0.068	23	31	1.16	121	0.009	2	0.79	0.069	0.19	<0.1	<0.01	3.5	<0.1	0.13	2	<0.5
660097	Drill Core	0.132	29	139	2.25	587	0.071	2	1.90	0.064	0.36	<0.1	<0.01	4.3	<0.1	0.28	6	<0.5
660098	Drill Core	0.204	39	121	2.91	327	0.170	2	2.36	0.109	0.74	<0.1	<0.01	4.5	0.2	0.43	8	0.7
660099	Drill Core	0.070	19	18	1.37	174	0.001	2	0.64	0.068	0.17	<0.1	<0.01	4.6	<0.1	0.25	2	<0.5
660100	Drill Core	0.069	22	16	1.28	205	0.001	2	0.69	0.081	0.19	<0.1	<0.01	4.5	<0.1	0.24	2	<0.5
659638	Drill Core	0.054	11	6	1.07	34	<0.001	2	0.49	0.086	0.14	<0.1	<0.01	3.1	<0.1	0.14	1	0.6
659639	Drill Core	0.060	23	7	0.99	37	<0.001	2	0.53	0.081	0.18	<0.1	<0.01	3.7	<0.1	0.12	1	<0.5



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Project: ART/DL
Report Date: June 13, 2000

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QUALITY CONTROL REPORT

VAN08006093.1

Method	WGHT	1DX15																			
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
	Unit	kg	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%								
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01	
Pulp Duplicates																					
660004	Drill Core	3.61	0.7	40.6	18.0	85	1.2	36.1	20.4	713	4.79	37.9	0.5	<0.5	4.7	65	0.3	0.5	0.3	6	1.43
REP 660004	QC		0.7	38.5	17.3	78	1.2	35.8	19.4	633	4.53	36.7	0.5	0.5	4.6	60	0.3	0.5	0.2	5	1.33
660034	Drill Core	9.65	1.8	27.7	13.4	61	0.5	27.1	15.5	445	3.18	29.8	0.8	<0.5	5.7	54	0.2	0.9	0.2	4	1.18
REP 660034	QC		1.5	27.1	13.5	57	0.5	26.3	16.0	446	3.22	31.3	0.8	1.2	6.0	51	0.2	1.0	0.2	3	1.17
660044	Drill Core	7.60	1.0	35.7	8.7	60	0.5	27.5	13.7	602	4.09	31.1	0.7	<0.5	5.5	46	0.1	2.1	0.3	11	0.62
REP 660044	QC		1.1	35.9	8.4	55	0.4	27.5	13.7	585	4.13	30.5	0.7	1.1	5.4	46	0.1	2.1	0.3	10	0.63
660076	Drill Core	4.10	1.2	28.5	12.1	72	0.7	26.3	13.1	875	3.88	29.9	0.7	0.8	4.6	79	0.2	0.7	0.2	7	1.74
REP 660076	QC		1.2	28.2	12.1	69	0.7	25.7	13.1	887	3.83	30.8	0.7	<0.5	5.1	77	0.3	0.7	0.2	7	1.76
Core Reject Duplicates																					
660028	Drill Core	7.18	2.4	25.4	26.6	75	0.6	20.5	11.3	593	3.54	15.4	0.5	1.7	3.7	65	0.4	0.2	0.2	5	1.75
DUP 660028	QC	<0.01	2.5	24.9	23.6	68	0.7	20.0	12.2	555	3.24	16.0	0.6	0.8	3.6	67	0.3	0.2	0.2	5	1.81
660063	Drill Core	3.20	0.8	21.5	8.7	65	0.2	28.8	14.7	572	4.10	31.8	0.6	0.7	8.4	62	0.2	3.7	0.2	7	0.83
DUP 660063	QC	<0.01	0.8	20.5	7.5	57	0.3	27.1	15.2	516	3.80	33.2	0.6	<0.5	8.6	64	0.1	4.1	0.2	6	0.82
660098	Drill Core	6.67	2.0	56.7	12.0	55	0.1	101.1	25.2	594	3.96	12.0	1.4	<0.5	6.5	1129	<0.1	0.2	0.1	96	2.97
DUP 660098	QC	<0.01	2.2	56.2	12.2	54	0.2	95.2	25.2	596	3.78	13.1	1.4	<0.5	6.5	1050	0.1	0.2	0.1	92	2.88
Reference Materials																					
STD DS7	Standard		22.4	115.8	66.9	389	0.9	60.6	10.4	639	2.45	54.6	4.5	63.1	4.1	60	6.2	5.4	4.1	86	0.97
STD DS7	Standard		22.0	115.5	66.2	394	0.8	59.3	10.3	633	2.47	50.3	4.8	66.6	4.2	63	5.6	5.0	4.0	86	0.97
STD DS7	Standard		18.9	109.7	61.1	375	0.8	54.0	9.1	583	2.26	48.7	4.3	61.6	3.7	56	5.8	5.1	3.9	82	0.89
STD DS7	Standard		20.8	115.1	61.6	392	0.8	58.3	9.6	608	2.33	51.1	4.4	70.6	3.8	60	5.9	5.3	4.1	84	0.93
STD DS7	Standard		20.3	108.3	72.5	390	0.8	54.9	8.8	619	2.34	51.7	5.3	66.6	4.5	71	6.3	6.0	4.8	93	0.91
STD DS7	Standard		20.9	108.5	74.1	395	0.8	55.8	9.9	640	2.35	51.9	5.4	63.2	4.6	68	6.2	6.0	5.0	94	0.92
STD DS7	Standard		22.0	110.8	64.3	396	0.8	54.2	9.7	609	2.33	55.5	4.9	63.5	4.3	73	6.8	6.1	4.2	86	1.02
STD DS7	Standard		20.4	116.0	63.4	394	0.8	55.3	9.9	631	2.37	54.0	4.4	54.1	4.2	70	6.5	5.8	4.1	83	1.05
STD DS7 Expected			20.92	109	70.6	411	0.89	56	9.7	627	2.39	48.2	4.9	70	4.4	68.7	6.38	5.86	4.51	86	0.93
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.1	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01

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Project:

ART/DL

Report Date:

June 13, 2008

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Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																		
660004	Drill Core	0.057	10	6	1.32	37	<0.001	<1	0.43	0.079	0.13	<0.1	<0.01	3.5	<0.1	0.39	1	2.1
REP 660004	QC	0.052	10	6	1.23	34	<0.001	1	0.42	0.075	0.12	<0.1	<0.01	3.4	<0.1	0.37	<1	1.8
660034	Drill Core	0.056	14	5	0.85	25	0.002	<1	0.35	0.059	0.09	<0.1	<0.01	2.7	<0.1	0.13	<1	<0.5
REP 660034	QC	0.056	14	5	0.83	26	<0.001	<1	0.36	0.058	0.10	<0.1	<0.01	2.6	<0.1	0.13	<1	<0.5
660044	Drill Core	0.061	18	9	0.97	30	0.005	2	1.00	0.067	0.14	0.1	<0.01	3.5	<0.1	0.18	2	0.6
REP 660044	QC	0.057	17	9	0.99	29	0.004	1	0.97	0.063	0.13	0.1	<0.01	3.4	<0.1	0.18	2	<0.5
660076	Drill Core	0.055	12	6	1.10	24	<0.001	1	0.41	0.060	0.10	<0.1	<0.01	3.3	<0.1	0.12	1	0.6
REP 660076	QC	0.053	14	6	1.09	25	0.001	1	0.41	0.061	0.10	<0.1	<0.01	3.3	<0.1	0.12	1	0.5
Core Reject Duplicates																		
660028	Drill Core	0.046	9	6	0.95	24	<0.001	<1	0.45	0.066	0.10	<0.1	<0.01	2.3	<0.1	0.68	1	2.7
DUP 660028	QC	0.044	8	6	0.90	23	<0.001	<1	0.43	0.069	0.11	<0.1	<0.01	2.4	<0.1	0.65	1	2.0
660063	Drill Core	0.055	27	7	1.04	32	0.001	2	0.54	0.074	0.14	<0.1	<0.01	3.9	<0.1	0.08	1	0.6
DUP 660063	QC	0.057	28	7	0.98	34	0.002	2	0.57	0.074	0.14	<0.1	<0.01	3.8	<0.1	0.08	1	0.6
660098	Drill Core	0.204	39	121	2.91	327	0.170	2	2.36	0.109	0.74	<0.1	<0.01	4.5	0.2	0.43	8	0.7
DUP 660098	QC	0.192	38	114	2.74	342	0.164	2	2.24	0.097	0.69	<0.1	<0.01	4.3	0.2	0.41	8	<0.5
Reference Materials																		
STD DS7	Standard	0.074	12	190	1.09	383	0.114	42	1.00	0.082	0.43	3.8	0.21	2.3	4.5	0.20	5	3.7
STD DS7	Standard	0.074	13	194	1.09	372	0.120	43	0.99	0.082	0.42	3.6	0.20	2.6	4.4	0.20	5	4.0
STD DS7	Standard	0.073	11	178	1.01	332	0.109	34	0.93	0.069	0.40	3.7	0.18	2.1	4.2	0.19	4	2.9
STD DS7	Standard	0.071	12	184	1.03	344	0.115	40	0.97	0.075	0.42	3.8	0.19	2.2	4.0	0.19	5	3.1
STD DS7	Standard	0.077	12	184	1.04	360	0.126	43	0.97	0.073	0.44	3.8	0.22	2.3	4.1	0.20	5	3.4
STD DS7	Standard	0.082	12	186	1.02	382	0.124	42	0.96	0.076	0.44	4.0	0.20	2.1	4.3	0.20	5	3.0
STD DS7	Standard	0.074	13	189	1.03	388	0.117	42	1.03	0.093	0.45	3.7	0.20	2.5	4.2	0.19	5	3.5
STD DS7	Standard	0.078	14	191	1.02	377	0.119	38	1.07	0.091	0.43	3.7	0.20	2.4	4.1	0.19	5	3.4
STD DS7 Expected		0.08	12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8	0.2	2.5	4.19	0.21	4.6	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5

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Project: ART/DL

Report Date: June 13, 2008

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QUALITY CONTROL REPORT

VAN08006093.1

SAMPLES REPORT

The content of this report was filtered as follows:
project ref #: 08PX0120 AND sample type: CORE

Sample	From	To	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
01-AD-04																																						
660001	6.71	10.36	1.8	38.5	17.6	106	1.6	41.8	16.8	440	5.24	36.3	0.6	<0.5	5.5	58	0.2	0.9	0.3	10	0.52	0.056	11	11	1.08	42	0.001	2	0.73	0.076	0.15	0.1	<0.1	4	<0.1	0.36	2	1.9
660002	10.36	12.19	1.1	39.6	15.2	96	1.4	44.2	19.4	531	4.76	42.1	0.5	<0.5	4.9	65	0.3	0.6	0.3	7	0.78	0.05	8	7	1.33	37	<0.001	1	0.47	0.068	0.14	<0.1	<0.1	3.9	<0.1	0.45	1	2
660003	13.19	15.54	6.3	51.3	31	81	2.3	40	26	547	4.65	55.8	0.6	1.7	4.2	63	0.3	1	0.8	8	0.92	0.05	5	7	1.11	36	<0.001	2	0.45	0.068	0.13	<0.1	<0.1	3.4	<0.1	1.13	1	3.5
660004	15.54	17.07	0.7	40.6	18	85	1.2	36.1	20.4	713	4.79	37.9	0.5	<0.5	4.7	65	0.3	0.5	0.3	6	1.43	0.057	10	6	1.32	37	<0.001	<1	0.43	0.079	0.13	<0.1	<0.1	3.5	<0.1	0.39	1	2.1
660006	17.07	20.12	1.3	39.6	8.6	76	1	35.2	14.6	508	4.03	29.1	0.6	<0.5	5.5	51	0.2	0.3	0.2	6	1.02	0.062	11	6	1.13	36	<0.001	1	0.42	0.079	0.12	<0.1	<0.1	3.3	<0.1	0.18	<1	1
660007	20.12	23.16	1.4	31.5	11.2	95	1	36.9	20	573	4.3	36.2	0.6	<0.5	5.8	60	0.3	0.4	0.3	6	1.15	0.057	13	6	1.27	37	<0.001	1	0.43	0.08	0.13	<0.1	<0.1	3.5	<0.1	0.15	1	0.7
660008	23.16	26.21	1.3	23.7	6.3	80	0.8	30.6	15.8	511	3.73	28.9	0.7	0.9	7.1	57	0.3	0.2	0.3	6	1.06	0.059	16	6	1.11	40	<0.001	1	0.47	0.084	0.13	<0.1	<0.1	3.4	<0.1	0.07	<1	0.7
660009	26.21	28.35	1.9	20.9	11.6	87	0.7	33.4	15	438	4.58	32.5	0.7	<0.5	6.3	50	0.2	0.4	0.2	7	0.69	0.049	13	6	1.26	35	<0.001	1	0.45	0.077	0.13	<0.1	<0.1	3.6	<0.1	0.11	1	0.9
660010	28.35	32.31	1.3	38.9	12.1	94	1.2	43.7	16.8	455	5.07	41.5	0.6	0.7	5.9	64	0.2	0.6	0.3	14	0.65	0.058	14	12	1.37	36	<0.001	2	1.09	0.068	0.14	<0.1	<0.1	4.4	<0.1	0.24	2	1
660012	32.31	36.88	3.4	42.8	20	120	1.2	38.6	17.2	564	4.23	34.6	0.9	<0.5	5.9	146	0.8	0.8	0.4	21	1.74	0.058	13	13	1.21	46	<0.001	2	0.79	0.07	0.16	<0.1	<0.1	4.7	<0.1	0.47	2	1.9
660013	36.88	39.93	16.6	69.2	25.1	202	1.9	60.5	16.6	621	4.01	31.2	1.2	<0.5	5.9	137	2.4	1.4	0.4	49	2.23	0.054	7	13	1.11	36	<0.001	1	0.91	0.049	0.13	<0.1	<0.1	4.1	<0.1	1.57	3	6.1
660014	40.93	44.50	1	41	20.8	85	1.3	35.6	21.4	685	4.43	34.7	0.8	1	5.6	80	0.5	0.7	0.4	7	2.05	0.049	7	7	0.94	36	<0.001	<1	0.66	0.067	0.14	<0.1	<0.1	3	<0.1	1.92	2	5.5
660015	44.50	45.50	1.4	65.1	32.7	79	1.6	43	25.5	487	3.82	35.6	0.7	<0.5	3.9	72	0.4	0.5	0.3	11	1.38	0.044	5	9	0.85	26	<0.001	<1	0.75	0.049	0.11	<0.1	<0.1	2.9	<0.1	1.26	2	4.9
660016	47.50	50.29	1.9	32.2	11.5	75	0.7	35.3	12	441	3.5	11.6	0.7	<0.5	6.1	73	0.4	0.4	0.2	10	1.43	0.051	12	8	1.02	33	<0.001	<1	0.66	0.055	0.13	<0.1	<0.1	3.1	<0.1	0.42	2	1.5
660017	50.29	53.34	2.3	42.4	42.5	121	1.7	52.5	28.4	497	4.84	58.6	0.6	<0.5	5.3	74	0.7	1.2	0.7	15	1.37	0.046	7	12	1.15	32	<0.001	<1	0.98	0.05	0.12	<0.1	<0.1	3.9	<0.1	1.75	3	6
660019	53.34	55.08	0.9	31	10.7	70	0.7	30.7	12.6	518	3.87	8.6	0.5	0.7	6.3	76	0.3	0.6	0.3	10	1.23	0.04	13	10	1.19	31	<0.001	1	0.73	0.059	0.13	<0.1	<0.1	4	<0.1	0.2	2	1.4
660020	56.08	59.44	1.3	46.5	16.6	129	1.1	43.1	19.1	513	5.06	17.5	0.6	<0.5	6	103	0.6	0.6	0.2	17	1.44	0.052	9	13	1.62	35	<0.001	<1	1.37	0.058	0.13	<0.1	<0.1	5.1	<0.1	0.5	3	2.7
660021	59.44	61.87	0.7	27.6	6.2	76	0.6	35.5	13.1	292	3.95	10	0.8	0.6	9	53	0.2	0.1	0.3	14	0.52	0.05	27	13	1.13	38	0.001	<1	1.3	0.078	0.16	<0.1	<0.1	4.3	<0.1	0.05	3	0.6
660022	61.87	64.62	0.7	27.4	8.3	78	0.6	38.6	14	361	4.6	11.3	0.8	<0.5	9.2	47	0.2	0.3	0.3	13	0.55	0.047	30	14	1.29	35	<0.001	1	1.2	0.07	0.15	<0.1	<0.1	4.8	<0.1	0.06	3	0.7
660023	64.62	66.45	0.8	27.3	8.1	68	0.8	40.6	14.7	371	4.22	14.9	0.7	<0.5	8.6	57																						

SAMPLES REPORT

The content of this report was filtered as follows:
project ref #: 08PX0120 AND sample type: CORE

Sample	From	To	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
01-AD-05																																						
660046	35.05	38.10	0.8	29.8	7.9	44	0.4	25.8	15.8	404	3.51	84.7	0.7	1.2	6.4	60	0.1	4.6	0.2	10	0.62	0.053	14	10	0.86	32 <0.001	1	1.07	0.058	0.15	<0.1	<0.01	3.1	<0.1	1.02	3	0.7	
660047	38.10	42.00	0.8	34.1	11.3	84	0.5	30.8	16.7	576	4.46	42.4	0.8	1.4	7.3	72	0.2	2.1	0.2	6	0.68	0.061	22	7	1.13	27 <0.001	1	0.59	0.07	0.12	<0.1	<0.01	3.7	<0.1	0.06	2	0.5	
660048	43.25	44.50	0.9	38.4	5.8	61	0.6	35.5	20.1	553	5.22	47.1	0.8	0.8	6	64	0.2	4.7	0.4	14	0.59	0.07	11	11	1.24	32 0.009	2	1.28	0.061	0.16	<0.1	<0.01	3.7	0.1	1.03	3	1.8	
660050	46.00	47.55	1.4	35.9	5.4	64	0.3	29.1	15.2	463	3.78	43.4	0.5	1.4	5.4	66	0.2	5.3	0.2	7	0.67	0.055	15	9	0.98	29 <0.001	1	0.73	0.06	0.13	<0.1	<0.01	3.4	<0.1	0.36	2	<0.5	
660051	47.55	50.60	0.8	66.2	8.4	94	0.7	36.5	16.7	461	4.28	47.7	0.5	0.7	6.8	65	0.3	4.9	0.3	6	0.74	0.061	22	6	1.1	29 0.002	3	0.5	0.069	0.13	<0.1	<0.01	3.4	<0.1	0.09	1	<0.5	
660052	50.60	54.60	1.3	32.1	8.8	85	0.5	28.3	15.3	547	4.59	39.1	0.5	0.7	4.9	64	0.2	4.2	0.2	5	1.06	0.064	14	6	1.2	25 <0.001	1	0.46	0.061	0.11	<0.1	<0.01	3.5	<0.1	0.29	1	0.7	
660053	55.50	56.69	0.9	42	13.8	83	0.4	34.1	17.2	629	4.78	42.7	0.6	0.8	6	75	0.2	4	0.3	6	1.11	0.058	15	6	1.25	28 <0.001	1	0.44	0.071	0.13	<0.1	<0.01	4	<0.1	0.18	1	0.8	
660054	56.69	59.74	0.6	37.4	6.2	82	0.5	28	16.7	532	4.16	36.7	0.6	<0.5	7	65	0.2	4	0.3	5	0.74	0.059	20	6	1.02	28 <0.001	1	0.43	0.071	0.13	<0.1	<0.01	3.6	<0.1	0.16	1	0.6	
660056	59.74	62.48	1.3	32.9	4.9	66	0.3	29.3	19.2	434	3.59	46.7	0.7	1.4	7.1	56	0.2	3.7	0.2	8	0.66	0.065	22	7	0.86	30 0.001	2	0.54	0.079	0.12	<0.1	<0.01	3.2	<0.1	0.12	1	<0.5	
660057	62.48	65.84	0.7	21.5	11.4	69	0.3	28	15.1	443	3.49	86.6	0.6	<0.5	7.2	82	0.2	6	0.2	11	0.96	0.062	17	11	0.91	32 0.002	2	0.94	0.069	0.15	<0.1	<0.01	3.5	<0.1	0.62	2	1	
660058	65.84	68.00	0.6	19.2	9.3	58	0.3	32.4	14.5	576	4.16	36.1	0.7	1.1	6.9	81	0.2	5.3	0.2	13	1.29	0.06	15	11	1.03	36 0.004	2	0.96	0.056	0.15	<0.1	<0.01	3.9	<0.1	0.68	3	0.5	
660059	69.00	70.71	0.6	40.3	10.5	74	0.5	36.4	17.1	561	4.86	43.2	0.7	1	8.3	71	0.2	6.5	0.3	15	0.6	0.065	22	11	1.21	35 0.005	3	1.07	0.073	0.17	0.2	<0.01	5.2	0.1	0.41	3	0.8	
660060	70.71	73.76	1.4	42.5	23	96	0.7	35.3	24.6	555	4.2	53.7	0.6	1.6	9	72	0.3	3.8	0.8	8	1.11	0.065	28	7	1.08	29 0.005	3	0.58	0.072	0.14	<0.1	<0.01	4.1	<0.1	<0.05	2	<0.5	
660061	73.76	76.81	0.5	24.6	6.3	71	0.2	28.8	15.1	526	3.97	29.5	0.6	<0.5	8.5	59	0.3	2.6	0.2	8	1.06	0.06	29	7	1.02	33 0.006	2	0.57	0.071	0.15	<0.1	<0.01	4.2	<0.1	<0.05	1	<0.5	
660063	76.81	79.86	0.8	21.5	8.7	65	0.2	28.8	14.7	572	4.1	31.8	0.6	0.7	8.4	62	0.2	3.7	0.2	7	0.83	0.055	27	7	1.04	32 0.001	2	0.54	0.074	0.14	<0.1	<0.01	3.9	<0.1	0.08	1	0.6	
660062	76.81	79.86	0.9	24.7	9	64	0.3	28.9	14.6	574	4.29	28.3	0.6	1.1	7.9	66	0.2	3.4	0.2	7	0.85	0.056	28	6	1.06	33 0.002	1	0.52	0.072	0.13	<0.1	<0.01	4.2	<0.1	0.05	1	0.5	
660064	79.86	82.31	1.1	25.7	7.6	62	0.4	38.2	19.1	661	5.04	48.6	0.7	1.4	9.8	88	0.1	6.7	0.2	14	1.19	0.07	25	10	1.35	32 0.003	2	1.07	0.068	0.14	<0.1	<0.01	4.8	<0.1	0.41	3	0.8	
660065	83.51	84.60	0.5	16.5	7.7	55	0.3	25.2	13.9	523	3.6	27.4	0.6	1	7	66	0.1	4.6	0.2	8	0.97	0.056	20	7	0.88	54 <0.001	2	0.76	0.058	0.14	<0.1	<0.01	3.5	<0.1	0.24	2	<0.5	
660066	85.60	86.39	0.6	33.3	19.8	56	0.8	33.4	18.6	493	4.33	51	0.8	1.4	5.3	63	0.2	8.1	0.3	15	1.21	0.064	11	12	1.17	31 0.003	2	1.39	0.06	0.14	<0.1	<0.01	4	<0.1	1.11	3	0.8	
660067	89.39	90.22	0.8	35.2	15.2	87	0.5	32.6	16.6	593	4.31	30.5	0.6	1.3	8.1	105	0.3	3.1	0.3	9	1.03	0.062	24	9	1.09	33 0.003	2	0.67	0.									

SAMPLES REPORT

The content of this report was filtered as follows:
project ref #: 08PX0120 AND sample type: CORE

Sample	From	To	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
01-AD-06																																						
660091	62.18	65.23	1.3	91.6	20.8	52	0.8	32.2	16.3	412	3.7	93.4	0.6	<0.5	4.5	67	0.1	1.5	0.4	7	0.98	0.049	8	7	0.77	24	0.001	2	0.54	0.063	0.11	<0.1	<0.01	2.7	<0.1	1.32	1	1.8
660093	65.23	68.28	0.8	37.7	11.3	74	0.2	34.4	16.1	558	4.26	24.2	0.7	<0.5	6.5	74	0.1	0.3	0.2	9	0.84	0.056	20	7	1.11	25	0.002	2	0.5	0.066	0.12	<0.1	<0.01	3.7	<0.1	0.07	1	<0.5
660094	68.28	71.32	0.9	31.9	14.4	76	0.2	29.5	15.1	506	3.48	12.8	0.6	<0.5	6.2	69	0.1	0.2	0.2	8	0.8	0.052	16	7	0.98	30	<0.001	<1	0.49	0.07	0.13	<0.1	<0.01	3.4	<0.1	0.11	1	<0.5
660095	71.32	74.37	1	42.1	10.8	85	0.3	36.6	15.3	531	4.23	12.8	0.6	<0.5	6.4	69	0.2	0.2	0.2	7	0.72	0.057	18	6	1.1	27	0.001	1	0.43	0.059	0.12	<0.1	<0.01	3.8	<0.1	0.08	1	0.6
660096	74.37	76.50	0.7	28.5	9.8	72	0.2	35.8	17.1	518	3.76	16.1	0.7	<0.5	6.6	235	0.2	0.3	0.2	15	0.94	0.068	23	31	1.16	121	0.009	2	0.79	0.069	0.19	<0.1	<0.01	3.5	<0.1	0.13	2	<0.5
660097	76.50	79.34	1	35.5	4.1	59	0.1	87.9	21.6	548	3.57	10.6	1	<0.5	5.4	744	<0.1	0.2	0.2	57	2.6	0.132	29	139	2.25	587	0.071	2	1.9	0.064	0.36	<0.1	<0.01	4.3	<0.1	0.28	6	<0.5
660098	80.50	83.82	2	56.7	12	55	0.1	101.1	25.2	594	3.96	12	1.4	<0.5	6.5	1129	<0.1	0.2	0.1	96	2.97	0.204	39	121	2.91	327	0.17	2	2.36	0.109	0.74	<0.1	<0.01	4.5	0.2	0.43	8	0.7
660099	83.82	86.87	0.8	39.9	11.4	90	0.2	39.5	19.3	531	4.94	24.7	0.6	<0.5	6.3	87	<0.1	0.6	0.3	12	0.89	0.07	19	18	1.37	174	0.001	2	0.64	0.068	0.17	<0.1	<0.01	4.6	<0.1	0.25	2	<0.5
659639	86.87	90.22	0.6	39.6	12.4	79	0.3	32.2	15.7	401	3.91	20.8	0.6	<0.5	7.8	54	0.1	0.5	0.3	6	0.38	0.06	23	7	0.99	37	<0.001	2	0.53	0.081	0.18	<0.1	<0.01	3.7	<0.1	0.12	1	<0.5

29 Assays reported for 01-AD-06

**APPENDIX F
CORE SAMPLES QA/QC REPORT**

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc

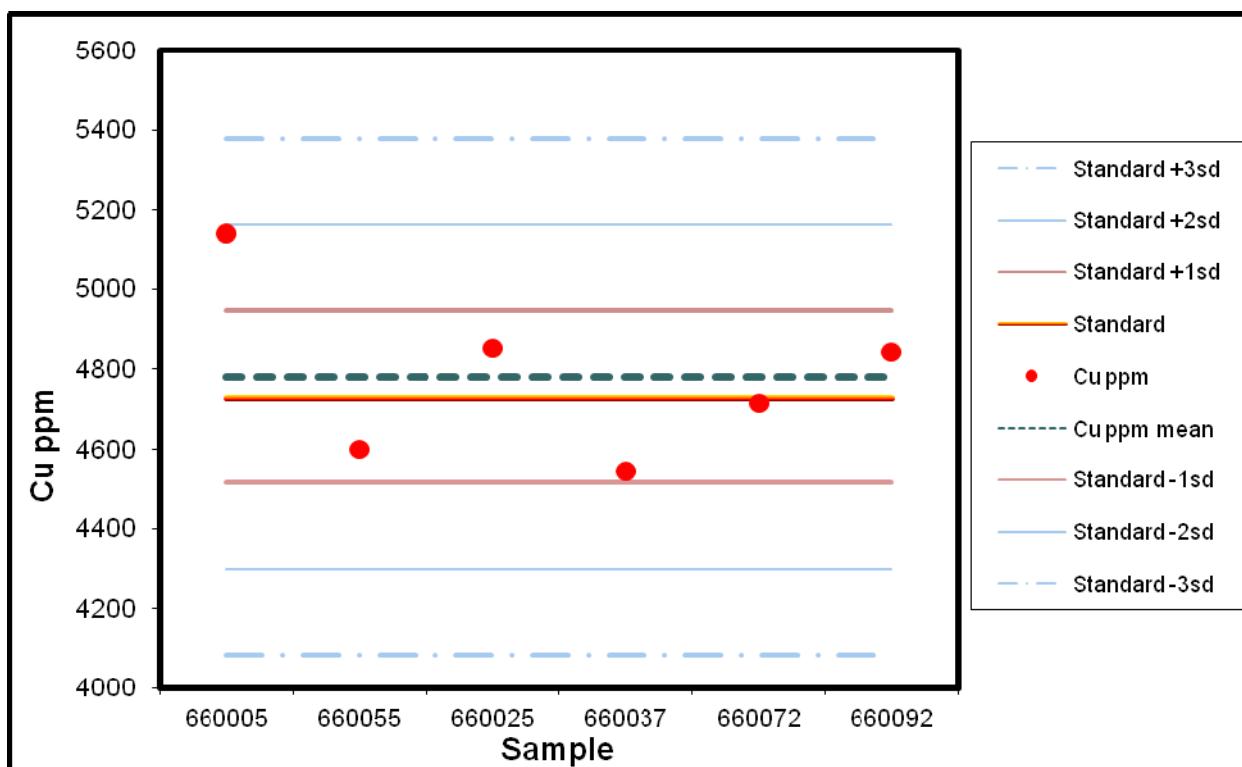
All core samples were selected by Allnorth Consultants site geologists. Each section of core to be sampled was clearly identified and then marked with a centre line and halved using a water-cooled diamond saw. Eighty-eight (88) core samples were labelled, cut and bagged. Fourteen (15) quality control samples (blanks, duplicates and standards) were inserted into the sample stream at regular intervals following a prescribed sequence: included in each batch of twenty core samples are one certified reference standard, one laboratory duplicate, one blank sample comprised of sterile pulp and one duplicate core sample.

All the core samples, collected during the 2008 core re-logging program, were selected, sealed and shipped to Acme Analytical Laboratories in Vancouver, BC. Individual samples were labeled, placed in plastic sample bags, sealed and stored at a secure facility in Forestgrove, BC. Groups of samples were then placed into durable rice bags and secured for shipping. The samples were delivered via carrier to Acme Laboratories in Vancouver, BC. The CDN-CGS-9 Minerals Cu-Au standard was used for quality control of the copper and gold abundances. CDN-BL-3 was the blank standard used for to check null/lower detection limit values. The duplicates inserted into the sample stream tested the precision of the analyses performed.

Cu ppm values of CDN-CGS-9 Standard (4730 ppm Cu)

Standard	Cu ppm
660005	5140.0
660025	4849.7
660037	4541.0
660055	4597.4
660072	4713.1
660092	4840.6

Cu ppm Statistics of CDN-CGS-9 Standard (4730 ppm Cu)

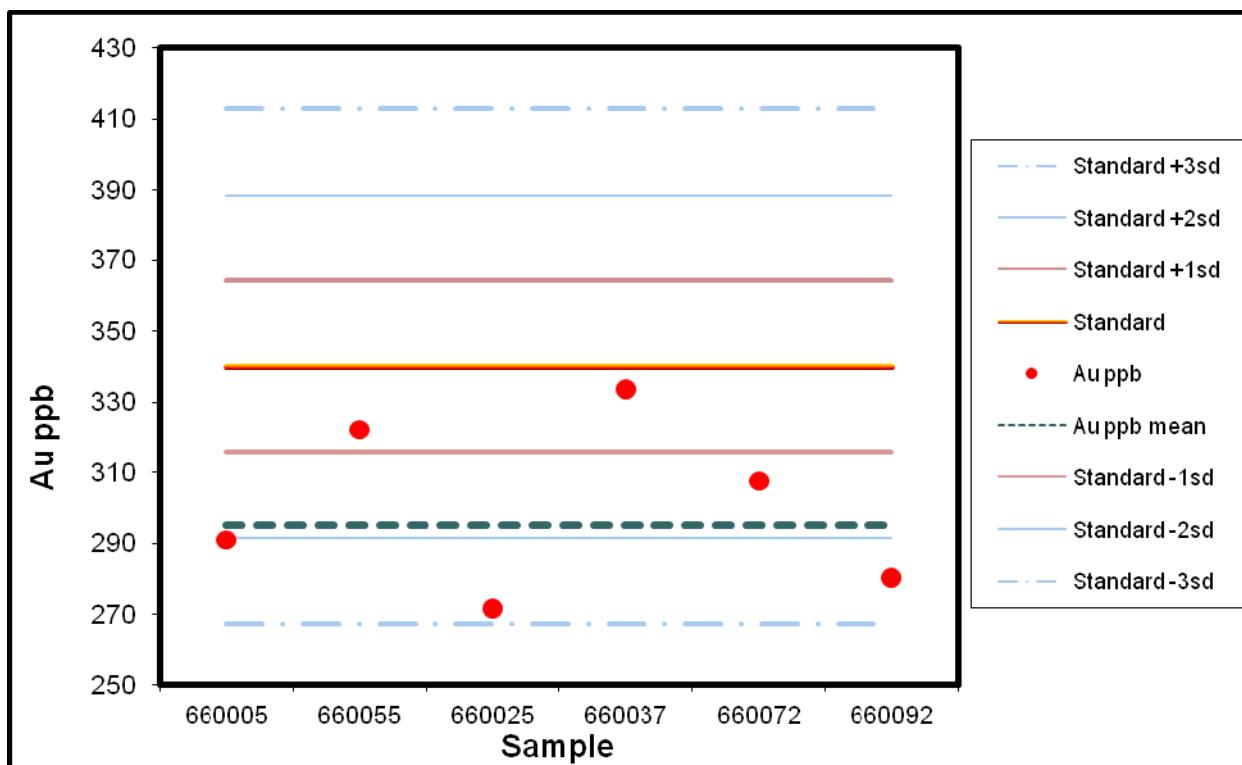


The sample mean Cu ppm results of the CDN-CGS-12 Standard are 86.88 ppm lower than the documented Cu ppm content of the standard. The Cu abundances are generally within 1 standard deviation of the documented standard Cu content, but 1 sample is within 2 standard deviation. The small, 86.88 ppm difference in Cu abundances, between the lab and the published values, and the one sample that falls within 2 larger standard deviation from the published standard value are not significant.

Au ppb Values of CDN-CGS-9 Standard (340 ppb Au)

Standard	Au ppb
660005	290.9
660025	271.7
660037	333.5
660055	322.2
660072	307.5
660092	280.4

Au ppb Statistics of CDN-CGS-9 Standard (340 ppb Au)



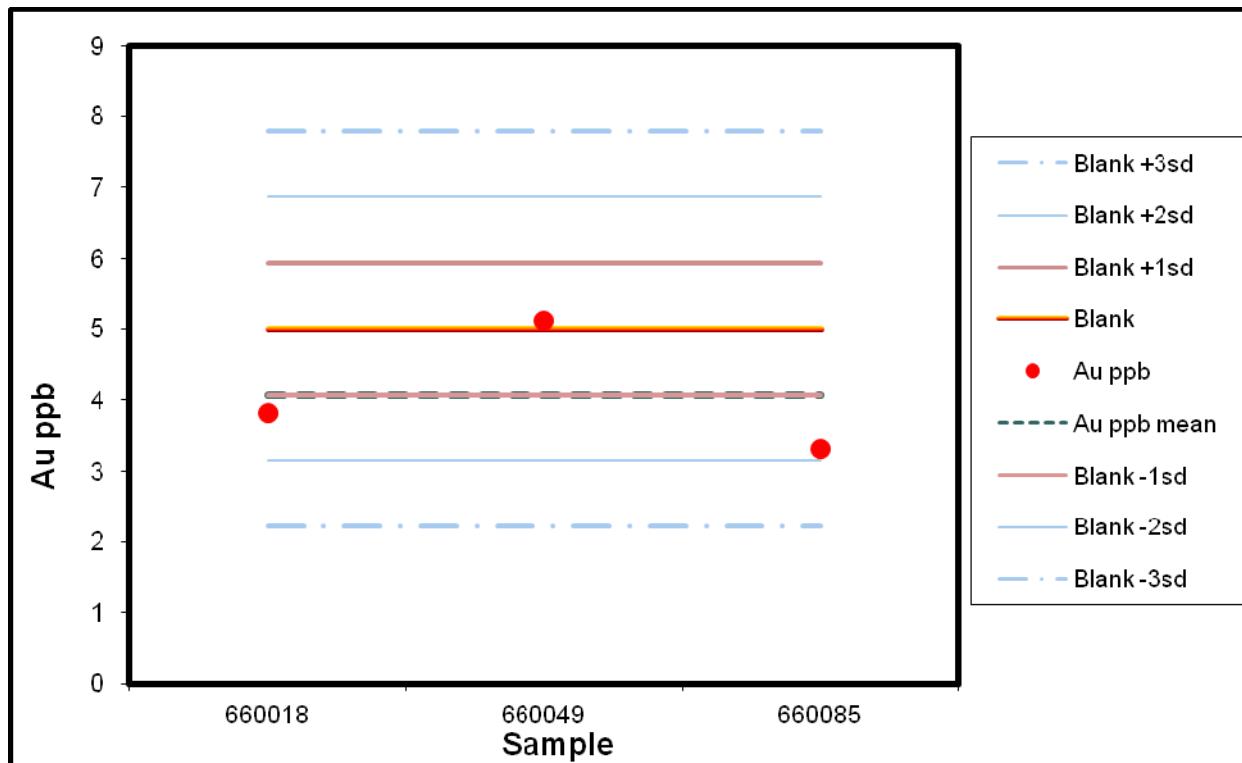
The sample mean Au ppb results of the CDN-CGS-12 Standard are 49 ppb smaller than the documented Au ppb content of the standard. The Au ppb abundances are generally within 3 standard deviation of the documented standard Au content. The small, 37 ppb difference in Au abundances, between the lab and the published values, and the 1 to 3 standard deviation from the published standard value is not significant but it does suggest there was improper or poor digestion of the sample material or a possible degradation of the standard sample material due to long or improper storage.

Au ppb Values of CDN-BL-3 Blank

Sample	Au ppb
660018	3.8
660049	5.1
660085	3.3

Au ppb Statistics for CDN-BL-3 Blank

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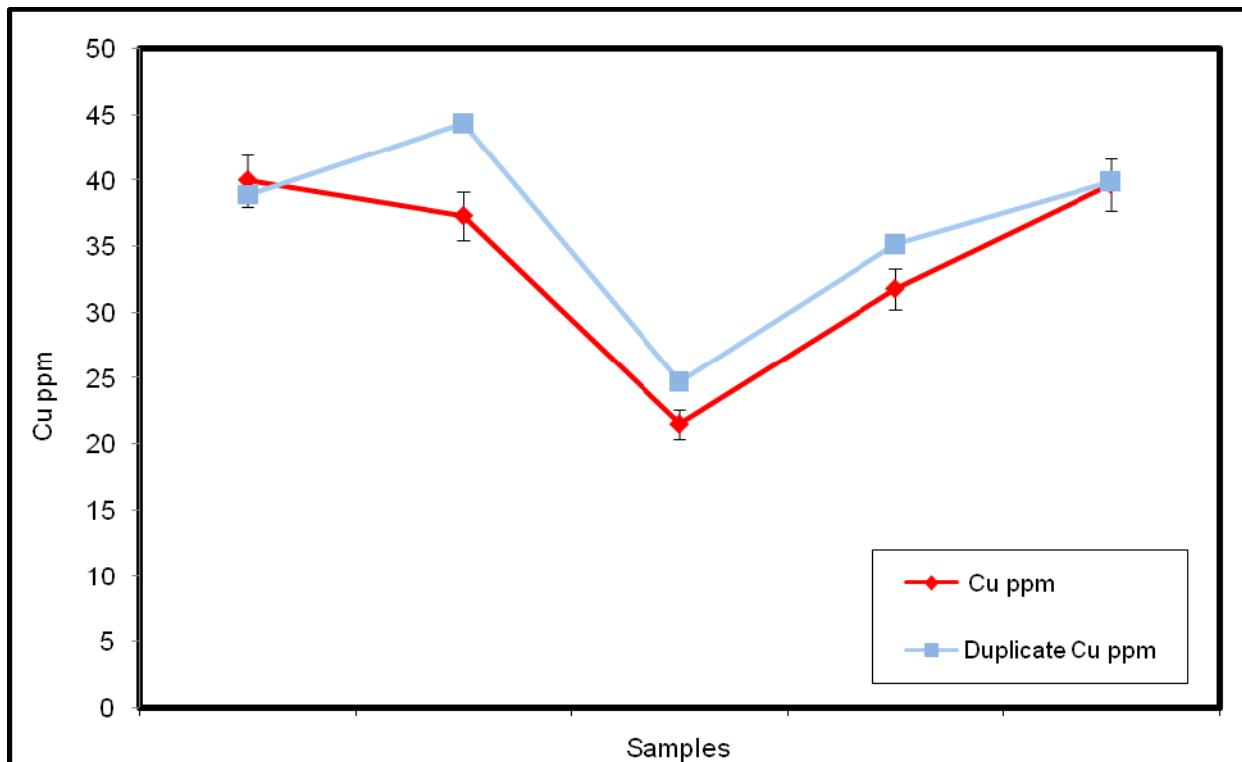
All the Au ppb values are within 2 standard deviation of the average documented abundance for the CDN-BL-3 blank standard of 5 ppb. The acceptable Au value for this blank standard is <10 ppb and all analyzed values fall below this limit. The CDN-BL-3 Au ppb results are consistent (within approximately 1 sd) with respect to each other.

Sample Duplicate Comparisons (* are less than 0.5 ppb)

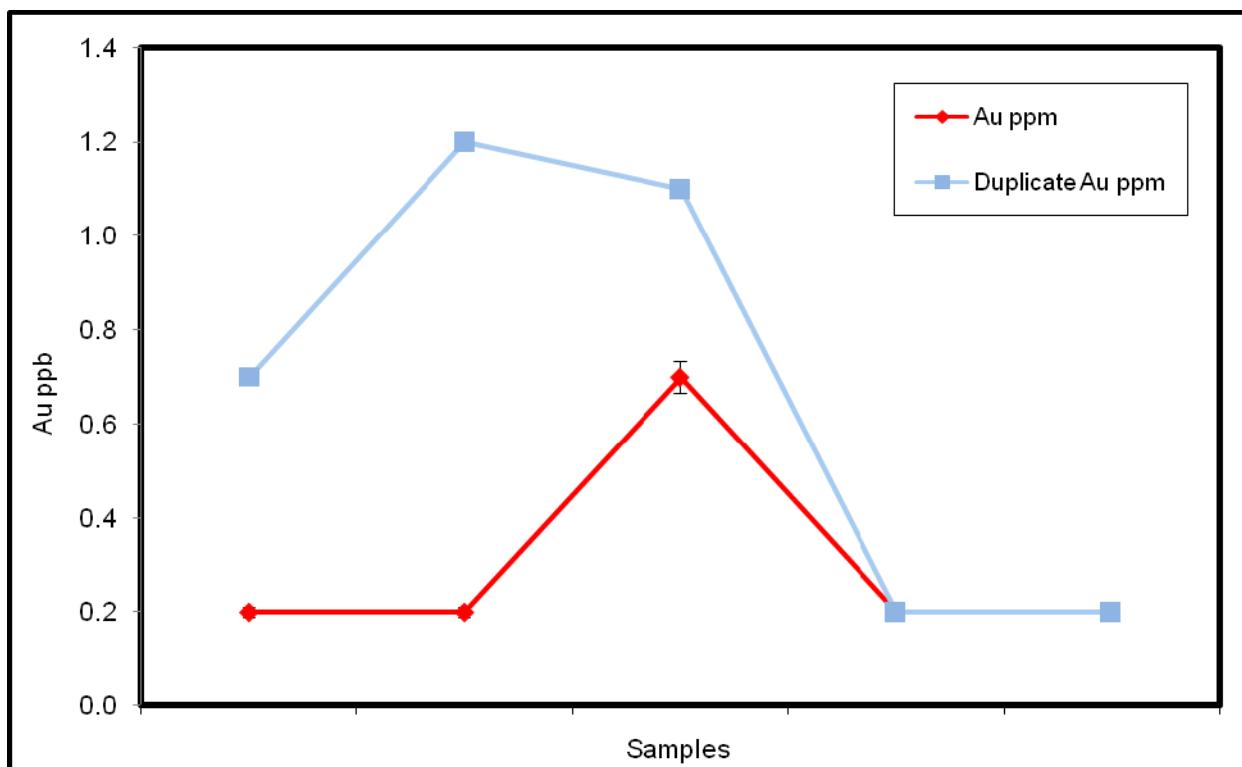
DDH Name	Sample	Cu ppm	Au ppb
01-AD-04	660011	40.00	0.2*
	660010	38.90	0.7
01-AD-05	660043	37.30	0.2*
	660042	44.40	1.2
01-AD-05	660063	21.50	0.7
	660062	24.70	1.1
01-AD-06	660078	31.80	0.2*
	660077	35.20	0.2*
01-AD-06	660100	39.70	0.2*
	660099	39.90	0.2*

Duplicate Comparison of Cu ppm with 5% error bars

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Duplicate Comparison of Au ppb with 5% error bars



The duplicate abundance comparisons are generally within a 5% error margin for the Cu ppm values. The Au contents for the duplicate samples are also generally within the 5% error margin. The Au ppb results are more precise than the Cu ppm results: 3 of the 5 duplicates have Cu contents greater than the 5% error margin. Errors in duplicating element abundances using acid digestion and ICP-MS analysis usually result from varying degrees of total digestion between sample, sample contamination or the 'nugget' effect where ¼ of the core has a greater mineralised volume percent than the other ¼ core.

In conclusion, the quality analysis/quality control results of the ART-DL core samples using the Group 1DX acid digestion and ICP-MS analysis produced varying results. Consistently low element abundances are usually associated with incomplete digestion/fusion or the degradation of the sample material due to the weathering effects of improper storage on the metal compounds. Degradation of the standard material may have occurred within the CDN-CGS-8 standard, since both the Cu and Ni abundances were lower than the published values. The Blank standard results were excellent since the variation between sample analyses never varied greater than 1 standard deviation. The duplicate analyses are typically within 5%. A difference between analyses of the same core material is usually a result of a 'nugget' effect within one of the ¼ split core pieces or contamination during sample processing.

A "best before" date, as well as proper reference material storage and care would help to eliminate the possibility of reference material degradation which could result in the lower reference standard abundances. It is recommended that a new batch of CDN-CGS-8 is purchased, stored in a waterproof bin and monitored to ensure humidity is low and temperature is cool within the bin. Reference material envelopes and sample bags should be checked to ensure there are no punctures and water marks prior to use. Due care in documenting the lithology present within the duplicate samples, and in choosing where to split a duplicate sample, will lessen the possibility of a 'nugget' effect from occurring and affecting the duplicate sample results.

APPENDIX G

2008 FIELD MAPPING NOTES

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADJD001	Zone 10 NAD 83 Canada	5764803	663859	Outcrop
ADJD002	Zone 10 NAD 83 Canada	5764888	663830	Outcrop
ADJD003	Zone 10 NAD 83 Canada	5765038	663790	Outcrop
ADJD004	Zone 10 NAD 83 Canada	5764996	663555	Outcrop
ADJD005	Zone 10 NAD 83 Canada	5765158	663777	Outcrop
ADJD006	Zone 10 NAD 83 Canada	5765197	663775	Outcrop
ADJD007	Zone 10 NAD 83 Canada	5765199	663917	Outcrop
ADJD008	Zone 10 NAD 83 Canada	5765247	664255	Outcrop
ADJD009	Zone 10 NAD 83 Canada	5764901	664041	Outcrop
ADJD010	Zone 10 NAD 83 Canada	5764877	663893	Outcrop
ADJD011	Zone 10 NAD 83 Canada	5764556	664046	Outcrop
ADJD012	Zone 10 NAD 83 Canada	5764266	664408	Outcrop
ADJD013	Zone 10 NAD 83 Canada	5764073	664127	Outcrop
ADJD014	Zone 10 NAD 83 Canada	5764810	664775	Outcrop
ADJD015	Zone 10 NAD 83 Canada	5764585	664741	Outcrop
ADJD016	Zone 10 NAD 83 Canada	5764484	666609	Subcrop
ADJD017	Zone 10 NAD 83 Canada	5764521	666684	Outcrop
ADJD018	Zone 10 NAD 83 Canada	5765099	664725	Outcrop
ADJD019	Zone 10 NAD 83 Canada	5765352	664696	Outcrop
ADJD020	Zone 10 NAD 83 Canada	5765452	664747	Outcrop
ADJD021	Zone 10 NAD 83 Canada	5764914	663134	Outcrop
ADJD021	Zone 10 NAD 83 Canada	5764945	663155	Outcrop
ADJD022	Zone 10 NAD 83 Canada	5764842	663080	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADJD023	Zone 10 NAD 83 Canada	5762177	664950	Outcrop
ADJD024	Zone 10 NAD 83 Canada	5762173	664968	Outcrop
ADJD025	Zone 10 NAD 83 Canada	5762121	664860	Outcrop
ADJD026	Zone 10 NAD 83 Canada	5762118	664756	Outcrop
ADJD027	Zone 10 NAD 83 Canada	5722002	665024	Outcrop
ADJD028	Zone 10 NAD 83 Canada	5765644	663144	Subcrop
ADJD029	Zone 10 NAD 83 Canada	5766168	663548	Outcrop
ADJD030	Zone 10 NAD 83 Canada	5766168	663548	Outcrop
ADJD031	Zone 10 NAD 83 Canada	5766096	663808	Outcrop
ADJD032	Zone 10 NAD 83 Canada	5766021	664016	Outcrop
ADJD033	Zone 10 NAD 83 Canada	5764087	666797	Outcrop
ADJD034	Zone 10 NAD 83 Canada	5764104	665572	Subcrop
ADJD035	Zone 10 NAD 83 Canada	5764295	664584	Outcrop
ADJD036	Zone 10 NAD 83 Canada	5764150	664713	Outcrop
ADJD037	Zone 10 NAD 83 Canada	5764134	664715	Outcrop
ADJD038	Zone 10 NAD 83 Canada	5763714	664507	Outcrop
ADJD040	Zone 10 NAD 83 Canada	5769149	664018	Outcrop
ADJD041	Zone 10 NAD 83 Canada	5769099	638898	Float
ADJD043	Zone 10 NAD 83 Canada	5768796	663963	Float

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADJD044	Zone 10 NAD 83 Canada	5768744	663982	Float
ADJD045	Zone 10 NAD 83 Canada	5768638	663999	Float
ADJD046	Zone 10 NAD 83 Canada	5768651	663999	Outcrop
ADJD047	Zone 10 NAD 83 Canada	5768554	664076	Outcrop
ADJD048	Zone 10 NAD 83 Canada	5768415	664219	Outcrop
ADJD049	Zone 10 NAD 83 Canada	5768312	664399	Outcrop
ADJD050	Zone 10 NAD 83 Canada	5768309	664632	Outcrop
ADJD051	Zone 10 NAD 83 Canada	5767006	664717	Subcrop
ADJD052	Zone 10 NAD 83 Canada	5764356	663828	Outcrop
ADJD053	Zone 10 NAD 83 Canada	5764315	663726	
ADJD054	Zone 10 NAD 83 Canada	5763696	663615	
ADJD055	Zone 10 NAD 83 Canada	5763638	663629	Subcrop
ADJD056	Zone 10 NAD 83 Canada	5764971	666461	Outcrop
ADJD057	Zone 10 NAD 83 Canada	5764950	666378	Outcrop
ADMR001	Zone 10 NAD 83 Canada	5766272	666160	Float
ADMR002	Zone 10 NAD 83 Canada	5765897	666218	Float
ADMR003	Zone 10 NAD 83 Canada	5765893	666291	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR004	Zone 10 NAD 83 Canada	5764746	663818	Outcrop
ADMR005	Zone 10 NAD 83 Canada	5764871	663533	Outcrop
ADMR006	Zone 10 NAD 83 Canada	5764852	663797	Outcrop
ADMR007	Zone 10 NAD 83 Canada	5764880	663808	Outcrop
ADMR008	Zone 10 NAD 83 Canada	5764887	663834	Outcrop
ADMR009				Outcrop
ADMR010	Zone 10 NAD 83 Canada	5764964	663856	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR011	Zone 10 NAD 83 Canada	5764982	663845	Outcrop
ADMR012	Zone 10 NAD 83 Canada	5765017	663885	Outcrop
ADMR013	Zone 10 NAD 83 Canada	5765055	663904	Outcrop
ADMR014	Zone 10 NAD 83 Canada	5765086	663896	Outcrop
ADMR015	Zone 10 NAD 83 Canada	5765129	663916	Outcrop
ADMR016	Zone 10 NAD 83 Canada	5765261	663984	Outcrop
ADMR017	Zone 10 NAD 83 Canada	5765382	664171	Outcrop
ADMR018	Zone 10 NAD 83 Canada	5765431	664788	Outcrop
ADMR019	Zone 10 NAD 83 Canada	5765448	664195	Outcrop
ADMR020	Zone 10 NAD 83 Canada	5765279	664294	Outcrop
ADMR021	Zone 10 NAD 83 Canada	5764549	663929	Float
ADMR022	Zone 10 NAD 83 Canada	5764527	663940	Subcrop
ADMR023	Zone 10 NAD 83 Canada	5764524	664019	Outcrop
ADMR024	Zone 10 NAD 83 Canada	5764504	664030	Outcrop
ADMR025	Zone 10 NAD 83 Canada	5764476	664033	Outcrop
ADMR026	Zone 10 NAD 83 Canada	5764443	664035	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR027	Zone 10 NAD 83 Canada	5764415	664034	Outcrop
ADMR028	Zone 10 NAD 83 Canada	5764386	664046	Outcrop
ADMR029	Zone 10 NAD 83 Canada	5764334	664061	Outcrop
ADMR030	Zone 10 NAD 83 Canada	5764092	664416	Outcrop
ADMR031	Zone 10 NAD 83 Canada	5764056	664406	Outcrop
ADMR032	Zone 10 NAD 83 Canada	5764024	664390	Subcrop
ADMR033	Zone 10 NAD 83 Canada	5764001	664390	Subcrop
ADMR034	Zone 10 NAD 83 Canada	5763987	664385	Outcrop
ADMR035	Zone 10 NAD 83 Canada	5765623	665803	Float
ADMR036	Zone 10 NAD 83 Canada	5765648	665688	Subcrop
ADMR037	Zone 10 NAD 83 Canada	5765668	665634	Outcrop
ADMR038	Zone 10 NAD 83 Canada	5765628	665416	Subcrop
ADMR039	Zone 10 NAD 83 Canada	5765688	665209	Outcrop
ADMR040	Zone 10 NAD 83 Canada	5765664	665113	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR041	Zone 10 NAD 83 Canada	5765672	665071	Float
ADMR042	Zone 10 NAD 83 Canada	5765673	665010	Outcrop
ADMR043	Zone 10 NAD 83 Canada	5765702	664963	Outcrop
ADMR044	Zone 10 NAD 83 Canada	5765804	664779	Subcrop
ADMR045	Zone 10 NAD 83 Canada	5765873	664740	Float
ADMR046	Zone 10 NAD 83 Canada	5765963	664591	Outcrop
ADMR047	Zone 10 NAD 83 Canada	5765948	664402	Outcrop
ADMR048	Zone 10 NAD 83 Canada	5765778	664368	Outcrop
ADMR049	Zone 10 NAD 83 Canada	5765755	664338	Outcrop
ADMR050	Zone 10 NAD 83 Canada	5765673	664141	Outcrop
ADMR051	Zone 10 NAD 83 Canada	5762784	665067	Outcrop
ADMR052	Zone 10 NAD 83 Canada	5762777	665004	Outcrop
ADMR053	Zone 10 NAD 83 Canada	5762769	664979	Outcrop
ADMR054	Zone 10 NAD 83 Canada	5762760	664917	Subcrop
ADMR055	Zone 10 NAD 83 Canada	5762881	664848	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR056	Zone 10 NAD 83 Canada	5762898	664854	Outcrop
ADMR057	Zone 10 NAD 83 Canada	5762948	664850	Outcrop
ADMR058	Zone 10 NAD 83 Canada	5762177	664985	Outcrop
ADMR059	Zone 10 NAD 83 Canada	5762171	664978	Outcrop
ADMR060	Zone 10 NAD 83 Canada	5762175	664949	Outcrop
ADMR061	Zone 10 NAD 83 Canada	5762120	664834	Outcrop
ADMR062	Zone 10 NAD 83 Canada	5762196	664822	Outcrop
ADMR063	Zone 10 NAD 83 Canada	5762292	664984	Outcrop
ADMR064	Zone 10 NAD 83 Canada	5762294	664993	Outcrop
ADMR065	Zone 10 NAD 83 Canada	5762304	665008	Outcrop
ADMR066	Zone 10 NAD 83 Canada	5765427	663037	Outcrop
ADMR067	Zone 10 NAD 83 Canada	5765694	663142	Outcrop
ADMR068	Zone 10 NAD 83 Canada	5765984	663217	Float
ADMR069	Zone 10 NAD 83 Canada	5766156	663243	Float
ADMR070	Zone 10 NAD 83 Canada	5766185	663353	Float
ADMR071	Zone 10 NAD 83 Canada	5766102	663791	Float
ADMR072	Zone 10 NAD 83 Canada	5766032	664069	Outcrop
ADMR073	Zone 10 NAD 83 Canada	5765989	664068	Outcrop
ADMR074	Zone 10 NAD 83 Canada	5765450	664028	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR075	Zone 10 NAD 83 Canada	5765190	666184	Float
ADMR076	Zone 10 NAD 83 Canada	5765228	665910	Float
ADMR077	Zone 10 NAD 83 Canada	5765297	666160	Float
ADMR078	Zone 10 NAD 83 Canada	5765349	666228	Outcrop
ADMR079	Zone 10 NAD 83 Canada	5764288	666825	Outcrop
ADMR080	Zone 10 NAD 83 Canada	5764174	666567	Subcrop
ADMR081	Zone 10 NAD 83 Canada	5764178	666540	Subcrop
ADMR082	Zone 10 NAD 83 Canada	5764180	666661	Float
ADMR083	Zone 10 NAD 83 Canada	5764013	666992	Outcrop
ADMR084	Zone 10 NAD 83 Canada	5764109	666869	Subcrop
ADMR085	Zone 10 NAD 83 Canada	5764101	666837	Outcrop
ADMR086	Zone 10 NAD 83 Canada	5764106	666826	Outcrop
ADMR087	Zone 10 NAD 83 Canada	5764071	666762	Float
ADMR088	Zone 10 NAD 83 Canada	5764052	666704	Outcrop
ADMR089	Zone 10 NAD 83 Canada	5764009	666646	Outcrop
ADMR090	Zone 10 NAD 83 Canada	5763920	666461	Outcrop
ADMR091	Zone 10 NAD 83 Canada	5763926	666392	Subcrop
ADMR092	Zone 10 NAD 83 Canada	5764135	665414	Subcrop
ADMR093	Zone 10 NAD 83 Canada	5764044	665377	Float
ADMR094	Zone 10 NAD 83 Canada	5763831	666225	Float
ADMR095	Zone 10 NAD 83 Canada	5763866	666332	Subcrop
ADMR096	Zone 10 NAD 83 Canada	5763931	664055	Subcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR097	Zone 10 NAD 83 Canada	5764357	664529	Float
ADMR098	Zone 10 NAD 83 Canada	5764287	664695	Float
ADMR099	Zone 10 NAD 83 Canada	5764211	664727	Subcrop
ADMR100	Zone 10 NAD 83 Canada	5764134	664703	Outcrop
ADMR101	Zone 10 NAD 83 Canada	5764149	664709	Outcrop
ADMR102	Zone 10 NAD 83 Canada	5764087	664674	Outcrop
ADMR103	Zone 10 NAD 83 Canada	5764052	664739	Subcrop
ADMR104	Zone 10 NAD 83 Canada	5763884	664645	Subcrop
ADMR105	Zone 10 NAD 83 Canada	5763861	664659	Outcrop
ADMR106	Zone 10 NAD 83 Canada	5763757	664562	Subcrop
ADMR107	Zone 10 NAD 83 Canada	5763651	664107	Outcrop
ADMR108	Zone 10 NAD 83 Canada	5763626	664047	Subcrop
ADMR109	Zone 10 NAD 83 Canada	5763612	664039	Outcrop
ADMR110	Zone 10 NAD 83 Canada	5768651	663999	Float
ADMR111	Zone 10 NAD 83 Canada	5768312	664399	Outcrop
ADMR112	Zone 10 NAD 83 Canada	5768309	664632	Float
ADMR113	Zone 10 NAD 83 Canada	5767603	664620	Float
ADMR114	Zone 10 NAD 83 Canada	5767351	664732	Float
ADMR115	Zone 10 NAD 83 Canada	5766984	664732	Outcrop
ADMR116	Zone 10 NAD 83 Canada	5767039	664928	Float
ADMR117	Zone 10 NAD 83 Canada	5764315	663720	
ADMR118	Zone 10 NAD 83 Canada	5763910	663573	
ADMR119	Zone 10 NAD 83 Canada	5763791	663617	Float

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADMR120	Zone 10 NAD 83 Canada	5763571	663742	Outcrop
ADMR121	Zone 10 NAD 83 Canada	5763509	663749	
ADMR122	Zone 10 NAD 83 Canada	5762959	663793	Outcrop
ADMR123	Zone 10 NAD 83 Canada	5762810	663813	Outcrop
ADMR124	Zone 10 NAD 83 Canada	5761880	663806	Outcrop
ADMR125	Zone 10 NAD 83 Canada	5764985	666501	DDH
ADMR126	Zone 10 NAD 83 Canada	5764975	666359	Outcrop
ADMR127	Zone 10 NAD 83 Canada	5764945	666365	Outcrop
ADSB001	Zone 10 NAD 83 Canada	5764956	666518	Outcrop
ADSB002	Zone 10 NAD 83 Canada	5764959	666430	Outcrop
ADSB003	Zone 10 NAD 83 Canada	5764967	666398	Outcrop
ADSB004	Zone 10 NAD 83 Canada	5764953	666307	Outcrop
ADSB005	Zone 10 NAD 83 Canada	5764839	666109	Outcrop
ADSB006	Zone 10 NAD 83 Canada	5764950	666412	Outcrop
ADSB007	Zone 10 NAD 83 Canada	5765211	662885	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADSB008	Zone 10 NAD 83 Canada	5765238	662842	Outcrop
ADSB009	Zone 10 NAD 83 Canada	5765204	662785	Contact
ADSB010	Zone 10 NAD 83 Canada	5765137	662774	Outcrop
ADSB011	Zone 10 NAD 83 Canada	5765078	662679	Outcrop
ADSB012	Zone 10 NAD 83 Canada	5765005	662638	Outcrop
ADSB013	Zone 10 NAD 83 Canada	5764993	662561	Outcrop
ADSB014	Zone 10 NAD 83 Canada	5765009	662478	Outcrop
ADSB015	Zone 10 NAD 83 Canada	5764918	662399	Outcrop
ADSB016	Zone 10 NAD 83 Canada	5764962	662361	Outcrop
ADSB017	Zone 10 NAD 83 Canada	5764945	662299	Outcrop
ADSB018	Zone 10 NAD 83 Canada	5765006	662275	Outcrop
ADSB019	Zone 10 NAD 83 Canada	5765073	662324	Outcrop
ADSB020	Zone 10 NAD 83 Canada	5765126	662189	Outcrop
ADSB021	Zone 10 NAD 83 Canada	5765326	662186	Outcrop
ADSB022	Zone 10 NAD 83 Canada	5765346	662133	Outcrop
ADSB023	Zone 10 NAD 83 Canada	5765376	662013	Outcrop
ADSB024	Zone 10 NAD 83 Canada	5765598	661650	Outcrop
ADSB025	Zone 10 NAD 83 Canada	5765270	662261	Outcrop
ADSB026	Zone 10 NAD 83 Canada	5765220	662367	Outcrop
ADSB027	Zone 10 NAD 83 Canada	5765332	662346	Outcrop
ADSB028	Zone 10 NAD 83 Canada	5765357	662485	Outcrop
ADSB029	Zone 10 NAD 83 Canada	5765445	662598	Outcrop
ADSB030	Zone 10 NAD 83 Canada	5765494	662604	Outcrop
ADSB031	Zone 10 NAD 83 Canada	5765527	662641	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADSB032	Zone 10 NAD 83 Canada	5765580	662835	Outcrop
ADSB033	Zone 10 NAD 83 Canada	5765580	662863	Outcrop
ADSB034	Zone 10 NAD 83 Canada	5765477	662910	Outcrop
ADSB035	Zone 10 NAD 83 Canada	5765426	663037	Outcrop
ADSB036	Zone 10 NAD 83 Canada	5765294	662954	Outcrop
ADSB037	Zone 10 NAD 83 Canada	5765108	663067	Outcrop
ADSB038	Zone 10 NAD 83 Canada	5765044	663197	Outcrop
ADSB039	Zone 10 NAD 83 Canada	5764964	663257	Outcrop
ADSB040	Zone 10 NAD 83 Canada	5763906	664023	Outcrop
ADSB041	Zone 10 NAD 83 Canada	5763858	664007	Outcrop
ADSB042	Zone 10 NAD 83 Canada	5763830	664006	Outcrop
ADSB043	Zone 10 NAD 83 Canada	5763762	663953	Outcrop
ADSB044	Zone 10 NAD 83 Canada	5763725	663938	Outcrop
ADSB045	Zone 10 NAD 83 Canada	5763868	664411	Outcrop
ADSB046	Zone 10 NAD 83 Canada	5763951	664416	Outcrop
ADSB047	Zone 10 NAD 83 Canada	5766839	663025	Float
ADSB048	Zone 10 NAD 83 Canada	5766913	663134	Float
ADSB049	Zone 10 NAD 83 Canada	5766964	663263	Float
ADSB050	Zone 10 NAD 83 Canada	5766964	663312	Outcrop
ADSB051	Zone 10 NAD 83 Canada	5766971	663331	Outcrop
ADSB052	Zone 10 NAD 83 Canada	5767089	663299	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADSB053	Zone 10 NAD 83 Canada	5767181	663239	Outcrop
ADSB054	Zone 10 NAD 83 Canada	5767238	663216	Outcrop
ADSB055	Zone 10 NAD 83 Canada	5767263	663205	Outcrop
ADSB056	Zone 10 NAD 83 Canada	5767403	663081	Outcrop
ADSB057	Zone 10 NAD 83 Canada	5764816	664770	Outcrop
ADSB058	Zone 10 NAD 83 Canada	5764585	664741	Outcrop
ADSB059	Zone 10 NAD 83 Canada	5764569	664730	Outcrop
ADSB060	Zone 10 NAD 83 Canada	5764523	664607	Outcrop
ADSB061	Zone 10 NAD 83 Canada	5764492	664722	Outcrop
ADSB062	Zone 10 NAD 83 Canada	5764490	664752	Outcrop
ADSB063	Zone 10 NAD 83 Canada	5764453	665051	Float
ADSB064	Zone 10 NAD 83 Canada	5764454	665250	Float
ADSB065	Zone 10 NAD 83 Canada	5764487	666609	Subcrop
ADSB066	Zone 10 NAD 83 Canada	5764525	666682	Outcrop
ADSB067	Zone 10 NAD 83 Canada	5764563	666698	Outcrop
ADSB068	Zone 10 NAD 83 Canada	5763952	666971	Outcrop
ADSB069	Zone 10 NAD 83 Canada	5765099	664725	Outcrop
ADSB070	Zone 10 NAD 83 Canada	5765118	664744	Outcrop
ADSB071	Zone 10 NAD 83 Canada	5765184	664730	Outcrop
ADSB072	Zone 10 NAD 83 Canada	5765244	664705	Outcrop
ADSB073	Zone 10 NAD 83 Canada	5765312	664677	Outcrop
ADSB074	Zone 10 NAD 83 Canada	5765355	664713	Outcrop
ADSB075	Zone 10 NAD 83 Canada	5765426	664732	Outcrop
ADSB076	Zone 10 NAD 83 Canada	5765490	664728	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
ADSB077	Zone 10 NAD 83 Canada	5765509	664717	Subcrop
ADSB078	Zone 10 NAD 83 Canada	5765465	664651	Contact
ADSB079	Zone 10 NAD 83 Canada	5765482	664603	Outcrop
ADSB080	Zone 10 NAD 83 Canada	5765447	664468	Float
ADSB081	Zone 10 NAD 83 Canada	5765413	664274	Outcrop
ADSB082	Zone 10 NAD 83 Canada	5764846	663081	Outcrop
ADSB083	Zone 10 NAD 83 Canada	5763001	663804	Outcrop
HNDB033	Zone 10 NAD 83 Canada	5767894	660708	Float
HNJD020	Zone 10 NAD 83 Canada	5767464	661010	Outcrop
HNSB057	Zone 10 NAD 83 Canada	5767464	661018	Float
HNSB058	Zone 10 NAD 83 Canada	5768239	660883	Outcrop
HNSB059	Zone 10 NAD 83 Canada	5768261	661141	Float
HNSB060	Zone 10 NAD 83 Canada	5768195	661591	Float
HNSB061	Zone 10 NAD 83 Canada	5768175	661797	Float
HNSB062	Zone 10 NAD 83 Canada	5768073	662202	Outcrop
HNSB063	Zone 10 NAD 83 Canada	5767750	662563	Outcrop
HNSB064	Zone 10 NAD 83 Canada	5767668	662593	Outcrop
HNSB065	Zone 10 NAD 83 Canada	5767628	662597	Outcrop
HNSB066	Zone 10 NAD 83 Canada	5767535	662618	Outcrop
HNSB067	Zone 10 NAD 83 Canada	5767181	662594	Outcrop
HNSB068	Zone 10 NAD 83 Canada	5767156	662549	Outcrop
HNSB069	Zone 10 NAD 83 Canada	5767013	662290	Outcrop
HNSB070	Zone 10 NAD 83 Canada	5766981	662261	Outcrop
HNSB071	Zone 10 NAD 83 Canada	5767088	662272	Outcrop
HNSB072	Zone 10 NAD 83 Canada	5767358	662051	Outcrop
HNSB074	Zone 10 NAD 83 Canada	5767205	662413	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Zone_Datum	Northing	Easting	Outcrop/Float
HNSB075	Zone 10 NAD 83 Canada	5766697	662668	Float
HNSB076	Zone 10 NAD 83 Canada	5766683	662641	Outcrop
HNSB077	Zone 10 NAD 83 Canada	5766742	662568	Outcrop
HNSB078	Zone 10 NAD 83 Canada	5766709	662501	Outcrop
HNSB079	Zone 10 NAD 83 Canada	5766703	662418	Outcrop
HNSB080	Zone 10 NAD 83 Canada	5766767	662342	Outcrop
HNSB081	Zone 10 NAD 83 Canada	5766761	662252	Outcrop
HNSB082	Zone 10 NAD 83 Canada	5766890	662100	Outcrop
HNSB083	Zone 10 NAD 83 Canada	5766942	662015	Outcrop

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADJD001	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD002	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD003	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD004	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD005	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD006	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD007	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD008	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD009	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD010	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD011	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD012	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD013	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD014	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD015	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD016	Knotty Phyllite	Kp	
ADJD017	Knotty Phyllite	Kp	
ADJD018	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD019	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD020	Siltstone	SI	
ADJD021	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD021	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD022	Andesite Tuff and Andesitic Augite Crystal Tuff	At	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADJD023	Knotty Phyllite	Kp	
ADJD024	Knotty Phyllite	Kp	
ADJD025	Knotty Phyllite	Kp	
ADJD026	Knotty Phyllite	Kp	
ADJD027	Knotty Phyllite	Kp	828505
ADJD028	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD029	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD030	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD031	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADJD032	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD033	Knotty Phyllite	Kp	
ADJD034	Knotty Phyllite	Kp	
ADJD035	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD036	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD037	Andesite Tuff and Andesitic Augite Crystal Tuff	At	828514
ADJD038	Knotty Phyllite	Kp	
ADJD040	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD041	Knotty Phyllite	Kp	
ADJD043	Siltstone	SI	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADJD044	Siltstone	SI	
ADJD045	Siltstone	SI	
ADJD046	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD047	Siltstone	SI	
ADJD048	Siltstone	SI	
ADJD049	Siltstone	SI	
ADJD050	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD051	Knotty Phyllite	Kp	
ADJD052	Andesite Tuff and Andesitic Augite Crystal Tuff	At	828515
ADJD053			
ADJD054			
ADJD055	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADJD056	Knotty Phyllite	Kp	
ADJD057	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR001	Knotty Phyllite	Kp	
ADMR002	Sandstone	Sa	
ADMR003	Knotty Phyllite	Kp	828506

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADMR004	Siltstone	Sl	828507
ADMR005	Conglomerate	Cg	
ADMR006	Conglomerate	Cg	
ADMR007	Conglomerate	Cg	
ADMR008	Conglomerate	Cg	
ADMR009			
ADMR010	Conglomerate	Cg	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADMR011	Conglomerate	Cg	
ADMR012	Conglomerate	Cg	
ADMR013	Conglomerate	Cg	
ADMR014	Conglomerate	Cg	
ADMR015	Conglomerate	Cg	
ADMR016	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR017	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR018	Conglomerate	Cg	
ADMR019	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR020	Unknown	Unk	
ADMR021	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR022	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR023	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR024	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR025	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR026	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADMR027	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	828508
ADMR028	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR029	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR030	Andesite Tuff and Andesitic Augite Crystal Tuff	At	828509
ADMR031	Limestone	Lm	
ADMR032	Limestone	Lm	
ADMR033	Limestone	Lm	
ADMR034	Limestone	Lm	
ADMR035	Siltstone	Sl	
ADMR036	Knotty Phyllite	Kp	
ADMR037	Knotty Phyllite	Kp	828510
ADMR038	Knotty Phyllite	Kp	
ADMR039	Knotty Phyllite	Kp	828511
ADMR040	Knotty Phyllite	Kp	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADMR041	Knotty Phyllite	Kp	
ADMR042	Knotty Phyllite	Kp	
ADMR043	Siltstone	SI	
ADMR044	Siltstone	SI	
ADMR045	Siltstone	SI	
ADMR046	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR047	Andesite Tuff and Andesitic Augite Crystal Tuff	At	828512
ADMR048	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR049	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR050	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR051	Knotty Phyllite	Kp	
ADMR052	Knotty Phyllite	Kp	
ADMR053	Knotty Phyllite	Kp	
ADMR054	Knotty Phyllite	Kp	
ADMR055	Knotty Phyllite	Kp	

2008 Art-DL Field Mapping Notes

Station_ID	Lithology	Lithology Code	Assay Sample
ADMR056	Knotty Phyllite	Kp	
ADMR057	Knotty Phyllite	Kp	
ADMR058	Knotty Phyllite	Kp	
ADMR059	Knotty Phyllite	Kp	
ADMR060	Knotty Phyllite	Kp	
ADMR061	Knotty Phyllite	Kp	
ADMR062	Knotty Phyllite	Kp	
ADMR063	Knotty Phyllite	Kp	
ADMR064	Knotty Phyllite	Kp	
ADMR065	Knotty Phyllite	Kp	
ADMR066	Conglomerate	Cg	
ADMR067	Siltstone	Sl	
ADMR068	Andesitic Augite Porphyry and Augite-phyric Andesite	Ap	
ADMR069	Knotty Phyllite	Kp	
ADMR070	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR071	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR072	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR073	Andesite Tuff and Andesitic Augite Crystal Tuff	At	
ADMR074	Conglomerate	Cg	

APPENDIX H

GEOCHEMICAL SURVEY SOIL, SILT AND ROCK RESULTS

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L649800N 661900E	661900	5649800	1.6	43.00	0.00	8.7	47	0.20	19.6	9.7	221	3.61	11	0.3	19.50	0.020	0.7	18	0.4	0.80
L649800N 661950E	661950	5649800	1.2	44.80	0.00	8.5	85	0.20	27.9	14.6	291	4.44	13.7	0.4	3.10	0.003	0.5	27	0.4	1.10
L649800N 662000E	662000	5649800	1.6	53.90	0.01	9.3	84	0.10	25.3	19.7	586	4.09	10.9	0.3	1.00	0.001	0.6	29	0.4	0.90
L649800N 662050E	662050	5649800	1.5	37.50	0.00	8.3	59	0.20	16.4	11.9	277	3.68	8.6	0.4	3.50	0.004	0.3	28	0.4	1.10
L649800N 662100E	662100	5649800	1.2	113.10	0.01	6.6	98	0.30	46.7	29.8	540	5.21	60.4	0.4	202.00	0.202	1.2	31	0.3	1.80
L649800N 662150E	662150	5649800	1.2	68.10	0.01	8.3	102	0.05	37.9	20.6	681	4.31	42.2	0.4	2.20	0.002	0.8	33	0.3	1.60
L649800N 662200E	662200	5649800	1.9	45.20	0.00	8.4	64	0.30	18.7	11.9	478	3.55	21	0.5	1.30	0.001	0.3	14	0.5	1.30
L649800N 662250E	662250	5649800	1.9	45.90	0.00	8.6	78	0.20	19.1	14.3	677	4.18	72.9	0.3	2.10	0.002	0.4	19	0.4	2.60
L649800N 662300E	662300	5649800	1.8	109.50	0.01	8	79	0.20	35.6	20.7	841	4.34	29	0.7	1.70	0.002	0.3	27	0.5	3.20
L649800N 662350E	662350	5649800	1.2	39.00	0.00	7.2	116	0.10	40.2	18.7	445	5.06	25.7	0.4	1.00	0.001	0.6	22	0.4	2.90
L649800N 662400E	662400	5649800	1.5	29.80	0.00	7.8	68	0.10	26.3	11.2	283	4.03	24.3	0.3	1.80	0.002	0.6	19	0.3	2.20
L649800N 662450E	662450	5649800	2.2	54.60	0.01	8	101	0.05	32.9	16	325	5.08	37.8	0.4	2.40	0.002	0.9	17	0.4	1.40
L649800N 662500E	662500	5649800	1.7	37.30	0.00	8.5	98	0.20	37.6	15.4	840	4.19	44.4	0.3	3.50	0.004	0.7	20	0.3	1.40
L649800N 662550E	662550	5649800	1.2	46.50	0.00	7.9	74	0.10	38.5	14.8	305	4.06	17.6	0.5	3.00	0.003	1.4	15	0.2	1.30
L649800N 662600E	662600	5649800	1.2	31.90	0.00	7.9	82	0.10	32.3	13.9	258	4.83	17.3	0.5	1.40	0.001	0.9	21	0.4	1.00
L649800N 662650E	662650	5649800	1.3	51.40	0.01	6.6	124	0.10	48.7	20.3	340	4.9	12.8	0.6	2.40	0.002	1.4	24	0.5	0.70
L649800N 662700E	662700	5649800	0.6	26.40	0.00	6.3	127	0.10	37.4	18.4	360	4.4	6.5	0.3	1.00	0.001	0.8	17	0.5	0.50
L649800N 662750E	662750	5649800	0.5	17.50	0.00	6.4	132	0.10	27.5	16.9	863	3.39	2.5	0.2	0.80	0.008	0.6	24	0.5	0.30
L649800N 662800E	662800	5649800	1	33.70	0.00	7.6	125	0.05	43.8	19.3	645	3.71	7.8	0.3	0.90	0.009	0.8	19	0.3	0.50
L649800N 662850E	662850	5649800	0.7	175.90	0.02	5	115	0.30	47.4	22.1	459	4.63	3.9	0.2	0.20	<0.001	0.5	21	0.7	0.20
L649800N 662900E	662900	5649800	0.9	25.50	0.00	8.5	136	0.10	39.5	16	299	3.92	9	0.4	0.20	<0.001	1	13	0.5	0.60
L649800N 662950E	662950	5649800	0.5	23.10	0.00	8.4	115	0.20	32.5	15.1	250	3.75	4.3	0.3	0.20	<0.001	0.8	28	0.9	0.20
L649800N 663000E	663000	5649800	1	38.70	0.00	6.2	78	0.05	55.3	25.8	629	5.44	12.1	0.4	0.70	0.007	0.6	38	0.3	0.70
L649800N 663050E	663050	5649800	1	38.60	0.00	4.9	102	0.10	63.3	28.6	492	6.1	20.5	0.3	1.20	0.001	0.8	34	0.3	0.80
L649800N 663100E	663100	5649800	0.6	26.80	0.00	5.9	113	0.05	39	21.4	340	3.64	10.3	0.3	1.40	0.001	0.9	30	0.2	0.50
L649800N 663150E	663150	5649800	1.1	30.80	0.00	9.7	63	0.05	27.2	13.9	275	4.13	7.2	0.3	0.20	<0.001	0.8	28	0.1	0.90
L649800N 663200E	663200	5649800	0.3	30.60	0.00	4.6	84	0.05	19	14.7	483	3.77	6.7	0.2	0.20	<0.001	0.5	50	0.1	0.50
L65000N 64700E	664700	5765000	2.3	46.90	0.00	9.5	112	0.20	125.5	24.4	379	4.94	19.4	0.4	1.20	0.001	1.9	31	0.5	0.80
L65000N 64750E	664750	5765000	0.9	73.20	0.01	15.2	164	0.10	65.3	22.8	871	5.13	9.4	0.3	0.20	<0.001	1.2	20	0.4	0.30
L65000N 64800E	664800	5765000	1.8	24.70	0.00	11.7	81	0.10	62.8	14.8	855	3.41	6.9	0.2	0.20	<0.001	1.1	15	0.2	0.40
L65000N 64850E	664850	5765000	3.4	43.80	0.00	14.7	170	0.20	50.7	15.5	385	4.57	17.2	0.7	2.50	0.003	2.3	11	0.5	1.00
L65000N 64900E	664900	5765000	3.8	78.70	0.01	8.6	270	1.20	37.5	17.3	483	3.97	6.8	0.3	0.20	<0.001	1.5	22	1.4	0.90
L65000N 64950E	664950	5765000	3.3	105.10	0.01	8.6	409	0.40	58.2	26.8	530	5.88	10.2	0.5	1.00	0.001	1.5	22	1.6	0.70
L65000N 65000E	665000	5765000	3.4	225.40	0.02	15	256	0.50	109.1	23.4	453	4.3	22.2	0.7	0.90	0.001	3.1	17	1.2	1.30
L65000N 65050E	665050	5765000	6.4	173.80	0.02	16.2	241	1.10	67.3	25.3	604	8.77	556.4	0.6	7.50	0.008	1.5	12	1.8	28.40
L65000N 65100E	665100	5765000	2.1	28.20	0.00	12.2	118	0.30	24.8	9.2	177	3.62	10.2	0.5	0.20	<0.001	2.7	7	0.7	0.50
L65000N 65150E	665150	5765000	2.1	27.20	0.00	11.4	165	0.30	23.2	13	241	3.33	8.1	0.5	1.80	0.002	2	14	1.3	0.50
L65000N 65200E	665200	5765000	1.3	81.20	0.01	10.3	127	0.20	51.6	15.7	261	2.77	5.6	0.2	0.90	0.001	1.1	10	0.5	0.20
L65000N 65250E	665250	5765000	2	125.40	0.01	8.6	172	0.90	79.2	27.5	339	3.58	5.4	0.4	1.60	0.002	1.3	12	0.7	0.30
L65000N 65300E	665300	5765000	5.1	88.50	0.01	9.6	420	0.30	153.9	33.2	435	4.21	6.4	0.6	0.50	0.001	1.8	17	2.1	0.70
L65000N 662000E	662000	5765000	1.2	113.70	0.01	6.5	94	0.20	49	21.9	643	4.67	15.5	0.3	0.80	0.001	0.8	18	0.3	1.00
L65000N 662050E	662050	5765000	1.6	131.10	0.01	8.4	104	0.20	63.5	26	1803	4.8	22.6	0.6	7.40	0.007	0.7	33	0.4	1.80
L65000N 662100E	662100	5765000	1.1	79.20	0.01	6.2	116	0.05	42.2	24	483	5.27	40.8	0.3	5.70	0.006	0.8	31	0.2	1.30
L65000N 662150E	662150	5765000	1.3	35.20	0.00	7.5	107	0.10	26	14.7	690	4.23	13.4	0.4	1.00	0.001	0.6	22	0.4	1.40
L65000N 662200E	662200	5765000	1.4	19.50	0.00	6.5	47	0.20	12.3	6.2	173	2.53	26.9	0.3	24.60	0.025	0.5	16	0.2	1.10
L65000N 662250E	662250	5765000	1.7	39.10	0.00	7.9	72	0.30	25	12.6	507	3.1	11	0.3	0.80	0.001	0.5	14	0.3	0.80
L65000N 662300E	662300	5765000	0.7	33.80	0.00	5.9	64	0.10	17.7	12.9	258	4.06	8.1	0.3	0.50	0.001	0.5	23	0.3	0.50
L65000N 662350E	662350	5765000	1.2	22.80	0.00	6.7	77	0.10	22.5	11.2	302	4	8.9	0.3	1.10	0.001	0.5	20	0.2	1.00
L65000N 662400E	662400	5765000	1.6	72.00	0.01	6.9	62	0.05	38.6	15.3	288	4.31	18.7	0.4	1.70	0.002	1	21	0.3	1.30
L65000N 662450E	662450	5765000	1.6	21.30	0.00	6.8	76	0.05	25.3	11.4	240	4.31	10	0.4	1.50	0.002	0.9	18	0.4	0.80
L65000N 662500E	662500	5765000	1.5	16.60	0.00	6.9	39	0.05	14.8	8.1	269	3.33	10.5	0.4	1.90	0.002	0.3	25	0.2	0.80
L65000N 662550E	662550	5765000	1	24.70	0.00	4.3	74	0.05	29.7	19	388	5.73	6.9	0.4	11.10	0.011	0.8	16	0.2	1.80
L65000N 662600E	662600	5765000	1.6	25.40	0.00	7.7	56	0.10	22.3	9.8	244	3.67	9.9	0.3	0.20	<0.001	0.7	15	<0.1	0.80
L65000N 662650E	662650	5765000	1.9	34.30	0.00	8.6	96	0.10	39.4	16.5	462	4.22	12.7	0.4	1.30	0.001	0.9	13	0.2	1.00</

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L65000N 662800E	662800	5765000	1.1	19.40	0.00	5.1	72	0.10	29.6	13.6	268	3.23	7.9	0.4	0.20	<0.001	0.6	11	0.2	0.50
L65000N 662850E	662850	5765000	1.6	23.60	0.00	6.7	76	0.05	48.9	17.7	248	4.72	11.8	0.4	0.60	0.001	0.6	19	0.6	0.60
L65000N 662900E	662900	5765000	1.5	62.50	0.01	6	74	0.05	59.9	19.7	363	4.5	15.2	0.4	0.20	<0.001	0.7	17	0.3	0.90
L65000N 662950E	662950	5765000	1.1	8.90	0.00	6.8	62	0.05	22.4	9.7	221	2.95	4.3	0.3	0.20	<0.001	0.6	19	0.2	0.30
L65000N 663000E	663000	5765000	1.2	30.10	0.00	6.8	89	0.40	51	15.7	464	3.58	14.9	0.5	282.70	0.283	1	16	0.2	1.00
L67000N 65450E	665450	5767000	3	22.50	0.02	7.1	83	0.90	42.5	10.6	249	2.47	8.2	0.7	2.10	0.0021	2	25	0.6	0.40
L67000N 65500E	665500	5767000	1.8	9.30	0.01	5.5	72	0.20	39.2	11.1	174	2.4	5.1	0.5	0.20	<0.0005	1.2	15	0.6	0.20
L67000N 65550E	665550	5767000	1.9	22.70	0.02	8	84	0.30	44.5	13.6	333	2.76	5.3	1.4	1.90	0.0019	2.6	39	0.6	0.20
L65000N 663200E	663200	5765000	0.8	65.30	0.1	4.1	71	0.05	19.9	14.5	423	5.01	8.3	0.3	6.20	0.0	0.4	19	0.3	0.50
L65000N 663150E	663150	5765000	0.6	42.90	0.0	4.9	90	0.20	25.3	16.3	597	4.09	3.2	0.3	2.70	0.0	0.3	26	0.4	0.30
L65000N 663100E	663100	5765000	1.0	69.40	0.1	7.2	74	0.20	96.6	18.7	763	3.30	26.4	0.5	2.30	0.0	1.5	25	0.5	2.00
L65000N 663050E	663050	5765000	1.5	138.60	0.1	7.0	95	0.20	24.8	23.4	834	6.73	22.2	0.5	12.50	0.0	1.2	52	0.2	2.30
L66200N 64500E	664500	5766200	4.9	28.80	0.0	10.7	143	1.00	40.2	10.1	735	3.01	15.2	1.2	5.40	0.0	0.5	37	1.6	1.10
L66200N 64550E	664550	5766200	5.5	36.90	0.0	16.4	167	1.10	51.5	11.9	376	3.33	15.5	2.0	4.70	0.0	1.3	50	2.6	1.00
L66200N 64600E	664600	5766200	3.1	35.80	0.0	11.6	100	1.80	36.7	7.2	319	1.89	7.9	1.6	4.40	0.0	0.9	15	1.3	0.70
L66200N 64650E	664650	5766200	4.0	21.90	0.0	8.6	66	1.50	17.2	4.2	98	1.62	40.5	0.5	2.50	0.0	1.0	11	1.8	2.00
L66200N 64700E	664700	5766200	3.8	31.30	0.0	12.9	183	3.50	35.9	7.6	432	2.56	16.9	0.6	4.50	0.0	3.3	5	0.7	1.30
L66200N 64750E	664750	5766200	23.4	36.50	0.0	33.9	139	1.50	21.4	4.6	154	3.85	27.1	1.3	5.60	0.0	3.7	12	0.5	1.50
L66200N 64800E	664800	5766200	4.6	31.20	0.0	10.5	110	1.50	25.8	11.1	337	2.76	9.6	0.7	2.30	0.0	1.6	9	0.8	0.50
L66200N 64850E	664850	5766200	3.0	21.60	0.0	16.1	159	0.60	36.5	12.6	680	2.84	11.1	0.7	3.90	0.0	1.9	30	2.1	0.70
L66200N 64900E	664900	5766200	3.3	25.90	0.0	11.0	122	0.80	40.7	10.3	347	2.84	10.3	1.0	2.70	0.0	2.7	30	1.3	0.70
L66200N 64950E	664950	5766200	2.7	21.20	0.0	13.6	90	0.60	27.9	10.0	345	2.29	8.4	0.8	2.30	0.0	1.1	28	1.4	0.50
L66200N 65000E	665000	5766200	3.6	27.00	0.0	13.5	118	0.30	39.4	12.9	329	3.45	13.7	0.9	6.00	0.0	3.9	21	0.8	0.70
L66200N 65050E	665050	5766200	3.5	34.30	0.0	15.1	157	0.90	51.6	12.9	417	3.01	11.9	2.1	6.00	0.0	2.4	28	1.8	0.60
L66200N 65100E	665100	5766200	4.8	47.00	0.0	11.5	86	1.00	41.4	8.7	171	2.61	12.9	19.7	5.90	0.0	2.3	58	3.7	0.40
L66200N 65150E	665150	5766200	9.0	72.80	0.1	14.3	199	3.20	77.4	16.1	1889	3.77	17.1	6.0	7.30	0.0	1.6	61	3.1	0.90
L66200N 65200E	665200	5766200	5.4	18.70	0.0	12.0	116	0.50	28.8	6.7	150	3.09	13.3	0.8	5.00	0.0	2.3	9	0.9	0.60
L66200N 65250E	665250	5766200	5.6	31.30	0.0	15.1	99	0.70	33.4	10.4	827	3.04	7.2	2.2	3.10	0.0	0.7	53	1.3	0.30
L66200N 65300E	665300	5766200	3.8	15.50	0.0	10.9	121	0.40	38.4	9.4	151	2.33	7.4	0.8	4.20	0.0	2.6	22	0.6	0.30
L66200N 65350E	665350	5766200	9.6	15.40	0.0	10.5	78	0.20	37.2	6.4	106	2.85	15.1	0.6	4.60	0.0	2.5	36	0.4	0.50
L66200N 65400E	665400	5766200	5.7	20.90	0.0	9.7	129	0.40	38.8	9.7	192	2.71	15.2	0.8	13.40	0.0	4.4	12	0.9	0.50
L66200N 65450E	665450	5766200	7.5	30.70	0.0	12.2	106	1.40	42.8	10.4	194	3.88	30.3	0.8	85.90	0.1	4.0	8	0.9	0.70
L66200N 65500E	665500	5766200	6.2	26.70	0.0	8.8	116	0.80	47.6	11.5	200	3.29	17.5	0.8	19.30	0.0	3.3	10	0.7	0.60
L66200N 65550E	665550	5766200	9.9	28.70	0.0	9.9	210	0.50	71.8	11.3	283	3.08	26.7	0.9	4.70	0.0	2.9	18	1.9	0.70
L66200N 65600E	665600	5766200	6.2	26.40	0.0	10.8	135	0.60	34.4	9.0	229	3.10	12.4	0.6	48.40	0.0	2.9	11	1.4	0.60
L66200N 65650E	665650	5766200	2.5	40.70	0.0	16.2	114	1.20	40.1	8.1	302	2.71	7.8	0.6	3.50	0.0	3.9	9	0.7	0.30
L66200N 65700E	665700	5766200	14.0	48.20	0.0	21.8	224	0.20	56.7	13.4	328	3.86	11.3	1.0	5.00	0.0	4.2	12	1.2	0.60
L66200N 65750E	665750	5766200	4.4	8.50	0.0	10.6	66	0.40	16.2	4.4	238	1.51	5.7	0.3	2.60	0.0	1.8	16	0.5	0.30
L66200N 65800E	665800	5766200	4.0	24.20	0.0	9.0	126	0.30	46.5	10.6	238	2.66	11.1	0.7	2.00	0.0	3.7	12	0.8	0.50
L66200N 63850E	663850	5766200	2.4	41.70	0.0	14.4	101	0.10	111.7	19.9	266	3.90	54.5	0.4	2.40	0.0	1.6	12	0.3	3.10
L66200N 63900E	663900	5766200	4.1	51.30	0.1	11.0	133	0.30	41.2	5.2	118	1.29	11.4	0.7	3.60	0.0	0.7	31	1.8	3.70
L66200N 63950E	663950	5766200	2.5	123.00	0.1	7.6	113	0.40	67.5	23.9	687	5.32	22.8	1.1	2.90	0.0	1.8	42	0.4	1.90
L66200N 64000E	664000	5766200	2.5	50.50	0.1	8.9	132	0.10	41.3	15.1	502	4.44	24.8	0.5	2.40	0.0	1.4	18	0.5	2.00
L66200N 64150E	664150	5766200	3.8	84.90	0.1	10.6	129	0.20	94.2	21.0	455	3.24	29.6	0.9	7.70	0.0	2.3	29	0.8	3.10
L66200N 64200E	664200	5766200	2.6	26.30	0.0	9.2	123	0.10	23.9	9.6	326	3.77	16.2	0.3	0.70	0.0	1.0	24	0.5	1.00
L66200N 64250E	664250	5766200	2.0	31.80	0.0	8.1	168	0.20	34.9	15.8	575	4.58	15.3	0.2	1.70	0.0	1.3	12	0.5	1.00
L66200N 64300E	664300	5766200	0.9	60.40	0.1	5.1	91	0.40	355.7	48.3	856	5.92	77.4	0.2	2.50	0.0	0.3	33	0.6	2.20
L66200N 64350E	664350	5766200	0.6	66.00	0.1	3.2	45	0.30	379.5	51.1	1015	6.49	29.5	0.2	2.00	0.0	0.3	31	0.3	0.80
L66200N 64500E	664500	5766200	4.2	30.60	0.0	12.1	215	0.50	53.9	13.0	883	3.21	15.6	1.0	0.20	<0.0	1.2	30	2.0	1.00
L66400N 65800E	665800	5766400	7.4	21.70	0.0	11.4	147	0.80	31.6	7.6	242	2.56	4.8	0.4	6.40	0.0	2.0	16	0.8	0.30
L66400N 65750E	665750	5766400	12.8	31.10	0.0	21.5	147	0.50	29.3	8.5	244	3.51	15.1	0.7	4.60	0.0	1.4	10	0.8	1.90
L66400N 65700E	665700	5766400	2.0	9.40	0.0	8.9	87	1.10	28.4	8.4	145	2.92	5.4	0.5	0.20	<0.0	2.1	6	0.6	0.20
L66400N 65650E	665650	5766400	2.8	6.90	0.0	8.1	35	0.50	12.8	3.3	79	1.48	5.0	0.4	0.60	0.0	1.4	4	0.2	0.20
L66400N 65600E	665600	5766400	6.3	8.20	0.0	8.1	35	0.60	12.5	2.3	78	1.05	8.9	0.3	1.80	0.0	0.8	8	0.2	0.30
L66400N 65550E	665550	5766400	9.4	23.10	0.0	10.2	107	1.20	56.2	11.3	151	3.29	16.3	0.6	1.80</					

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L66400N 65500E	665500	5766400	3.3	23.00	0.0	12.6	94	1.80	34.7	8.4	247	1.99	9.2	2.3	4.50	0.0	0.8	100	1.3	0.30
L66400N 65450E	665450	5766400	5.4	11.70	0.0	10.7	73	0.40	25.5	7.1	207	2.26	9.7	0.5	12.80	0.0	1.4	14	0.5	0.30
L66400N 65400E	665400	5766400	4.8	27.20	0.0	10.4	83	0.50	39.5	7.9	178	2.45	9.9	2.1	6.50	0.0	1.8	31	0.9	0.30
L66400N 65300E	665300	5766400	6.9	21.40	0.0	8.7	103	0.50	48.9	15.9	692	3.84	14.3	1.4	6.40	0.0	2.0	41	1.0	0.50
L66400N 65200E	665200	5766400	3.9	62.70	0.1	14.3	121	1.40	56.0	14.2	451	3.62	13.4	4.4	5.90	0.0	1.4	72	3.7	0.80
L66400N 65150E	665150	5766400	4.1	26.90	0.0	10.3	89	0.40	39.4	11.2	321	2.78	11.4	0.8	2.30	0.0	0.5	58	1.3	0.70
L66400N 65100E	665100	5766400	3.4	20.10	0.0	12.7	115	2.30	30.2	10.1	385	2.98	9.5	0.6	2.70	0.0	1.4	17	1.0	0.60
L66400N 65050E	665050	5766400	2.7	13.20	0.0	10.6	87	0.40	17.9	6.6	203	2.31	6.5	0.4	0.20	<0.0	0.8	8	1.5	0.50
L66400N 65000E	665000	5766400	5.9	29.70	0.0	12.9	79	0.60	26.8	6.0	165	3.41	16.1	1.0	2.90	0.0	0.6	30	0.8	1.10
L66400N 64950E	664950	5766400	3.1	32.80	0.0	12.2	109	0.90	45.3	14.0	284	3.15	11.1	2.5	4.70	0.0	3.2	37	1.8	0.70
L66400N 64900E	664900	5766400	4.1	34.60	0.0	18.0	246	0.50	51.2	12.8	790	2.95	8.7	1.0	3.90	0.0	1.3	44	5.1	0.60
L66400N 64850E	664850	5766400	3.4	12.60	0.0	14.1	69	0.30	14.4	4.0	279	1.98	5.8	0.4	0.20	<0.0	2.2	20	0.8	0.40
L66400N 64800E	664800	5766400	17.4	27.00	0.0	13.9	136	0.30	36.6	6.8	266	2.62	15.3	0.7	1.90	0.0	3.4	9	0.9	1.00
L66400N 64750E	664750	5766400	3.8	20.40	0.0	16.5	90	0.60	22.5	6.1	239	3.11	8.0	0.5	0.20	<0.0	5.2	6	0.4	0.40
L66400N 64700E	664700	5766400	3.5	14.00	0.0	10.8	45	0.50	10.9	2.9	84	1.97	7.4	0.3	0.20	<0.0	2.1	4	0.3	0.40
L66400N 64650E	664650	5766400	8.1	33.60	0.0	12.5	121	0.30	37.2	8.2	303	3.21	16.4	0.6	1.70	0.0	3.3	7	0.5	1.60
L66400N 64600E	664600	5766400	3.8	24.00	0.0	12.3	105	0.50	35.5	7.4	195	3.16	10.2	0.5	1.00	0.0	2.8	7	0.5	0.50
L66400N 64550E	664550	5766400	3.1	11.70	0.0	7.0	64	0.60	19.7	3.7	101	1.98	8.6	0.3	0.20	<0.0	1.9	5	0.3	1.10
L66400N 64500E	664500	5766400	4.6	12.90	0.0	10.3	67	0.40	14.8	4.2	123	2.14	12.6	0.4	3.80	0.0	2.3	8	0.5	1.20
L66400N 64500EA	664500	5766400	4.4	13.20	0.0	12.5	71	0.90	15.6	4.0	113	2.80	9.7	0.5	2.00	0.0	2.7	7	0.4	0.80
L66400N 64450E	664450	5766400	8.5	59.20	0.1	13.1	181	0.30	58.4	11.6	290	3.95	34.0	1.1	2.10	0.0	3.7	13	0.9	5.80
L66400N 64400E	664400	5766400	6.6	103.70	0.1	14.2	175	1.40	93.0	15.7	642	3.42	23.6	1.8	4.90	0.0	3.1	25	6.4	9.60
L66400N 64350E	664350	5766400	7.6	114.00	0.1	7.3	323	0.70	349.0	53.5	991	8.29	596.2	1.5	55.60	0.1	1.0	52	4.2	52.30
L66400N 64300E	664300	5766400	2.3	56.70	0.1	8.1	182	0.40	19.0	20.5	671	6.38	21.7	0.4	0.20	<0.0	0.7	13	0.8	1.70
L66400N 64250E	664250	5766400	3.4	60.50	0.1	11.3	63	0.30	18.7	11.3	496	4.99	12.0	0.4	6.40	0.0	0.9	29	0.3	1.10
L66400N 64100E	664100	5766400	8.3	59.30	0.1	7.4	62	0.05	10.7	11.4	339	5.05	12.6	0.8	1.10	0.0	0.5	13	<0.1	0.40
L66400N 64050E	664050	5766400	2.1	61.40	0.1	9.1	100	0.20	28.6	18.3	1286	4.57	20.8	0.4	1.40	0.0	1.3	14	0.3	2.80
L66400N 64000E	664000	5766400	1.8	118.30	0.1	8.5	96	0.10	27.2	27.3	498	5.26	44.8	0.5	68.60	0.1	1.1	22	0.2	0.60
L66400N 63950E	663950	5766400	2.8	38.10	0.0	9.7	85	0.20	54.9	12.6	252	4.74	19.6	0.4	2.90	0.0	1.6	15	0.4	1.90
L66400N 63900E	663900	5766400	3.0	88.70	0.1	11.6	144	0.50	97.0	19.5	754	3.13	27.7	0.8	0.50	0.0	1.6	23	1.4	1.30
L66400N 63850E	663850	5766400	0.6	103.50	0.1	4.6	72	0.05	103.0	36.4	482	3.46	8.1	0.2	1.90	0.0	0.4	25	0.2	0.40
L66400N 63800E	663800	5766400	1.6	34.00	0.0	11.5	54	0.05	25.1	15.9	1058	3.05	70.3	0.2	1.50	0.0	0.5	24	0.2	1.70
L66600N 65800E	665800	5766600	1.8	11.40	0.0	6.0	56	0.20	31.3	9.6	144	2.32	3.4	0.4	0.20	<0.0	2.3	14	0.2	0.20
L66600N 65750E	665750	5766600	2.4	14.60	0.0	12.9	116	0.50	29.0	11.5	331	3.16	5.7	0.8	0.20	<0.0	1.9	20	1.5	0.20
L66600N 65700E	665700	5766600	2.4	13.00	0.0	10.0	96	0.20	23.5	7.9	177	2.33	4.3	0.7	0.50	0.0	2.0	12	0.8	0.20
L66600N 65650E	665650	5766600	1.2	10.60	0.0	10.5	111	0.50	14.5	6.8	219	2.08	2.3	0.3	0.20	<0.0	1.7	16	0.4	0.20
L66600N 65600E	665600	5766600	3.8	17.00	0.0	14.0	100	0.30	19.6	5.9	194	2.88	3.4	0.6	1.00	0.0	1.6	8	0.8	0.30
L66600N 65550E	665550	5766600	2.5	22.90	0.0	9.6	157	0.90	52.5	14.9	211	3.24	8.1	0.7	0.90	0.0	3.6	11	0.6	0.40
L66600N 65500E	665500	5766600	1.7	15.60	0.0	6.5	86	0.40	61.4	12.5	170	2.18	3.7	0.7	72.60	0.1	3.1	18	0.6	0.20
L66600N 65450E	665450	5766600	2.0	14.80	0.0	5.9	103	0.50	54.7	12.5	193	2.43	4.5	0.8	0.50	0.0	3.4	15	0.9	0.20
L66600N 65400E	665400	5766600	4.5	18.90	0.0	10.6	110	0.70	35.6	11.7	303	2.37	8.9	0.8	2.10	0.0	3.4	14	1.1	0.40
L66600N 65350E	665350	5766600	5.7	25.60	0.0	11.0	118	0.20	36.4	8.3	176	3.31	10.2	0.6	2.20	0.0	3.8	14	0.8	0.50
L66600N 65300E	665300	5766600	4.3	22.90	0.0	10.7	99	0.40	42.1	10.8	161	3.14	8.2	0.8	6.70	0.0	4.0	7	0.8	0.40
L66600N 65250E	665250	5766600	4.6	26.60	0.0	10.1	132	0.70	54.5	10.6	236	2.88	10.4	0.9	3.30	0.0	3.3	14	1.2	0.40
L66600N 65200E	665200	5766600	2.8	17.90	0.0	7.3	130	0.30	47.5	10.7	222	2.30	6.0	0.7	2.30	0.0	3.6	13	0.7	0.40
L66600N 65150E	665150	5766600	5.4	23.20	0.0	8.5	123	1.60	67.9	13.8	192	2.75	13.8	0.8	10.10	0.0	3.6	23	0.9	0.40
L66600N 65100E	665100	5766600	2.6	40.00	0.0	9.8	31	1.10	20.4	2.1	41	0.43	2.0	3.1	2.90	0.0	0.5	46	2.0	0.40
L66600N 65050E	665050	5766600	2.9	37.70	0.0	6.4	35	1.50	25.3	4.3	348	1.29	3.9	3.1	2.40	0.0	0.3	127	2.8	0.30
L66600N 65000E	665000	5766600	8.7	34.70	0.0	16.5	179	0.60	76.0	14.2	268	4.27	12.7	0.8	0.20	<0.0	2.8	20	1.9	0.70
L66600N 64950E	664950	5766600	5.8	31.30	0.0	12.8	189	0.70	45.1	10.5	395	3.14	7.0	0.7	2.30	0.0	3.2	20	1.1	0.50
L66600N 64900E	664900	5766600	2.8	30.50	0.0	11.1	50	0.50	14.8	4.6	181	1.48	3.0	0.5	0.90	0.0	0.9	30	2.6	0.30
L66600N 64850E	664850	5766600	4.6	34.30	0.0	11.1	126	1.30	47.7	12.3	523	2.64	8.1	1.8	4.90	0.0	1.5	52	2.5	0.70
L66600N 64800E	664800	5766600	5.6	61.20	0.1	17.8	96	2.10	34.0	11.6	529	2.78	8.7	2.6	2.50	0.0	1.2	8	1.1	0.60
L66600N 64750E	664750	5766600	4.6	26.80	0.0	11.1	102	0.30	35.7	9.3	230	2.80	9.0	0.7	4.10	0.0	2.8	14	0.9	0.50
L66600N 64700E	664700	5766600	4.9	37.40	0.0	14.1	98	0.70	41.2	15.7	330	3.00	9.4	1.5	4.00	0.0	2.3			

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L66600N 64650E	664650	5766600	4.6	25.70	0.0	13.2	68	0.90	24.2	6.1	233	2.59	7.2	0.8	0.70	0.0	1.6	8	0.6	0.60
L66600N 64600E	664600	5766600	3.2	12.80	0.0	9.1	69	0.40	17.7	6.2	360	1.91	4.9	0.4	0.20	<0.0	3.3	7	0.4	0.60
L66600N 64550E	664550	5766600	7.5	36.80	0.0	12.5	114	0.90	35.6	6.7	191	2.90	18.0	0.7	3.70	0.0	1.8	9	0.7	1.60
L66600N 64500E	664500	5766600	8.7	46.50	0.0	16.3	136	1.40	42.8	11.0	639	3.39	17.7	1.3	6.60	0.0	1.9	11	1.1	1.60
L66600N 64450E	664450	5766600	5.0	26.10	0.0	9.6	92	1.30	29.7	7.0	215	2.76	9.5	0.9	2.20	0.0	2.5	9	0.5	0.90
L66600N 64400E	664400	5766600	4.7	30.90	0.0	11.6	146	1.80	34.4	10.3	539	3.36	12.6	0.9	0.80	0.0	1.4	17	3.3	1.50
L66600N 64350E	664350	5766600	5.6	39.60	0.0	12.5	233	1.20	56.8	10.3	278	4.01	19.7	0.7	4.90	0.0	2.5	15	2.0	1.40
L66600N 64300E	664300	5766600	5.6	27.00	0.0	12.6	149	0.50	29.9	7.4	279	3.94	15.3	0.8	5.70	0.0	1.1	14	1.0	1.20
L66600N 64250E	664250	5766600	12.7	64.80	0.1	21.0	505	0.70	74.0	17.0	1242	6.30	38.3	1.0	3.70	0.0	0.4	46	2.5	4.80
L66600N 64200E	664200	5766600	2.0	136.40	0.1	8.4	147	0.20	42.9	28.4	859	5.99	12.0	0.5	10.40	0.0	1.2	26	0.3	1.40
L66600N 64150E	664150	5766600	2.1	162.00	0.2	6.6	125	0.20	33.7	34.3	608	6.70	24.2	0.4	2.00	0.0	1.4	20	0.3	0.80
L66600N 64100E	664100	5766600	3.8	40.60	0.0	9.3	174	0.30	42.8	14.1	331	5.41	19.6	0.6	1.60	0.0	1.8	15	0.6	1.30
L66600N 64050E	664050	5766600	3.6	28.40	0.0	8.0	80	0.30	75.7	10.4	155	3.93	32.3	0.4	10.10	0.0	1.7	8	0.4	1.50
L66600N 64000E	664000	5766600	2.4	50.90	0.1	8.2	121	0.10	42.6	13.4	346	5.25	47.9	0.5	3.30	0.0	1.2	13	0.3	4.90
L66600N 63950E	663950	5766600	2.2	45.00	0.0	8.5	85	0.20	85.8	15.0	382	5.32	80.9	0.3	1.80	0.0	0.5	26	0.5	6.90
L66600N 63900E	663900	5766600	1.0	65.70	0.1	9.5	175	0.20	36.1	32.8	2330	5.33	10.8	0.4	1.30	0.0	0.8	40	0.5	1.00
L66600N 63850E	663850	5766600	2.0	88.30	0.1	9.6	107	0.20	37.5	21.4	748	5.04	27.9	0.4	10.10	0.0	1.5	22	0.2	6.50
L66600N 63800E	663800	5766600	2.4	67.90	0.1	8.3	117	0.40	38.5	17.4	512	5.08	23.0	0.6	2.40	0.0	1.1	12	0.6	1.80
L66600N 63800E	663800	5766800	2.9	34.00	0.0	9.6	96	0.90	34.8	10.1	310	3.86	30.7	0.4	2.90	0.0	1.2	11	0.6	3.20
L66600N 63850E	663850	5766800	3.5	37.00	0.0	10.9	129	0.20	40.5	10.6	277	3.58	14.5	0.5	1.80	0.0	1.9	10	0.6	1.70
L66600N 63900E	663900	5766800	2.7	79.60	0.1	7.9	121	0.40	34.4	19.2	579	6.39	37.3	0.5	1.80	0.0	0.8	18	0.9	7.70
L66600N 63950E	663950	5766800	1.8	284.90	0.3	10.3	119	0.20	51.8	39.3	1292	9.74	26.6	0.4	20.00	0.0	1.0	24	0.7	51.80
L66600N 64000E	664000	5766800	4.5	46.90	0.0	8.5	216	0.30	85.1	18.2	406	4.83	22.2	0.5	8.00	0.0	0.8	20	1.4	1.70
L66600N 64050E	664050	5766800	3.2	46.00	0.0	10.2	237	0.40	62.5	17.8	1187	4.29	18.4	0.4	1.20	0.0	1.0	11	1.2	1.30
L66600N 64100E	664100	5766800	4.9	66.50	0.1	12.7	86	0.60	33.7	12.7	599	5.57	24.2	0.8	2.60	0.0	0.6	11	0.5	1.70
L66600N 64150E	664150	5766800	3.6	38.30	0.0	8.7	116	0.30	42.4	11.9	391	3.63	18.1	0.6	4.30	0.0	1.0	23	0.6	1.80
L66600N 64200E	664200	5766800	4.2	38.70	0.0	15.4	114	0.50	46.1	13.6	372	4.52	31.1	1.1	5.10	0.0	1.1	35	1.1	2.30
L66600N 64250E	664250	5766800	3.1	35.80	0.0	14.4	199	1.30	53.6	15.9	476	4.34	22.4	1.6	5.10	0.0	1.9	76	2.6	1.70
L66600N 64300E	664300	5766800	5.7	26.80	0.0	14.1	167	0.80	36.3	8.7	227	4.07	19.6	0.7	2.70	0.0	1.5	21	0.8	1.20
L66600N 64350E	664350	5766800	4.8	27.50	0.0	12.5	180	1.60	37.0	7.9	449	3.02	13.5	0.6	2.80	0.0	1.9	11	0.9	1.90
L66600N 64400E	664400	5766800	7.4	32.80	0.0	12.5	127	0.60	41.3	11.1	355	3.16	12.2	1.3	1.80	0.0	1.4	13	0.8	1.10
L66600N 64450E	664450	5766800	8.5	34.90	0.0	13.0	147	0.70	39.3	8.6	248	3.67	13.8	0.8	6.10	0.0	3.7	9	0.7	1.10
L66600N 64500E	664500	5766800	9.1	28.10	0.0	12.1	119	0.40	29.3	5.9	180	2.70	10.8	0.7	38.80	0.0	2.9	7	0.7	1.50
L66600N 64550E	664550	5766800	9.0	55.50	0.1	15.0	157	2.50	39.5	7.1	172	3.39	10.4	1.0	6.70	0.0	3.5	7	0.7	1.00
L66600N 64600E	664600	5766800	7.5	20.20	0.0	12.0	146	0.40	25.2	6.1	225	2.42	7.8	0.5	13.70	0.0	1.2	9	1.1	0.70
L66600N 64650E	664650	5766800	3.5	20.40	0.0	10.4	91	0.10	30.0	8.2	214	2.56	8.7	0.5	2.60	0.0	2.5	10	1.2	0.50
L66600N 64700E	664700	5766800	5.2	31.00	0.0	13.9	128	0.50	42.8	10.4	215	3.34	10.9	0.7	5.30	0.0	3.2	15	0.8	0.70
L66600N 64750E	664750	5766800	4.0	16.40	0.0	11.2	99	0.20	25.8	7.8	188	2.56	7.5	0.5	17.50	0.0	2.5	13	1.0	0.60
L66600N 64800E	664800	5766800	4.1	30.30	0.0	13.8	142	0.60	36.8	12.4	359	2.83	9.9	0.9	6.70	0.0	1.9	24	3.2	0.60
L66600N 64850E	664850	5766800	5.0	104.30	0.1	20.8	166	4.00	102.4	18.0	826	3.86	15.5	10.3	6.50	0.0	2.7	86	6.6	1.00
L66600N 64900E	664900	5766800	3.9	65.10	0.1	24.8	155	1.60	83.3	22.7	1206	3.91	13.7	4.8	5.70	0.0	3.8	58	3.6	0.80
L66600N 64950E	664950	5766800	4.7	30.60	0.0	14.6	136	1.00	48.7	10.1	259	3.13	7.3	1.1	2.50	0.0	2.2	41	3.2	0.60
L66600N 65000E	665000	5766800	4.5	51.40	0.1	17.5	142	1.90	59.2	15.9	672	3.62	13.0	3.6	15.70	0.0	1.9	42	1.9	0.90
L66600N 65050E	665050	5766800	4.2	34.20	0.0	20.1	269	1.00	58.5	16.0	511	4.20	11.3	0.9	1.70	0.0	1.9	43	3.0	0.80
L66600N 65100E	665100	5766800	3.8	45.80	0.0	13.5	160	1.40	58.2	12.3	329	3.25	10.5	1.9	4.20	0.0	2.5	57	4.5	0.80
L66600N 65150E	665150	5766800	22.7	36.80	0.0	19.5	299	0.60	97.8	10.5	220	4.24	24.1	1.1	6.70	0.0	2.5	17	2.1	1.30
L66600N 65200E	665200	5766800	3.8	20.30	0.0	10.3	103	1.70	36.2	8.6	182	2.73	8.5	4.4	3.60	0.0	0.8	82	4.2	0.30
L66600N 65250E	665250	5766800	7.9	22.20	0.0	12.8	157	0.90	39.0	12.4	168	3.44	19.2	0.8	9.30	0.0	3.0	17	1.4	0.70
L66600N 65300E	665300	5766800	4.7	13.70	0.0	10.0	102	0.30	21.7	5.5	206	2.92	12.4	0.6	8.30	0.0	2.3	15	0.4	0.40
L66600N 65350E	665350	5766800	2.8	21.90	0.0	9.4	121	0.30	45.5	11.2	365	2.81	8.3	0.7	4.40	0.0	2.9	16	0.9	0.50
L66600N 65400E	665400	5766800	2.6	16.40	0.0	8.3	116	0.50	53.1	9.8	195	3.01	9.0	0.8	2.90	0.0	3.2	14	0.8	0.40
L66600N 65450E	665450	5766800	3.3	21.10	0.0	9.9	143	0.30	49.5	11.4	306	3.21	10.3	1.5	2.60	0.0	3.8	13	1.0	0.60
L66600N 65500E	665500	5766800	3.7	18.30	0.0	8.3	120	0.70	32.1	8.6	220	3.12	8.5	0.7	2.50	0.0	3.1	19	0.6	0.40
L66600N 65550E	665550	5766800	3.1	15.40	0.0	10.1	99	0.70	31.7	8.2	194	3.01	7.6	0.7	110.90	0.1	3.1	9	0.9	0.40
L66600N 65600E	665600	5766800	2.1	10.10	0.0	8.0	75	0.40	17.2	6.2	269	1.65	3.9	0.6	2					

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L66800N 65650E	665650	5766800	4.1	22.40	0.0	10.6	101	0.30	38.6	10.5	335	2.77	12.3	0.6	4.40	0.0	3.1	21	1.6	0.80
L66800N 65700E	665700	5766800	4.4	23.10	0.0	12.3	99	0.50	31.1	11.9	546	2.83	11.5	0.9	3.50	0.0	1.8	19	1.7	0.50
L66800N 65750E	665750	5766800	1.2	9.60	0.0	7.0	59	0.30	26.1	8.4	445	1.37	3.0	0.4	0.60	0.0	0.6	20	0.8	0.10
L66800N 65800E	665800	5766800	1.7	8.80	0.0	7.7	77	0.30	20.1	6.0	154	1.82	4.3	0.4	0.80	0.0	1.7	13	0.5	0.20
L67000N 63800E	663800	5767000	4.0	56.30	0.1	7.5	90	0.20	99.0	18.7	424	4.47	25.0	0.5	3.00	0.0	1.3	13	0.4	1.90
L67000N 63850E	663850	5767000	2.1	34.90	0.0	9.2	69	1.00	42.7	11.5	235	2.95	18.1	0.9	3.80	0.0	1.3	35	0.9	1.90
L67000N 63900E	663900	5767000	3.1	33.30	0.0	9.1	122	0.30	51.9	11.6	356	3.76	26.6	0.7	2.90	0.0	1.5	13	0.7	3.70
L67000N 63950E	663950	5767000	2.8	56.90	0.1	7.6	100	0.30	24.0	15.1	413	5.07	32.3	0.4	4.50	0.0	0.4	14	0.5	10.50
L67000N 64000E	664000	5767000	2.1	18.60	0.0	7.1	137	0.30	35.5	10.3	712	2.78	12.5	0.3	1.60	0.0	0.9	12	0.9	2.70
L67000N 64050E	664050	5767000	5.7	30.50	0.0	13.3	95	1.30	30.0	7.5	428	3.03	21.2	0.4	4.90	0.0	0.8	13	1.2	4.40
L67000N 64100E	664100	5767000	3.3	26.70	0.0	12.7	119	0.70	42.1	10.9	841	3.17	24.3	0.5	2.50	0.0	0.8	10	0.7	2.30
L67000N 64150E	664150	5767000	3.9	23.20	0.0	11.9	91	0.50	26.2	7.3	196	3.15	26.4	0.6	2.20	0.0	1.0	15	0.9	2.90
L67000N 64200E	664200	5767000	2.5	64.60	0.1	6.8	111	0.30	28.7	15.0	426	5.48	63.4	0.5	2.30	0.0	1.3	13	0.4	3.00
L67000N 64250E	664250	5767000	2.0	163.70	0.2	5.8	147	0.10	17.2	25.8	878	7.45	7.6	0.6	8.10	0.0	1.2	20	0.5	0.30
L67000N 64300E	664300	5767000	8.8	35.20	0.0	10.9	248	1.20	67.3	18.0	2359	3.71	10.9	4.9	4.20	0.0	1.0	99	1.6	4.30
L67000N 64350E	664350	5767000	4.8	18.30	0.0	9.9	79	1.30	21.2	4.8	203	2.62	14.1	0.5	1.60	0.0	2.0	9	0.6	2.40
L67000N 64400E	664400	5767000	7.9	25.20	0.0	11.9	126	2.90	22.1	4.2	287	2.37	19.5	1.3	10.20	0.0	1.5	8	0.8	5.30
L67000N 64450E	664450	5767000	6.6	50.60	0.1	17.2	167	1.30	60.3	14.7	946	3.19	12.9	1.8	6.40	0.0	1.6	30	2.1	1.80
L67000N 64500E	664500	5767000	4.4	20.50	0.0	10.3	143	0.60	30.9	7.9	248	2.96	10.5	0.6	3.40	0.0	3.2	9	1.2	0.90
L67000N 64550E	664550	5767000	9.7	25.20	0.0	15.7	205	1.40	29.4	8.2	248	3.82	10.3	1.0	3.30	0.0	3.5	7	1.7	1.20
L67000N 64600E	664600	5767000	3.9	13.20	0.0	9.7	87	0.50	17.5	5.1	178	2.06	5.8	0.5	0.20	<0.0	3.5	14	0.8	0.60
L67000N 64650E	664650	5767000	10.9	31.20	0.0	17.1	218	1.00	41.9	8.5	166	3.25	11.7	0.8	4.10	0.0	3.5	7	1.8	1.30
L67000N 64700E	664700	5767000	3.7	30.70	0.0	12.4	120	0.70	63.2	13.0	386	3.13	10.1	3.8	17.10	0.0	2.9	34	0.8	0.50
L67000N 64750E	664750	5767000	2.3	10.70	0.0	12.1	54	0.20	13.7	6.1	378	1.55	3.9	0.3	2.70	0.0	0.8	8	0.9	0.30
L67000N 64800E	664800	5767000	2.7	25.60	0.0	16.9	117	0.60	41.2	16.0	461	3.22	6.4	1.0	9.60	0.0	2.7	21	1.4	0.50
L67000N 64850E	664850	5767000	3.6	22.00	0.0	10.8	110	0.70	30.9	8.3	499	2.25	6.5	0.4	1.20	0.0	1.5	28	1.7	0.60
L67000N 64900E	664900	5767000	4.3	19.40	0.0	11.4	126	1.20	22.2	6.8	387	2.19	5.6	0.5	6.30	0.0	2.4	11	1.1	0.50
L67000N 64950E	664950	5767000	2.5	24.40	0.0	13.3	103	1.60	53.0	10.4	338	2.43	4.0	0.9	2.30	0.0	1.1	48	2.7	0.40
L67000N 65000E	665000	5767000	3.9	18.70	0.0	13.5	98	0.40	24.2	7.8	246	2.26	4.2	0.6	6.60	0.0	1.2	9	1.5	0.40
L67000N 65050E	665050	5767000	4.3	23.90	0.0	8.9	96	0.40	55.2	12.9	309	2.87	10.5	1.0	3.70	0.0	3.0	30	1.9	0.60
L67000N 65100E	665100	5767000	9.7	28.50	0.0	13.2	109	0.90	45.8	9.3	151	3.45	19.9	0.9	11.30	0.0	2.3	16	0.8	0.60
L67000N 65150E	665150	5767000	6.3	25.20	0.0	9.5	85	0.30	45.0	12.2	348	2.76	14.6	0.9	5.40	0.0	3.4	23	0.9	0.70
L67000N 65200E	665200	5767000	3.7	26.10	0.0	10.4	87	0.60	56.4	14.1	614	2.84	10.2	1.6	8.00	0.0	2.7	33	1.4	0.40
L67000N 65250E	665250	5767000	4.7	17.80	0.0	9.8	73	0.40	26.8	7.6	299	2.25	9.1	1.1	4.80	0.0	1.3	50	0.7	0.40
L67000N 65300E	665300	5767000	2.2	13.90	0.0	11.9	58	0.50	18.2	5.3	127	1.65	5.1	0.6	1.80	0.0	1.5	9	0.5	0.30
L67000N 65350E	665350	5767000	5.2	30.90	0.0	11.7	116	1.10	46.7	13.3	468	3.01	15.8	1.7	6.90	0.0	2.1	31	1.8	0.70
L67000N 65400E	665400	5767000	2.5	21.80	0.0	7.8	79	0.60	50.7	12.5	227	2.51	5.9	0.7	3.20	0.0	1.9	21	0.7	0.30
L67000N 65600E	665600	5767000	2.6	24.00	0.0	10.5	92	0.20	41.5	15.1	714	3.20	5.6	1.4	10.90	0.0	3.3	35	0.7	0.20
L67000N 65650E	665650	5767000	3.3	27.30	0.0	12.0	87	0.90	41.4	14.4	327	2.73	6.4	3.4	2.10	0.0	0.8	43	1.5	0.30
L67000N 65700E	665700	5767000	1.1	11.30	0.0	5.2	49	0.05	26.1	9.7	204	2.12	9.0	1.3	1.10	0.0	2.1	32	0.2	0.20
L67000N 65750E	665750	5767000	2.0	17.40	0.0	6.8	84	0.20	43.8	10.6	168	2.33	3.7	0.8	1.20	0.0	3.0	11	0.4	0.20
L67000N 65800E	665800	5767000	1.1	7.80	0.0	6.1	50	0.20	19.7	5.7	300	1.41	2.1	0.4	2.10	0.0	1.0	15	0.4	0.10
L66000N 64500E	664500	5766000	4.7	14.10	0.0	10.5	97	0.40	19.1	4.8	148	2.59	18.0	0.3	2.40	0.0	2.2	7	0.8	1.50
L66000N 64550E	664550	5766000	4.9	24.00	0.0	13.2	168	0.20	32.2	13.5	516	3.78	15.0	0.5	1.80	0.0	2.6	8	1.0	0.80
L66000N 64600E	664600	5766000	5.0	23.20	0.0	11.4	101	0.20	25.4	6.4	176	2.83	13.9	0.5	0.80	0.0	2.6	5	0.5	0.90
L66000N 64650E	664650	5766000	4.2	90.80	0.1	12.7	709	3.10	87.5	12.5	723	2.74	13.5	4.3	3.30	0.0	1.4	26	10.0	1.60
L66000N 64700E	664700	5766000	7.6	57.30	0.1	16.4	300	1.00	103.2	18.3	413	3.81	25.0	0.7	4.30	0.0	3.3	9	0.9	2.80
L66000N 64750E	664750	5766000	5.6	26.00	0.0	11.1	125	0.70	32.1	7.2	172	2.86	13.0	0.5	3.00	0.0	3.8	4	0.5	0.80
L66000N 64800E	664800	5766000	6.6	53.60	0.1	14.3	249	1.40	90.0	11.9	285	3.41	30.9	0.7	2.60	0.0	2.5	8	1.0	1.50
L66000N 64850E	664850	5766000	2.0	27.60	0.0	7.3	97	0.20	14.7	7.8	624	2.62	8.5	0.3	2.00	0.0	1.4	6	0.3	0.40
L66000N 64900E	664900	5766000	3.3	27.20	0.0	13.7	120	0.30	34.3	10.9	307	2.95	172.5	0.5	3.80	0.0	2.7	10	0.4	1.20
L66000N 64950E	664950	5766000	5.7	29.80	0.0	13.3	144	0.70	42.6	7.6	182	2.92	19.1	0.5	5.90	0.0	3.0	10	0.8	1.80
L66000N 65000E	665000	5766000	3.0	13.00	0.0	8.2	59	0.20	13.7	4.1	125	1.45	6.6	0.3	5.80	0.0	2.4	8	0.4	0.50
L66000N 65050E	665050	5766000	4.7	43.90	0.0	16.9	147	0.90	45.4	11.4	282	3.64	18.6	0.6	3.40	0.0	4.0	11	0.4	0.70
L66000N 65100E	665100	5766000	2.9	28.60	0.0	15.7	147	0.70	48.5	12.7	452	3.22	10.7	1.0	5.50	0.0	3.0	53	1.4	0.50

2008 Art-DL Soil Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
L66000N 65150E	665150	5766000	5.1	18.20	0.0	14.6	92	0.50	21.0	5.5	117	3.09	15.1	0.6	4.80	0.0	4.1	9	0.6	1.20
L66000N 65200E	665200	5766000	3.8	24.20	0.0	9.6	89	0.70	35.6	10.2	498	2.19	12.4	0.9	2.60	0.0	2.3	20	1.3	0.50
L66000N 65250E	665250	5766000	5.4	21.40	0.0	9.9	108	0.30	41.5	11.2	236	2.81	14.3	0.8	3.70	0.0	3.0	16	0.8	0.50
L66000N 65300E	665300	5766000	4.1	34.80	0.0	12.5	151	0.90	48.3	14.9	607	3.94	10.7	1.2	3.20	0.0	2.0	27	1.8	0.40
L66000N 65350E	665350	5766000	3.8	32.00	0.0	11.8	109	1.00	38.1	9.9	400	2.66	10.4	1.4	1.90	0.0	0.8	38	1.6	0.50
L66000N 65400E	665400	5766000	3.2	28.20	0.0	12.6	108	0.60	36.3	14.1	459	2.55	9.4	1.1	5.50	0.0	1.6	34	2.2	0.40
L66000N 65450E	665450	5766000																		
L66000N 65500E	665500	5766000																		
L66000N 65550E	665550	5766000																		
L66000N 65600E	665600	5766000	6.4	23.40	0.0	10.6	96	0.60	39.9	10.1	153	2.64	14.5	1.9	4.50	0.0	1.5	50	1.3	0.50
L66000N 65650E	665650	5766000	3.5	8.10	0.0	5.1	32	0.10	10.2	2.0	40	0.81	3.8	0.2	0.20	<0.0	1.3	6	0.4	0.20
L66000N 65700E	665700	5766000	31.0	54.10	0.1	18.9	191	0.30	100.1	15.5	278	4.01	36.1	1.2	14.50	0.0	3.8	13	1.8	0.90
L66000N 65750E	665750	5766000	12.8	33.10	0.0	21.2	125	2.00	59.7	12.2	244	3.94	14.9	0.9	4.60	0.0	2.8	10	0.8	0.60
L66000N 65800E	665800	5766000	5.6	18.50	0.0	9.2	92	3.10	36.3	7.8	142	2.41	8.1	0.6	4.40	0.0	3.0	9	0.6	0.30
L65800N 64500E	664500	5765800	4.7	44.50	0.0	11.1	144	1.80	65.1	13.8	323	3.49	23.2	0.7	5.60	0.0	2.8	19	1.2	1.70
L65800N 64550E	664550	5765800	6.1	40.20	0.0	11.2	128	1.10	59.1	12.9	268	3.58	28.6	0.7	6.70	0.0	2.4	17	1.3	1.80
L65800N 64600E	664600	5765800	3.3	34.20	0.0	9.6	101	0.50	31.7	11.8	255	2.83	15.5	0.5	3.50	0.0	3.0	12	0.9	0.90
L65800N 64650E	664650	5765800	5.1	64.40	0.1	11.7	170	0.70	82.4	14.7	304	3.27	25.0	0.9	3.50	0.0	2.5	15	1.8	1.60
L65800N 64700E	664700	5765800	5.0	50.20	0.1	11.0	169	0.40	54.5	14.0	342	3.28	19.5	0.7	4.20	0.0	2.8	10	1.2	1.60
L65800N 64750E	664750	5765800	6.8	38.60	0.0	11.6	164	0.70	114.7	20.3	525	3.14	19.1	0.9	2.00	0.0	1.7	51	2.9	2.40
L65800N 64800E	664800	5765800	6.9	43.10	0.0	11.7	170	0.20	51.0	10.6	178	3.34	42.0	0.6	5.30	0.0	3.6	9	0.7	1.60
L65800N 64850E	664850	5765800	5.1	40.30	0.0	12.1	127	0.30	52.8	12.7	988	2.84	24.5	0.6	3.90	0.0	2.5	15	0.9	1.50
L65800N 64900E	664900	5765800	5.6	68.10	0.1	14.0	138	1.80	98.5	13.3	854	3.26	26.9	2.3	4.90	0.0	2.9	38	1.9	1.70
L65800N 64950E	664950	5765800	12.0	49.80	0.0	14.3	298	1.90	54.6	12.0	2485	2.22	9.9	1.1	1.80	0.0	0.5	26	7.2	0.80
L65800N 65000E	665000	5765800	6.2	51.70	0.1	16.3	214	5.40	74.6	30.4	885	3.00	16.4	1.3	7.50	0.0	3.1	13	2.4	1.10
L65800N 65050E	665050	5765800	5.6	26.40	0.0	10.0	189	1.60	38.9	5.8	157	2.34	10.3	0.4	16.80	0.0	2.5	12	0.8	1.50
L65800N 65100E	665100	5765800	4.7	42.70	0.0	13.6	172	0.60	62.4	14.0	459	2.97	12.9	1.2	21.50	0.0	2.5	21	1.6	0.80
L65800N 65150E	665150	5765800	4.7	32.00	0.0	10.1	118	0.40	50.0	10.7	321	2.53	12.7	1.3	6.10	0.0	4.0	21	1.5	0.70
L65800N 65200E	665200	5765800	4.4	26.50	0.0	9.1	110	0.30	39.5	10.5	364	2.42	10.7	0.9	26.50	0.0	2.8	25	1.7	0.50
L65800N 65250E	665250	5765800	4.1	19.50	0.0	9.4	107	0.20	40.0	10.6	314	2.51	11.2	0.9	9.20	0.0	2.6	18	1.1	0.50
L65800N 65300E	665300	5765800	5.2	25.60	0.0	11.8	92	0.80	25.2	11.6	405	2.24	6.2	1.0	12.40	0.0	1.3	15	1.2	0.30
L65800N 65350E	665350	5765800	7.0	24.00	0.0	14.9	114	2.00	18.8	4.7	152	2.08	6.9	0.5	2.20	0.0	1.4	4	0.7	0.80
L65800N 65400E	665400	5765800	4.1	18.80	0.0	9.4	98	0.60	35.6	8.1	181	2.35	10.6	0.7	2.80	0.0	2.1	21	0.9	0.50
L65800N 65450E	665450	5765800	3.2	20.70	0.0	9.9	118	0.30	36.7	11.6	401	2.43	10.1	0.9	4.50	0.0	2.1	21	1.3	0.30
L65800N 65500E	665500	5765800	3.6	33.50	0.0	11.7	143	0.80	34.9	10.5	503	2.53	9.1	1.9	2.40	0.0	1.2	39	3.9	0.40
L65800N 65550E	665550	5765800	3.1	7.60	0.0	4.6	32	0.20	9.9	2.6	69	0.89	5.5	0.2	2.60	0.0	1.0	4	0.2	0.20
L65800N 65600E	665600	5765800	5.0	42.80	0.0	12.5	292	0.80	87.0	10.4	214	3.05	11.5	0.8	4.90	0.0	3.4	16	0.9	1.10
L65800N 65650E	665650	5765800	7.5	33.80	0.0	10.4	112	2.30	50.9	12.6	491	2.59	14.0	1.4	9.10	0.0	1.7	35	2.6	0.50
L65800N 65700E	665700	5765800	11.7	32.10	0.0	18.2	175	0.30	44.2	10.5	196	4.74	13.9	0.8	3.80	0.0	2.7	10	1.1	0.50
L65800N 65750E	665750	5765800	10.1	26.10	0.0	12.1	142	1.10	49.4	8.7	174	3.05	13.5	0.6	11.40	0.0	2.7	13	1.2	0.50
L65800N 65800E	665800	5765800	6.7	25.90	0.0	9.3	129	1.20	49.3	9.6	297	2.94	13.8	0.7	3.60	0.0	3.5	10	1.0	0.50

2008 Art-DL Soil Samples

Sample	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
L649800N 661900E	0.1	117	0.17	0.069	2	44	0.75	81	0.196	<20	1.55	0.012	0.07	0.6	0.03	2.1	<0.1	<0.05	9	<0.5
L649800N 661950E	0.2	142	0.28	0.132	3	56	1.12	120	0.196	<20	2.02	0.011	0.09	2	0.03	2.7	<0.1	<0.05	12	<0.5
L649800N 662000E	0.2	124	0.37	0.108	4	42	0.83	138	0.198	<20	1.87	0.016	0.1	0.4	0.04	2.5	<0.1	<0.05	10	<0.5
L649800N 662050E	0.2	115	0.28	0.056	2	40	0.72	97	0.159	<20	1.51	0.016	0.07	0.5	0.03	2.1	<0.1	<0.05	9	<0.5
L649800N 662100E	0.1	170	0.26	0.171	4	81	1.75	149	0.257	<20	3.44	0.016	0.4	1.1	0.03	4	0.4	<0.05	11	<0.5
L649800N 662150E	0.1	143	0.41	0.222	4	70	1.47	183	0.222	<20	2.43	0.013	0.3	0.3	0.02	3.2	0.1	<0.05	10	<0.5
L649800N 662200E	0.1	114	0.12	0.082	3	45	0.83	93	0.164	<20	1.97	0.013	0.2	0.3	0.05	2.6	<0.1	<0.05	9	<0.5
L649800N 662250E	0.1	144	0.14	0.078	3	41	0.82	67	0.223	<20	1.71	0.012	0.09	0.6	0.03	2.7	<0.1	<0.05	11	<0.5
L649800N 662300E	0.1	154	0.39	0.058	6	57	0.93	104	0.184	<20	2.16	0.013	0.12	2	0.06	3.2	<0.1	<0.05	10	<0.5
L649800N 662350E	0.1	142	0.26	0.207	3	82	1.16	172	0.167	<20	2.19	0.01	0.12	0.5	0.04	2.6	<0.1	<0.05	10	<0.5
L649800N 662400E	0.1	143	0.19	0.107	2	56	0.84	85	0.242	<20	1.73	0.011	0.12	0.7	0.04	2.2	<0.1	<0.05	10	<0.5
L649800N 662450E	0.1	171	0.16	0.062	4	77	1.22	119	0.273	<20	2.71	0.011	0.18	1.1	0.04	4.1	<0.1	<0.05	11	0.6
L649800N 662500E	0.1	137	0.27	0.11	4	83	1.23	141	0.205	<20	2.08	0.017	0.12	0.5	0.04	3.1	<0.1	<0.05	11	<0.5
L649800N 662550E	0.1	114	0.16	0.155	6	82	0.97	73	0.164	<20	2.37	0.011	0.08	0.7	0.05	3.1	<0.1	<0.05	9	<0.5
L649800N 662600E	0.2	133	0.2	0.123	4	77	1	133	0.196	<20	2.41	0.011	0.06	0.5	0.04	2.9	<0.1	<0.05	10	<0.5
L649800N 662650E	0.1	136	0.28	0.108	5	104	1.2	148	0.197	<20	3.16	0.012	0.09	0.5	0.04	3.6	<0.1	<0.05	9	<0.5
L649800N 662700E	0.1	125	0.22	0.212	3	87	1.22	131	0.192	<20	2.15	0.01	0.1	0.8	0.04	3.1	<0.1	<0.05	10	<0.5
L649800N 662750E	<0.1	107	0.3	0.095	2	43	1.08	129	0.19	<20	1.91	0.015	0.11	0.3	0.02	2.4	0.1	<0.05	7	<0.5
L649800N 662800E	0.1	112	0.18	0.123	2	72	1.33	108	0.199	<20	2.79	0.01	0.05	0.2	0.04	2.8	<0.1	<0.05	9	<0.5
L649800N 662850E	<0.1	128	0.32	0.14	2	85	1.53	218	0.235	<20	2.58	0.014	0.09	0.3	0.02	1.9	<0.1	<0.05	10	<0.5
L649800N 662900E	0.1	100	0.16	0.292	2	91	0.9	106	0.184	<20	2.7	0.007	0.06	0.5	0.04	2.6	<0.1	<0.05	10	<0.5
L649800N 662950E	0.1	91	0.29	0.229	2	97	0.8	105	0.216	<20	1.93	0.013	0.09	0.4	0.02	1.5	<0.1	<0.05	11	<0.5
L649800N 663000E	<0.1	184	0.58	0.079	3	156	1.86	167	0.276	<20	3.15	0.012	0.2	0.4	0.03	3.4	<0.1	<0.05	11	<0.5
L649800N 663050E	<0.1	235	0.3	0.05	3	161	2.53	350	0.314	<20	4.19	0.022	0.42	0.6	0.03	12.2	0.1	<0.05	12	<0.5
L649800N 663100E	0.1	114	0.26	0.16	3	62	1.37	88	0.196	<20	2.88	0.01	0.06	0.3	0.03	2.5	<0.1	<0.05	9	<0.5
L649800N 663150E	0.2	115	0.22	0.077	3	49	0.97	194	0.256	<20	2	0.013	0.12	0.2	0.02	2.7	<0.1	<0.05	12	<0.5
L649800N 663200E	<0.1	117	0.47	0.188	2	50	1.76	209	0.22	<20	2.13	0.019	0.14	0.1	0.02	1.4	<0.1	<0.05	13	<0.5
L65000N 64700E	0.2	99	0.29	0.208	6	229	1.6	97	0.111	<20	2.23	0.006	0.12	0.1	0.02	3.4	<0.1	<0.05	8	0.6
L65000N 64750E	0.2	106	0.18	0.298	2	133	1.07	97	0.144	<20	2.42	0.005	0.1	0.2	0.02	2.2	0.1	<0.05	11	<0.5
L65000N 64800E	0.2	91	0.18	0.118	4	153	1.18	62	0.124	<20	1.8	0.011	0.06	0.1	0.01	1.6	<0.1	<0.05	8	<0.5
L65000N 64850E	0.2	93	0.09	0.222	7	87	0.61	88	0.08	<20	2.77	0.006	0.08	0.3	0.04	3.5	0.1	<0.05	8	1
L65000N 64900E	0.1	86	0.12	0.109	5	48	0.85	81	0.081	<20	2.13	0.006	0.14	0.2	0.04	4.9	0.3	<0.05	6	2.8
L65000N 64950E	0.1	159	0.24	0.135	5	90	1.63	71	0.146	<20	3.34	0.008	0.11	0.3	0.04	3.7	0.1	<0.05	9	2.3
L65000N 65000E	0.3	73	0.23	0.184	8	79	0.87	99	0.117	<20	2.9	0.01	0.13	0.3	0.06	3	0.2	<0.05	7	1.1
L65000N 65050E	0.2	45	0.11	0.179	8	31	0.17	193	0.007	<20	0.99	0.004	0.06	0.1	0.13	3.6	0.2	<0.05	2	5.4
L65000N 65100E	0.3	70	0.06	0.167	7	50	0.37	63	0.082	<20	1.87	0.006	0.05	0.2	0.05	1.9	0.1	<0.05	8	<0.5
L65000N 65150E	0.3	68	0.15	0.262	4	45	0.29	77	0.087	<20	2.37	0.007	0.05	0.3	0.03	1.9	0.1	<0.05	8	0.7
L65000N 65200E	0.2	65	0.15	0.099	4	92	0.68	80	0.056	<20	2.17	0.005	0.06	0.2	0.02	1.2	0.2	<0.05	7	<0.5
L65000N 65250E	0.1	92	0.16	0.061	4	68	1.02	80	0.106	<20	2.58	0.01	0.09	0.2	0.02	3.4	0.2	<0.05	8	0.8
L65000N 65300E	0.1	83	0.17	0.123	5	198	1.14	63	0.1	<20	2.3	0.007	0.08	0.2	0.02	1.8	0.2	<0.05	5	0.8
L65000N 662000E	0.1	164	0.2	0.07	4	47	1.36	91	0.261	<20	2.92	0.016	0.15	0.2	0.03	4.1	<0.1	<0.05	11	<0.5
L65000N 662050E	0.1	159	0.45	0.066	7	74	1.46	153	0.19	<20	2.86	0.017	0.26	0.2	0.05	5	0.2	<0.05	10	0.7
L65000N 662100E	0.1	184	0.3	0.155	4	99	1.87	148	0.221	<20	3.08	0.017	0.19	0.3	0.02	4.3	<0.1	<0.05	10	<0.5
L65000N 662150E	0.2	153	0.2	0.114	4	58	1.06	159	0.191	<20	1.99	0.015	0.14	0.2	0.01	2.9	<0.1	<0.05	11	<0.5
L65000N 662200E	0.1	102	0.08	0.037	3	31	0.48	46	0.131	<20	1.43	0.013	0.06	1.4	0.02	1.8	<0.1	<0.05	9	<0.5
L65000N 662250E	0.1	105	0.13	0.098	3	52	0.79	87	0.155	<20	1.56	0.013	0.09	0.3	0.02	1.8	0.1	<0.05	9	0.8
L65000N 662300E	<0.1	154	0.17	0.08	2	30	1.11	77	0.283	<20	1.77	0.014	0.18	0.3	0.03	1.7	<0.1	<0.05	10	0.7
L65000N 662350E	0.1	121	0.24	0.171	3	48	0.85	67	0.159	<20	1.81	0.011	0.09	0.3	0.03	1.8	<0.1	<0.05	11	<0.5
L65000N 662400E	0.1	130	0.27	0.061	5	69	1.1	81	0.194	<20	2.72	0.017	0.13	0.5	0.06	2.6	<0.1	<0.05	9	1
L65000N 662450E	0.1	131	0.18	0.065	4	63	0.74	76	0.169	<20	1.87	0.011	0.07	0.5	0.06	2.1	<0.1	<0.05	9	0.8
L65000N 662500E	0.1	154	0.47	0.041	3	48	0.6	80	0.325	<20	1.68	0.018	0.17	0.2	0.03	1.5	<0.1	<0.05	12	<0.5
L65000N 662550E	<0.1	211	0.31	0.024	3	73	1.23	45	0.312	<20	2.11	0.016	0.16	0.5	0.03	3.7	<0.1	<0.05	9	0.6
L65000N 662600E	0.1	140	0.14	0.048	4	56	1.02	83	0.223	<20	1.98	0.014	0.15	0.3	0.02	2.1	<0.1	<0.05	10	<0.5
L65000N 662650E	0.1	121	0.13	0.064	5	82	0.91	97	0.175	<20	2.17	0.009	0.1	0.2	0.04	2.2	<0.1	<0.05	10	<0.5
L65000N 662700E	0.1	154	0.1	0.035	3	37	1.15	49	0.249	<20	2.57	0.019	0.07	0.5	0.04	1.9	<0.1	<0.05	10	0.5

2008 Art-DL Soil Samples

Sample	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
L65000N 662800E	<0.1	115	0.16	0.041	2	63	0.86	54	0.21	<20	1.28	0.008	0.06	0.2	0.02	1.6	<0.1	<0.05	8	0.7
L65000N 662850E	<0.1	180	0.16	0.028	3	126	1.47	82	0.277	<20	2.59	0.018	0.1	0.6	0.03	3	<0.1	<0.05	10	0.7
L65000N 662900E	0.1	146	0.17	0.05	3	121	1.58	71	0.255	<20	2.65	0.009	0.09	0.4	0.03	3.2	<0.1	<0.05	10	<0.5
L65000N 662950E	<0.1	92	0.21	0.122	2	63	0.61	51	0.162	<20	1.42	0.014	0.05	0.2	0.03	1	<0.1	<0.05	7	<0.5
L65000N 663000E	0.1	101	0.22	0.091	6	94	1.1	136	0.141	<20	1.92	0.009	0.11	0.1	0.03	2.8	<0.1	<0.05	8	<0.5
L67000N 65450E	0.2	44	0.3	0.098	13	34	0.54	93	0.078	<20	1.47	0.014	0.18	4.7	0.02	1.8	0.1	<0.05	4	0.7
L67000N 65500E	0.1	42	0.2	0.093	9	24	0.6	63	0.087	<20	1.3	0.011	0.07	0.2	0.01	1.3	0.1	<0.05	4	<0.5
L67000N 65550E	0.2	56	0.47	0.082	16	39	0.81	124	0.114	<20	1.67	0.036	0.21	0.2	0.02	2.7	0.2	<0.05	5	<0.5
L65000N 663200E	0.1	165	0.34	0.030	4	38	1.60	161	0.290	<20	2.49	0.011	0.79	0.1	0.04	1.7	0.2	<0.05	12	<0.5
L65000N 663150E	<0.1	136	0.25	0.056	2	44	1.67	231	0.220	<20	2.14	0.013	0.53	0.2	0.02	1.7	0.1	<0.05	11	<0.5
L65000N 663100E	0.2	75	0.46	0.036	9	127	1.40	136	0.119	<20	1.93	0.010	0.24	0.2	0.02	4.3	0.3	<0.05	5	0.7
L65000N 663050E	0.1	315	1.47	0.260	6	34	2.79	262	0.200	<20	2.60	0.021	0.36	0.3	0.02	17.3	0.1	1.05	14	1.9
L66200N 64500E	0.3	33	0.43	0.096	13	29	0.46	118	0.015	<20	1.68	0.006	0.10	0.1	0.05	1.2	0.1	<0.05	5	2.2
L66200N 64550E	0.3	38	0.38	0.050	16	29	0.46	160	0.019	<20	2.03	0.008	0.10	0.1	0.05	2.0	0.1	<0.05	7	1.5
L66200N 64600E	0.3	28	0.15	0.044	19	30	0.51	120	0.017	<20	1.51	0.006	0.09	<0.1	0.04	1.4	0.1	<0.05	5	1.0
L66200N 64650E	0.2	29	0.07	0.022	9	17	0.15	94	0.014	<20	0.57	0.004	0.03	<0.1	0.03	0.7	<0.1	<0.05	3	1.5
L66200N 64700E	0.3	32	0.04	0.087	13	20	0.29	105	0.013	<20	1.53	0.003	0.05	0.1	0.09	1.2	0.1	<0.05	6	1.3
L66200N 64750E	0.4	53	0.03	0.114	11	20	0.21	120	0.008	<20	1.54	0.005	0.06	0.1	0.06	1.4	0.2	<0.05	7	2.3
L66200N 64800E	0.2	33	0.07	0.109	9	16	0.20	78	0.021	<20	1.19	0.008	0.04	0.1	0.07	1.0	<0.1	<0.05	5	1.7
L66200N 64850E	0.3	30	0.32	0.141	15	23	0.36	137	0.019	<20	1.74	0.006	0.08	0.1	0.04	1.5	<0.1	<0.05	5	0.9
L66200N 64900E	0.2	31	0.23	0.045	22	27	0.53	82	0.022	<20	1.47	0.006	0.06	0.6	0.02	1.8	<0.1	<0.05	5	1.0
L66200N 64950E	0.3	29	0.24	0.034	15	20	0.28	69	0.018	<20	1.15	0.007	0.07	0.1	0.03	1.1	<0.1	<0.05	5	0.9
L66200N 65000E	0.3	34	0.20	0.102	19	30	0.54	85	0.027	<20	1.66	0.006	0.08	0.1	0.02	2.1	<0.1	<0.05	5	0.9
L66200N 65050E	0.3	32	0.25	0.088	16	29	0.41	119	0.031	<20	1.69	0.008	0.10	0.2	0.04	2.5	0.1	<0.05	5	1.6
L66200N 65100E	0.3	28	0.28	0.024	21	24	0.25	75	0.021	<20	1.40	0.006	0.07	0.2	0.03	2.1	<0.1	<0.05	4	0.8
L66200N 65150E	0.5	36	0.48	0.068	16	38	0.37	224	0.041	<20	2.38	0.009	0.16	0.1	0.10	4.1	0.1	0.06	7	2.8
L66200N 65200E	0.3	35	0.08	0.060	11	23	0.22	79	0.027	<20	1.66	0.003	0.05	0.3	0.06	1.3	0.1	<0.05	5	1.8
L66200N 65250E	0.4	43	0.41	0.051	16	32	0.33	114	0.021	<20	2.09	0.011	0.08	0.2	0.06	2.2	0.1	0.05	7	1.3
L66200N 65300E	0.3	36	0.16	0.030	15	39	0.37	126	0.047	<20	1.79	0.007	0.08	0.2	0.04	1.7	0.1	<0.05	5	<0.5
L66200N 65350E	0.3	42	0.27	0.036	12	32	0.27	100	0.023	<20	1.50	0.006	0.05	0.3	0.03	1.5	0.1	<0.05	5	0.9
L66200N 65400E	0.3	32	0.11	0.065	16	25	0.37	103	0.050	<20	1.53	0.006	0.09	0.2	0.04	1.9	0.1	<0.05	4	1.1
L66200N 65450E	0.3	31	0.06	0.120	13	23	0.23	94	0.023	<20	1.68	0.003	0.05	0.3	0.08	1.7	<0.1	<0.05	4	1.9
L66200N 65500E	0.3	30	0.08	0.099	14	23	0.31	99	0.032	<20	1.54	0.003	0.07	0.3	0.04	1.6	0.1	<0.05	4	1.4
L66200N 65550E	0.3	31	0.24	0.129	15	25	0.39	97	0.036	<20	1.37	0.005	0.07	0.3	0.04	1.6	<0.1	<0.05	4	2.0
L66200N 65600E	0.3	29	0.09	0.050	16	20	0.31	80	0.027	<20	1.04	0.003	0.05	0.3	0.02	1.3	<0.1	<0.05	4	1.6
L66200N 65650E	0.5	17	0.13	0.086	23	17	0.58	34	0.005	<20	1.17	0.001	0.03	<0.1	0.03	1.4	<0.1	<0.05	4	0.8
L66200N 65700E	0.5	37	0.11	0.145	18	30	0.36	70	0.039	<20	1.22	0.004	0.09	0.6	0.01	2.1	0.1	<0.05	4	2.1
L66200N 65750E	0.3	23	0.10	0.058	13	9	0.06	56	0.020	<20	0.42	0.003	0.03	<0.1	0.02	0.6	<0.1	<0.05	4	<0.5
L66200N 65800E	0.3	33	0.13	0.086	13	25	0.43	91	0.058	<20	1.43	0.006	0.11	0.4	0.02	1.7	0.1	<0.05	4	1.1
L66200N 63850E	0.1	82	0.14	0.116	7	265	1.65	88	0.086	<20	2.61	0.005	0.08	0.1	0.04	4.0	0.1	<0.05	7	<0.5
L66200N 63900E	0.2	26	0.51	0.088	7	23	0.19	103	0.029	<20	0.99	0.010	0.06	<0.1	0.11	1.7	0.3	0.10	3	2.2
L66200N 63950E	0.2	217	0.51	0.094	6	71	3.08	92	0.120	<20	3.73	0.005	0.27	0.1	0.02	10.3	0.2	<0.05	12	2.4
L66200N 64000E	0.2	89	0.18	0.111	5	72	1.07	99	0.084	<20	2.22	0.004	0.09	<0.1	0.03	2.5	<0.1	<0.05	7	0.6
L66200N 64150E	0.2	72	0.35	0.070	12	158	1.22	107	0.062	<20	1.88	0.006	0.19	0.1	0.02	4.8	0.2	<0.05	5	1.6
L66200N 64200E	0.2	105	0.26	0.066	5	51	0.86	111	0.124	<20	1.63	0.006	0.13	0.1	0.03	2.4	<0.1	<0.05	8	0.5
L66200N 64250E	0.2	124	0.10	0.087	6	77	1.53	107	0.135	<20	2.60	0.005	0.13	0.1	0.01	5.5	<0.1	<0.05	10	<0.5
L66200N 64300E	<0.1	166	0.36	0.060	3	917	4.42	148	0.130	<20	3.66	0.002	0.23	<0.1	0.02	11.9	0.5	<0.05	9	<0.5
L66200N 64350E	<0.1	179	0.28	0.082	1	1225	5.35	185	0.088	<20	3.81	<0.001	0.15	<0.1	0.02	7.3	0.1	<0.05	8	<0.5
L66200N 64500E	0.3	37	0.29	0.066	17	22	0.51	135	0.032	<20	1.68	0.005	0.12	0.1	0.02	1.7	<0.1	<0.05	5	1.6
L66400N 65800E	0.3	24	0.15	0.112	16	19	0.22	61	0.014	<20	0.79	0.003	0.05	<0.1	0.02	1.0	<0.1	<0.05	4	1.4
L66400N 65750E	0.3	33	0.04	0.076	13	20	0.19	75	0.017	<20	1.11	0.003	0.05	0.2	0.04	0.9	<0.1	<0.05	4	2.9
L66400N 65700E	0.2	51	0.06	0.130	9	41	0.35	82	0.081	<20	1.98	0.004	0.05	0.4	0.07	1.8	<0.1	<0.05	7	<0.5
L66400N 65650E	0.2	31	0.03	0.028	13	15	0.16	40	0.050	<20	0.63	0.004	0.04	1.6	0.02	0.7	<0.1	<0.05	5	<0.5
L66400N 65600E	0.2	21	0.04	0.052	11	8	0.04	49	0.026	<20	0.40	0.003	0.03	0.1	0.02	0.4	<0.1	<0.05	4	<0.5
L66400N 65550E	0.2	35	0.12	0.081	9	41	0.35	92	0.035	<20	1.81	0.003	0.04	0.3	0.06	1.6	<0.1	<0.05	4	1.8

2008 Art-DL Soil Samples

Sample	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
L66400N 65500E	0.3	31	0.82	0.095	14	29	0.29	160	0.037	<20	1.56	0.010	0.12	0.2	0.06	2.7	0.1	<0.05	4	1.7
L66400N 65450E	0.3	39	0.10	0.039	12	21	0.21	88	0.043	<20	0.88	0.007	0.07	0.2	0.02	1.2	<0.1	<0.05	5	0.6
L66400N 65400E	0.2	36	0.20	0.038	16	31	0.31	110	0.041	<20	1.46	0.008	0.10	0.2	0.03	2.3	0.1	<0.05	4	<0.5
L66400N 65300E	0.2	39	0.34	0.058	15	58	0.56	115	0.046	<20	1.41	0.010	0.05	<0.1	0.03	2.1	<0.1	<0.05	4	1.5
L66400N 65200E	0.3	35	0.65	0.059	23	37	0.42	99	0.037	<20	1.46	0.009	0.09	0.1	0.05	2.8	<0.1	<0.05	4	1.6
L66400N 65150E	0.2	31	0.41	0.060	10	34	0.30	53	0.032	<20	1.06	0.005	0.07	0.2	0.05	1.3	<0.1	<0.05	4	1.9
L66400N 65100E	0.2	41	0.15	0.138	13	41	0.36	89	0.029	<20	1.33	0.004	0.05	0.1	0.05	1.2	<0.1	<0.05	6	0.6
L66400N 65050E	0.2	29	0.04	0.083	11	17	0.21	57	0.020	<20	0.88	0.004	0.04	<0.1	0.02	0.9	<0.1	<0.05	5	<0.5
L66400N 65000E	0.2	42	0.21	0.054	12	28	0.25	49	0.024	<20	1.25	0.005	0.04	0.1	0.03	1.0	<0.1	<0.05	6	1.2
L66400N 64950E	0.2	33	0.31	0.043	18	30	0.49	85	0.031	<20	1.56	0.008	0.08	0.1	0.03	2.6	<0.1	<0.05	5	1.2
L66400N 64900E	0.4	34	0.40	0.087	13	25	0.28	109	0.019	<20	1.59	0.006	0.08	0.1	0.04	1.5	<0.1	<0.05	5	0.8
L66400N 64850E	0.3	34	0.25	0.066	18	15	0.17	64	0.010	<20	0.87	0.005	0.04	<0.1	0.04	0.9	<0.1	<0.05	6	0.8
L66400N 64800E	0.2	56	0.05	0.040	14	28	0.49	60	0.008	<20	1.23	0.003	0.03	<0.1	0.03	1.3	<0.1	<0.05	5	1.4
L66400N 64750E	0.3	39	0.05	0.082	17	30	0.40	73	0.009	<20	2.15	0.003	0.06	<0.1	0.03	1.7	0.1	<0.05	8	<0.5
L66400N 64700E	0.2	39	0.03	0.065	11	14	0.16	40	0.020	<20	0.77	0.004	0.03	<0.1	0.01	0.9	<0.1	<0.05	4	<0.5
L66400N 64650E	0.2	36	0.03	0.042	21	30	0.64	84	0.012	<20	1.40	0.002	0.05	<0.1	0.02	1.4	<0.1	<0.05	5	1.7
L66400N 64600E	0.3	36	0.06	0.102	15	30	0.37	115	0.012	<20	2.34	0.004	0.07	0.1	0.06	1.5	0.1	<0.05	7	0.9
L66400N 64550E	0.2	38	0.03	0.044	14	46	0.24	39	0.019	<20	0.73	0.003	0.02	<0.1	0.01	1.1	<0.1	<0.05	5	<0.5
L66400N 64500E	0.3	39	0.04	0.032	22	16	0.15	64	0.023	<20	0.70	0.003	0.04	0.1	0.02	0.9	<0.1	<0.05	6	1.0
L66400N 64500EA	0.3	39	0.03	0.051	17	20	0.16	81	0.020	<20	1.60	0.004	0.04	0.1	0.05	1.2	<0.1	<0.05	7	0.9
L66400N 64450E	0.2	41	0.09	0.106	15	63	0.57	97	0.018	<20	2.47	0.005	0.08	0.2	0.07	2.3	0.1	<0.05	4	2.8
L66400N 64400E	0.2	37	0.31	0.030	22	46	0.63	92	0.028	<20	1.58	0.008	0.12	0.1	0.07	3.7	0.2	0.05	4	2.3
L66400N 64350E	0.1	142	0.59	0.152	15	899	2.20	157	0.021	<20	2.77	0.004	0.15	<0.1	0.06	11.9	0.4	<0.05	7	1.4
L66400N 64300E	0.2	215	0.12	0.083	5	38	1.96	63	0.139	<20	3.52	0.005	0.10	0.1	0.06	9.7	0.1	<0.05	14	0.7
L66400N 64250E	0.1	153	0.26	0.029	7	28	0.90	70	0.054	<20	2.54	0.007	0.06	0.1	0.04	3.9	0.3	<0.05	10	0.9
L66400N 64100E	0.1	142	0.18	0.047	2	20	1.09	36	0.148	<20	2.03	0.006	0.04	<0.1	0.04	2.7	<0.1	<0.05	8	0.5
L66400N 64050E	0.1	108	0.15	0.064	8	51	0.90	128	0.061	<20	2.10	0.007	0.10	<0.1	0.04	4.6	0.1	<0.05	7	<0.5
L66400N 64000E	0.1	133	0.24	0.097	4	40	1.57	81	0.156	<20	3.07	0.005	0.16	<0.1	0.03	5.0	<0.1	<0.05	9	<0.5
L66400N 63950E	0.2	111	0.15	0.060	7	130	1.06	67	0.102	<20	1.75	0.005	0.08	0.2	0.02	3.2	<0.1	<0.05	7	1.0
L66400N 63900E	0.2	70	0.49	0.069	7	95	0.67	203	0.089	<20	2.08	0.010	0.10	0.2	0.08	3.0	0.2	<0.05	6	0.5
L66400N 63850E	<0.1	58	0.48	0.184	<1	184	1.85	137	0.171	<20	2.31	0.010	0.08	0.3	0.01	1.8	<0.1	<0.05	5	<0.5
L66400N 63800E	0.1	84	0.28	0.066	3	58	0.80	142	0.148	<20	1.38	0.009	0.16	0.2	0.02	3.1	<0.1	<0.05	7	<0.5
L66600N 65800E	0.1	49	0.14	0.064	7	32	0.41	54	0.102	<20	1.32	0.008	0.05	0.3	0.02	1.5	<0.1	<0.05	5	<0.5
L66600N 65750E	0.3	71	0.25	0.085	8	33	0.49	80	0.136	<20	1.43	0.005	0.05	0.7	0.04	1.7	<0.1	<0.05	8	0.6
L66600N 65700E	0.2	54	0.16	0.059	9	27	0.32	53	0.097	<20	0.96	0.004	0.04	0.2	0.03	1.3	<0.1	<0.05	5	0.8
L66600N 65650E	0.2	34	0.17	0.092	8	19	0.23	50	0.051	<20	0.98	0.005	0.04	<0.1	0.03	0.9	<0.1	<0.05	5	<0.5
L66600N 65600E	0.3	32	0.08	0.039	11	31	0.20	44	0.032	<20	1.43	0.004	0.04	0.1	0.05	1.3	<0.1	<0.05	5	1.3
L66600N 65550E	0.2	55	0.12	0.121	10	57	0.57	93	0.083	<20	2.37	0.005	0.06	0.3	0.05	2.3	<0.1	<0.05	5	1.0
L66600N 65500E	0.2	45	0.18	0.084	10	35	0.54	120	0.090	<20	1.73	0.010	0.12	1.4	0.03	2.2	0.1	<0.05	4	0.7
L66600N 65450E	0.2	50	0.18	0.137	9	35	0.58	128	0.100	<20	2.13	0.012	0.09	0.2	0.02	2.4	<0.1	<0.05	5	0.6
L66600N 65400E	0.2	35	0.13	0.094	16	23	0.33	92	0.045	<20	1.19	0.005	0.06	0.1	0.03	1.8	<0.1	<0.05	5	0.8
L66600N 65350E	0.2	34	0.13	0.118	20	26	0.34	93	0.021	<20	1.50	0.005	0.04	0.1	0.04	1.6	<0.1	<0.05	4	1.7
L66600N 65300E	0.3	47	0.07	0.057	13	43	0.52	113	0.070	<20	2.33	0.006	0.14	0.3	0.09	2.7	0.1	<0.05	5	1.3
L66600N 65250E	0.2	37	0.15	0.116	16	36	0.46	91	0.048	<20	1.67	0.006	0.09	0.2	0.07	2.1	<0.1	<0.05	4	1.3
L66600N 65200E	0.2	40	0.17	0.071	13	43	0.46	104	0.067	<20	1.52	0.007	0.08	0.2	0.04	2.1	<0.1	<0.05	4	0.6
L66600N 65150E	0.2	36	0.20	0.080	13	36	0.52	129	0.057	<20	2.02	0.007	0.09	0.2	0.05	2.5	0.1	<0.05	4	1.5
L66600N 65100E	0.1	16	0.59	0.059	8	13	0.09	52	0.039	<20	1.11	0.012	0.03	<0.1	0.07	2.2	<0.1	0.25	3	4.7
L66600N 65050E	0.1	12	1.71	0.093	7	11	0.11	77	0.011	<20	0.76	0.007	0.04	<0.1	0.14	1.7	<0.1	0.43	1	5.9
L66600N 65000E	0.3	49	0.17	0.064	12	57	0.49	128	0.040	<20	2.07	0.005	0.07	0.1	0.06	2.1	0.1	<0.05	5	1.8
L66600N 64950E	0.3	32	0.22	0.097	17	35	0.41	110	0.022	<20	1.24	0.005	0.06	<0.1	0.03	1.9	<0.1	<0.05	4	1.0
L66600N 64900E	0.2	31	0.35	0.032	7	15	0.07	39	0.055	<20	0.34	0.007	0.03	0.1	0.03	0.9	<0.1	<0.05	3	0.5
L66600N 64850E	0.2	30	0.57	0.053	18	27	0.31	81	0.022	<20	1.21	0.005	0.07	0.6	0.05	2.2	<0.1	<0.05	3	1.9
L66600N 64800E	0.3	32	0.05	0.067	19	24	0.16	50	0.023	<20	1.24	0.005	0.06	0.1	0.06	1.8	<0.1	<0.05	4	1.5
L66600N 64750E	0.2	31	0.09	0.031	23	25	0.36	62	0.024	<20	1.14	0.003	0.06	<0.1	0.01	1.5	<0.1	<0.05	4	0.8
L66600N 64700E	0.3	36	0.12	0.037	19	29	0.34	90	0.018	<20	1.61	0.006	0.09	0.1	0.04	2.0	<0.1	<0.05	5	0.8

2008 Art-DL Soil Samples

Sample	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
L66600N 64650E	0.3	33	0.06	0.043	22	21	0.34	38	0.020	<20	1.01	0.003	0.05	<0.1	0.06	1.0	<0.1	<0.05	5	2.0
L66600N 64600E	0.2	26	0.06	0.055	22	18	0.30	38	0.023	<20	0.77	0.003	0.05	<0.1	0.01	1.1	<0.1	<0.05	4	<0.5
L66600N 64550E	0.2	41	0.05	0.069	15	36	0.37	124	0.012	<20	1.47	0.004	0.07	<0.1	0.06	1.8	<0.1	<0.05	5	1.9
L66600N 64500E	0.3	40	0.06	0.045	18	33	0.47	113	0.016	<20	1.60	0.005	0.10	<0.1	0.05	1.7	0.1	<0.05	5	2.0
L66600N 64450E	0.3	35	0.07	0.039	19	30	0.42	75	0.026	<20	1.47	0.004	0.10	0.1	0.06	1.6	<0.1	<0.05	5	1.0
L66600N 64400E	0.2	42	0.15	0.075	20	31	0.40	122	0.018	<20	1.87	0.004	0.08	0.1	0.06	1.9	<0.1	<0.05	6	1.4
L66600N 64350E	0.3	41	0.21	0.094	16	45	0.49	124	0.018	<20	2.06	0.004	0.09	0.1	0.04	2.2	0.1	0.08	5	1.5
L66600N 64300E	0.3	44	0.10	0.066	18	34	0.38	100	0.024	<20	1.56	0.004	0.11	0.1	0.03	1.6	0.1	0.05	7	1.4
L66600N 64250E	0.2	106	0.39	0.214	5	33	0.19	115	0.017	<20	1.66	0.006	0.06	0.1	0.08	2.2	1.1	0.07	5	4.7
L66600N 64200E	0.2	157	0.35	0.156	4	63	2.07	108	0.126	<20	3.33	0.011	0.20	<0.1	0.02	3.0	0.2	<0.05	10	<0.5
L66600N 64150E	0.1	145	0.19	0.111	4	56	1.66	56	0.127	<20	3.51	0.005	0.07	0.2	0.03	6.0	<0.1	<0.05	9	<0.5
L66600N 64100E	0.2	113	0.13	0.061	9	91	0.88	80	0.109	<20	2.28	0.005	0.08	0.2	0.06	2.8	0.1	<0.05	8	1.2
L66600N 64050E	0.2	114	0.06	0.042	9	255	1.43	105	0.079	<20	2.08	0.005	0.06	0.2	0.04	4.5	0.2	<0.05	8	1.1
L66600N 64000E	0.1	123	0.11	0.045	8	116	1.23	82	0.089	<20	2.96	0.004	0.08	0.2	0.05	5.5	0.1	<0.05	8	0.7
L66600N 63950E	0.1	132	0.34	0.087	3	162	0.92	84	0.104	<20	1.75	0.006	0.07	0.1	0.03	3.5	<0.1	<0.05	8	<0.5
L66600N 63900E	0.2	129	0.55	0.191	5	75	1.63	134	0.120	<20	3.06	0.008	0.14	<0.1	0.04	4.4	0.1	<0.05	12	<0.5
L66600N 63850E	0.1	88	0.21	0.100	9	70	1.06	110	0.058	<20	2.16	0.007	0.13	0.1	0.03	3.6	0.1	<0.05	7	<0.5
L66600N 63800E	0.1	104	0.15	0.092	7	96	1.08	51	0.091	<20	2.57	0.006	0.13	0.1	0.06	3.6	<0.1	<0.05	8	<0.5
L66800N 63800E	0.2	91	0.10	0.092	10	76	0.63	86	0.063	<20	1.37	0.006	0.09	0.1	0.03	2.4	<0.1	<0.05	7	<0.5
L66800N 63850E	0.2	83	0.11	0.128	10	77	0.65	99	0.046	<20	1.97	0.006	0.07	0.2	0.03	2.9	0.1	<0.05	8	<0.5
L66800N 63900E	0.1	114	0.19	0.105	9	76	0.89	117	0.036	<20	2.51	0.008	0.11	<0.1	0.06	5.6	<0.1	0.06	8	0.6
L66800N 63950E	<0.1	76	0.29	0.212	11	31	0.92	111	0.014	<20	1.52	0.005	0.16	<0.1	0.04	9.9	0.2	0.14	3	1.2
L66800N 64000E	0.1	123	0.22	0.105	7	282	1.69	97	0.082	<20	2.46	0.006	0.10	<0.1	0.05	4.7	0.1	<0.05	9	0.9
L66800N 64050E	0.2	95	0.14	0.115	6	147	1.11	123	0.056	<20	2.24	0.006	0.07	0.1	0.03	3.4	0.3	0.06	8	0.7
L66800N 64100E	0.2	105	0.14	0.140	7	118	0.64	36	0.085	<20	1.56	0.003	0.08	0.1	0.06	2.3	<0.1	0.10	8	1.8
L66800N 64150E	0.2	59	0.28	0.070	11	84	0.69	105	0.049	<20	1.75	0.005	0.12	<0.1	0.05	1.8	0.1	0.10	5	1.3
L66800N 64200E	0.2	54	0.41	0.078	12	66	0.53	81	0.035	<20	2.20	0.005	0.09	0.2	0.08	2.4	0.1	0.11	6	0.9
L66800N 64250E	0.3	62	0.96	0.091	15	54	0.64	140	0.064	<20	2.72	0.011	0.16	0.1	0.07	2.8	0.2	0.08	7	1.1
L66800N 64300E	0.3	54	0.20	0.057	15	39	0.42	145	0.024	<20	2.03	0.004	0.11	0.1	0.04	2.2	0.1	<0.05	8	1.5
L66800N 64350E	0.2	48	0.12	0.111	14	36	0.30	145	0.017	<20	1.72	0.004	0.07	<0.1	0.05	1.9	0.1	<0.05	7	1.3
L66800N 64400E	0.3	36	0.10	0.049	23	31	0.53	109	0.011	<20	1.73	0.005	0.10	0.1	0.05	1.4	0.1	<0.05	5	1.3
L66800N 64450E	0.3	41	0.05	0.051	22	29	0.43	112	0.014	<20	1.58	0.005	0.08	0.4	0.03	1.8	0.1	<0.05	5	1.9
L66800N 64500E	0.2	33	0.03	0.070	20	19	0.32	64	0.014	<20	1.06	0.004	0.05	<0.1	0.03	0.9	<0.1	<0.05	5	1.6
L66800N 64550E	0.3	39	0.04	0.118	15	30	0.30	113	0.011	<20	2.01	0.003	0.06	0.1	0.12	1.7	0.1	<0.05	5	2.8
L66800N 64600E	0.2	31	0.07	0.032	11	19	0.22	71	0.019	<20	1.06	0.005	0.04	<0.1	0.04	0.9	<0.1	<0.05	4	1.7
L66800N 64650E	0.2	29	0.08	0.060	20	21	0.33	54	0.021	<20	1.09	0.004	0.06	<0.1	0.03	1.3	<0.1	<0.05	4	<0.5
L66800N 64700E	0.3	31	0.15	0.073	21	30	0.42	84	0.021	<20	1.63	0.005	0.09	<0.1	0.04	1.7	0.1	<0.05	5	1.5
L66800N 64750E	0.2	33	0.08	0.050	21	19	0.26	56	0.025	<20	0.86	0.004	0.05	<0.1	0.02	1.0	<0.1	<0.05	4	0.6
L66800N 64800E	0.3	33	0.18	0.061	18	23	0.26	73	0.024	<20	1.16	0.006	0.07	<0.1	0.02	1.4	<0.1	<0.05	4	<0.5
L66800N 64850E	0.3	39	0.81	0.065	32	44	0.43	165	0.026	<20	2.39	0.014	0.18	0.1	0.11	6.1	0.1	<0.05	5	2.9
L66800N 64900E	0.4	39	0.47	0.063	25	40	0.44	168	0.036	<20	2.28	0.016	0.17	0.1	0.05	4.1	0.1	<0.05	5	1.5
L66800N 64950E	0.3	38	0.34	0.050	17	27	0.18	97	0.022	<20	1.42	0.007	0.09	<0.1	0.02	2.1	<0.1	<0.05	5	0.6
L66800N 65000E	0.4	38	0.36	0.055	22	33	0.36	107	0.029	<20	1.85	0.011	0.12	0.1	0.04	2.9	0.1	<0.05	5	1.4
L66800N 65050E	0.4	46	0.27	0.135	11	33	0.28	176	0.033	<20	2.19	0.011	0.13	0.2	0.03	1.8	0.1	<0.05	7	0.8
L66800N 65100E	0.4	41	0.57	0.038	17	36	0.37	120	0.055	<20	1.85	0.013	0.13	0.2	0.04	2.9	0.1	<0.05	5	1.6
L66800N 65150E	0.3	51	0.14	0.167	10	27	0.24	96	0.025	<20	1.91	0.006	0.07	0.2	0.07	2.0	0.2	<0.05	4	2.7
L66800N 65200E	0.3	44	0.64	0.045	13	30	0.20	113	0.038	<20	2.10	0.011	0.07	0.2	0.07	1.8	0.1	<0.05	6	1.4
L66800N 65250E	0.3	37	0.12	0.085	13	26	0.18	123	0.026	<20	1.93	0.005	0.05	0.2	0.07	1.8	0.1	<0.05	5	1.4
L66800N 65300E	0.3	38	0.15	0.092	13	21	0.15	71	0.028	<20	1.00	0.004	0.03	0.2	0.03	1.3	<0.1	<0.05	5	0.8
L66800N 65350E	0.2	48	0.14	0.049	14	42	0.53	154	0.071	<20	1.83	0.009	0.13	0.2	0.03	2.1	0.1	<0.05	5	<0.5
L66800N 65400E	0.2	44	0.16	0.113	14	41	0.52	107	0.069	<20	2.05	0.007	0.09	0.2	0.07	1.9	0.1	<0.05	6	0.8
L66800N 65450E	0.2	43	0.17	0.141	16	43	0.57	137	0.071	<20	2.08	0.008	0.10	0.3	0.03	1.9	0.1	<0.05	6	0.9
L66800N 65500E	0.2	43	0.23	0.175	14	37	0.41	107	0.063	<20	1.95	0.007	0.09	0.2	0.05	1.7	<0.1	<0.05	5	0.7
L66800N 65550E	0.2	52	0.08	0.046	14	39	0.31	94	0.074	<20	1.90	0.009	0.10	0.2	0.04	1.8	<0.1	<0.05	7	0.7
L66800N 65600E	0.2	33	0.05	0.035	15	21	0.21	70	0.058	<20	0.79	0.007	0.05	<0.1	0.03	0.9	<0.1	<0.05	4	<0.5

2008 Art-DL Soil Samples

Sample	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
L66800N 65650E	0.2	32	0.19	0.069	19	23	0.45	83	0.043	<20	0.94	0.007	0.05	0.4	0.02	1.3	<0.1	<0.05	4	0.8
L66800N 65700E	0.3	37	0.16	0.048	18	26	0.22	99	0.035	<20	1.16	0.005	0.07	0.1	0.03	1.4	<0.1	<0.05	5	0.9
L66800N 65750E	0.2	29	0.19	0.054	7	22	0.24	79	0.044	<20	0.82	0.008	0.06	0.4	0.02	0.7	<0.1	<0.05	4	<0.5
L66800N 65800E	0.2	34	0.10	0.124	9	21	0.26	90	0.069	<20	1.11	0.005	0.06	0.2	0.03	1.1	<0.1	<0.05	5	0.6
L67000N 63800E	0.1	81	0.20	0.055	6	180	1.16	41	0.215	<20	2.38	0.006	0.13	0.2	0.05	2.1	0.2	<0.05	7	0.9
L67000N 63850E	0.2	55	0.34	0.034	10	62	0.60	52	0.055	<20	1.90	0.007	0.06	<0.1	0.07	2.3	0.1	<0.05	5	0.9
L67000N 63900E	0.2	69	0.14	0.102	12	88	0.83	104	0.035	<20	1.54	0.005	0.09	<0.1	0.04	3.0	<0.1	<0.05	6	0.6
L67000N 63950E	0.2	79	0.11	0.082	8	39	0.45	68	0.018	<20	1.45	0.007	0.06	<0.1	0.03	2.2	<0.1	<0.05	6	0.5
L67000N 64000E	0.1	58	0.13	0.069	9	84	0.53	109	0.029	<20	1.43	0.005	0.06	<0.1	0.03	2.0	0.1	<0.05	5	0.6
L67000N 64050E	0.2	56	0.12	0.075	11	49	0.41	89	0.033	<20	1.04	0.004	0.07	<0.1	0.05	1.5	0.1	<0.05	6	0.8
L67000N 64100E	0.2	48	0.09	0.100	13	70	0.62	103	0.017	<20	1.62	0.003	0.06	<0.1	0.05	1.3	<0.1	<0.05	6	0.7
L67000N 64150E	0.2	69	0.08	0.040	9	44	0.26	59	0.049	<20	1.12	0.003	0.06	0.1	0.03	1.5	<0.1	<0.05	6	1.0
L67000N 64200E	0.1	127	0.14	0.090	6	55	1.23	68	0.074	<20	2.51	0.004	0.08	0.1	0.06	4.3	<0.1	<0.05	8	0.5
L67000N 64250E	<0.1	97	0.33	0.280	4	23	1.02	80	0.095	<20	3.30	0.003	0.04	<0.1	0.05	2.9	0.1	<0.05	6	<0.5
L67000N 64300E	0.2	31	1.12	0.109	13	32	0.43	100	0.021	<20	1.85	0.011	0.13	<0.1	0.08	1.7	0.1	0.07	4	2.0
L67000N 64350E	0.2	37	0.07	0.039	18	24	0.31	71	0.014	<20	1.18	0.003	0.06	<0.1	0.04	1.1	<0.1	<0.05	5	1.4
L67000N 64400E	0.2	42	0.05	0.089	9	20	0.13	95	0.013	<20	0.86	0.007	0.04	<0.1	0.08	1.0	0.1	<0.05	4	2.0
L67000N 64450E	0.3	40	0.24	0.051	18	32	0.50	128	0.015	<20	1.79	0.007	0.11	<0.1	0.04	2.0	0.1	<0.05	5	1.8
L67000N 64500E	0.2	35	0.08	0.112	20	26	0.38	146	0.011	<20	1.57	0.003	0.06	0.1	0.04	1.3	0.1	<0.05	5	1.0
L67000N 64550E	0.3	43	0.04	0.224	17	23	0.37	121	0.006	<20	1.77	0.003	0.06	<0.1	0.05	1.2	0.1	<0.05	5	1.7
L67000N 64600E	0.2	27	0.15	0.081	21	16	0.26	58	0.014	<20	0.86	0.004	0.05	<0.1	0.03	0.9	<0.1	<0.05	4	0.7
L67000N 64650E	0.3	40	0.06	0.144	17	26	0.37	64	0.012	<20	1.61	0.004	0.04	0.1	0.05	1.3	<0.1	<0.05	5	1.6
L67000N 64700E	0.3	30	0.28	0.078	24	32	0.51	121	0.015	<20	2.12	0.005	0.09	0.1	0.05	1.9	<0.1	<0.05	5	1.2
L67000N 64750E	0.2	27	0.06	0.031	9	11	0.09	75	0.019	<20	0.53	0.005	0.04	<0.1	0.02	0.5	<0.1	0.06	3	0.7
L67000N 64800E	0.3	36	0.19	0.052	10	32	0.28	107	0.011	<20	2.32	0.020	0.11	<0.1	0.04	1.8	0.2	<0.05	5	1.1
L67000N 64850E	0.2	28	0.35	0.082	10	17	0.22	75	0.034	<20	0.87	0.006	0.05	0.1	0.05	1.0	<0.1	<0.05	4	0.7
L67000N 64900E	0.2	28	0.08	0.148	14	16	0.16	81	0.026	<20	0.77	0.004	0.04	<0.1	0.02	1.0	<0.1	<0.05	4	0.7
L67000N 64950E	0.2	34	0.49	0.043	9	32	0.26	72	0.054	<20	1.35	0.011	0.08	<0.1	0.05	1.8	<0.1	<0.05	5	1.3
L67000N 65000E	0.2	33	0.09	0.094	12	26	0.20	69	0.033	<20	1.12	0.006	0.04	<0.1	0.04	1.0	<0.1	<0.05	4	1.4
L67000N 65050E	0.2	38	0.25	0.032	17	35	0.61	88	0.058	<20	1.35	0.012	0.10	0.2	0.03	2.3	0.1	<0.05	4	1.7
L67000N 65100E	0.2	32	0.14	0.077	14	24	0.20	100	0.018	<20	1.89	0.005	0.06	0.3	0.06	1.7	<0.1	<0.05	4	1.2
L67000N 65150E	0.3	40	0.18	0.053	19	26	0.45	90	0.049	<20	1.17	0.010	0.08	0.3	0.02	1.9	0.1	<0.05	4	1.4
L67000N 65200E	0.2	45	0.27	0.051	16	39	0.63	127	0.076	<20	1.59	0.014	0.14	0.1	0.02	3.3	0.1	<0.05	4	1.3
L67000N 65250E	0.2	32	0.48	0.049	11	20	0.26	67	0.031	<20	0.82	0.006	0.07	1.6	0.05	1.2	<0.1	<0.05	4	1.4
L67000N 65300E	0.2	30	0.07	0.031	12	22	0.23	69	0.051	<20	1.04	0.008	0.08	0.1	0.04	1.3	<0.1	<0.05	4	<0.5
L67000N 65350E	0.2	37	0.26	0.068	20	30	0.40	118	0.041	<20	1.45	0.008	0.11	0.2	0.04	3.0	0.1	<0.05	4	1.7
L67000N 65400E	0.2	43	0.20	0.063	11	44	0.64	120	0.073	<20	1.75	0.012	0.13	0.2	0.04	2.2	0.1	<0.05	5	1.5
L67000N 65600E	0.2	68	0.37	0.081	19	47	0.68	146	0.134	<20	2.08	0.021	0.18	0.2	0.02	3.6	0.2	<0.05	6	1.0
L67000N 65650E	0.3	54	0.51	0.065	16	77	0.47	123	0.081	<20	1.73	0.011	0.15	0.2	0.05	3.1	0.1	<0.05	6	1.7
L67000N 65700E	0.1	46	0.42	0.063	11	37	0.54	74	0.094	<20	1.01	0.026	0.10	0.5	0.02	2.0	0.1	<0.05	4	2.3
L67000N 65750E	0.2	43	0.12	0.105	9	35	0.44	74	0.084	<20	1.90	0.007	0.07	0.7	0.04	1.8	0.1	<0.05	5	0.9
L67000N 65800E	0.2	29	0.14	0.079	5	18	0.25	75	0.059	<20	0.89	0.007	0.05	0.3	0.02	0.9	<0.1	<0.05	4	1.0
L66000N 64500E	0.2	55	0.05	0.060	13	26	0.27	78	0.029	<20	0.97	0.003	0.06	0.1	0.02	1.2	0.1	<0.05	6	1.0
L66000N 64550E	0.2	54	0.09	0.176	9	42	0.38	120	0.042	<20	2.72	0.005	0.07	0.2	0.05	1.8	0.1	<0.05	7	1.0
L66000N 64600E	0.2	43	0.04	0.079	16	22	0.25	67	0.020	<20	1.20	0.003	0.05	0.1	0.02	1.2	<0.1	<0.05	6	0.8
L66000N 64650E	0.2	31	0.60	0.065	38	33	0.37	100	0.029	<20	2.10	0.010	0.07	<0.1	0.09	3.4	0.1	0.08	4	3.6
L66000N 64700E	0.3	46	0.08	0.097	14	57	0.52	174	0.014	<20	2.42	0.004	0.11	0.1	0.05	2.3	0.2	<0.05	6	2.7
L66000N 64750E	0.2	40	0.02	0.069	17	25	0.31	114	0.012	<20	1.68	0.005	0.06	<0.1	0.03	1.8	0.1	<0.05	6	1.7
L66000N 64800E	0.3	48	0.05	0.042	13	37	0.42	107	0.026	<20	1.87	0.005	0.09	0.1	0.05	2.1	0.1	<0.05	6	1.8
L66000N 64850E	0.1	52	0.05	0.051	8	15	0.54	100	0.024	<20	1.73	0.003	0.07	0.1	0.04	3.2	0.1	<0.05	7	0.8
L66000N 64900E	0.2	44	0.09	0.042	11	25	0.27	123	0.017	<20	1.70	0.005	0.07	<0.1	0.05	1.9	0.1	<0.05	6	0.8
L66000N 64950E	0.3	36	0.06	0.091	15	21	0.26	71	0.011	<20	1.20	0.003	0.06	0.1	0.03	1.2	<0.1	<0.05	5	1.3
L66000N 65000E	0.2	25	0.06	0.032	16	11	0.14	46	0.015	<20	0.59	0.003	0.04	<0.1	0.01	0.7	<0.1	<0.05	4	1.2
L66000N 65050E	0.3	44	0.09	0.103	15	32	0.46	107	0.017	<20	1.99	0.004	0.07	0.1	0.06	1.9	0.1	<0.05	7	1.4
L66000N 65100E	0.2	38	0.35	0.107	15	34	0.36	133	0.022	<20	1.93	0.006	0.10	0.1	0.05	1.8	<0.1	<0.05	6	1.7

2008 Art-DL Soil Samples

Sample	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
L66000N 65150E	0.3	40	0.06	0.069	22	18	0.22	53	0.010	<20	1.18	0.004	0.04	0.1	0.02	1.0	<0.1	<0.05	6	1.5
L66000N 65200E	0.2	30	0.22	0.075	15	20	0.33	88	0.040	<20	1.15	0.009	0.10	0.2	0.03	1.7	0.1	<0.05	4	1.2
L66000N 65250E	0.3	31	0.20	0.116	16	25	0.31	83	0.043	<20	1.39	0.006	0.11	0.2	0.03	1.7	<0.1	<0.05	4	1.7
L66000N 65300E	0.2	67	0.24	0.056	12	50	0.79	151	0.082	<20	2.31	0.013	0.23	0.2	0.03	5.1	0.2	<0.05	9	1.8
L66000N 65350E	0.3	37	0.35	0.052	13	26	0.26	119	0.036	<20	1.39	0.009	0.11	0.2	0.03	1.7	0.1	<0.05	5	1.2
L66000N 65400E	0.3	35	0.28	0.032	17	27	0.29	95	0.034	<20	1.43	0.008	0.08	0.1	0.02	1.9	<0.1	<0.05	4	1.1
L66000N 65450E																				
L66000N 65500E																				
L66000N 65550E																				
L66000N 65600E	0.3	32	0.50	0.041	13	26	0.23	66	0.028	<20	1.31	0.006	0.06	0.2	0.03	1.5	<0.1	<0.05	4	1.0
L66000N 65650E	0.2	24	0.06	0.023	11	9	0.05	22	0.025	<20	0.27	0.002	0.03	0.1	<0.01	0.4	<0.1	<0.05	3	<0.5
L66000N 65700E	0.3	35	0.08	0.045	14	21	0.21	138	0.011	<20	1.36	0.004	0.06	0.3	0.06	2.6	0.2	<0.05	3	2.7
L66000N 65750E	0.4	36	0.08	0.159	13	31	0.27	74	0.018	<20	1.33	0.003	0.05	0.2	0.05	1.6	<0.1	<0.05	4	1.5
L66000N 65800E	0.2	31	0.08	0.073	15	23	0.25	90	0.025	<20	1.16	0.005	0.05	0.2	0.05	1.4	<0.1	<0.05	4	0.8
L65800N 64500E	0.2	41	0.19	0.090	17	45	0.55	108	0.032	<20	1.81	0.005	0.13	<0.1	0.04	2.2	0.1	<0.05	5	1.8
L65800N 64550E	0.2	36	0.13	0.206	14	48	0.46	69	0.018	<20	1.88	0.005	0.07	0.3	0.05	1.5	0.1	<0.05	4	0.9
L65800N 64600E	0.2	47	0.13	0.106	13	33	0.40	78	0.039	<20	1.35	0.006	0.06	0.1	0.03	2.1	<0.1	<0.05	4	0.5
L65800N 64650E	0.2	41	0.13	0.063	16	50	0.45	85	0.030	<20	1.55	0.006	0.11	0.1	0.04	2.4	0.1	<0.05	4	1.2
L65800N 64700E	0.2	45	0.09	0.051	14	46	0.56	97	0.034	<20	1.60	0.005	0.09	0.1	0.02	2.3	0.1	<0.05	5	1.5
L65800N 64750E	0.2	49	0.53	0.061	9	113	0.75	106	0.020	<20	1.60	0.007	0.09	<0.1	0.06	3.1	0.2	<0.05	4	2.4
L65800N 64800E	0.2	34	0.07	0.077	15	33	0.42	127	0.015	<20	1.70	0.004	0.07	0.1	0.03	1.8	<0.1	<0.05	5	2.0
L65800N 64850E	0.2	35	0.16	0.066	14	48	0.54	97	0.026	<20	1.28	0.005	0.09	<0.1	0.02	1.8	0.1	<0.05	4	1.3
L65800N 64900E	0.2	37	0.38	0.043	23	39	0.55	116	0.032	<20	1.59	0.007	0.12	0.1	0.06	3.2	0.1	<0.05	4	2.2
L65800N 64950E	0.2	40	0.32	0.051	14	22	0.19	96	0.019	<20	1.23	0.007	0.06	0.1	0.08	0.7	<0.1	<0.05	5	2.8
L65800N 65000E	0.2	33	0.10	0.183	11	27	0.23	130	0.014	<20	2.74	0.006	0.06	0.1	0.12	2.0	<0.1	<0.05	4	2.2
L65800N 65050E	0.2	35	0.13	0.052	12	18	0.24	75	0.015	<20	1.05	0.004	0.05	<0.1	0.04	1.0	<0.1	<0.05	5	1.4
L65800N 65100E	0.2	30	0.22	0.069	22	27	0.38	157	0.020	<20	1.36	0.006	0.08	0.1	0.03	1.5	<0.1	<0.05	5	0.9
L65800N 65150E	0.2	27	0.22	0.041	20	25	0.44	118	0.034	<20	1.16	0.008	0.10	0.2	0.02	2.1	<0.1	<0.05	3	<0.5
L65800N 65200E	0.2	31	0.25	0.061	18	24	0.38	93	0.043	<20	1.03	0.010	0.10	0.1	<0.01	1.8	<0.1	<0.05	3	0.9
L65800N 65250E	0.2	33	0.17	0.052	20	24	0.38	79	0.046	<20	1.22	0.008	0.08	0.2	0.01	1.6	<0.1	<0.05	4	<0.5
L65800N 65300E	0.2	32	0.11	0.031	18	22	0.20	109	0.017	<20	1.27	0.007	0.07	<0.1	0.02	1.3	<0.1	<0.05	4	0.6
L65800N 65350E	0.2	30	0.03	0.076	12	10	0.09	36	0.016	<20	0.70	0.007	0.02	0.1	0.03	0.7	<0.1	<0.05	4	1.8
L65800N 65400E	0.2	33	0.24	0.053	18	24	0.26	81	0.039	<20	1.11	0.006	0.08	0.2	0.03	1.3	<0.1	<0.05	4	0.9
L65800N 65450E	0.2	32	0.22	0.070	17	27	0.34	100	0.040	<20	1.36	0.009	0.10	0.2	0.02	1.8	<0.1	<0.05	5	0.5
L65800N 65500E	0.3	32	0.38	0.055	17	25	0.26	120	0.035	<20	1.49	0.015	0.10	0.2	0.03	1.9	0.1	<0.05	5	0.9
L65800N 65550E	0.1	23	0.02	0.033	8	7	0.05	19	0.038	<20	0.26	0.007	0.03	0.1	0.01	0.5	<0.1	<0.05	4	<0.5
L65800N 65600E	0.2	35	0.14	0.077	17	24	0.35	115	0.023	<20	1.57	0.007	0.07	0.1	0.04	1.4	<0.1	<0.05	6	1.3
L65800N 65650E	0.3	34	0.43	0.065	19	26	0.31	119	0.028	<20	1.39	0.008	0.11	0.2	0.04	2.2	0.1	<0.05	4	1.4
L65800N 65700E	0.3	45	0.09	0.061	12	39	0.33	68	0.031	<20	1.57	0.005	0.04	0.2	0.04	1.7	<0.1	<0.05	6	2.3
L65800N 65750E	0.3	31	0.10	0.129	14	20	0.23	87	0.022	<20	1.23	0.005	0.06	0.2	0.04	1.4	<0.1	<0.05	4	1.8
L65800N 65800E	0.2	31	0.09	0.157	16	27	0.30	99	0.036	<20	1.52	0.006	0.09	0.3	0.04	1.6	0.1	<0.05	4	1.8

2008 Art-DL Reconnaissance Silt Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm
DL08BKS-1	664565	5768490	2.8	48.9	0.00	8.1	123	0.4	211.3	30.4	1504	3.78	15.7	1.1	<0.5	<0.001	1	71	3.2	3.8
DL08BKS-2	665049	5767535	5.9	24.6	0.00	10.1	92	0.6	58.5	19.2	1588	3.36	11	1.2	7.6	0.008	2.8	49	2.4	0.5
DL08BKS-3	665170	5767458	4.3	26.2	0.00	10.2	88	0.4	60.4	17	704	3.4	9.1	1.1	1.9	0.002	3.5	51	1.1	0.6
DL08BKS-4	665319	5767281	6.8	34.3	0.00	16.3	148	1	87.8	16.4	648	3.65	11.1	2.8	4.5	0.005	2	76	1.8	0.6
DL08 BKS-05	665757	5765329	12.5	26	0.00	16.4	290	1.4	79.9	22.1	6867	5	21.9	8.9	3.6	0.004	1.6	88	15.2	0.9
DL08 BKS-06	666425	5765111	4.2	34.1	0.00	16.6	199	1	73.8	16.2	843	3.48	16.5	2.8	21.8	0.022	1.6	70	4.3	0.8
DL08 BKS-07	665189	5766914	8.2	33.5	0.00	16.3	161	1.4	78.1	20.1	2188	4.59	15	4.5	5.6	0.006	1.2	97	4.8	0.7
DL08 BKS-08	665335	5766899	9.2	32	0.00	12.7	110	1	60.1	14.7	862	3.35	21.2	1.1	882.7	0.883	2.7	67	1	0.8
DL08 BKS-09	661532	5769670	1.4	84.1	0.01	4	106	0.2	85.2	28.7	754	4.14	15.6	0.6	9.6	0.010	0.7	41	1	1.7
DL08 BKS-10	662225	5769333	0.5	108.3	0.01	3.4	56	0.2	84.6	23.3	583	3.13	9.6	0.3	1.3	0.001	0.2	53	0.5	0.7
DL08 BKS-11	662420	5769154	1.2	104.6	0.01	3.1	63	0.1	135.8	34.1	727	4.08	7.5	0.2	2	0.002	0.3	35	0.3	0.7
DL08 BKS-12	662475	5769006	0.3	88.8	0.01	1.7	59	<0.1	125.2	35.3	676	4.01	3.3	0.2	0.8	0.001	0.2	36	0.3	0.2
DL08 BKS-13	662163	5768812	1.2	67.5	0.01	5.1	92	0.2	60.6	23	677	3.45	15.1	0.8	3.8	0.004	0.5	43	0.9	1.5
DL08BKS-14	664468	5765820	3.6	43.0	0.00	8.3	172	0.4	117.8	22.3	5622	3.77	93.7	0.7	1.5	0.002	0.6	98	3.2	2.2
DL08BKS-15	664073	5765746	1.5	68.6	0.01	8.0	90	0.3	160.0	30.2	732	4.00	18.4	0.7	0.9	0.001	1.0	61	0.8	1.1
DL08 TRS-01	666329	5766555	2.4	19.6	0.00	6.8	93	0.2	71.4	17.2	1310	3.05	9.2	0.9	2.6	0.003	2.1	45	1	0.5
DL08 TRS-02	665459	5767147	14.1	53.2	0.01	20.3	280	0.6	95.7	19.9	1168	4.36	25.6	1.4	7.4	0.007	4.2	71	2.9	1.7
DL08 TRS-03	665717	5765023	6.1	64	0.01	11.3	229	0.4	148.7	31.6	1507	4.8	53.7	1.2	8	0.008	1.9	59	2.7	3.5
DL08 TRS-04	665156	5765251	6.1	63	0.01	9.4	185	0.3	187.1	36	1450	4.87	53.9	0.8	3.9	0.004	1.6	85	2.4	3.4
DL08 TRS-05	664386	5765589	3.3	42.3	0.00	7.5	74	0.2	255.7	45.2	2393	4.87	68.2	0.4	1.7	0.002	0.9	273	0.9	1.4
DL08 TRS-06	664369	5765620	4.4	59.7	0.01	8	129	0.1	212.9	39.9	1888	5.11	69.5	0.7	4.4	0.004	0.8	106	1	3.8
DL08 TRS-07	664471	5764884	2.9	36.4	0.00	9.2	122	0.3	115.4	22.4	1227	4.29	77.7	0.9	1.8	0.002	1	69	1.2	1.2
DL08 TRS-08	666407	5764945	5	48.8	0.00	11.8	164	0.3	117	25	1092	3.98	40.3	0.8	4.9	0.005	1.7	48	1.4	2.8
DL08 TRS-09	666524	5764939	9.1	49.4	0.00	12.5	170	0.3	144.4	23.2	1026	3.72	42.6	0.8	3.1	0.003	3.3	41	1.4	3
DL08 TRS-10	663080	5767292	1.8	148.9	0.01	5.9	80	0.3	65	21.9	717	3.87	22.5	1	3.5	0.004	0.2	55	1.6	2
DL08 TRS-11	663130	5767494	1.3	132.7	0.01	5.6	112	0.2	123.2	30.7	1131	4.45	44.5	0.5	11	0.011	0.3	53	0.9	2.2
DL08 TRS-12	662956	5767918	1.5	99.8	0.01	6	98	0.3	98.6	24.9	873	3.65	32.3	0.6	4.5	0.005	0.3	56	0.9	2.7
DL08 TRS-13	662895	5768165	1.2	112.4	0.01	4.9	107	0.2	79.2	26.5	791	4.31	16.1	0.4	4	0.004	0.4	51	1.2	1.7
DL08 TRS-14	663705	5769314	2.7	36.4	0.00	8.2	136	0.6	69.1	13.5	1721	2.63	14.4	1.7	3.6	0.004	0.5	71	3.1	1.5
DL08 TRS-15	662897	5769247	1.5	80.6	0.01	4.4	73	0.2	109.1	26.7	839	3.59	20.7	0.4	3.1	0.003	0.5	43	0.5	1.4
DL08 TRS-16	663380	5768287	3.4	77.1	0.01	7.9	110	0.4	96.5	23.8	2073	3.81	46.5	0.6	3.2	0.003	0.5	62	1.3	3.2
DL08-BKS-16	664256	5767132	6.3	31.3	0.00	12.6	173	0.8	68.1	19.7	2077	3.89	27.3	1.4	2.4	0.002	1.1	48	3.2	1.5
DL08-BKS-17	663734	5767099	2.0	108.7	0.01	7.1	110	0.3	103.8	23.8	1443	3.91	52.5	0.6	3.0	0.003	0.5	55	0.8	1.7

2008 Art-DL Reconnaissance Silt Samples

Sample	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
DL08BKS-1	0.1	86	0.82	0.092	7	460	2.62	112	0.053	<20	2.13	0.009	0.12	1.3	0.04	3.8	<0.1	<0.05	5	2.6
DL08BKS-2	0.2	45	0.45	0.077	15	40	0.8	97	0.067	<20	1.24	0.018	0.12	3.6	0.02	2.5	0.1	<0.05	4	1.4
DL08BKS-3	0.2	48	0.52	0.092	15	48	0.85	102	0.089	<20	1.3	0.026	0.15	0.4	0.01	2.4	0.2	<0.05	4	1.7
DL08BKS-4	0.3	41	0.71	0.089	13	56	0.71	119	0.056	<20	1.66	0.016	0.13	0.3	0.04	3	<0.1	0.07	4	2.8
DL08 BKS-05	0.3	36	0.96	0.099	16	36	0.37	243	0.035	<20	1.73	0.011	0.15	0.3	0.07	2.7	0.3	0.07	4	3
DL08 BKS-06	0.4	42	0.72	0.056	15	44	0.53	153	0.074	<20	2.24	0.015	0.15	0.2	0.04	3.1	0.2	0.07	5	2
DL08 BKS-07	0.3	39	0.88	0.094	13	42	0.49	163	0.045	<20	1.67	0.013	0.14	0.3	0.08	3.1	0.2	0.07	4	2.8
DL08 BKS-08	0.3	30	0.62	0.074	14	23	0.47	77	0.04	<20	0.84	0.014	0.08	1.3	0.02	2.5	0.1	<0.05	3	1.9
DL08 BKS-09	<0.1	96	0.89	0.102	6	122	1.85	52	0.173	<20	2.54	0.009	0.21	0.3	0.03	3.5	0.1	<0.05	7	0.8
DL08 BKS-10	<0.1	76	1.21	0.066	4	148	1.96	26	0.171	<20	2.39	0.006	0.1	0.2	0.05	2.7	0.1	0.07	6	2
DL08 BKS-11	<0.1	88	0.89	0.086	3	196	2.89	28	0.197	<20	2.78	0.008	0.22	0.2	0.02	2.6	0.2	0.05	8	0.6
DL08 BKS-12	<0.1	69	0.89	0.08	2	135	2.74	17	0.234	<20	2.8	0.007	0.17	0.2	<0.01	1.7	<0.1	<0.05	6	<0.5
DL08 BKS-13	<0.1	78	0.95	0.069	6	92	1.26	39	0.122	<20	2.03	0.009	0.13	0.3	0.03	3	0.1	0.07	5	1.9
DL08BKS-14	0.1	56	1.02	0.096	7	193	1.19	290	0.046	<20	1.56	0.007	0.12	<0.1	0.06	2.3	0.2	0.09	4	2.2
DL08BKS-15	0.1	80	0.82	0.113	7	282	2.11	199	0.088	<20	2.31	0.010	0.30	0.1	0.03	3.6	0.2	<0.05	6	1.3
DL08 TRS-01	0.1	44	0.44	0.081	12	111	1.05	100	0.068	<20	1.25	0.015	0.08	0.2	0.02	2	0.1	<0.05	3	0.8
DL08 TRS-02	0.5	38	0.64	0.131	16	48	0.69	98	0.041	<20	1.09	0.018	0.08	0.2	0.02	3.3	0.1	0.06	3	4.4
DL08 TRS-03	0.1	83	0.77	0.132	10	244	1.93	155	0.074	<20	2.05	0.017	0.18	0.3	0.03	4.9	0.2	0.09	5	4.1
DL08 TRS-04	<0.1	86	1.19	0.121	8	346	2.35	163	0.076	<20	2.09	0.014	0.2	0.3	0.03	5.2	0.2	0.12	5	4.5
DL08 TRS-05	<0.1	99	1.77	0.095	5	642	3.48	166	0.075	<20	2.26	0.01	0.19	0.2	0.03	8.6	0.2	<0.05	5	0.7
DL08 TRS-06	<0.1	122	1.24	0.126	6	395	3.03	182	0.11	<20	2.71	0.022	0.31	0.5	0.03	6.2	0.3	0.08	7	2
DL08 TRS-07	<0.1	67	0.88	0.104	10	190	1.46	178	0.078	<20	2.05	0.013	0.17	0.3	0.03	3.4	0.2	0.11	5	1.4
DL08 TRS-08	0.2	67	0.66	0.104	9	201	1.62	131	0.073	<20	1.61	0.016	0.16	0.5	0.02	3.7	0.2	0.09	4	2.5
DL08 TRS-09	0.2	58	0.52	0.098	11	244	1.32	100	0.054	<20	1.33	0.014	0.13	0.3	0.02	3.6	0.1	<0.05	4	2.6
DL08 TRS-10	<0.1	103	1.34	0.075	5	102	1.44	86	0.104	<20	2.45	0.011	0.2	0.3	0.07	4.3	0.2	0.08	6	2.6
DL08 TRS-11	<0.1	108	1.14	0.078	5	186	2.25	74	0.169	<20	3.02	0.011	0.27	0.2	0.05	5.5	0.2	0.06	8	1.7
DL08 TRS-12	<0.1	87	1.23	0.095	6	161	1.81	65	0.143	<20	2.53	0.012	0.2	0.3	0.09	3.8	0.2	0.09	7	2.8
DL08 TRS-13	<0.1	101	0.81	0.071	5	102	1.75	61	0.199	<20	2.63	0.012	0.3	0.5	0.04	3.3	0.2	<0.05	7	1.4
DL08 TRS-14	<0.1	31	0.86	0.13	9	96	0.66	108	0.017	<20	1.16	0.008	0.07	<0.1	0.08	2.1	0.1	0.08	3	3.7
DL08 TRS-15	<0.1	80	0.83	0.091	5	170	2.11	64	0.166	<20	2.33	0.01	0.2	0.2	0.02	3.1	0.1	<0.05	6	0.9
DL08 TRS-16	<0.1	80	1.04	0.101	7	143	1.49	128	0.073	<20	1.99	0.01	0.17	0.3	0.07	4.1	0.2	0.09	5	2.5
DL08-BKS-16	0.2	40	0.57	0.085	12	54	0.67	135	0.032	<20	1.55	0.007	0.10	<0.1	0.04	2.1	0.2	<0.05	4	1.4
DL08-BKS-17	0.1	94	0.96	0.100	6	111	1.42	117	0.084	<20	2.08	0.010	0.18	3.3	0.08	3.2	0.2	0.05	6	1.2

2008 Art-DL Reconnaissance Rock Samples

Sample	Easting	Northing	Mo_ppm	Cu_ppm	Cu_%	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_%	As_ppm	U_ppm	Au_ppb	Au_g/t	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm
151571	665379	5767250	1.3	28.6	0.00	33.5	69	0.3	23.1	12.1	1021	3.11	3.8	0.4	0.6	0.001	4.1	508	1.3	0.2	0.6
151572	665738	5765019	0.7	14.7	0.00	18.7	49	0.2	16.9	6.9	470	2.20	7.3	0.3	<0.5	<0.001	3.1	12	0.2	0.3	0.2
151573	665148	5765616	3.7	50.3	0.01	6.3	103	0.5	24.0	6.9	326	2.15	41.5	0.4	2.2	0.002	3.1	6	0.2	3.8	0.1
151575	664824	5765000	1.7	114.3	0.01	7.2	86	<0.1	37.3	22.9	652	4.16	1.0	0.3	2.8	0.003	1.0	71	0.2	0.2	<0.1
151576	664708	5765006	0.4	109.3	0.01	4.6	64	<0.1	51.7	25.1	605	4.57	3.0	0.2	<0.5	<0.001	0.9	96	0.1	0.2	<0.1
151577	663010	5769003	0.5	55.8	0.01	7.4	75	<0.1	4.5	21.0	1204	4.57	7.6	0.3	3.7	0.004	1.4	218	<0.1	3.5	<0.1
DL08TRR-1	665225	5765277	3.4	77.2	0.01	7.5	188	0.7	35.5	18.2	476	3.48	1.5	1.4	0.6	0.001	2.4	10	3.1	1.7	0.1
493374	662796	5765316	48.5	9.7	0.00	2.6	10	<0.1	1.2	2.7	2300	0.88	12.5	0.3	<0.5	<0.001	0.2	478	<0.1	0.3	<0.1
493375	662421	5765151	0.8	30.9	0.00	1.2	40	<0.1	8.9	11.8	539	3.49	3.8	0.2	1.4	0.001	0.7	68	0.2	1.1	<0.1
493376	661638	5765597	0.1	174.8	0.02	2.3	34	0.1	45.1	23.0	324	4.04	7.6	0.4	28.5	0.029	0.8	29	0.1	1.2	0.2
493377	665111	5765547	4.4	13.5	0.00	5.6	72	<0.1	6.6	2.7	607	2.02	1.2	0.2	0.9	0.001	1.0	21	0.4	1.4	0.1
493378	665242	5765289	1.0	7.9	0.00	6.1	19	<0.1	6.3	1.9	79	0.69	2.7	0.2	0.8	0.001	1.6	7	0.2	0.5	<0.1
493379	666418	5764964	0.7	28.8	0.00	47.7	42	1.6	9.7	5.5	665	3.02	17.7	0.3	0.5	0.001	3.5	125	0.2	3.6	0.7
493380	666421	5764964	1.2	32.4	0.00	35.9	110	1.7	143.2	30.9	1054	5.16	261.8	1.7	1.9	0.002	4.6	603	0.3	28.7	0.3
493381	666412	5764964	1.0	36.3	0.00	13.5	47	0.5	86.7	24.3	789	3.91	68.3	0.7	1.4	0.001	4.4	301	0.2	5.9	0.2
493382	666402	5764964	1.0	31.2	0.00	36.4	72	0.6	247.5	35.6	942	4.77	61.5	1.1	1.4	0.001	5.7	649	0.2	8.2	0.2
493383	666395	5764964	0.5	25.9	0.00	10.6	46	0.4	132.7	18.7	483	2.91	19.5	0.9	1.0	0.001	3.9	257	0.2	2.0	<0.1
493384	666395	5764980	46.1	34.0	0.00	8.1	60	0.2	77.5	19.1	458	3.44	16.2	0.6	<0.5	<0.001	3.6	493	0.2	0.7	0.2
493385	666410	5764964	0.9	3.0	0.00	5.1	13	0.1	4.3	1.0	425	1.16	5.4	<0.1	<0.5	<0.001	0.2	53	0.1	0.6	<0.1
493386	666335	5764956	0.6	68.1	0.01	24.3	46	0.5	19.8	12.1	1216	3.26	21.4	0.3	<0.5	<0.001	1.7	61	0.6	0.3	0.2
853901	662130	5765011	0.2	119.5	0.01	1.1	48	<0.1	20.4	16.6	540	3.38	3.8	0.3	2.9	0.003	1.0	63	0.2	1.3	<0.1
853902	662158	5764830	1.4	84.9	0.01	4.2	31	0.2	16.2	18.9	294	3.22	151.3	0.4	19.8	0.020	1.4	67	0.1	4.2	0.1
853903	662126	5764797	0.2	89.1	0.01	1.5	48	<0.1	20.9	20.1	415	3.58	26.4	0.3	23.5	0.024	0.9	48	0.1	1.1	<0.1
151596	662139	5765021	0.3	60.9	0.01	1.5	48	<0.1	12.2	12.9	291	2.66	5.5	0.4	10.5	0.011	1.3	35	0.2	1.2	<0.1
151597	662133	5764794	0.5	68.0	0.01	1.7	56	<0.1	17.2	19.5	494	4.16	4.3	0.2	4.5	0.005	1.0	23	0.1	1.2	<0.1
151598	663004	5764991	0.3	41.8	0.00	1.6	43	<0.1	30.1	13.5	546	3.00	4.0	0.3	2.6	0.003	0.6	82	0.2	0.6	<0.1
828505	665024	5722002	0.6	45.4	0.05	1.7	48	0.1	9.7	10.4	346	2.64	2.1	0.2	2.1	0.002	1.0	25	<0.1	0.7	<0.1
828506	666291	5765893	2.9	6.1	0.00	5.4	101	0.4	34.6	2.3	267	0.85	28.8	1.3	1.7	0.002	1.5	1642	3.1	0.9	<0.1
828507	663818	5764746	2.5	139.1	0.01	7.2	52	<0.1	75.6	34.9	409	6.06	0.7	0.3	2.1	0.002	0.6	42	0.2	1.1	0.2
828508	664034	5764415	0.9	74.1	0.01	1.7	26	<0.1	908.4	70.1	597	2.34	13.8	0.5	1.7	0.002	0.3	108	0.2	<0.1	<0.1
828509	664416	5764092	0.3	54.5	0.01	4.0	65	<0.1	105.8	30.2	1374	5.96	22.3	0.2	2.2	0.002	0.7	646	0.2	4.2	<0.1
828510	665634	5765668	0.6	51.0	0.01	9.3	183	0.1	37.9	14.7	281	7.42	1.4	0.5	1.2	0.001	7.6	13	0.3	0.3	0.2
828511	665209	5765688	5.0	76.5	0.01	11.8	170	0.3	51.9	16.2	867	4.24	18.2	2.1	<0.5	0.001	5.7	23	1.0	0.8	0.1
828512	664402	5765948	0.5	130.9	0.01	4.0	111	<0.1	6.8	31.0	1304	6.78	5.3	0.3	0.9	0.001	1.6	94	0.2	1.2	<0.1
828513	666228	5765349	0.6	24.2	0.00	10.6	72	<0.1	22.8	14.6	578	3.50	6.6	0.7	<0.5	0.001	9.2	17	0.2	0.2	0.2
828514	664715	5764134	0.9	1.8	0.00	16.7	75	<0.1	2.2	0.8	273	0.68	91.2	2.2	<0.5	0.000	10.3	5	0.5	0.6	0.1
828515	663828	5764356	0.5	114.7	0.01	2.7	27	<0.1	56.8	22.4	368	2.63	0.7	0.1	0.5	0.001	0.4	47	<0.1	0.3	<0.1
828516	663629	5763638	18.3	31.7	0.00	9.4	135	0.1	17.2	3.4	428	3.91	18.7	1.5	<0.5	0.000	2.0	26	0.3	3.5	0.2

2008 Art-DL Reconnaissance Rock Samples

Sample	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
151571	19	6.27	0.046	6	17	0.71	32	0.005	<20	1.59	0.022	0.09	<0.1	<0.01	2.7	<0.1	0.05	4	1.1
151572	30	0.09	0.027	10	12	0.23	35	0.001	<20	0.45	0.032	0.04	<0.1	<0.01	3.2	<0.1	0.08	2	1.5
151573	11	0.03	0.037	9	11	0.18	78	<0.001	<20	0.40	0.012	0.15	<0.1	0.02	1.5	<0.1	<0.05	<1	11.2
151575	114	0.71	0.181	3	52	1.41	24	0.095	<20	1.89	0.015	0.39	0.1	<0.01	2.0	0.2	0.19	5	<0.5
151576	118	0.89	0.178	2	94	1.68	74	0.121	<20	2.08	0.026	0.47	0.1	<0.01	2.1	0.1	0.08	7	<0.5
151577	86	3.88	0.221	7	4	1.94	30	0.034	<20	1.80	0.023	0.32	<0.1	0.01	2.9	<0.1	1.51	5	<0.5
DL08TRR-1	39	0.11	0.087	6	14	1.52	131	0.002	<20	1.76	0.018	0.18	<0.1	0.02	3.3	0.1	1.15	4	12.9
493374	16	30.42	0.036	1	3	1.19	31	0.009	<20	0.53	0.002	0.01	0.2	<0.01	1.7	<0.1	0.41	<1	<0.5
493375	116	2.20	0.185	3	25	0.70	69	0.110	<20	0.76	0.061	0.33	0.3	<0.01	3.3	<0.1	<0.05	3	<0.5
493376	134	1.39	0.148	2	121	1.62	452	0.156	<20	1.27	0.098	0.97	0.1	<0.01	4.0	0.2	<0.05	4	<0.5
493377	27	0.26	0.053	6	9	0.32	133	0.003	<20	0.55	0.035	0.09	<0.1	0.02	2.0	<0.1	<0.05	2	2.2
493378	5	0.06	0.034	6	8	0.13	20	0.002	<20	0.22	0.011	0.04	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5
493379	11	2.30	0.051	9	10	1.03	24	0.001	<20	0.62	0.025	0.07	<0.1	<0.01	2.8	<0.1	0.24	2	0.8
493380	93	5.65	0.245	21	123	3.96	84	0.005	<20	1.68	0.033	0.08	<0.1	<0.01	11.9	<0.1	1.14	5	2.8
493381	72	3.89	0.168	25	90	3.16	506	0.032	<20	1.37	0.039	0.19	<0.1	<0.01	7.0	<0.1	0.38	5	0.7
493382	79	5.56	0.239	34	157	4.91	264	0.004	<20	1.09	0.037	0.10	<0.1	<0.01	10.4	0.1	0.61	4	<0.5
493383	37	2.51	0.133	24	124	2.08	278	0.012	<20	0.71	0.027	0.09	<0.1	<0.01	4.8	<0.1	0.48	2	<0.5
493384	22	1.09	0.091	18	72	1.35	287	0.008	<20	0.53	0.037	0.10	<0.1	<0.01	3.4	<0.1	0.10	2	<0.5
493385	<2	1.48	0.021	<1	6	0.48	6	<0.001	<20	0.03	0.007	<0.01	<0.1	<0.01	0.8	<0.1	0.05	<1	<0.5
493386	2	3.15	0.036	4	2	1.03	15	<0.001	<20	0.18	0.035	0.06	<0.1	<0.01	1.9	<0.1	0.85	<1	1.4
853901	130	1.53	0.168	5	23	1.31	108	0.248	<20	1.80	0.086	1.37	0.1	<0.01	2.5	0.1	<0.05	7	<0.5
853902	145	1.16	0.226	6	14	0.72	83	0.123	<20	1.32	0.149	0.40	8.3	0.01	3.6	<0.1	1.20	6	1.0
853903	132	1.13	0.161	4	65	1.42	247	0.253	<20	1.91	0.068	1.45	0.2	0.02	1.7	0.3	<0.05	7	<0.5
151596	144	0.86	0.197	5	13	1.09	149	0.183	<20	1.20	0.077	0.74	0.4	<0.01	2.1	0.2	0.14	8	<0.5
151597	176	0.73	0.160	4	23	1.57	280	0.293	<20	1.93	0.057	1.68	0.2	<0.01	3.0	0.2	0.12	8	<0.5
151598	101	1.99	0.150	3	73	0.89	45	0.153	<20	0.94	0.048	0.58	0.2	<0.01	2.1	0.1	<0.05	4	<0.5
828505	79	1.01	0.078	4	35	0.74	298	0.172	<20	1.88	0.136	0.56	0.3	<0.01	3.9	<0.1	0.14	7	1.5
828506	7	18.49	0.096	4	13	0.17	98	0.002	<20	0.14	0.004	0.06	<0.1	<0.01	2.2	<0.1	0.06	<1	7.6
828507	118	0.53	0.169	3	148	2.03	292	0.310	<20	2.25	0.091	1.59	0.3	<0.01	2.6	0.3	1.17	10	5.1
828508	55	9.62	0.099	2	223	1.30	192	0.147	46	1.62	0.067	0.82	<0.1	<0.01	1.5	0.1	<0.05	4	<0.5
828509	159	7.41	0.162	4	244	3.73	184	0.065	<20	2.23	0.042	0.58	<0.1	<0.01	16.4	<0.1	<0.05	7	0.8
828510	34	0.13	0.055	17	35	1.42	40	0.005	<20	3.21	0.014	0.07	<0.1	<0.01	3.0	<0.1	<0.05	10	1.7
828511	30	0.20	0.091	16	33	1.24	96	0.003	<20	1.64	0.016	0.17	<0.1	0.05	1.8	0.1	<0.05	4	5.1
828512	199	1.25	0.266	6	5	3.11	119	0.089	<20	3.51	0.022	0.65	0.1	<0.01	7.2	<0.1	0.13	12	<0.5
828513	8	0.10	0.064	27	8	0.16	39	0.004	<20	0.59	0.062	0.12	<0.1	<0.01	3.2	<0.1	0.05	1	0.6
828514	4	0.05	0.025	11	4	0.06	38	0.002	<20	0.30	0.058	0.10	<0.1	<0.01	1.0	<0.1	<0.05	2	<0.5
828515	63	1.11	0.139	1	76	1.48	341	0.157	<20	1.35	0.103	0.64	0.2	<0.01	4.5	<0.1	<0.05	4	<0.5
828516	227	0.25	0.097	5	108	1.40	43	0.138	<20	1.53	0.071	0.65	0.2	0.05	10.8	1.6	0.07	8	2.9

APPENDIX I
GEOCHEMICAL SURVEY SOIL, SILT AND ROCK
ACME LAB CERTIFICATES

ALLNORTH CONSULTANTS LIMITED

Art-DL 2008 Assessment Report 081211_Final.doc



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ACME ANALYTICAL LABORATORIES LTD.

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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

October 15, 2008

Report Date:

October 29, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08010237A.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 253

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	SS80	3	Dry at 60C sieve 100g to -80 mesh		
	Dry at 60C	3	Dry at 60C		
	RJSV	3	Save all or part of soil reject fraction		
	RJSV	3	Saving all or part of Soil Reject		
	IDX	3	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	3	Warehouse handling / Disposition of reject		

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

ADDITIONAL COMMENTS

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
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Canada

CC: Bob Lane
D. Ridley
Mark Ralph



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Project:

ART/DL

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237A.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
L67000N 65450E	Soil	3.0	22.5	7.1	83	0.9	42.5	10.6	249	2.47	8.2	0.7	2.1	2.0	25	0.6	0.4	0.2	44	0.30	0.098
L67000N 65500E	Soil	1.8	9.3	5.5	72	0.2	39.2	11.1	174	2.40	5.1	0.5	<0.5	1.2	15	0.6	0.2	0.1	42	0.20	0.093
L67000N 65550E	Soil	1.9	22.7	8.0	84	0.3	44.5	13.6	333	2.76	5.3	1.4	1.9	2.6	39	0.6	0.2	0.2	56	0.47	0.082



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Project:

ART/DL

Report Date:

October 29, 2008

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CERTIFICATE OF ANALYSIS

VAN08010237A.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
L67000N 65450E	Soil	13	34	0.54	93	0.078	<20	1.47	0.014	0.18	4.7	0.02	1.8	0.1	<0.05	4	0.7
L67000N 65500E	Soil	9	24	0.60	63	0.087	<20	1.30	0.011	0.07	0.2	0.01	1.3	0.1	<0.05	4	<0.5
L67000N 65550E	Soil	16	39	0.81	124	0.114	<20	1.67	0.036	0.21	0.2	0.02	2.7	0.2	<0.05	5	<0.5



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Report Date:

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Part 1

QUALITY CONTROL REPORT

VAN08010237A.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																				
L67000N 65450E	Soil	3.0	22.5	7.1	83	0.9	42.5	10.6	249	2.47	8.2	0.7	2.1	2.0	25	0.6	0.4	0.2	44	0.30 0.098
REP L67000N 65450E	QC	2.8	22.8	7.2	84	0.9	39.9	10.4	253	2.42	8.4	0.7	2.8	2.2	26	0.7	0.3	0.2	44	0.30 0.097
Reference Materials																				
STD DS7	Standard	18.7	97.7	66.1	370	0.9	52.4	8.3	585	2.21	44.7	4.9	48.7	3.6	64	5.7	3.7	4.1	82	0.88 0.071
STD DS7	Standard	20.9	107.1	64.9	378	0.8	54.9	8.7	581	2.19	46.9	4.4	47.1	4.1	64	5.9	3.9	4.1	84	0.88 0.070
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93 0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01 <0.001



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Project:

ART/DL

Report Date:

October 29, 2008

Page:

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Part 2

QUALITY CONTROL REPORT

VAN08010237A.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																	
L67000N 65450E	Soil	13	34	0.54	93	0.078	<20	1.47	0.014	0.18	4.7	0.02	1.8	0.1	<0.05	4	0.7
REP L67000N 65450E	QC	14	34	0.53	93	0.076	<20	1.44	0.013	0.18	0.3	0.02	1.8	0.2	<0.05	4	<0.5
Reference Materials																	
STD DS7	Standard	11	164	0.97	354	0.101	40	0.91	0.076	0.42	3.4	0.19	1.9	4.1	0.19	4	2.9
STD DS7	Standard	11	168	0.97	358	0.103	35	0.93	0.078	0.41	3.5	0.18	1.9	4.1	0.19	4	3.2
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

October 15, 2008

Report Date:

October 28, 2008

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CERTIFICATE OF ANALYSIS

VAN08010237.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 253

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	SS80	250	Dry at 60C sieve 100g to -80 mesh		
	Dry at 60C	250	Dry at 60C		
	RJSV	250	Save all or part of soil reject fraction		
	RJSV	250	Saving all or part of Soil Reject		
	1DX	250	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	250	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane
D. Ridley
Mark Ralph



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Project:

ART/DL

Report Date:

October 28, 2008

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L65000N 663200E	Soil	0.8	65.3	4.1	71	<0.1	19.9	14.5	423	5.01	8.3	0.3	6.2	0.4	19	0.3	0.5	0.1	165	0.34	0.030
L65000N 663150E	Soil	0.6	42.9	4.9	90	0.2	25.3	16.3	597	4.09	3.2	0.3	2.7	0.3	26	0.4	0.3	<0.1	136	0.25	0.056
L65000N 663100E	Soil	1.0	69.4	7.2	74	0.2	96.6	18.7	763	3.30	26.4	0.5	2.3	1.5	25	0.5	2.0	0.2	75	0.46	0.036
L65000N 663050E	Soil	1.5	138.6	7.0	95	0.2	24.8	23.4	834	6.73	22.2	0.5	12.5	1.2	52	0.2	2.3	0.1	315	1.47	0.260
L66200N 64500E	Soil	4.9	28.8	10.7	143	1.0	40.2	10.1	735	3.01	15.2	1.2	5.4	0.5	37	1.6	1.1	0.3	33	0.43	0.096
L66200N 64550E	Soil	5.5	36.9	16.4	167	1.1	51.5	11.9	376	3.33	15.5	2.0	4.7	1.3	50	2.6	1.0	0.3	38	0.38	0.050
L66200N 64600E	Soil	3.1	35.8	11.6	100	1.8	36.7	7.2	319	1.89	7.9	1.6	4.4	0.9	15	1.3	0.7	0.3	28	0.15	0.044
L66200N 64650E	Soil	4.0	21.9	8.6	66	1.5	17.2	4.2	98	1.62	40.5	0.5	2.5	1.0	11	1.8	2.0	0.2	29	0.07	0.022
L66200N 64700E	Soil	3.8	31.3	12.9	183	3.5	35.9	7.6	432	2.56	16.9	0.6	4.5	3.3	5	0.7	1.3	0.3	32	0.04	0.087
L66200N 64750E	Soil	23.4	36.5	33.9	139	1.5	21.4	4.6	154	3.85	27.1	1.3	5.6	3.7	12	0.5	1.5	0.4	53	0.03	0.114
L66200N 64800E	Soil	4.6	31.2	10.5	110	1.5	25.8	11.1	337	2.76	9.6	0.7	2.3	1.6	9	0.8	0.5	0.2	33	0.07	0.109
L66200N 64850E	Soil	3.0	21.6	16.1	159	0.6	36.5	12.6	680	2.84	11.1	0.7	3.9	1.9	30	2.1	0.7	0.3	30	0.32	0.141
L66200N 64900E	Soil	3.3	25.9	11.0	122	0.8	40.7	10.3	347	2.84	10.3	1.0	2.7	2.7	30	1.3	0.7	0.2	31	0.23	0.045
L66200N 64950E	Soil	2.7	21.2	13.6	90	0.6	27.9	10.0	345	2.29	8.4	0.8	2.3	1.1	28	1.4	0.5	0.3	29	0.24	0.034
L66200N 65000E	Soil	3.6	27.0	13.5	118	0.3	39.4	12.9	329	3.45	13.7	0.9	6.0	3.9	21	0.8	0.7	0.3	34	0.20	0.102
L66200N 65050E	Soil	3.5	34.3	15.1	157	0.9	51.6	12.9	417	3.01	11.9	2.1	6.0	2.4	28	1.8	0.6	0.3	32	0.25	0.088
L66200N 65100E	Soil	4.8	47.0	11.5	86	1.0	41.4	8.7	171	2.61	12.9	19.7	5.9	2.3	58	3.7	0.4	0.3	28	0.28	0.024
L66200N 65150E	Soil	9.0	72.8	14.3	199	3.2	77.4	16.1	1889	3.77	17.1	6.0	7.3	1.6	61	3.1	0.9	0.5	36	0.48	0.068
L66200N 65200E	Soil	5.4	18.7	12.0	116	0.5	28.8	6.7	150	3.09	13.3	0.8	5.0	2.3	9	0.9	0.6	0.3	35	0.08	0.060
L66200N 65250E	Soil	5.6	31.3	15.1	99	0.7	33.4	10.4	827	3.04	7.2	2.2	3.1	0.7	53	1.3	0.3	0.4	43	0.41	0.051
L66200N 65300E	Soil	3.8	15.5	10.9	121	0.4	38.4	9.4	151	2.33	7.4	0.8	4.2	2.6	22	0.6	0.3	0.3	36	0.16	0.030
L66200N 65350E	Soil	9.6	15.4	10.5	78	0.2	37.2	6.4	106	2.85	15.1	0.6	4.6	2.5	36	0.4	0.5	0.3	42	0.27	0.036
L66200N 65400E	Soil	5.7	20.9	9.7	129	0.4	38.8	9.7	192	2.71	15.2	0.8	13.4	4.4	12	0.9	0.5	0.3	32	0.11	0.065
L66200N 65450E	Soil	7.5	30.7	12.2	106	1.4	42.8	10.4	194	3.88	30.3	0.8	85.9	4.0	8	0.9	0.7	0.3	31	0.06	0.120
L66200N 65500E	Soil	6.2	26.7	8.8	116	0.8	47.6	11.5	200	3.29	17.5	0.8	19.3	3.3	10	0.7	0.6	0.3	30	0.08	0.099
L66200N 65550E	Soil	9.9	28.7	9.9	210	0.5	71.8	11.3	283	3.08	26.7	0.9	4.7	2.9	18	1.9	0.7	0.3	31	0.24	0.129
L66200N 65600E	Soil	6.2	26.4	10.8	135	0.6	34.4	9.0	229	3.10	12.4	0.6	48.4	2.9	11	1.4	0.6	0.3	29	0.09	0.050
L66200N 65650E	Soil	2.5	40.7	16.2	114	1.2	40.1	8.1	302	2.71	7.8	0.6	3.5	3.9	9	0.7	0.3	0.5	17	0.13	0.086
L66200N 65700E	Soil	14.0	48.2	21.8	224	0.2	56.7	13.4	328	3.86	11.3	1.0	5.0	4.2	12	1.2	0.6	0.5	37	0.11	0.145
L66200N 65750E	Soil	4.4	8.5	10.6	66	0.4	16.2	4.4	238	1.51	5.7	0.3	2.6	1.8	16	0.5	0.3	0.3	23	0.10	0.058

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Project:

ART/DL

Report Date:

October 28, 2008

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Part 2

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L65000N 663200E	Soil	4	38	1.60	161	0.290	<20	2.49	0.011	0.79	0.1	0.04	1.7	0.2	<0.05	12	<0.5
L65000N 663150E	Soil	2	44	1.67	231	0.220	<20	2.14	0.013	0.53	0.2	0.02	1.7	0.1	<0.05	11	<0.5
L65000N 663100E	Soil	9	127	1.40	136	0.119	<20	1.93	0.010	0.24	0.2	0.02	4.3	0.3	<0.05	5	0.7
L65000N 663050E	Soil	6	34	2.79	262	0.200	<20	2.60	0.021	0.36	0.3	0.02	17.3	0.1	1.05	14	1.9
L66200N 64500E	Soil	13	29	0.46	118	0.015	<20	1.68	0.006	0.10	0.1	0.05	1.2	0.1	<0.05	5	2.2
L66200N 64550E	Soil	16	29	0.46	160	0.019	<20	2.03	0.008	0.10	0.1	0.05	2.0	0.1	<0.05	7	1.5
L66200N 64600E	Soil	19	30	0.51	120	0.017	<20	1.51	0.006	0.09	<0.1	0.04	1.4	0.1	<0.05	5	1.0
L66200N 64650E	Soil	9	17	0.15	94	0.014	<20	0.57	0.004	0.03	<0.1	0.03	0.7	<0.1	<0.05	3	1.5
L66200N 64700E	Soil	13	20	0.29	105	0.013	<20	1.53	0.003	0.05	0.1	0.09	1.2	0.1	<0.05	6	1.3
L66200N 64750E	Soil	11	20	0.21	120	0.008	<20	1.54	0.005	0.06	0.1	0.06	1.4	0.2	<0.05	7	2.3
L66200N 64800E	Soil	9	16	0.20	78	0.021	<20	1.19	0.008	0.04	0.1	0.07	1.0	<0.1	<0.05	5	1.7
L66200N 64850E	Soil	15	23	0.36	137	0.019	<20	1.74	0.006	0.08	0.1	0.04	1.5	<0.1	<0.05	5	0.9
L66200N 64900E	Soil	22	27	0.53	82	0.022	<20	1.47	0.006	0.06	0.6	0.02	1.8	<0.1	<0.05	5	1.0
L66200N 64950E	Soil	15	20	0.28	69	0.018	<20	1.15	0.007	0.07	0.1	0.03	1.1	<0.1	<0.05	5	0.9
L66200N 65000E	Soil	19	30	0.54	85	0.027	<20	1.66	0.006	0.08	0.1	0.02	2.1	<0.1	<0.05	5	0.9
L66200N 65050E	Soil	16	29	0.41	119	0.031	<20	1.69	0.008	0.10	0.2	0.04	2.5	0.1	<0.05	5	1.6
L66200N 65100E	Soil	21	24	0.25	75	0.021	<20	1.40	0.006	0.07	0.2	0.03	2.1	<0.1	<0.05	4	0.8
L66200N 65150E	Soil	16	38	0.37	224	0.041	<20	2.38	0.009	0.16	0.1	0.10	4.1	0.1	0.06	7	2.8
L66200N 65200E	Soil	11	23	0.22	79	0.027	<20	1.66	0.003	0.05	0.3	0.06	1.3	0.1	<0.05	5	1.8
L66200N 65250E	Soil	16	32	0.33	114	0.021	<20	2.09	0.011	0.08	0.2	0.06	2.2	0.1	0.05	7	1.3
L66200N 65300E	Soil	15	39	0.37	126	0.047	<20	1.79	0.007	0.08	0.2	0.04	1.7	0.1	<0.05	5	<0.5
L66200N 65350E	Soil	12	32	0.27	100	0.023	<20	1.50	0.006	0.05	0.3	0.03	1.5	0.1	<0.05	5	0.9
L66200N 65400E	Soil	16	25	0.37	103	0.050	<20	1.53	0.006	0.09	0.2	0.04	1.9	0.1	<0.05	4	1.1
L66200N 65450E	Soil	13	23	0.23	94	0.023	<20	1.68	0.003	0.05	0.3	0.08	1.7	<0.1	<0.05	4	1.9
L66200N 65500E	Soil	14	23	0.31	99	0.032	<20	1.54	0.003	0.07	0.3	0.04	1.6	0.1	<0.05	4	1.4
L66200N 65550E	Soil	15	25	0.39	97	0.036	<20	1.37	0.005	0.07	0.3	0.04	1.6	<0.1	<0.05	4	2.0
L66200N 65600E	Soil	16	20	0.31	80	0.027	<20	1.04	0.003	0.05	0.3	0.02	1.3	<0.1	<0.05	4	1.6
L66200N 65650E	Soil	23	17	0.58	34	0.005	<20	1.17	0.001	0.03	<0.1	0.03	1.4	<0.1	<0.05	4	0.8
L66200N 65700E	Soil	18	30	0.36	70	0.039	<20	1.22	0.004	0.09	0.6	0.01	2.1	0.1	<0.05	4	2.1
L66200N 65750E	Soil	13	9	0.06	56	0.020	<20	0.42	0.003	0.03	<0.1	0.02	0.6	<0.1	<0.05	4	<0.5

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L66200N 65800E	Soil	4.0	24.2	9.0	126	0.3	46.5	10.6	238	2.66	11.1	0.7	2.0	3.7	12	0.8	0.5	0.3	33	0.13	0.086
L66200N 63850E	Soil	2.4	41.7	14.4	101	0.1	111.7	19.9	266	3.90	54.5	0.4	2.4	1.6	12	0.3	3.1	0.1	82	0.14	0.116
L66200N 63900E	Soil	4.1	51.3	11.0	133	0.3	41.2	5.2	118	1.29	11.4	0.7	3.6	0.7	31	1.8	3.7	0.2	26	0.51	0.088
L66200N 63950E	Soil	2.5	123.0	7.6	113	0.4	67.5	23.9	687	5.32	22.8	1.1	2.9	1.8	42	0.4	1.9	0.2	217	0.51	0.094
L66200N 64000E	Soil	2.5	50.5	8.9	132	0.1	41.3	15.1	502	4.44	24.8	0.5	2.4	1.4	18	0.5	2.0	0.2	89	0.18	0.111
L66200N 64150E	Soil	3.8	84.9	10.6	129	0.2	94.2	21.0	455	3.24	29.6	0.9	7.7	2.3	29	0.8	3.1	0.2	72	0.35	0.070
L66200N 64200E	Soil	2.6	26.3	9.2	123	0.1	23.9	9.6	326	3.77	16.2	0.3	0.7	1.0	24	0.5	1.0	0.2	105	0.26	0.066
L66200N 64250E	Soil	2.0	31.8	8.1	168	0.2	34.9	15.8	575	4.58	15.3	0.2	1.7	1.3	12	0.5	1.0	0.2	124	0.10	0.087
L66200N 64300E	Soil	0.9	60.4	5.1	91	0.4	355.7	48.3	856	5.92	77.4	0.2	2.5	0.3	33	0.6	2.2	<0.1	166	0.36	0.060
L66200N 64350E	Soil	0.6	66.0	3.2	45	0.3	379.5	51.1	1015	6.49	29.5	0.2	2.0	0.3	31	0.3	0.8	<0.1	179	0.28	0.082
L66200N 64500E	Soil	4.2	30.6	12.1	215	0.5	53.9	13.0	883	3.21	15.6	1.0	<0.5	1.2	30	2.0	1.0	0.3	37	0.29	0.066
L66400N 65800E	Soil	7.4	21.7	11.4	147	0.8	31.6	7.6	242	2.56	4.8	0.4	6.4	2.0	16	0.8	0.3	0.3	24	0.15	0.112
L66400N 65750E	Soil	12.8	31.1	21.5	147	0.5	29.3	8.5	244	3.51	15.1	0.7	4.6	1.4	10	0.8	1.9	0.3	33	0.04	0.076
L66400N 65700E	Soil	2.0	9.4	8.9	87	1.1	28.4	8.4	145	2.92	5.4	0.5	<0.5	2.1	6	0.6	0.2	0.2	51	0.06	0.130
L66400N 65650E	Soil	2.8	6.9	8.1	35	0.5	12.8	3.3	79	1.48	5.0	0.4	0.6	1.4	4	0.2	0.2	0.2	31	0.03	0.028
L66400N 65600E	Soil	6.3	8.2	8.1	35	0.6	12.5	2.3	78	1.05	8.9	0.3	1.8	0.8	8	0.2	0.3	0.2	21	0.04	0.052
L66400N 65550E	Soil	9.4	23.1	10.2	107	1.2	56.2	11.3	151	3.29	16.3	0.6	1.8	1.7	13	0.5	0.7	0.2	35	0.12	0.081
L66400N 65500E	Soil	3.3	23.0	12.6	94	1.8	34.7	8.4	247	1.99	9.2	2.3	4.5	0.8	100	1.3	0.3	0.3	31	0.82	0.095
L66400N 65450E	Soil	5.4	11.7	10.7	73	0.4	25.5	7.1	207	2.26	9.7	0.5	12.8	1.4	14	0.5	0.3	0.3	39	0.10	0.039
L66400N 65400E	Soil	4.8	27.2	10.4	83	0.5	39.5	7.9	178	2.45	9.9	2.1	6.5	1.8	31	0.9	0.3	0.2	36	0.20	0.038
L66400N 65300E	Soil	6.9	21.4	8.7	103	0.5	48.9	15.9	692	3.84	14.3	1.4	6.4	2.0	41	1.0	0.5	0.2	39	0.34	0.058
L66400N 65200E	Soil	3.9	62.7	14.3	121	1.4	56.0	14.2	451	3.62	13.4	4.4	5.9	1.4	72	3.7	0.8	0.3	35	0.65	0.059
L66400N 65150E	Soil	4.1	26.9	10.3	89	0.4	39.4	11.2	321	2.78	11.4	0.8	2.3	0.5	58	1.3	0.7	0.2	31	0.41	0.060
L66400N 65100E	Soil	3.4	20.1	12.7	115	2.3	30.2	10.1	385	2.98	9.5	0.6	2.7	1.4	17	1.0	0.6	0.2	41	0.15	0.138
L66400N 65050E	Soil	2.7	13.2	10.6	87	0.4	17.9	6.6	203	2.31	6.5	0.4	<0.5	0.8	8	1.5	0.5	0.2	29	0.04	0.083
L66400N 65000E	Soil	5.9	29.7	12.9	79	0.6	26.8	6.0	165	3.41	16.1	1.0	2.9	0.6	30	0.8	1.1	0.2	42	0.21	0.054
L66400N 64950E	Soil	3.1	32.8	12.2	109	0.9	45.3	14.0	284	3.15	11.1	2.5	4.7	3.2	37	1.8	0.7	0.2	33	0.31	0.043
L66400N 64900E	Soil	4.1	34.6	18.0	246	0.5	51.2	12.8	790	2.95	8.7	1.0	3.9	1.3	44	5.1	0.6	0.4	34	0.40	0.087
L66400N 64850E	Soil	3.4	12.6	14.1	69	0.3	14.4	4.0	279	1.98	5.8	0.4	<0.5	2.2	20	0.8	0.4	0.3	34	0.25	0.066
L66400N 64800E	Soil	17.4	27.0	13.9	136	0.3	36.6	6.8	266	2.62	15.3	0.7	1.9	3.4	9	0.9	1.0	0.2	56	0.05	0.040

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CERTIFICATE OF ANALYSIS

VAN08010237.1

Method Analyte Unit MDL	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
	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	
	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
L66200N 65800E	Soil	13	25	0.43	91	0.058	<20	1.43	0.006	0.11	0.4	0.02	1.7	0.1	<0.05	4	1.1
L66200N 63850E	Soil	7	265	1.65	88	0.086	<20	2.61	0.005	0.08	0.1	0.04	4.0	0.1	<0.05	7	<0.5
L66200N 63900E	Soil	7	23	0.19	103	0.029	<20	0.99	0.010	0.06	<0.1	0.11	1.7	0.3	0.10	3	2.2
L66200N 63950E	Soil	6	71	3.08	92	0.120	<20	3.73	0.005	0.27	0.1	0.02	10.3	0.2	<0.05	12	2.4
L66200N 64000E	Soil	5	72	1.07	99	0.084	<20	2.22	0.004	0.09	<0.1	0.03	2.5	<0.1	<0.05	7	0.6
L66200N 64150E	Soil	12	158	1.22	107	0.062	<20	1.88	0.006	0.19	0.1	0.02	4.8	0.2	<0.05	5	1.6
L66200N 64200E	Soil	5	51	0.86	111	0.124	<20	1.63	0.006	0.13	0.1	0.03	2.4	<0.1	<0.05	8	0.5
L66200N 64250E	Soil	6	77	1.53	107	0.135	<20	2.60	0.005	0.13	0.1	0.01	5.5	<0.1	<0.05	10	<0.5
L66200N 64300E	Soil	3	917	4.42	148	0.130	<20	3.66	0.002	0.23	<0.1	0.02	11.9	0.5	<0.05	9	<0.5
L66200N 64350E	Soil	1	1225	5.35	185	0.088	<20	3.81	<0.001	0.15	<0.1	0.02	7.3	0.1	<0.05	8	<0.5
L66200N 64500E	Soil	17	22	0.51	135	0.032	<20	1.68	0.005	0.12	0.1	0.02	1.7	<0.1	<0.05	5	1.6
L66400N 65800E	Soil	16	19	0.22	61	0.014	<20	0.79	0.003	0.05	<0.1	0.02	1.0	<0.1	<0.05	4	1.4
L66400N 65750E	Soil	13	20	0.19	75	0.017	<20	1.11	0.003	0.05	0.2	0.04	0.9	<0.1	<0.05	4	2.9
L66400N 65700E	Soil	9	41	0.35	82	0.081	<20	1.98	0.004	0.05	0.4	0.07	1.8	<0.1	<0.05	7	<0.5
L66400N 65650E	Soil	13	15	0.16	40	0.050	<20	0.63	0.004	0.04	1.6	0.02	0.7	<0.1	<0.05	5	<0.5
L66400N 65600E	Soil	11	8	0.04	49	0.026	<20	0.40	0.003	0.03	0.1	0.02	0.4	<0.1	<0.05	4	<0.5
L66400N 65550E	Soil	9	41	0.35	92	0.035	<20	1.81	0.003	0.04	0.3	0.06	1.6	<0.1	<0.05	4	1.8
L66400N 65500E	Soil	14	29	0.29	160	0.037	<20	1.56	0.010	0.12	0.2	0.06	2.7	0.1	<0.05	4	1.7
L66400N 65450E	Soil	12	21	0.21	88	0.043	<20	0.88	0.007	0.07	0.2	0.02	1.2	<0.1	<0.05	5	0.6
L66400N 65400E	Soil	16	31	0.31	110	0.041	<20	1.46	0.008	0.10	0.2	0.03	2.3	0.1	<0.05	4	<0.5
L66400N 65300E	Soil	15	58	0.56	115	0.046	<20	1.41	0.010	0.05	<0.1	0.03	2.1	<0.1	<0.05	4	1.5
L66400N 65200E	Soil	23	37	0.42	99	0.037	<20	1.46	0.009	0.09	0.1	0.05	2.8	<0.1	<0.05	4	1.6
L66400N 65150E	Soil	10	34	0.30	53	0.032	<20	1.06	0.005	0.07	0.2	0.05	1.3	<0.1	<0.05	4	1.9
L66400N 65100E	Soil	13	41	0.36	89	0.029	<20	1.33	0.004	0.05	0.1	0.05	1.2	<0.1	<0.05	6	0.6
L66400N 65050E	Soil	11	17	0.21	57	0.020	<20	0.88	0.004	0.04	<0.1	0.02	0.9	<0.1	<0.05	5	<0.5
L66400N 65000E	Soil	12	28	0.25	49	0.024	<20	1.25	0.005	0.04	0.1	0.03	1.0	<0.1	<0.05	6	1.2
L66400N 64950E	Soil	18	30	0.49	85	0.031	<20	1.56	0.008	0.08	0.1	0.03	2.6	<0.1	<0.05	5	1.2
L66400N 64900E	Soil	13	25	0.28	109	0.019	<20	1.59	0.006	0.08	0.1	0.04	1.5	<0.1	<0.05	5	0.8
L66400N 64850E	Soil	18	15	0.17	64	0.010	<20	0.87	0.005	0.04	<0.1	0.04	0.9	<0.1	<0.05	6	0.8
L66400N 64800E	Soil	14	28	0.49	60	0.008	<20	1.23	0.003	0.03	<0.1	0.03	1.3	<0.1	<0.05	5	1.4

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Project:

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Analyte	Method	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.001		
L66400N 64750E	Soil	3.8	20.4	16.5	90	0.6	22.5	6.1	239	3.11	8.0	0.5	<0.5	5.2	6	0.4	0.4	0.3	39	0.05	0.082
L66400N 64700E	Soil	3.5	14.0	10.8	45	0.5	10.9	2.9	84	1.97	7.4	0.3	<0.5	2.1	4	0.3	0.4	0.2	39	0.03	0.065
L66400N 64650E	Soil	8.1	33.6	12.5	121	0.3	37.2	8.2	303	3.21	16.4	0.6	1.7	3.3	7	0.5	1.6	0.2	36	0.03	0.042
L66400N 64600E	Soil	3.8	24.0	12.3	105	0.5	35.5	7.4	195	3.16	10.2	0.5	1.0	2.8	7	0.5	0.5	0.3	36	0.06	0.102
L66400N 64550E	Soil	3.1	11.7	7.0	64	0.6	19.7	3.7	101	1.98	8.6	0.3	<0.5	1.9	5	0.3	1.1	0.2	38	0.03	0.044
L66400N 64500E	Soil	4.6	12.9	10.3	67	0.4	14.8	4.2	123	2.14	12.6	0.4	3.8	2.3	8	0.5	1.2	0.3	39	0.04	0.032
L66400N 64500EA	Soil	4.4	13.2	12.5	71	0.9	15.6	4.0	113	2.80	9.7	0.5	2.0	2.7	7	0.4	0.8	0.3	39	0.03	0.051
L66400N 64450E	Soil	8.5	59.2	13.1	181	0.3	58.4	11.6	290	3.95	34.0	1.1	2.1	3.7	13	0.9	5.8	0.2	41	0.09	0.106
L66400N 64400E	Soil	6.6	103.7	14.2	175	1.4	93.0	15.7	642	3.42	23.6	1.8	4.9	3.1	25	6.4	9.6	0.2	37	0.31	0.030
L66400N 64350E	Soil	7.6	114.0	7.3	323	0.7	349.0	53.5	991	8.29	596.2	1.5	55.6	1.0	52	4.2	52.3	0.1	142	0.59	0.152
L66400N 64300E	Soil	2.3	56.7	8.1	182	0.4	19.0	20.5	671	6.38	21.7	0.4	<0.5	0.7	13	0.8	1.7	0.2	215	0.12	0.083
L66400N 64250E	Soil	3.4	60.5	11.3	63	0.3	18.7	11.3	496	4.99	12.0	0.4	6.4	0.9	29	0.3	1.1	0.1	153	0.26	0.029
L66400N 64100E	Soil	8.3	59.3	7.4	62	<0.1	10.7	11.4	339	5.05	12.6	0.8	1.1	0.5	13	<0.1	0.4	0.1	142	0.18	0.047
L66400N 64050E	Soil	2.1	61.4	9.1	100	0.2	28.6	18.3	1286	4.57	20.8	0.4	1.4	1.3	14	0.3	2.8	0.1	108	0.15	0.064
L66400N 64000E	Soil	1.8	118.3	8.5	96	0.1	27.2	27.3	498	5.26	44.8	0.5	68.6	1.1	22	0.2	0.6	0.1	133	0.24	0.097
L66400N 63950E	Soil	2.8	38.1	9.7	85	0.2	54.9	12.6	252	4.74	19.6	0.4	2.9	1.6	15	0.4	1.9	0.2	111	0.15	0.060
L66400N 63900E	Soil	3.0	88.7	11.6	144	0.5	97.0	19.5	754	3.13	27.7	0.8	0.5	1.6	23	1.4	1.3	0.2	70	0.49	0.069
L66400N 63850E	Soil	0.6	103.5	4.6	72	<0.1	103.0	36.4	482	3.46	8.1	0.2	1.9	0.4	25	0.2	0.4	<0.1	58	0.48	0.184
L66400N 63800E	Soil	1.6	34.0	11.5	54	<0.1	25.1	15.9	1058	3.05	70.3	0.2	1.5	0.5	24	0.2	1.7	0.1	84	0.28	0.066
L66600N 65800E	Soil	1.8	11.4	6.0	56	0.2	31.3	9.6	144	2.32	3.4	0.4	<0.5	2.3	14	0.2	0.2	0.1	49	0.14	0.064
L66600N 65750E	Soil	2.4	14.6	12.9	116	0.5	29.0	11.5	331	3.16	5.7	0.8	<0.5	1.9	20	1.5	0.2	0.3	71	0.25	0.085
L66600N 65700E	Soil	2.4	13.0	10.0	96	0.2	23.5	7.9	177	2.33	4.3	0.7	0.5	2.0	12	0.8	0.2	0.2	54	0.16	0.059
L66600N 65650E	Soil	1.2	10.6	10.5	111	0.5	14.5	6.8	219	2.08	2.3	0.3	<0.5	1.7	16	0.4	0.2	0.2	34	0.17	0.092
L66600N 65600E	Soil	3.8	17.0	14.0	100	0.3	19.6	5.9	194	2.88	3.4	0.6	1.0	1.6	8	0.8	0.3	0.3	32	0.08	0.039
L66600N 65550E	Soil	2.5	22.9	9.6	157	0.9	52.5	14.9	211	3.24	8.1	0.7	0.9	3.6	11	0.6	0.4	0.2	55	0.12	0.121
L66600N 65500E	Soil	1.7	15.6	6.5	86	0.4	61.4	12.5	170	2.18	3.7	0.7	72.6	3.1	18	0.6	0.2	0.2	45	0.18	0.084
L66600N 65450E	Soil	2.0	14.8	5.9	103	0.5	54.7	12.5	193	2.43	4.5	0.8	0.5	3.4	15	0.9	0.2	0.2	50	0.18	0.137
L66600N 65400E	Soil	4.5	18.9	10.6	110	0.7	35.6	11.7	303	2.37	8.9	0.8	2.1	3.4	14	1.1	0.4	0.2	35	0.13	0.094
L66600N 65350E	Soil	5.7	25.6	11.0	118	0.2	36.4	8.3	176	3.31	10.2	0.6	2.2	3.8	14	0.8	0.5	0.2	34	0.13	0.118
L66600N 65300E	Soil	4.3	22.9	10.7	99	0.4	42.1	10.8	161	3.14	8.2	0.8	6.7	4.0	7	0.8	0.4	0.3	47	0.07	0.057

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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Project:

ART/DL

Report Date:

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Part 2

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L66400N 64750E	Soil	17	30	0.40	73	0.009	<20	2.15	0.003	0.06	<0.1	0.03	1.7	0.1	<0.05	8	<0.5
L66400N 64700E	Soil	11	14	0.16	40	0.020	<20	0.77	0.004	0.03	<0.1	0.01	0.9	<0.1	<0.05	4	<0.5
L66400N 64650E	Soil	21	30	0.64	84	0.012	<20	1.40	0.002	0.05	<0.1	0.02	1.4	<0.1	<0.05	5	1.7
L66400N 64600E	Soil	15	30	0.37	115	0.012	<20	2.34	0.004	0.07	0.1	0.06	1.5	0.1	<0.05	7	0.9
L66400N 64550E	Soil	14	46	0.24	39	0.019	<20	0.73	0.003	0.02	<0.1	0.01	1.1	<0.1	<0.05	5	<0.5
L66400N 64500E	Soil	22	16	0.15	64	0.023	<20	0.70	0.003	0.04	0.1	0.02	0.9	<0.1	<0.05	6	1.0
L66400N 64500EA	Soil	17	20	0.16	81	0.020	<20	1.60	0.004	0.04	0.1	0.05	1.2	<0.1	<0.05	7	0.9
L66400N 64450E	Soil	15	63	0.57	97	0.018	<20	2.47	0.005	0.08	0.2	0.07	2.3	0.1	<0.05	4	2.8
L66400N 64400E	Soil	22	46	0.63	92	0.028	<20	1.58	0.008	0.12	0.1	0.07	3.7	0.2	0.05	4	2.3
L66400N 64350E	Soil	15	899	2.20	157	0.021	<20	2.77	0.004	0.15	<0.1	0.06	11.9	0.4	<0.05	7	1.4
L66400N 64300E	Soil	5	38	1.96	63	0.139	<20	3.52	0.005	0.10	0.1	0.06	9.7	0.1	<0.05	14	0.7
L66400N 64250E	Soil	7	28	0.90	70	0.054	<20	2.54	0.007	0.06	0.1	0.04	3.9	0.3	<0.05	10	0.9
L66400N 64100E	Soil	2	20	1.09	36	0.148	<20	2.03	0.006	0.04	<0.1	0.04	2.7	<0.1	<0.05	8	0.5
L66400N 64050E	Soil	8	51	0.90	128	0.061	<20	2.10	0.007	0.10	<0.1	0.04	4.6	0.1	<0.05	7	<0.5
L66400N 64000E	Soil	4	40	1.57	81	0.156	<20	3.07	0.005	0.16	<0.1	0.03	5.0	<0.1	<0.05	9	<0.5
L66400N 63950E	Soil	7	130	1.06	67	0.102	<20	1.75	0.005	0.08	0.2	0.02	3.2	<0.1	<0.05	7	1.0
L66400N 63900E	Soil	7	95	0.67	203	0.089	<20	2.08	0.010	0.10	0.2	0.08	3.0	0.2	<0.05	6	0.5
L66400N 63850E	Soil	<1	184	1.85	137	0.171	<20	2.31	0.010	0.08	0.3	0.01	1.8	<0.1	<0.05	5	<0.5
L66400N 63800E	Soil	3	58	0.80	142	0.148	<20	1.38	0.009	0.16	0.2	0.02	3.1	<0.1	<0.05	7	<0.5
L66600N 65800E	Soil	7	32	0.41	54	0.102	<20	1.32	0.008	0.05	0.3	0.02	1.5	<0.1	<0.05	5	<0.5
L66600N 65750E	Soil	8	33	0.49	80	0.136	<20	1.43	0.005	0.05	0.7	0.04	1.7	<0.1	<0.05	8	0.6
L66600N 65700E	Soil	9	27	0.32	53	0.097	<20	0.96	0.004	0.04	0.2	0.03	1.3	<0.1	<0.05	5	0.8
L66600N 65650E	Soil	8	19	0.23	50	0.051	<20	0.98	0.005	0.04	<0.1	0.03	0.9	<0.1	<0.05	5	<0.5
L66600N 65600E	Soil	11	31	0.20	44	0.032	<20	1.43	0.004	0.04	0.1	0.05	1.3	<0.1	<0.05	5	1.3
L66600N 65550E	Soil	10	57	0.57	93	0.083	<20	2.37	0.005	0.06	0.3	0.05	2.3	<0.1	<0.05	5	1.0
L66600N 65500E	Soil	10	35	0.54	120	0.090	<20	1.73	0.010	0.12	1.4	0.03	2.2	0.1	<0.05	4	0.7
L66600N 65450E	Soil	9	35	0.58	128	0.100	<20	2.13	0.012	0.09	0.2	0.02	2.4	<0.1	<0.05	5	0.6
L66600N 65400E	Soil	16	23	0.33	92	0.045	<20	1.19	0.005	0.06	0.1	0.03	1.8	<0.1	<0.05	5	0.8
L66600N 65350E	Soil	20	26	0.34	93	0.021	<20	1.50	0.005	0.04	0.1	0.04	1.6	<0.1	<0.05	4	1.7
L66600N 65300E	Soil	13	43	0.52	113	0.070	<20	2.33	0.006	0.14	0.3	0.09	2.7	0.1	<0.05	5	1.3

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L66600N 65250E	Soil	4.6	26.6	10.1	132	0.7	54.5	10.6	236	2.88	10.4	0.9	3.3	3.3	14	1.2	0.4	0.2	37	0.15	0.116
L66600N 65200E	Soil	2.8	17.9	7.3	130	0.3	47.5	10.7	222	2.30	6.0	0.7	2.3	3.6	13	0.7	0.4	0.2	40	0.17	0.071
L66600N 65150E	Soil	5.4	23.2	8.5	123	1.6	67.9	13.8	192	2.75	13.8	0.8	10.1	3.6	23	0.9	0.4	0.2	36	0.20	0.080
L66600N 65100E	Soil	2.6	40.0	9.8	31	1.1	20.4	2.1	41	0.43	2.0	3.1	2.9	0.5	46	2.0	0.4	0.1	16	0.59	0.059
L66600N 65050E	Soil	2.9	37.7	6.4	35	1.5	25.3	4.3	348	1.29	3.9	3.1	2.4	0.3	127	2.8	0.3	0.1	12	1.71	0.093
L66600N 65000E	Soil	8.7	34.7	16.5	179	0.6	76.0	14.2	268	4.27	12.7	0.8	<0.5	2.8	20	1.9	0.7	0.3	49	0.17	0.064
L66600N 64950E	Soil	5.8	31.3	12.8	189	0.7	45.1	10.5	395	3.14	7.0	0.7	2.3	3.2	20	1.1	0.5	0.3	32	0.22	0.097
L66600N 64900E	Soil	2.8	30.5	11.1	50	0.5	14.8	4.6	181	1.48	3.0	0.5	0.9	0.9	30	2.6	0.3	0.2	31	0.35	0.032
L66600N 64850E	Soil	4.6	34.3	11.1	126	1.3	47.7	12.3	523	2.64	8.1	1.8	4.9	1.5	52	2.5	0.7	0.2	30	0.57	0.053
L66600N 64800E	Soil	5.6	61.2	17.8	96	2.1	34.0	11.6	529	2.78	8.7	2.6	2.5	1.2	8	1.1	0.6	0.3	32	0.05	0.067
L66600N 64750E	Soil	4.6	26.8	11.1	102	0.3	35.7	9.3	230	2.80	9.0	0.7	4.1	2.8	14	0.9	0.5	0.2	31	0.09	0.031
L66600N 64700E	Soil	4.9	37.4	14.1	98	0.7	41.2	15.7	330	3.00	9.4	1.5	4.0	2.3	19	1.0	0.6	0.3	36	0.12	0.037
L66600N 64650E	Soil	4.6	25.7	13.2	68	0.9	24.2	6.1	233	2.59	7.2	0.8	0.7	1.6	8	0.6	0.6	0.3	33	0.06	0.043
L66600N 64600E	Soil	3.2	12.8	9.1	69	0.4	17.7	6.2	360	1.91	4.9	0.4	<0.5	3.3	7	0.4	0.6	0.2	26	0.06	0.055
L66600N 64550E	Soil	7.5	36.8	12.5	114	0.9	35.6	6.7	191	2.90	18.0	0.7	3.7	1.8	9	0.7	1.6	0.2	41	0.05	0.069
L66600N 64500E	Soil	8.7	46.5	16.3	136	1.4	42.8	11.0	639	3.39	17.7	1.3	6.6	1.9	11	1.1	1.6	0.3	40	0.06	0.045
L66600N 64450E	Soil	5.0	26.1	9.6	92	1.3	29.7	7.0	215	2.76	9.5	0.9	2.2	2.5	9	0.5	0.9	0.3	35	0.07	0.039
L66600N 64400E	Soil	4.7	30.9	11.6	146	1.8	34.4	10.3	539	3.36	12.6	0.9	0.8	1.4	17	3.3	1.5	0.2	42	0.15	0.075
L66600N 64350E	Soil	5.6	39.6	12.5	233	1.2	56.8	10.3	278	4.01	19.7	0.7	4.9	2.5	15	2.0	1.4	0.3	41	0.21	0.094
L66600N 64300E	Soil	5.6	27.0	12.6	149	0.5	29.9	7.4	279	3.94	15.3	0.8	5.7	1.1	14	1.0	1.2	0.3	44	0.10	0.066
L66600N 64250E	Soil	12.7	64.8	21.0	505	0.7	74.0	17.0	1242	6.30	38.3	1.0	3.7	0.4	46	2.5	4.8	0.2	106	0.39	0.214
L66600N 64200E	Soil	2.0	136.4	8.4	147	0.2	42.9	28.4	859	5.99	12.0	0.5	10.4	1.2	26	0.3	1.4	0.2	157	0.35	0.156
L66600N 64150E	Soil	2.1	162.0	6.6	125	0.2	33.7	34.3	608	6.70	24.2	0.4	2.0	1.4	20	0.3	0.8	0.1	145	0.19	0.111
L66600N 64100E	Soil	3.8	40.6	9.3	174	0.3	42.8	14.1	331	5.41	19.6	0.6	1.6	1.8	15	0.6	1.3	0.2	113	0.13	0.061
L66600N 64050E	Soil	3.6	28.4	8.0	80	0.3	75.7	10.4	155	3.93	32.3	0.4	10.1	1.7	8	0.4	1.5	0.2	114	0.06	0.042
L66600N 64000E	Soil	2.4	50.9	8.2	121	0.1	42.6	13.4	346	5.25	47.9	0.5	3.3	1.2	13	0.3	4.9	0.1	123	0.11	0.045
L66600N 63950E	Soil	2.2	45.0	8.5	85	0.2	85.8	15.0	382	5.32	80.9	0.3	1.8	0.5	26	0.5	6.9	0.1	132	0.34	0.087
L66600N 63900E	Soil	1.0	65.7	9.5	175	0.2	36.1	32.8	2330	5.33	10.8	0.4	1.3	0.8	40	0.5	1.0	0.2	129	0.55	0.191
L66600N 63850E	Soil	2.0	88.3	9.6	107	0.2	37.5	21.4	748	5.04	27.9	0.4	10.1	1.5	22	0.2	6.5	0.1	88	0.21	0.100
L66600N 63800E	Soil	2.4	67.9	8.3	117	0.4	38.5	17.4	512	5.08	23.0	0.6	2.4	1.1	12	0.6	1.8	0.1	104	0.15	0.092

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Client:

Happy Creek Minerals Ltd.

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Vancouver BC V6E 3X2 Canada

Project:

ART/DL

Report Date:

October 28, 2008

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Part 2

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L66600N 65250E	Soil	16	36	0.46	91	0.048	<20	1.67	0.006	0.09	0.2	0.07	2.1	<0.1	<0.05	4	1.3
L66600N 65200E	Soil	13	43	0.46	104	0.067	<20	1.52	0.007	0.08	0.2	0.04	2.1	<0.1	<0.05	4	0.6
L66600N 65150E	Soil	13	36	0.52	129	0.057	<20	2.02	0.007	0.09	0.2	0.05	2.5	0.1	<0.05	4	1.5
L66600N 65100E	Soil	8	13	0.09	52	0.039	<20	1.11	0.012	0.03	<0.1	0.07	2.2	<0.1	0.25	3	4.7
L66600N 65050E	Soil	7	11	0.11	77	0.011	<20	0.76	0.007	0.04	<0.1	0.14	1.7	<0.1	0.43	1	5.9
L66600N 65000E	Soil	12	57	0.49	128	0.040	<20	2.07	0.005	0.07	0.1	0.06	2.1	0.1	<0.05	5	1.8
L66600N 64950E	Soil	17	35	0.41	110	0.022	<20	1.24	0.005	0.06	<0.1	0.03	1.9	<0.1	<0.05	4	1.0
L66600N 64900E	Soil	7	15	0.07	39	0.055	<20	0.34	0.007	0.03	0.1	0.03	0.9	<0.1	<0.05	3	0.5
L66600N 64850E	Soil	18	27	0.31	81	0.022	<20	1.21	0.005	0.07	0.6	0.05	2.2	<0.1	<0.05	3	1.9
L66600N 64800E	Soil	19	24	0.16	50	0.023	<20	1.24	0.005	0.06	0.1	0.06	1.8	<0.1	<0.05	4	1.5
L66600N 64750E	Soil	23	25	0.36	62	0.024	<20	1.14	0.003	0.06	<0.1	0.01	1.5	<0.1	<0.05	4	0.8
L66600N 64700E	Soil	19	29	0.34	90	0.018	<20	1.61	0.006	0.09	0.1	0.04	2.0	<0.1	<0.05	5	0.8
L66600N 64650E	Soil	22	21	0.34	38	0.020	<20	1.01	0.003	0.05	<0.1	0.06	1.0	<0.1	<0.05	5	2.0
L66600N 64600E	Soil	22	18	0.30	38	0.023	<20	0.77	0.003	0.05	<0.1	0.01	1.1	<0.1	<0.05	4	<0.5
L66600N 64550E	Soil	15	36	0.37	124	0.012	<20	1.47	0.004	0.07	<0.1	0.06	1.8	<0.1	<0.05	5	1.9
L66600N 64500E	Soil	18	33	0.47	113	0.016	<20	1.60	0.005	0.10	<0.1	0.05	1.7	0.1	<0.05	5	2.0
L66600N 64450E	Soil	19	30	0.42	75	0.026	<20	1.47	0.004	0.10	0.1	0.06	1.6	<0.1	<0.05	5	1.0
L66600N 64400E	Soil	20	31	0.40	122	0.018	<20	1.87	0.004	0.08	0.1	0.06	1.9	<0.1	<0.05	6	1.4
L66600N 64350E	Soil	16	45	0.49	124	0.018	<20	2.06	0.004	0.09	0.1	0.04	2.2	0.1	0.08	5	1.5
L66600N 64300E	Soil	18	34	0.38	100	0.024	<20	1.56	0.004	0.11	0.1	0.03	1.6	0.1	0.05	7	1.4
L66600N 64250E	Soil	5	33	0.19	115	0.017	<20	1.66	0.006	0.06	0.1	0.08	2.2	1.1	0.07	5	4.7
L66600N 64200E	Soil	4	63	2.07	108	0.126	<20	3.33	0.011	0.20	<0.1	0.02	3.0	0.2	<0.05	10	<0.5
L66600N 64150E	Soil	4	56	1.66	56	0.127	<20	3.51	0.005	0.07	0.2	0.03	6.0	<0.1	<0.05	9	<0.5
L66600N 64100E	Soil	9	91	0.88	80	0.109	<20	2.28	0.005	0.08	0.2	0.06	2.8	0.1	<0.05	8	1.2
L66600N 64050E	Soil	9	255	1.43	105	0.079	<20	2.08	0.005	0.06	0.2	0.04	4.5	0.2	<0.05	8	1.1
L66600N 64000E	Soil	8	116	1.23	82	0.089	<20	2.96	0.004	0.08	0.2	0.05	5.5	0.1	<0.05	8	0.7
L66600N 63950E	Soil	3	162	0.92	84	0.104	<20	1.75	0.006	0.07	0.1	0.03	3.5	<0.1	<0.05	8	<0.5
L66600N 63900E	Soil	5	75	1.63	134	0.120	<20	3.06	0.008	0.14	<0.1	0.04	4.4	0.1	<0.05	12	<0.5
L66600N 63850E	Soil	9	70	1.06	110	0.058	<20	2.16	0.007	0.13	0.1	0.03	3.6	0.1	<0.05	7	<0.5
L66600N 63800E	Soil	7	96	1.08	51	0.091	<20	2.57	0.006	0.13	0.1	0.06	3.6	<0.1	<0.05	8	<0.5

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Method	Analyte	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.001		
L66800N 63800E	Soil	2.9	34.0	9.6	96	0.9	34.8	10.1	310	3.86	30.7	0.4	2.9	1.2	11	0.6	3.2	0.2	91	0.10	0.092
L66800N 63850E	Soil	3.5	37.0	10.9	129	0.2	40.5	10.6	277	3.58	14.5	0.5	1.8	1.9	10	0.6	1.7	0.2	83	0.11	0.128
L66800N 63900E	Soil	2.7	79.6	7.9	121	0.4	34.4	19.2	579	6.39	37.3	0.5	1.8	0.8	18	0.9	7.7	0.1	114	0.19	0.105
L66800N 63950E	Soil	1.8	284.9	10.3	119	0.2	51.8	39.3	1292	9.74	26.6	0.4	20.0	1.0	24	0.7	51.8	<0.1	76	0.29	0.212
L66800N 64000E	Soil	4.5	46.9	8.5	216	0.3	85.1	18.2	406	4.83	22.2	0.5	8.0	0.8	20	1.4	1.7	0.1	123	0.22	0.105
L66800N 64050E	Soil	3.2	46.0	10.2	237	0.4	62.5	17.8	1187	4.29	18.4	0.4	1.2	1.0	11	1.2	1.3	0.2	95	0.14	0.115
L66800N 64100E	Soil	4.9	66.5	12.7	86	0.6	33.7	12.7	599	5.57	24.2	0.8	2.6	0.6	11	0.5	1.7	0.2	105	0.14	0.140
L66800N 64150E	Soil	3.6	38.3	8.7	116	0.3	42.4	11.9	391	3.63	18.1	0.6	4.3	1.0	23	0.6	1.8	0.2	59	0.28	0.070
L66800N 64200E	Soil	4.2	38.7	15.4	114	0.5	46.1	13.6	372	4.52	31.1	1.1	5.1	1.1	35	1.1	2.3	0.2	54	0.41	0.078
L66800N 64250E	Soil	3.1	35.8	14.4	199	1.3	53.6	15.9	476	4.34	22.4	1.6	5.1	1.9	76	2.6	1.7	0.3	62	0.96	0.091
L66800N 64300E	Soil	5.7	26.8	14.1	167	0.8	36.3	8.7	227	4.07	19.6	0.7	2.7	1.5	21	0.8	1.2	0.3	54	0.20	0.057
L66800N 64350E	Soil	4.8	27.5	12.5	180	1.6	37.0	7.9	449	3.02	13.5	0.6	2.8	1.9	11	0.9	1.9	0.2	48	0.12	0.111
L66800N 64400E	Soil	7.4	32.8	12.5	127	0.6	41.3	11.1	355	3.16	12.2	1.3	1.8	1.4	13	0.8	1.1	0.3	36	0.10	0.049
L66800N 64450E	Soil	8.5	34.9	13.0	147	0.7	39.3	8.6	248	3.67	13.8	0.8	6.1	3.7	9	0.7	1.1	0.3	41	0.05	0.051
L66800N 64500E	Soil	9.1	28.1	12.1	119	0.4	29.3	5.9	180	2.70	10.8	0.7	38.8	2.9	7	0.7	1.5	0.2	33	0.03	0.070
L66800N 64550E	Soil	9.0	55.5	15.0	157	2.5	39.5	7.1	172	3.39	10.4	1.0	6.7	3.5	7	0.7	1.0	0.3	39	0.04	0.118
L66800N 64600E	Soil	7.5	20.2	12.0	146	0.4	25.2	6.1	225	2.42	7.8	0.5	13.7	1.2	9	1.1	0.7	0.2	31	0.07	0.032
L66800N 64650E	Soil	3.5	20.4	10.4	91	0.1	30.0	8.2	214	2.56	8.7	0.5	2.6	2.5	10	1.2	0.5	0.2	29	0.08	0.060
L66800N 64700E	Soil	5.2	31.0	13.9	128	0.5	42.8	10.4	215	3.34	10.9	0.7	5.3	3.2	15	0.8	0.7	0.3	31	0.15	0.073
L66800N 64750E	Soil	4.0	16.4	11.2	99	0.2	25.8	7.8	188	2.56	7.5	0.5	17.5	2.5	13	1.0	0.6	0.2	33	0.08	0.050
L66800N 64800E	Soil	4.1	30.3	13.8	142	0.6	36.8	12.4	359	2.83	9.9	0.9	6.7	1.9	24	3.2	0.6	0.3	33	0.18	0.061
L66800N 64850E	Soil	5.0	104.3	20.8	166	4.0	102.4	18.0	826	3.86	15.5	10.3	6.5	2.7	86	6.6	1.0	0.3	39	0.81	0.065
L66800N 64900E	Soil	3.9	65.1	24.8	155	1.6	83.3	22.7	1206	3.91	13.7	4.8	5.7	3.8	58	3.6	0.8	0.4	39	0.47	0.063
L66800N 64950E	Soil	4.7	30.6	14.6	136	1.0	48.7	10.1	259	3.13	7.3	1.1	2.5	2.2	41	3.2	0.6	0.3	38	0.34	0.050
L66800N 65000E	Soil	4.5	51.4	17.5	142	1.9	59.2	15.9	672	3.62	13.0	3.6	15.7	1.9	42	1.9	0.9	0.4	38	0.36	0.055
L66800N 65050E	Soil	4.2	34.2	20.1	269	1.0	58.5	16.0	511	4.20	11.3	0.9	1.7	1.9	43	3.0	0.8	0.4	46	0.27	0.135
L66800N 65100E	Soil	3.8	45.8	13.5	160	1.4	58.2	12.3	329	3.25	10.5	1.9	4.2	2.5	57	4.5	0.8	0.4	41	0.57	0.038
L66800N 65150E	Soil	22.7	36.8	19.5	299	0.6	97.8	10.5	220	4.24	24.1	1.1	6.7	2.5	17	2.1	1.3	0.3	51	0.14	0.167
L66800N 65200E	Soil	3.8	20.3	10.3	103	1.7	36.2	8.6	182	2.73	8.5	4.4	3.6	0.8	82	4.2	0.3	0.3	44	0.64	0.045
L66800N 65250E	Soil	7.9	22.2	12.8	157	0.9	39.0	12.4	168	3.44	19.2	0.8	9.3	3.0	17	1.4	0.7	0.3	37	0.12	0.085

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Method	Analyte	1DX															
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L66800N 63800E	Soil	10	76	0.63	86	0.063	<20	1.37	0.006	0.09	0.1	0.03	2.4	<0.1	<0.05	7	<0.5
L66800N 63850E	Soil	10	77	0.65	99	0.046	<20	1.97	0.006	0.07	0.2	0.03	2.9	0.1	<0.05	8	<0.5
L66800N 63900E	Soil	9	76	0.89	117	0.036	<20	2.51	0.008	0.11	<0.1	0.06	5.6	<0.1	0.06	8	0.6
L66800N 63950E	Soil	11	31	0.92	111	0.014	<20	1.52	0.005	0.16	<0.1	0.04	9.9	0.2	0.14	3	1.2
L66800N 64000E	Soil	7	282	1.69	97	0.082	<20	2.46	0.006	0.10	<0.1	0.05	4.7	0.1	<0.05	9	0.9
L66800N 64050E	Soil	6	147	1.11	123	0.056	<20	2.24	0.006	0.07	0.1	0.03	3.4	0.3	0.06	8	0.7
L66800N 64100E	Soil	7	118	0.64	36	0.085	<20	1.56	0.003	0.08	0.1	0.06	2.3	<0.1	0.10	8	1.8
L66800N 64150E	Soil	11	84	0.69	105	0.049	<20	1.75	0.005	0.12	<0.1	0.05	1.8	0.1	0.10	5	1.3
L66800N 64200E	Soil	12	66	0.53	81	0.035	<20	2.20	0.005	0.09	0.2	0.08	2.4	0.1	0.11	6	0.9
L66800N 64250E	Soil	15	54	0.64	140	0.064	<20	2.72	0.011	0.16	0.1	0.07	2.8	0.2	0.08	7	1.1
L66800N 64300E	Soil	15	39	0.42	145	0.024	<20	2.03	0.004	0.11	0.1	0.04	2.2	0.1	<0.05	8	1.5
L66800N 64350E	Soil	14	36	0.30	145	0.017	<20	1.72	0.004	0.07	<0.1	0.05	1.9	0.1	<0.05	7	1.3
L66800N 64400E	Soil	23	31	0.53	109	0.011	<20	1.73	0.005	0.10	0.1	0.05	1.4	0.1	<0.05	5	1.3
L66800N 64450E	Soil	22	29	0.43	112	0.014	<20	1.58	0.005	0.08	0.4	0.03	1.8	0.1	<0.05	5	1.9
L66800N 64500E	Soil	20	19	0.32	64	0.014	<20	1.06	0.004	0.05	<0.1	0.03	0.9	<0.1	<0.05	5	1.6
L66800N 64550E	Soil	15	30	0.30	113	0.011	<20	2.01	0.003	0.06	0.1	0.12	1.7	0.1	<0.05	5	2.8
L66800N 64600E	Soil	11	19	0.22	71	0.019	<20	1.06	0.005	0.04	<0.1	0.04	0.9	<0.1	<0.05	4	1.7
L66800N 64650E	Soil	20	21	0.33	54	0.021	<20	1.09	0.004	0.06	<0.1	0.03	1.3	<0.1	<0.05	4	<0.5
L66800N 64700E	Soil	21	30	0.42	84	0.021	<20	1.63	0.005	0.09	<0.1	0.04	1.7	0.1	<0.05	5	1.5
L66800N 64750E	Soil	21	19	0.26	56	0.025	<20	0.86	0.004	0.05	<0.1	0.02	1.0	<0.1	<0.05	4	0.6
L66800N 64800E	Soil	18	23	0.26	73	0.024	<20	1.16	0.006	0.07	<0.1	0.02	1.4	<0.1	<0.05	4	<0.5
L66800N 64850E	Soil	32	44	0.43	165	0.026	<20	2.39	0.014	0.18	0.1	0.11	6.1	0.1	<0.05	5	2.9
L66800N 64900E	Soil	25	40	0.44	168	0.036	<20	2.28	0.016	0.17	0.1	0.05	4.1	0.1	<0.05	5	1.5
L66800N 64950E	Soil	17	27	0.18	97	0.022	<20	1.42	0.007	0.09	<0.1	0.02	2.1	<0.1	<0.05	5	0.6
L66800N 65000E	Soil	22	33	0.36	107	0.029	<20	1.85	0.011	0.12	0.1	0.04	2.9	0.1	<0.05	5	1.4
L66800N 65050E	Soil	11	33	0.28	176	0.033	<20	2.19	0.011	0.13	0.2	0.03	1.8	0.1	<0.05	7	0.8
L66800N 65100E	Soil	17	36	0.37	120	0.055	<20	1.85	0.013	0.13	0.2	0.04	2.9	0.1	<0.05	5	1.6
L66800N 65150E	Soil	10	27	0.24	96	0.025	<20	1.91	0.006	0.07	0.2	0.07	2.0	0.2	<0.05	4	2.7
L66800N 65200E	Soil	13	30	0.20	113	0.038	<20	2.10	0.011	0.07	0.2	0.07	1.8	0.1	<0.05	6	1.4
L66800N 65250E	Soil	13	26	0.18	123	0.026	<20	1.93	0.005	0.05	0.2	0.07	1.8	0.1	<0.05	5	1.4

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Analyte	Method	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L66800N 65300E	Soil	4.7	13.7	10.0	102	0.3	21.7	5.5	206	2.92	12.4	0.6	8.3	2.3	15	0.4	0.4	0.3	38	0.15	0.092
L66800N 65350E	Soil	2.8	21.9	9.4	121	0.3	45.5	11.2	365	2.81	8.3	0.7	4.4	2.9	16	0.9	0.5	0.2	48	0.14	0.049
L66800N 65400E	Soil	2.6	16.4	8.3	116	0.5	53.1	9.8	195	3.01	9.0	0.8	2.9	3.2	14	0.8	0.4	0.2	44	0.16	0.113
L66800N 65450E	Soil	3.3	21.1	9.9	143	0.3	49.5	11.4	306	3.21	10.3	1.5	2.6	3.8	13	1.0	0.6	0.2	43	0.17	0.141
L66800N 65500E	Soil	3.7	18.3	8.3	120	0.7	32.1	8.6	220	3.12	8.5	0.7	2.5	3.1	19	0.6	0.4	0.2	43	0.23	0.175
L66800N 65550E	Soil	3.1	15.4	10.1	99	0.7	31.7	8.2	194	3.01	7.6	0.7	110.9	3.1	9	0.9	0.4	0.2	52	0.08	0.046
L66800N 65600E	Soil	2.1	10.1	8.0	75	0.4	17.2	6.2	269	1.65	3.9	0.6	2.4	1.2	8	1.2	0.2	0.2	33	0.05	0.035
L66800N 65650E	Soil	4.1	22.4	10.6	101	0.3	38.6	10.5	335	2.77	12.3	0.6	4.4	3.1	21	1.6	0.8	0.2	32	0.19	0.069
L66800N 65700E	Soil	4.4	23.1	12.3	99	0.5	31.1	11.9	546	2.83	11.5	0.9	3.5	1.8	19	1.7	0.5	0.3	37	0.16	0.048
L66800N 65750E	Soil	1.2	9.6	7.0	59	0.3	26.1	8.4	445	1.37	3.0	0.4	0.6	0.6	20	0.8	0.1	0.2	29	0.19	0.054
L66800N 65800E	Soil	1.7	8.8	7.7	77	0.3	20.1	6.0	154	1.82	4.3	0.4	0.8	1.7	13	0.5	0.2	0.2	34	0.10	0.124
L67000N 63800E	Soil	4.0	56.3	7.5	90	0.2	99.0	18.7	424	4.47	25.0	0.5	3.0	1.3	13	0.4	1.9	0.1	81	0.20	0.055
L67000N 63850E	Soil	2.1	34.9	9.2	69	1.0	42.7	11.5	235	2.95	18.1	0.9	3.8	1.3	35	0.9	1.9	0.2	55	0.34	0.034
L67000N 63900E	Soil	3.1	33.3	9.1	122	0.3	51.9	11.6	356	3.76	26.6	0.7	2.9	1.5	13	0.7	3.7	0.2	69	0.14	0.102
L67000N 63950E	Soil	2.8	56.9	7.6	100	0.3	24.0	15.1	413	5.07	32.3	0.4	4.5	0.4	14	0.5	10.5	0.2	79	0.11	0.082
L67000N 64000E	Soil	2.1	18.6	7.1	137	0.3	35.5	10.3	712	2.78	12.5	0.3	1.6	0.9	12	0.9	2.7	0.1	58	0.13	0.069
L67000N 64050E	Soil	5.7	30.5	13.3	95	1.3	30.0	7.5	428	3.03	21.2	0.4	4.9	0.8	13	1.2	4.4	0.2	56	0.12	0.075
L67000N 64100E	Soil	3.3	26.7	12.7	119	0.7	42.1	10.9	841	3.17	24.3	0.5	2.5	0.8	10	0.7	2.3	0.2	48	0.09	0.100
L67000N 64150E	Soil	3.9	23.2	11.9	91	0.5	26.2	7.3	196	3.15	26.4	0.6	2.2	1.0	15	0.9	2.9	0.2	69	0.08	0.040
L67000N 64200E	Soil	2.5	64.6	6.8	111	0.3	28.7	15.0	426	5.48	63.4	0.5	2.3	1.3	13	0.4	3.0	0.1	127	0.14	0.090
L67000N 64250E	Soil	2.0	163.7	5.8	147	0.1	17.2	25.8	878	7.45	7.6	0.6	8.1	1.2	20	0.5	0.3	<0.1	97	0.33	0.280
L67000N 64300E	Soil	8.8	35.2	10.9	248	1.2	67.3	18.0	2359	3.71	10.9	4.9	4.2	1.0	99	1.6	4.3	0.2	31	1.12	0.109
L67000N 64350E	Soil	4.8	18.3	9.9	79	1.3	21.2	4.8	203	2.62	14.1	0.5	1.6	2.0	9	0.6	2.4	0.2	37	0.07	0.039
L67000N 64400E	Soil	7.9	25.2	11.9	126	2.9	22.1	4.2	287	2.37	19.5	1.3	10.2	1.5	8	0.8	5.3	0.2	42	0.05	0.089
L67000N 64450E	Soil	6.6	50.6	17.2	167	1.3	60.3	14.7	946	3.19	12.9	1.8	6.4	1.6	30	2.1	1.8	0.3	40	0.24	0.051
L67000N 64500E	Soil	4.4	20.5	10.3	143	0.6	30.9	7.9	248	2.96	10.5	0.6	3.4	3.2	9	1.2	0.9	0.2	35	0.08	0.112
L67000N 64550E	Soil	9.7	25.2	15.7	205	1.4	29.4	8.2	248	3.82	10.3	1.0	3.3	3.5	7	1.7	1.2	0.3	43	0.04	0.224
L67000N 64600E	Soil	3.9	13.2	9.7	87	0.5	17.5	5.1	178	2.06	5.8	0.5	<0.5	3.5	14	0.8	0.6	0.2	27	0.15	0.081
L67000N 64650E	Soil	10.9	31.2	17.1	218	1.0	41.9	8.5	166	3.25	11.7	0.8	4.1	3.5	7	1.8	1.3	0.3	40	0.06	0.144
L67000N 64700E	Soil	3.7	30.7	12.4	120	0.7	63.2	13.0	386	3.13	10.1	3.8	17.1	2.9	34	0.8	0.5	0.3	30	0.28	0.078

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Project:

ART/DL

Report Date:

October 28, 2008

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Part 2

CERTIFICATE OF ANALYSIS

VAN08010237.1

Analyte	Method	1DX															
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L66800N 65300E	Soil	13	21	0.15	71	0.028	<20	1.00	0.004	0.03	0.2	0.03	1.3	<0.1	<0.05	5	0.8
L66800N 65350E	Soil	14	42	0.53	154	0.071	<20	1.83	0.009	0.13	0.2	0.03	2.1	0.1	<0.05	5	<0.5
L66800N 65400E	Soil	14	41	0.52	107	0.069	<20	2.05	0.007	0.09	0.2	0.07	1.9	0.1	<0.05	6	0.8
L66800N 65450E	Soil	16	43	0.57	137	0.071	<20	2.08	0.008	0.10	0.3	0.03	1.9	0.1	<0.05	6	0.9
L66800N 65500E	Soil	14	37	0.41	107	0.063	<20	1.95	0.007	0.09	0.2	0.05	1.7	<0.1	<0.05	5	0.7
L66800N 65550E	Soil	14	39	0.31	94	0.074	<20	1.90	0.009	0.10	0.2	0.04	1.8	<0.1	<0.05	7	0.7
L66800N 65600E	Soil	15	21	0.21	70	0.058	<20	0.79	0.007	0.05	<0.1	0.03	0.9	<0.1	<0.05	4	<0.5
L66800N 65650E	Soil	19	23	0.45	83	0.043	<20	0.94	0.007	0.05	0.4	0.02	1.3	<0.1	<0.05	4	0.8
L66800N 65700E	Soil	18	26	0.22	99	0.035	<20	1.16	0.005	0.07	0.1	0.03	1.4	<0.1	<0.05	5	0.9
L66800N 65750E	Soil	7	22	0.24	79	0.044	<20	0.82	0.008	0.06	0.4	0.02	0.7	<0.1	<0.05	4	<0.5
L66800N 65800E	Soil	9	21	0.26	90	0.069	<20	1.11	0.005	0.06	0.2	0.03	1.1	<0.1	<0.05	5	0.6
L67000N 63800E	Soil	6	180	1.16	41	0.215	<20	2.38	0.006	0.13	0.2	0.05	2.1	0.2	<0.05	7	0.9
L67000N 63850E	Soil	10	62	0.60	52	0.055	<20	1.90	0.007	0.06	<0.1	0.07	2.3	0.1	<0.05	5	0.9
L67000N 63900E	Soil	12	88	0.83	104	0.035	<20	1.54	0.005	0.09	<0.1	0.04	3.0	<0.1	<0.05	6	0.6
L67000N 63950E	Soil	8	39	0.45	68	0.018	<20	1.45	0.007	0.06	<0.1	0.03	2.2	<0.1	<0.05	6	0.5
L67000N 64000E	Soil	9	84	0.53	109	0.029	<20	1.43	0.005	0.06	<0.1	0.03	2.0	0.1	<0.05	5	0.6
L67000N 64050E	Soil	11	49	0.41	89	0.033	<20	1.04	0.004	0.07	<0.1	0.05	1.5	0.1	<0.05	6	0.8
L67000N 64100E	Soil	13	70	0.62	103	0.017	<20	1.62	0.003	0.06	<0.1	0.05	1.3	<0.1	<0.05	6	0.7
L67000N 64150E	Soil	9	44	0.26	59	0.049	<20	1.12	0.003	0.06	0.1	0.03	1.5	<0.1	<0.05	6	1.0
L67000N 64200E	Soil	6	55	1.23	68	0.074	<20	2.51	0.004	0.08	0.1	0.06	4.3	<0.1	<0.05	8	0.5
L67000N 64250E	Soil	4	23	1.02	80	0.095	<20	3.30	0.003	0.04	<0.1	0.05	2.9	0.1	<0.05	6	<0.5
L67000N 64300E	Soil	13	32	0.43	100	0.021	<20	1.85	0.011	0.13	<0.1	0.08	1.7	0.1	0.07	4	2.0
L67000N 64350E	Soil	18	24	0.31	71	0.014	<20	1.18	0.003	0.06	<0.1	0.04	1.1	<0.1	<0.05	5	1.4
L67000N 64400E	Soil	9	20	0.13	95	0.013	<20	0.86	0.007	0.04	<0.1	0.08	1.0	0.1	<0.05	4	2.0
L67000N 64450E	Soil	18	32	0.50	128	0.015	<20	1.79	0.007	0.11	<0.1	0.04	2.0	0.1	<0.05	5	1.8
L67000N 64500E	Soil	20	26	0.38	146	0.011	<20	1.57	0.003	0.06	0.1	0.04	1.3	0.1	<0.05	5	1.0
L67000N 64550E	Soil	17	23	0.37	121	0.006	<20	1.77	0.003	0.06	<0.1	0.05	1.2	0.1	<0.05	5	1.7
L67000N 64600E	Soil	21	16	0.26	58	0.014	<20	0.86	0.004	0.05	<0.1	0.03	0.9	<0.1	<0.05	4	0.7
L67000N 64650E	Soil	17	26	0.37	64	0.012	<20	1.61	0.004	0.04	0.1	0.05	1.3	<0.1	<0.05	5	1.6
L67000N 64700E	Soil	24	32	0.51	121	0.015	<20	2.12	0.005	0.09	0.1	0.05	1.9	<0.1	<0.05	5	1.2

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Project:

ART/DL

Report Date:

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L67000N 64750E	Soil	2.3	10.7	12.1	54	0.2	13.7	6.1	378	1.55	3.9	0.3	2.7	0.8	8	0.9	0.3	0.2	27	0.06	0.031
L67000N 64800E	Soil	2.7	25.6	16.9	117	0.6	41.2	16.0	461	3.22	6.4	1.0	9.6	2.7	21	1.4	0.5	0.3	36	0.19	0.052
L67000N 64850E	Soil	3.6	22.0	10.8	110	0.7	30.9	8.3	499	2.25	6.5	0.4	1.2	1.5	28	1.7	0.6	0.2	28	0.35	0.082
L67000N 64900E	Soil	4.3	19.4	11.4	126	1.2	22.2	6.8	387	2.19	5.6	0.5	6.3	2.4	11	1.1	0.5	0.2	28	0.08	0.148
L67000N 64950E	Soil	2.5	24.4	13.3	103	1.6	53.0	10.4	338	2.43	4.0	0.9	2.3	1.1	48	2.7	0.4	0.2	34	0.49	0.043
L67000N 65000E	Soil	3.9	18.7	13.5	98	0.4	24.2	7.8	246	2.26	4.2	0.6	6.6	1.2	9	1.5	0.4	0.2	33	0.09	0.094
L67000N 65050E	Soil	4.3	23.9	8.9	96	0.4	55.2	12.9	309	2.87	10.5	1.0	3.7	3.0	30	1.9	0.6	0.2	38	0.25	0.032
L67000N 65100E	Soil	9.7	28.5	13.2	109	0.9	45.8	9.3	151	3.45	19.9	0.9	11.3	2.3	16	0.8	0.6	0.2	32	0.14	0.077
L67000N 65150E	Soil	6.3	25.2	9.5	85	0.3	45.0	12.2	348	2.76	14.6	0.9	5.4	3.4	23	0.9	0.7	0.3	40	0.18	0.053
L67000N 65200E	Soil	3.7	26.1	10.4	87	0.6	56.4	14.1	614	2.84	10.2	1.6	8.0	2.7	33	1.4	0.4	0.2	45	0.27	0.051
L67000N 65250E	Soil	4.7	17.8	9.8	73	0.4	26.8	7.6	299	2.25	9.1	1.1	4.8	1.3	50	0.7	0.4	0.2	32	0.48	0.049
L67000N 65300E	Soil	2.2	13.9	11.9	58	0.5	18.2	5.3	127	1.65	5.1	0.6	1.8	1.5	9	0.5	0.3	0.2	30	0.07	0.031
L67000N 65350E	Soil	5.2	30.9	11.7	116	1.1	46.7	13.3	468	3.01	15.8	1.7	6.9	2.1	31	1.8	0.7	0.2	37	0.26	0.068
L67000N 65400E	Soil	2.5	21.8	7.8	79	0.6	50.7	12.5	227	2.51	5.9	0.7	3.2	1.9	21	0.7	0.3	0.2	43	0.20	0.063
L67000N 65600E	Soil	2.6	24.0	10.5	92	0.2	41.5	15.1	714	3.20	5.6	1.4	10.9	3.3	35	0.7	0.2	0.2	68	0.37	0.081
L67000N 65650E	Soil	3.3	27.3	12.0	87	0.9	41.4	14.4	327	2.73	6.4	3.4	2.1	0.8	43	1.5	0.3	0.3	54	0.51	0.065
L67000N 65700E	Soil	1.1	11.3	5.2	49	<0.1	26.1	9.7	204	2.12	9.0	1.3	1.1	2.1	32	0.2	0.2	0.1	46	0.42	0.063
L67000N 65750E	Soil	2.0	17.4	6.8	84	0.2	43.8	10.6	168	2.33	3.7	0.8	1.2	3.0	11	0.4	0.2	0.2	43	0.12	0.105
L67000N 65800E	Soil	1.1	7.8	6.1	50	0.2	19.7	5.7	300	1.41	2.1	0.4	2.1	1.0	15	0.4	<0.1	0.2	29	0.14	0.079
L66000N 64500E	Soil	4.7	14.1	10.5	97	0.4	19.1	4.8	148	2.59	18.0	0.3	2.4	2.2	7	0.8	1.5	0.2	55	0.05	0.060
L66000N 64550E	Soil	4.9	24.0	13.2	168	0.2	32.2	13.5	516	3.78	15.0	0.5	1.8	2.6	8	1.0	0.8	0.2	54	0.09	0.176
L66000N 64600E	Soil	5.0	23.2	11.4	101	0.2	25.4	6.4	176	2.83	13.9	0.5	0.8	2.6	5	0.5	0.9	0.2	43	0.04	0.079
L66000N 64650E	Soil	4.2	90.8	12.7	709	3.1	87.5	12.5	723	2.74	13.5	4.3	3.3	1.4	26	10.0	1.6	0.2	31	0.60	0.065
L66000N 64700E	Soil	7.6	57.3	16.4	300	1.0	103.2	18.3	413	3.81	25.0	0.7	4.3	3.3	9	0.9	2.8	0.3	46	0.08	0.097
L66000N 64750E	Soil	5.6	26.0	11.1	125	0.7	32.1	7.2	172	2.86	13.0	0.5	3.0	3.8	4	0.5	0.8	0.2	40	0.02	0.069
L66000N 64800E	Soil	6.6	53.6	14.3	249	1.4	90.0	11.9	285	3.41	30.9	0.7	2.6	2.5	8	1.0	1.5	0.3	48	0.05	0.042
L66000N 64850E	Soil	2.0	27.6	7.3	97	0.2	14.7	7.8	624	2.62	8.5	0.3	2.0	1.4	6	0.3	0.4	0.1	52	0.05	0.051
L66000N 64900E	Soil	3.3	27.2	13.7	120	0.3	34.3	10.9	307	2.95	172.5	0.5	3.8	2.7	10	0.4	1.2	0.2	44	0.09	0.042
L66000N 64950E	Soil	5.7	29.8	13.3	144	0.7	42.6	7.6	182	2.92	19.1	0.5	5.9	3.0	10	0.8	1.8	0.3	36	0.06	0.091
L66000N 65000E	Soil	3.0	13.0	8.2	59	0.2	13.7	4.1	125	1.45	6.6	0.3	5.8	2.4	8	0.4	0.5	0.2	25	0.06	0.032

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Vancouver BC V6E 3X2 Canada

Project:

ART/DL

Report Date:

October 28, 2008

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Part 2

CERTIFICATE OF ANALYSIS

VAN08010237.1

Method Analyte Unit MDL	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
	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	
	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
L67000N 64750E	Soil	9	11	0.09	75	0.019	<20	0.53	0.005	0.04	<0.1	0.02	0.5	<0.1	0.06	3	0.7
L67000N 64800E	Soil	10	32	0.28	107	0.011	<20	2.32	0.020	0.11	<0.1	0.04	1.8	0.2	<0.05	5	1.1
L67000N 64850E	Soil	10	17	0.22	75	0.034	<20	0.87	0.006	0.05	0.1	0.05	1.0	<0.1	<0.05	4	0.7
L67000N 64900E	Soil	14	16	0.16	81	0.026	<20	0.77	0.004	0.04	<0.1	0.02	1.0	<0.1	<0.05	4	0.7
L67000N 64950E	Soil	9	32	0.26	72	0.054	<20	1.35	0.011	0.08	<0.1	0.05	1.8	<0.1	<0.05	5	1.3
L67000N 65000E	Soil	12	26	0.20	69	0.033	<20	1.12	0.006	0.04	<0.1	0.04	1.0	<0.1	<0.05	4	1.4
L67000N 65050E	Soil	17	35	0.61	88	0.058	<20	1.35	0.012	0.10	0.2	0.03	2.3	0.1	<0.05	4	1.7
L67000N 65100E	Soil	14	24	0.20	100	0.018	<20	1.89	0.005	0.06	0.3	0.06	1.7	<0.1	<0.05	4	1.2
L67000N 65150E	Soil	19	26	0.45	90	0.049	<20	1.17	0.010	0.08	0.3	0.02	1.9	0.1	<0.05	4	1.4
L67000N 65200E	Soil	16	39	0.63	127	0.076	<20	1.59	0.014	0.14	0.1	0.02	3.3	0.1	<0.05	4	1.3
L67000N 65250E	Soil	11	20	0.26	67	0.031	<20	0.82	0.006	0.07	1.6	0.05	1.2	<0.1	<0.05	4	1.4
L67000N 65300E	Soil	12	22	0.23	69	0.051	<20	1.04	0.008	0.08	0.1	0.04	1.3	<0.1	<0.05	4	<0.5
L67000N 65350E	Soil	20	30	0.40	118	0.041	<20	1.45	0.008	0.11	0.2	0.04	3.0	0.1	<0.05	4	1.7
L67000N 65400E	Soil	11	44	0.64	120	0.073	<20	1.75	0.012	0.13	0.2	0.04	2.2	0.1	<0.05	5	1.5
L67000N 65600E	Soil	19	47	0.68	146	0.134	<20	2.08	0.021	0.18	0.2	0.02	3.6	0.2	<0.05	6	1.0
L67000N 65650E	Soil	16	77	0.47	123	0.081	<20	1.73	0.011	0.15	0.2	0.05	3.1	0.1	<0.05	6	1.7
L67000N 65700E	Soil	11	37	0.54	74	0.094	<20	1.01	0.026	0.10	0.5	0.02	2.0	0.1	<0.05	4	2.3
L67000N 65750E	Soil	9	35	0.44	74	0.084	<20	1.90	0.007	0.07	0.7	0.04	1.8	0.1	<0.05	5	0.9
L67000N 65800E	Soil	5	18	0.25	75	0.059	<20	0.89	0.007	0.05	0.3	0.02	0.9	<0.1	<0.05	4	1.0
L66000N 64500E	Soil	13	26	0.27	78	0.029	<20	0.97	0.003	0.06	0.1	0.02	1.2	0.1	<0.05	6	1.0
L66000N 64550E	Soil	9	42	0.38	120	0.042	<20	2.72	0.005	0.07	0.2	0.05	1.8	0.1	<0.05	7	1.0
L66000N 64600E	Soil	16	22	0.25	67	0.020	<20	1.20	0.003	0.05	0.1	0.02	1.2	<0.1	<0.05	6	0.8
L66000N 64650E	Soil	38	33	0.37	100	0.029	<20	2.10	0.010	0.07	<0.1	0.09	3.4	0.1	0.08	4	3.6
L66000N 64700E	Soil	14	57	0.52	174	0.014	<20	2.42	0.004	0.11	0.1	0.05	2.3	0.2	<0.05	6	2.7
L66000N 64750E	Soil	17	25	0.31	114	0.012	<20	1.68	0.005	0.06	<0.1	0.03	1.8	0.1	<0.05	6	1.7
L66000N 64800E	Soil	13	37	0.42	107	0.026	<20	1.87	0.005	0.09	0.1	0.05	2.1	0.1	<0.05	6	1.8
L66000N 64850E	Soil	8	15	0.54	100	0.024	<20	1.73	0.003	0.07	0.1	0.04	3.2	0.1	<0.05	7	0.8
L66000N 64900E	Soil	11	25	0.27	123	0.017	<20	1.70	0.005	0.07	<0.1	0.05	1.9	0.1	<0.05	6	0.8
L66000N 64950E	Soil	15	21	0.26	71	0.011	<20	1.20	0.003	0.06	0.1	0.03	1.2	<0.1	<0.05	5	1.3
L66000N 65000E	Soil	16	11	0.14	46	0.015	<20	0.59	0.003	0.04	<0.1	0.01	0.7	<0.1	<0.05	4	1.2

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010237.1

Analyte	Method	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%									
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L66000N 65050E	Soil	4.7	43.9	16.9	147	0.9	45.4	11.4	282	3.64	18.6	0.6	3.4	4.0	11	0.4	0.7	0.3	44	0.09	0.103
L66000N 65100E	Soil	2.9	28.6	15.7	147	0.7	48.5	12.7	452	3.22	10.7	1.0	5.5	3.0	53	1.4	0.5	0.2	38	0.35	0.107
L66000N 65150E	Soil	5.1	18.2	14.6	92	0.5	21.0	5.5	117	3.09	15.1	0.6	4.8	4.1	9	0.6	1.2	0.3	40	0.06	0.069
L66000N 65200E	Soil	3.8	24.2	9.6	89	0.7	35.6	10.2	498	2.19	12.4	0.9	2.6	2.3	20	1.3	0.5	0.2	30	0.22	0.075
L66000N 65250E	Soil	5.4	21.4	9.9	108	0.3	41.5	11.2	236	2.81	14.3	0.8	3.7	3.0	16	0.8	0.5	0.3	31	0.20	0.116
L66000N 65300E	Soil	4.1	34.8	12.5	151	0.9	48.3	14.9	607	3.94	10.7	1.2	3.2	2.0	27	1.8	0.4	0.2	67	0.24	0.056
L66000N 65350E	Soil	3.8	32.0	11.8	109	1.0	38.1	9.9	400	2.66	10.4	1.4	1.9	0.8	38	1.6	0.5	0.3	37	0.35	0.052
L66000N 65400E	Soil	3.2	28.2	12.6	108	0.6	36.3	14.1	459	2.55	9.4	1.1	5.5	1.6	34	2.2	0.4	0.3	35	0.28	0.032
L66000N 65450E	Soil	L.N.R.																			
L66000N 65500E	Soil	L.N.R.																			
L66000N 65550E	Soil	L.N.R.																			
L66000N 65600E	Soil	6.4	23.4	10.6	96	0.6	39.9	10.1	153	2.64	14.5	1.9	4.5	1.5	50	1.3	0.5	0.3	32	0.50	0.041
L66000N 65650E	Soil	3.5	8.1	5.1	32	0.1	10.2	2.0	40	0.81	3.8	0.2	<0.5	1.3	6	0.4	0.2	0.2	24	0.06	0.023
L66000N 65700E	Soil	31.0	54.1	18.9	191	0.3	100.1	15.5	278	4.01	36.1	1.2	14.5	3.8	13	1.8	0.9	0.3	35	0.08	0.045
L66000N 65750E	Soil	12.8	33.1	21.2	125	2.0	59.7	12.2	244	3.94	14.9	0.9	4.6	2.8	10	0.8	0.6	0.4	36	0.08	0.159
L66000N 65800E	Soil	5.6	18.5	9.2	92	3.1	36.3	7.8	142	2.41	8.1	0.6	4.4	3.0	9	0.6	0.3	0.2	31	0.08	0.073
L65800N 64500E	Soil	4.7	44.5	11.1	144	1.8	65.1	13.8	323	3.49	23.2	0.7	5.6	2.8	19	1.2	1.7	0.2	41	0.19	0.090
L65800N 64550E	Soil	6.1	40.2	11.2	128	1.1	59.1	12.9	268	3.58	28.6	0.7	6.7	2.4	17	1.3	1.8	0.2	36	0.13	0.206
L65800N 64600E	Soil	3.3	34.2	9.6	101	0.5	31.7	11.8	255	2.83	15.5	0.5	3.5	3.0	12	0.9	0.9	0.2	47	0.13	0.106
L65800N 64650E	Soil	5.1	64.4	11.7	170	0.7	82.4	14.7	304	3.27	25.0	0.9	3.5	2.5	15	1.8	1.6	0.2	41	0.13	0.063
L65800N 64700E	Soil	5.0	50.2	11.0	169	0.4	54.5	14.0	342	3.28	19.5	0.7	4.2	2.8	10	1.2	1.6	0.2	45	0.09	0.051
L65800N 64750E	Soil	6.8	38.6	11.6	164	0.7	114.7	20.3	525	3.14	19.1	0.9	2.0	1.7	51	2.9	2.4	0.2	49	0.53	0.061
L65800N 64800E	Soil	6.9	43.1	11.7	170	0.2	51.0	10.6	178	3.34	42.0	0.6	5.3	3.6	9	0.7	1.6	0.2	34	0.07	0.077
L65800N 64850E	Soil	5.1	40.3	12.1	127	0.3	52.8	12.7	988	2.84	24.5	0.6	3.9	2.5	15	0.9	1.5	0.2	35	0.16	0.066
L65800N 64900E	Soil	5.6	68.1	14.0	138	1.8	98.5	13.3	854	3.26	26.9	2.3	4.9	2.9	38	1.9	1.7	0.2	37	0.38	0.043
L65800N 64950E	Soil	12.0	49.8	14.3	298	1.9	54.6	12.0	2485	2.22	9.9	1.1	1.8	0.5	26	7.2	0.8	0.2	40	0.32	0.051
L65800N 65000E	Soil	6.2	51.7	16.3	214	5.4	74.6	30.4	885	3.00	16.4	1.3	7.5	3.1	13	2.4	1.1	0.2	33	0.10	0.183
L65800N 65050E	Soil	5.6	26.4	10.0	189	1.6	38.9	5.8	157	2.34	10.3	0.4	16.8	2.5	12	0.8	1.5	0.2	35	0.13	0.052
L65800N 65100E	Soil	4.7	42.7	13.6	172	0.6	62.4	14.0	459	2.97	12.9	1.2	21.5	2.5	21	1.6	0.8	0.2	30	0.22	0.069
L65800N 65150E	Soil	4.7	32.0	10.1	118	0.4	50.0	10.7	321	2.53	12.7	1.3	6.1	4.0	21	1.5	0.7	0.2	27	0.22	0.041

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Analyte	Method	1DX															
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L66000N 65050E	Soil	15	32	0.46	107	0.017	<20	1.99	0.004	0.07	0.1	0.06	1.9	0.1	<0.05	7	1.4
L66000N 65100E	Soil	15	34	0.36	133	0.022	<20	1.93	0.006	0.10	0.1	0.05	1.8	<0.1	<0.05	6	1.7
L66000N 65150E	Soil	22	18	0.22	53	0.010	<20	1.18	0.004	0.04	0.1	0.02	1.0	<0.1	<0.05	6	1.5
L66000N 65200E	Soil	15	20	0.33	88	0.040	<20	1.15	0.009	0.10	0.2	0.03	1.7	0.1	<0.05	4	1.2
L66000N 65250E	Soil	16	25	0.31	83	0.043	<20	1.39	0.006	0.11	0.2	0.03	1.7	<0.1	<0.05	4	1.7
L66000N 65300E	Soil	12	50	0.79	151	0.082	<20	2.31	0.013	0.23	0.2	0.03	5.1	0.2	<0.05	9	1.8
L66000N 65350E	Soil	13	26	0.26	119	0.036	<20	1.39	0.009	0.11	0.2	0.03	1.7	0.1	<0.05	5	1.2
L66000N 65400E	Soil	17	27	0.29	95	0.034	<20	1.43	0.008	0.08	0.1	0.02	1.9	<0.1	<0.05	4	1.1
L66000N 65450E	Soil	L.N.R.															
L66000N 65500E	Soil	L.N.R.															
L66000N 65550E	Soil	L.N.R.															
L66000N 65600E	Soil	13	26	0.23	66	0.028	<20	1.31	0.006	0.06	0.2	0.03	1.5	<0.1	<0.05	4	1.0
L66000N 65650E	Soil	11	9	0.05	22	0.025	<20	0.27	0.002	0.03	0.1	<0.01	0.4	<0.1	<0.05	3	<0.5
L66000N 65700E	Soil	14	21	0.21	138	0.011	<20	1.36	0.004	0.06	0.3	0.06	2.6	0.2	<0.05	3	2.7
L66000N 65750E	Soil	13	31	0.27	74	0.018	<20	1.33	0.003	0.05	0.2	0.05	1.6	<0.1	<0.05	4	1.5
L66000N 65800E	Soil	15	23	0.25	90	0.025	<20	1.16	0.005	0.05	0.2	0.05	1.4	<0.1	<0.05	4	0.8
L65800N 64500E	Soil	17	45	0.55	108	0.032	<20	1.81	0.005	0.13	<0.1	0.04	2.2	0.1	<0.05	5	1.8
L65800N 64550E	Soil	14	48	0.46	69	0.018	<20	1.88	0.005	0.07	0.3	0.05	1.5	0.1	<0.05	4	0.9
L65800N 64600E	Soil	13	33	0.40	78	0.039	<20	1.35	0.006	0.06	0.1	0.03	2.1	<0.1	<0.05	4	0.5
L65800N 64650E	Soil	16	50	0.45	85	0.030	<20	1.55	0.006	0.11	0.1	0.04	2.4	0.1	<0.05	4	1.2
L65800N 64700E	Soil	14	46	0.56	97	0.034	<20	1.60	0.005	0.09	0.1	0.02	2.3	0.1	<0.05	5	1.5
L65800N 64750E	Soil	9	113	0.75	106	0.020	<20	1.60	0.007	0.09	<0.1	0.06	3.1	0.2	<0.05	4	2.4
L65800N 64800E	Soil	15	33	0.42	127	0.015	<20	1.70	0.004	0.07	0.1	0.03	1.8	<0.1	<0.05	5	2.0
L65800N 64850E	Soil	14	48	0.54	97	0.026	<20	1.28	0.005	0.09	<0.1	0.02	1.8	0.1	<0.05	4	1.3
L65800N 64900E	Soil	23	39	0.55	116	0.032	<20	1.59	0.007	0.12	0.1	0.06	3.2	0.1	<0.05	4	2.2
L65800N 64950E	Soil	14	22	0.19	96	0.019	<20	1.23	0.007	0.06	0.1	0.08	0.7	<0.1	<0.05	5	2.8
L65800N 65000E	Soil	11	27	0.23	130	0.014	<20	2.74	0.006	0.06	0.1	0.12	2.0	<0.1	<0.05	4	2.2
L65800N 65050E	Soil	12	18	0.24	75	0.015	<20	1.05	0.004	0.05	<0.1	0.04	1.0	<0.1	<0.05	5	1.4
L65800N 65100E	Soil	22	27	0.38	157	0.020	<20	1.36	0.006	0.08	0.1	0.03	1.5	<0.1	<0.05	5	0.9
L65800N 65150E	Soil	20	25	0.44	118	0.034	<20	1.16	0.008	0.10	0.2	0.02	2.1	<0.1	<0.05	3	<0.5

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Analyte	Method	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01		
L65800N 65200E	Soil	4.4	26.5	9.1	110	0.3	39.5	10.5	364	2.42	10.7	0.9	26.5	2.8	25	1.7	0.5	0.2	31	0.25	0.061
L65800N 65250E	Soil	4.1	19.5	9.4	107	0.2	40.0	10.6	314	2.51	11.2	0.9	9.2	2.6	18	1.1	0.5	0.2	33	0.17	0.052
L65800N 65300E	Soil	5.2	25.6	11.8	92	0.8	25.2	11.6	405	2.24	6.2	1.0	12.4	1.3	15	1.2	0.3	0.2	32	0.11	0.031
L65800N 65350E	Soil	7.0	24.0	14.9	114	2.0	18.8	4.7	152	2.08	6.9	0.5	2.2	1.4	4	0.7	0.8	0.2	30	0.03	0.076
L65800N 65400E	Soil	4.1	18.8	9.4	98	0.6	35.6	8.1	181	2.35	10.6	0.7	2.8	2.1	21	0.9	0.5	0.2	33	0.24	0.053
L65800N 65450E	Soil	3.2	20.7	9.9	118	0.3	36.7	11.6	401	2.43	10.1	0.9	4.5	2.1	21	1.3	0.3	0.2	32	0.22	0.070
L65800N 65500E	Soil	3.6	33.5	11.7	143	0.8	34.9	10.5	503	2.53	9.1	1.9	2.4	1.2	39	3.9	0.4	0.3	32	0.38	0.055
L65800N 65550E	Soil	3.1	7.6	4.6	32	0.2	9.9	2.6	69	0.89	5.5	0.2	2.6	1.0	4	0.2	0.2	0.1	23	0.02	0.033
L65800N 65600E	Soil	5.0	42.8	12.5	292	0.8	87.0	10.4	214	3.05	11.5	0.8	4.9	3.4	16	0.9	1.1	0.2	35	0.14	0.077
L65800N 65650E	Soil	7.5	33.8	10.4	112	2.3	50.9	12.6	491	2.59	14.0	1.4	9.1	1.7	35	2.6	0.5	0.3	34	0.43	0.065
L65800N 65700E	Soil	11.7	32.1	18.2	175	0.3	44.2	10.5	196	4.74	13.9	0.8	3.8	2.7	10	1.1	0.5	0.3	45	0.09	0.061
L65800N 65750E	Soil	10.1	26.1	12.1	142	1.1	49.4	8.7	174	3.05	13.5	0.6	11.4	2.7	13	1.2	0.5	0.3	31	0.10	0.129
L65800N 65800E	Soil	6.7	25.9	9.3	129	1.2	49.3	9.6	297	2.94	13.8	0.7	3.6	3.5	10	1.0	0.5	0.2	31	0.09	0.157



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ART/DL

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October 28, 2008

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CERTIFICATE OF ANALYSIS

VAN08010237.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
		Unit	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
		MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5
L65800N 65200E	Soil	18	24	0.38	93	0.043	<20	1.03	0.010	0.10	0.1	<0.01	1.8	<0.1	<0.05	3	0.9
L65800N 65250E	Soil	20	24	0.38	79	0.046	<20	1.22	0.008	0.08	0.2	0.01	1.6	<0.1	<0.05	4	<0.5
L65800N 65300E	Soil	18	22	0.20	109	0.017	<20	1.27	0.007	0.07	<0.1	0.02	1.3	<0.1	<0.05	4	0.6
L65800N 65350E	Soil	12	10	0.09	36	0.016	<20	0.70	0.007	0.02	0.1	0.03	0.7	<0.1	<0.05	4	1.8
L65800N 65400E	Soil	18	24	0.26	81	0.039	<20	1.11	0.006	0.08	0.2	0.03	1.3	<0.1	<0.05	4	0.9
L65800N 65450E	Soil	17	27	0.34	100	0.040	<20	1.36	0.009	0.10	0.2	0.02	1.8	<0.1	<0.05	5	0.5
L65800N 65500E	Soil	17	25	0.26	120	0.035	<20	1.49	0.015	0.10	0.2	0.03	1.9	0.1	<0.05	5	0.9
L65800N 65550E	Soil	8	7	0.05	19	0.038	<20	0.26	0.007	0.03	0.1	0.01	0.5	<0.1	<0.05	4	<0.5
L65800N 65600E	Soil	17	24	0.35	115	0.023	<20	1.57	0.007	0.07	0.1	0.04	1.4	<0.1	<0.05	6	1.3
L65800N 65650E	Soil	19	26	0.31	119	0.028	<20	1.39	0.008	0.11	0.2	0.04	2.2	0.1	<0.05	4	1.4
L65800N 65700E	Soil	12	39	0.33	68	0.031	<20	1.57	0.005	0.04	0.2	0.04	1.7	<0.1	<0.05	6	2.3
L65800N 65750E	Soil	14	20	0.23	87	0.022	<20	1.23	0.005	0.06	0.2	0.04	1.4	<0.1	<0.05	4	1.8
L65800N 65800E	Soil	16	27	0.30	99	0.036	<20	1.52	0.006	0.09	0.3	0.04	1.6	0.1	<0.05	4	1.8



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QUALITY CONTROL REPORT

VAN08010237.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
L66200N 65700E	Soil	14.0	48.2	21.8	224	0.2	56.7	13.4	328	3.86	11.3	1.0	5.0	4.2	12	1.2	0.6	0.5	37	0.11	0.145
REP L66200N 65700E	QC	13.7	47.6	20.4	232	0.2	58.3	14.1	343	4.13	11.3	0.9	5.5	4.3	12	1.4	0.6	0.5	36	0.10	0.144
L66400N 64750E	Soil	3.8	20.4	16.5	90	0.6	22.5	6.1	239	3.11	8.0	0.5	<0.5	5.2	6	0.4	0.4	0.3	39	0.05	0.082
REP L66400N 64750E	QC	3.9	20.7	17.8	91	0.6	23.2	6.4	241	3.17	8.5	0.5	0.8	5.4	6	0.3	0.4	0.3	40	0.05	0.083
L66400N 63850E	Soil	0.6	103.5	4.6	72	<0.1	103.0	36.4	482	3.46	8.1	0.2	1.9	0.4	25	0.2	0.4	<0.1	58	0.48	0.184
REP L66400N 63850E	QC	0.6	105.2	4.6	74	<0.1	104.7	38.0	492	3.55	8.1	0.2	1.1	0.4	25	0.2	0.3	<0.1	58	0.48	0.192
L66600N 64300E	Soil	5.6	27.0	12.6	149	0.5	29.9	7.4	279	3.94	15.3	0.8	5.7	1.1	14	1.0	1.2	0.3	44	0.10	0.066
REP L66600N 64300E	QC	5.8	28.2	13.3	151	0.5	31.2	8.1	286	4.04	16.0	0.8	3.6	1.1	14	1.2	1.2	0.3	44	0.10	0.067
L67000N 64000E	Soil	2.1	18.6	7.1	137	0.3	35.5	10.3	712	2.78	12.5	0.3	1.6	0.9	12	0.9	2.7	0.1	58	0.13	0.069
REP L67000N 64000E	QC	2.1	20.2	6.8	146	0.4	37.7	10.4	784	2.82	12.8	0.3	0.8	0.9	12	0.9	2.8	0.1	58	0.13	0.071
L67000N 65600E	Soil	2.6	24.0	10.5	92	0.2	41.5	15.1	714	3.20	5.6	1.4	10.9	3.3	35	0.7	0.2	0.2	68	0.37	0.081
REP L67000N 65600E	QC	2.3	23.5	9.5	92	0.2	39.1	15.3	712	3.12	5.4	1.5	2.5	3.5	33	0.6	0.2	0.2	64	0.34	0.078
L65800N 64800E	Soil	6.9	43.1	11.7	170	0.2	51.0	10.6	178	3.34	42.0	0.6	5.3	3.6	9	0.7	1.6	0.2	34	0.07	0.077
REP L65800N 64800E	QC	6.1	40.4	10.9	161	0.2	47.5	10.2	167	3.22	40.0	0.6	4.4	3.8	8	0.7	1.8	0.2	34	0.07	0.075
Reference Materials																					
STD DS7	Standard	18.3	99.6	71.9	399	0.8	49.0	8.6	572	2.38	58.0	4.8	75.5	3.7	70	6.4	5.5	4.6	81	0.90	0.072
STD DS7	Standard	17.5	102.8	68.7	403	1.0	49.5	8.0	592	2.18	52.0	4.5	64.9	3.7	62	6.4	5.0	4.7	80	0.87	0.077
STD DS7	Standard	20.7	101.4	66.7	375	0.7	51.8	8.9	590	2.23	50.5	4.2	63.5	3.4	62	6.0	4.9	3.9	80	0.87	0.072
STD DS7	Standard	20.0	110.4	70.0	403	0.8	56.8	9.2	599	2.36	55.1	4.4	89.1	3.7	66	6.5	5.0	4.0	87	0.97	0.075
STD DS7	Standard	18.4	101.7	67.0	409	0.8	52.4	8.5	595	2.27	55.0	4.4	65.3	3.5	64	6.3	5.4	4.3	87	0.89	0.077
STD DS7	Standard	17.8	109.3	64.6	408	0.7	53.9	8.2	575	2.30	51.7	4.2	57.2	3.6	64	6.4	5.7	4.2	85	0.87	0.071
STD DS7	Standard	18.9	104.8	66.3	382	0.7	52.7	8.4	560	2.23	50.4	4.4	51.4	3.8	61	6.2	4.8	3.9	79	0.86	0.076
STD DS7	Standard	19.1	108.1	66.1	394	0.8	53.7	8.6	588	2.21	50.1	4.0	51.0	3.5	62	6.4	4.6	3.9	79	0.86	0.071
STD DS7	Standard	18.6	101.1	69.8	397	0.8	54.1	8.5	591	2.18	47.0	4.3	60.8	3.6	67	6.3	5.3	4.3	79	0.86	0.072
STD DS7	Standard	19.2	105.0	68.8	418	0.9	52.8	8.8	585	2.37	48.2	4.1	52.0	3.7	73	6.9	5.3	4.5	85	0.92	0.076
STD DS7	Standard	19.4	106.2	68.8	392	0.8	55.9	8.5	599	2.36	53.1	4.3	75.0	3.8	65	6.1	4.8	3.9	84	0.91	0.077
STD DS7	Standard	18.9	105.2	68.9	412	0.9	56.2	9.3	604	2.40	54.6	4.3	58.2	3.5	63	6.2	5.7	3.9	82	0.92	0.082
STD DS7	Standard	21.2	107.0	71.3	383	0.8	57.1	9.1	576	2.32	51.5	5.1	48.9	4.7	65	6.0	5.0	4.4	87	0.92	0.076

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Project:

ART/DL

Report Date:

October 28, 2008

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QUALITY CONTROL REPORT

VAN08010237.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																	
L66200N 65700E	Soil	18	30	0.36	70	0.039	<20	1.22	0.004	0.09	0.6	0.01	2.1	0.1	<0.05	4	2.1
REP L66200N 65700E	QC	19	27	0.36	69	0.038	<20	1.20	0.004	0.09	0.1	0.01	2.0	0.1	<0.05	4	2.4
L66400N 64750E	Soil	17	30	0.40	73	0.009	<20	2.15	0.003	0.06	<0.1	0.03	1.7	0.1	<0.05	8	<0.5
REP L66400N 64750E	QC	19	32	0.40	73	0.010	<20	2.17	0.003	0.06	<0.1	0.03	1.8	0.1	<0.05	9	<0.5
L66400N 63850E	Soil	<1	184	1.85	137	0.171	<20	2.31	0.010	0.08	0.3	0.01	1.8	<0.1	<0.05	5	<0.5
REP L66400N 63850E	QC	<1	190	1.89	140	0.169	<20	2.45	0.010	0.08	0.2	0.01	1.7	<0.1	<0.05	6	<0.5
L66600N 64300E	Soil	18	34	0.38	100	0.024	<20	1.56	0.004	0.11	0.1	0.03	1.6	0.1	0.05	7	1.4
REP L66600N 64300E	QC	18	35	0.40	105	0.025	<20	1.60	0.004	0.11	0.2	0.02	1.6	0.2	0.06	7	0.7
L67000N 64000E	Soil	9	84	0.53	109	0.029	<20	1.43	0.005	0.06	<0.1	0.03	2.0	0.1	<0.05	5	0.6
REP L67000N 64000E	QC	10	83	0.52	110	0.029	<20	1.37	0.005	0.06	<0.1	0.04	1.8	0.1	<0.05	6	<0.5
L67000N 65600E	Soil	19	47	0.68	146	0.134	<20	2.08	0.021	0.18	0.2	0.02	3.6	0.2	<0.05	6	1.0
REP L67000N 65600E	QC	18	48	0.66	145	0.127	<20	2.02	0.020	0.17	0.3	0.02	3.4	0.2	<0.05	6	0.9
L65800N 64800E	Soil	15	33	0.42	127	0.015	<20	1.70	0.004	0.07	0.1	0.03	1.8	<0.1	<0.05	5	2.0
REP L65800N 64800E	QC	16	30	0.41	119	0.016	<20	1.51	0.004	0.07	0.2	0.03	1.8	<0.1	<0.05	4	1.5
Reference Materials																	
STD DS7	Standard	11	150	1.00	383	0.095	29	0.87	0.081	0.45	3.8	0.22	2.1	4.4	0.17	5	3.9
STD DS7	Standard	11	151	0.97	360	0.095	<20	0.92	0.076	0.42	3.4	0.21	1.9	4.3	0.19	4	3.4
STD DS7	Standard	11	156	0.93	365	0.094	28	0.91	0.081	0.38	4.0	0.18	2.1	4.2	0.21	4	3.3
STD DS7	Standard	11	166	0.97	393	0.103	36	0.96	0.085	0.45	3.4	0.18	2.2	4.3	0.23	5	4.1
STD DS7	Standard	11	153	0.97	381	0.096	22	0.92	0.081	0.44	3.1	0.19	2.0	4.3	0.17	4	3.3
STD DS7	Standard	11	155	1.00	387	0.097	27	0.90	0.082	0.45	3.6	0.19	2.0	4.1	0.11	4	3.5
STD DS7	Standard	11	151	0.93	365	0.088	33	0.88	0.081	0.40	3.4	0.18	1.9	4.1	0.14	4	3.6
STD DS7	Standard	10	162	0.95	377	0.092	38	0.92	0.085	0.42	3.4	0.19	1.9	4.2	0.13	4	2.8
STD DS7	Standard	11	158	0.98	407	0.097	29	0.90	0.077	0.43	3.7	0.20	2.1	4.1	0.15	5	3.5
STD DS7	Standard	11	167	1.02	401	0.103	33	0.94	0.082	0.43	3.5	0.20	2.1	4.1	0.16	5	3.9
STD DS7	Standard	12	158	1.01	385	0.095	42	0.93	0.086	0.45	3.6	0.19	2.1	4.1	0.21	5	3.5
STD DS7	Standard	11	164	1.04	364	0.093	40	0.90	0.081	0.44	3.7	0.20	2.3	4.1	0.24	5	4.0
STD DS7	Standard	11	171	0.97	366	0.109	32	0.94	0.082	0.40	3.3	0.20	2.4	4.1	0.18	4	3.1

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Part 1

QUALITY CONTROL REPORT

VAN08010237.1

		1DX Mo ppm 0.1	1DX Cu ppm 0.1	1DX Pb ppm 0.1	1DX Zn ppm 1	1DX Ag ppm 0.1	1DX Ni ppm 0.1	1DX Co ppm 0.1	1DX Mn ppm 1	1DX Fe %	1DX As ppm 0.01	1DX U ppm 0.5	1DX Au ppb 0.1	1DX Th ppm 0.5	1DX Sr ppm 0.1	1DX Cd ppm 0.1	1DX Sb ppm 0.1	1DX Bi ppm 0.1	1DX V ppm 2	1DX Ca ppm 0.01	1DX P %
STD DS7	Standard	20.3	108.1	70.7	403	0.8	58.7	9.8	591	2.30	51.6	5.1	58.3	4.3	67	6.4	5.0	4.6	86	0.96	0.075
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001



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October 28, 2008

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Part 2

QUALITY CONTROL REPORT

VAN08010237.1

		1DX La ppm	1DX Cr ppm	1DX Mg %	1DX Ba ppm	1DX Ti %	1DX B ppm	1DX Al %	1DX Na %	1DX K %	1DX W ppm	1DX Hg ppm	1DX Sc ppm	1DX Tl ppm	1DX S %	1DX Ga ppm	1DX Se ppm
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
STD DS7	Standard	11	170	1.00	366	0.109	32	0.96	0.082	0.42	3.3	0.21	2.5	4.2	0.20	4	3.5
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



1020 Cordova St. East Vancouver BC V6A 4A3 Canada
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ACME ANALYTICAL LABORATORIES LTD.

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Client:

Happy Creek Minerals Ltd.

Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2 Canada

Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

October 15, 2008

Report Date:

October 22, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08010236.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 4

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	SS80	4	Dry at 60C sieve 100g to -80 mesh		
	Dry at 60C	4	Dry at 60C		
	RJSV	4	Save all or part of soil reject fraction		
	RJSV	4	Saving all or part of Soil Reject		
	1DX	4	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	4	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane
D. Ridley
Mark Ralph



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.
** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Suite 2300 - 1066 W. Hastings St.
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Project:

ART/DL

Report Date:

October 22, 2008

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010236.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
DL08-BKS-14	Silt	3.6	43.0	8.3	172	0.4	117.8	22.3	5622	3.77	93.7	0.7	1.5	0.6	98	3.2	2.2	0.1	56	1.02	0.096
DL08-BKS-15	Silt	1.5	68.6	8.0	90	0.3	160.0	30.2	732	4.00	18.4	0.7	0.9	1.0	61	0.8	1.1	0.1	80	0.82	0.113
DL08-BKS-16	Silt	6.3	31.3	12.6	173	0.8	68.1	19.7	2077	3.89	27.3	1.4	2.4	1.1	48	3.2	1.5	0.2	40	0.57	0.085
DL08-BKS-17	Silt	2.0	108.7	7.1	110	0.3	103.8	23.8	1443	3.91	52.5	0.6	3.0	0.5	55	0.8	1.7	0.1	94	0.96	0.100



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Project:

ART/DL

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October 22, 2008

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CERTIFICATE OF ANALYSIS

VAN08010236.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
DL08-BKS-14	Silt	7	193	1.19	290	0.046	<20	1.56	0.007	0.12	<0.1	0.06	2.3	0.2	0.09	4	2.2
DL08-BKS-15	Silt	7	282	2.11	199	0.088	<20	2.31	0.010	0.30	0.1	0.03	3.6	0.2	<0.05	6	1.3
DL08-BKS-16	Silt	12	54	0.67	135	0.032	<20	1.55	0.007	0.10	<0.1	0.04	2.1	0.2	<0.05	4	1.4
DL08-BKS-17	Silt	6	111	1.42	117	0.084	<20	2.08	0.010	0.18	3.3	0.08	3.2	0.2	0.05	6	1.2



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Project:

ART/DL

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October 22, 2008

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Part 1

QUALITY CONTROL REPORT

VAN08010236.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Reference Materials																					
STD DS7	Standard	19.4	108.9	67.2	378	0.8	59.0	9.7	582	2.27	49.3	4.5	52.4	3.9	58	5.5	4.7	4.3	84	0.84	0.069
STD DS7	Standard	20.0	108.2	67.5	392	0.8	56.7	9.4	576	2.25	44.5	4.6	49.6	4.1	61	5.8	4.6	4.3	86	0.87	0.071
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	



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ART/DL

Report Date:

October 22, 2008

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Part 2

QUALITY CONTROL REPORT

VAN08010236.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Reference Materials																	
STD DS7	Standard	10	174	0.95	375	0.109	41	0.87	0.083	0.39	4.0	0.18	2.7	4.0	0.18	4	3.4
STD DS7	Standard	10	174	0.98	381	0.111	43	0.91	0.080	0.41	3.5	0.17	2.8	3.9	0.17	4	3.3
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



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Suite 2300 - 1066 W. Hastings St.
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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

October 15, 2008

Report Date:

October 22, 2008

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CERTIFICATE OF ANALYSIS

VAN08010235.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 6

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	R150	6	Crush, split and pulverize rock to 200 mesh		
	1DX	6	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	6	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane
D. Ridley
Mark Ralph



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Project: ART/DL

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Part 1

CERTIFICATE OF ANALYSIS

VAN08010235.1

	Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	Ca	
	MDL	0.01	0.1	0.1	0.1	1	<0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01	
853901	Rock	0.92	0.2	119.5	1.1	48	<0.1	20.4	16.6	540	3.38	3.8	0.3	2.9	1.0	63	0.2	1.3	<0.1	130	1.53
853902	Rock	1.03	1.4	84.9	4.2	31	0.2	16.2	18.9	294	3.22	151.3	0.4	19.8	1.4	67	0.1	4.2	0.1	145	1.16
853903	Rock	1.09	0.2	89.1	1.5	48	<0.1	20.9	20.1	415	3.58	26.4	0.3	23.5	0.9	48	0.1	1.1	<0.1	132	1.13
151596	Rock	1.20	0.3	60.9	1.5	48	<0.1	12.2	12.9	291	2.66	5.5	0.4	10.5	1.3	35	0.2	1.2	<0.1	144	0.86
151597	Rock	1.31	0.5	68.0	1.7	56	<0.1	17.2	19.5	494	4.16	4.3	0.2	4.5	1.0	23	0.1	1.2	<0.1	176	0.73
151598	Rock	1.67	0.3	41.8	1.6	43	<0.1	30.1	13.5	546	3.00	4.0	0.3	2.6	0.6	82	0.2	0.6	<0.1	101	1.99



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Project:

ART/DL

Report Date:

October 22, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08010235.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
853901	Rock	0.168	5	23	1.31	108	0.248	<20	1.80	0.086	1.37	0.1	<0.01	2.5	0.1	<0.05	7	<0.5
853902	Rock	0.226	6	14	0.72	83	0.123	<20	1.32	0.149	0.40	8.3	0.01	3.6	<0.1	1.20	6	1.0
853903	Rock	0.161	4	65	1.42	247	0.253	<20	1.91	0.068	1.45	0.2	0.02	1.7	0.3	<0.05	7	<0.5
151596	Rock	0.197	5	13	1.09	149	0.183	<20	1.20	0.077	0.74	0.4	<0.01	2.1	0.2	0.14	8	<0.5
151597	Rock	0.160	4	23	1.57	280	0.293	<20	1.93	0.057	1.68	0.2	<0.01	3.0	0.2	0.12	8	<0.5
151598	Rock	0.150	3	73	0.89	45	0.153	<20	0.94	0.048	0.58	0.2	<0.01	2.1	0.1	<0.05	4	<0.5



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ART/DL

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October 22, 2008

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QUALITY CONTROL REPORT

VAN08010235.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
Reference Materials																					
STD DS7	Standard	19.6	96.8	70.5	392	0.8	55.9	8.6	593	2.27	46.0	4.1	53.3	3.8	69	5.8	4.4	4.1	73	0.89	
STD DS7	Standard	21.0	96.8	70.1	395	0.8	53.9	8.6	614	2.31	46.3	4.3	55.3	3.7	68	6.2	4.6	4.3	74	0.89	
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
Prep Wash																					
G1	Prep Blank	<0.01	0.1	1.8	2.5	42	<0.1	7.4	4.4	512	1.84	<0.5	1.2	<0.5	2.8	46	<0.1	<0.1	<0.1	35	0.46



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Project:

ART/DL

Report Date:

October 22, 2008

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Part 2

QUALITY CONTROL REPORT

VAN08010235.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Reference Materials																		
STD DS7	Standard	0.072	10	173	1.00	397	0.098	33	0.94	0.082	0.43	3.4	0.20	1.8	4.0	0.18	4	3.4
STD DS7	Standard	0.071	10	177	1.01	398	0.097	32	0.94	0.083	0.43	3.5	0.19	1.8	4.0	0.19	4	3.6
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.076	5	10	0.65	213	0.108	<20	0.88	0.061	0.51	<0.1	<0.01	1.5	0.3	<0.05	4	<0.5



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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

August 26, 2008

Report Date:

September 08, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08008652.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 20

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	20	Crush, split and pulverize rock to 200 mesh		
1DX	20	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
DIS-RJT	20	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane
D. Ridley
Mark Ralph



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Project:

ART/DL

Report Date:

September 08, 2008

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Part 1

CERTIFICATE OF ANALYSIS

VAN08008652.1

Method	Analyte	Unit	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
			Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	
			kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01
151571	Rock		1.07	1.3	28.6	33.5	69	0.3	23.1	12.1	1021	3.11	3.8	0.4	0.6	4.1	508	1.3	0.2	0.6	19	6.27
151572	Rock		1.00	0.7	14.7	18.7	49	0.2	16.9	6.9	470	2.20	7.3	0.3	<0.5	3.1	12	0.2	0.3	0.2	30	0.09
151573	Rock		1.06	3.7	50.3	6.3	103	0.5	24.0	6.9	326	2.15	41.5	0.4	2.2	3.1	6	0.2	3.8	0.1	11	0.03
151575	Rock		1.19	1.7	114.3	7.2	86	<0.1	37.3	22.9	652	4.16	1.0	0.3	2.8	1.0	71	0.2	0.2	<0.1	114	0.71
151576	Rock		1.57	0.4	109.3	4.6	64	<0.1	51.7	25.1	605	4.57	3.0	0.2	<0.5	0.9	96	0.1	0.2	<0.1	118	0.89
151577	Rock		1.14	0.5	55.8	7.4	75	<0.1	4.5	21.0	1204	4.57	7.6	0.3	3.7	1.4	218	<0.1	3.5	<0.1	86	3.88
DL08TRR-1	Rock		0.89	3.4	77.2	7.5	188	0.7	35.5	18.2	476	3.48	1.5	1.4	0.6	2.4	10	3.1	1.7	0.1	39	0.11
493374	Rock		1.11	48.5	9.7	2.6	10	<0.1	1.2	2.7	2300	0.88	12.5	0.3	<0.5	0.2	478	<0.1	0.3	<0.1	16	30.42
493375	Rock		1.31	0.8	30.9	1.2	40	<0.1	8.9	11.8	539	3.49	3.8	0.2	1.4	0.7	68	0.2	1.1	<0.1	116	2.20
493376	Rock		1.21	0.1	174.8	2.3	34	0.1	45.1	23.0	324	4.04	7.6	0.4	28.5	0.8	29	0.1	1.2	0.2	134	1.39
493377	Rock		1.14	4.4	13.5	5.6	72	<0.1	6.6	2.7	607	2.02	1.2	0.2	0.9	1.0	21	0.4	1.4	0.1	27	0.26
493378	Rock		1.36	1.0	7.9	6.1	19	<0.1	6.3	1.9	79	0.69	2.7	0.2	0.8	1.6	7	0.2	0.5	<0.1	5	0.06
493379	Rock		1.19	0.7	28.8	47.7	42	1.6	9.7	5.5	665	3.02	17.7	0.3	0.5	3.5	125	0.2	3.6	0.7	11	2.30
493380	Rock		1.23	1.2	32.4	35.9	110	1.7	143.2	30.9	1054	5.16	261.8	1.7	1.9	4.6	603	0.3	28.7	0.3	93	5.65
493381	Rock		1.39	1.0	36.3	13.5	47	0.5	86.7	24.3	789	3.91	68.3	0.7	1.4	4.4	301	0.2	5.9	0.2	72	3.89
493382	Rock		1.12	1.0	31.2	36.4	72	0.6	247.5	35.6	942	4.77	61.5	1.1	1.4	5.7	649	0.2	8.2	0.2	79	5.56
493383	Rock		1.35	0.5	25.9	10.6	46	0.4	132.7	18.7	483	2.91	19.5	0.9	1.0	3.9	257	0.2	2.0	<0.1	37	2.51
493384	Rock		1.31	46.1	34.0	8.1	60	0.2	77.5	19.1	458	3.44	16.2	0.6	<0.5	3.6	493	0.2	0.7	0.2	22	1.09
493385	Rock		1.38	0.9	3.0	5.1	13	0.1	4.3	1.0	425	1.16	5.4	<0.1	<0.5	0.2	53	0.1	0.6	<0.1	<2	1.48
493386	Rock		1.25	0.6	68.1	24.3	46	0.5	19.8	12.1	1216	3.26	21.4	0.3	<0.5	1.7	61	0.6	0.3	0.2	2	3.15



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Project:

ART/DL

Report Date:

September 08, 2008

Page:

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Part 2

CERTIFICATE OF ANALYSIS

VAN08008652.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
151571	Rock	0.046	6	17	0.71	32	0.005	<20	1.59	0.022	0.09	<0.1	<0.01	2.7	<0.1	0.05	4	1.1
151572	Rock	0.027	10	12	0.23	35	0.001	<20	0.45	0.032	0.04	<0.1	<0.01	3.2	<0.1	0.08	2	1.5
151573	Rock	0.037	9	11	0.18	78	<0.001	<20	0.40	0.012	0.15	<0.1	0.02	1.5	<0.1	<0.05	<1	11.2
151575	Rock	0.181	3	52	1.41	24	0.095	<20	1.89	0.015	0.39	0.1	<0.01	2.0	0.2	0.19	5	<0.5
151576	Rock	0.178	2	94	1.68	74	0.121	<20	2.08	0.026	0.47	0.1	<0.01	2.1	0.1	0.08	7	<0.5
151577	Rock	0.221	7	4	1.94	30	0.034	<20	1.80	0.023	0.32	<0.1	0.01	2.9	<0.1	1.51	5	<0.5
DL08TRR-1	Rock	0.087	6	14	1.52	131	0.002	<20	1.76	0.018	0.18	<0.1	0.02	3.3	0.1	1.15	4	12.9
493374	Rock	0.036	1	3	1.19	31	0.009	<20	0.53	0.002	0.01	0.2	<0.01	1.7	<0.1	0.41	<1	<0.5
493375	Rock	0.185	3	25	0.70	69	0.110	<20	0.76	0.061	0.33	0.3	<0.01	3.3	<0.1	<0.05	3	<0.5
493376	Rock	0.148	2	121	1.62	452	0.156	<20	1.27	0.098	0.97	0.1	<0.01	4.0	0.2	<0.05	4	<0.5
493377	Rock	0.053	6	9	0.32	133	0.003	<20	0.55	0.035	0.09	<0.1	0.02	2.0	<0.1	<0.05	2	2.2
493378	Rock	0.034	6	8	0.13	20	0.002	<20	0.22	0.011	0.04	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5
493379	Rock	0.051	9	10	1.03	24	0.001	<20	0.62	0.025	0.07	<0.1	<0.01	2.8	<0.1	0.24	2	0.8
493380	Rock	0.245	21	123	3.96	84	0.005	<20	1.68	0.033	0.08	<0.1	<0.01	11.9	<0.1	1.14	5	2.8
493381	Rock	0.168	25	90	3.16	506	0.032	<20	1.37	0.039	0.19	<0.1	<0.01	7.0	<0.1	0.38	5	0.7
493382	Rock	0.239	34	157	4.91	264	0.004	<20	1.09	0.037	0.10	<0.1	<0.01	10.4	0.1	0.61	4	<0.5
493383	Rock	0.133	24	124	2.08	278	0.012	<20	0.71	0.027	0.09	<0.1	<0.01	4.8	<0.1	0.48	2	<0.5
493384	Rock	0.091	18	72	1.35	287	0.008	<20	0.53	0.037	0.10	<0.1	<0.01	3.4	<0.1	0.10	2	<0.5
493385	Rock	0.021	<1	6	0.48	6	<0.001	<20	0.03	0.007	<0.01	<0.1	<0.01	0.8	<0.1	0.05	<1	<0.5
493386	Rock	0.036	4	2	1.03	15	<0.001	<20	0.18	0.035	0.06	<0.1	<0.01	1.9	<0.1	0.85	<1	1.4



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Project:

ART/DL

Report Date:

September 08, 2008

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QUALITY CONTROL REPORT

VAN08008652.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
Pulp Duplicates																					
493384	Rock	1.31	46.1	34.0	8.1	60	0.2	77.5	19.1	458	3.44	16.2	0.6	<0.5	3.6	493	0.2	0.7	0.2	22	1.09
REP 493384	QC		45.1	34.0	6.8	59	0.2	75.5	17.5	449	3.39	15.3	0.6	<0.5	3.3	489	0.2	0.6	0.2	20	1.02
Reference Materials																					
STD DS7	Standard	18.7	105.8	75.8	396	0.9	53.1	8.9	600	2.27	50.6	4.8	54.7	4.3	72	5.8	4.5	4.8	80	0.90	
STD DS7	Standard	19.7	103.2	74.3	398	0.8	53.0	9.2	607	2.31	50.0	4.8	49.5	4.4	72	6.1	4.5	4.7	82	0.91	
STD DS7	Standard	21.9	113.4	73.5	408	0.8	55.7	9.9	646	2.44	58.7	4.9	56.6	4.4	73	7.3	4.6	4.6	89	0.99	
STD DS7	Standard	19.5	113.3	69.0	375	0.8	54.6	9.7	607	2.29	55.9	5.3	50.2	4.5	69	6.8	4.6	4.7	85	0.95	
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
Prep Wash																					
G1	Prep Blank	<0.01	0.2	3.5	2.5	48	<0.1	3.6	4.4	543	1.85	<0.5	2.6	0.9	3.7	53	<0.1	<0.1	<0.1	40	0.46
G1	Prep Blank	<0.01	0.2	3.0	2.9	44	<0.1	3.7	4.3	522	1.82	<0.5	2.0	0.8	3.2	51	<0.1	<0.1	0.1	38	0.43



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Report Date:

September 08, 2008

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Page:

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Part 2

QUALITY CONTROL REPORT

VAN08008652.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																		
493384	Rock	0.091	18	72	1.35	287	0.008	<20	0.53	0.037	0.10	<0.1	<0.01	3.4	<0.1	0.10	2	<0.5
REP 493384	QC	0.086	17	69	1.30	278	0.008	<20	0.51	0.035	0.10	<0.1	<0.01	3.4	<0.1	0.10	2	<0.5
Reference Materials																		
STD DS7	Standard	0.079	11	187	1.01	400	0.114	32	0.97	0.086	0.44	3.4	0.20	2.5	4.3	0.18	4	3.8
STD DS7	Standard	0.075	12	188	1.01	392	0.118	37	0.96	0.079	0.46	3.5	0.22	2.3	4.2	0.18	4	3.6
STD DS7	Standard	0.090	13	185	1.08	420	0.132	40	1.06	0.100	0.50	3.6	0.22	2.5	4.2	0.20	5	3.8
STD DS7	Standard	0.082	12	177	1.05	392	0.122	38	1.03	0.093	0.47	3.4	0.21	2.5	4.2	0.19	5	3.9
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.086	6	9	0.60	244	0.134	<20	0.96	0.067	0.54	<0.1	<0.01	2.0	0.4	<0.05	5	<0.5
G1	Prep Blank	0.083	6	7	0.58	239	0.131	<20	0.91	0.063	0.54	<0.1	<0.01	1.9	0.4	<0.05	4	<0.5



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Suite 2300 - 1066 W. Hastings St.
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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

August 26, 2008

Report Date:

September 02, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08008651.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 29

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT-SOIL Immediate Disposal of Soil Reject

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	SS80	29	Dry at 60C sieve 100g to -80 mesh		
	Dry at 60C	29	Dry at 60C		
	RJSV	29	Save all or part of soil reject fraction		
	1DX	29	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	29	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
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CC: Bob Lane
Mark Ralph
D. Ridley



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Page:

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Part 1

CERTIFICATE OF ANALYSIS

VAN08008651.1

Method	Analyte	Unit	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
			Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
			0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
DL08 BKS-01	Silt		2.8	48.9	8.1	123	0.4	211.3	30.4	1504	3.78	15.7	1.1	<0.5	1.0	71	3.2	3.8	0.1	86	0.82	0.092
DL08 BKS-02	Silt		5.9	24.6	10.1	92	0.6	58.5	19.2	1588	3.36	11.0	1.2	7.6	2.8	49	2.4	0.5	0.2	45	0.45	0.077
DL08 BKS-03	Silt		4.3	26.2	10.2	88	0.4	60.4	17.0	704	3.40	9.1	1.1	1.9	3.5	51	1.1	0.6	0.2	48	0.52	0.092
DL08 BKS-04	Silt		6.8	34.3	16.3	148	1.0	87.8	16.4	648	3.65	11.1	2.8	4.5	2.0	76	1.8	0.6	0.3	41	0.71	0.089
DL08 BKS-05	Silt		12.5	26.0	16.4	290	1.4	79.9	22.1	6867	5.00	21.9	8.9	3.6	1.6	88	15.2	0.9	0.3	36	0.96	0.099
DL08 BKS-06	Silt		4.2	34.1	16.6	199	1.0	73.8	16.2	843	3.48	16.5	2.8	21.8	1.6	70	4.3	0.8	0.4	42	0.72	0.056
DL08 BKS-07	Silt		8.2	33.5	16.3	161	1.4	78.1	20.1	2188	4.59	15.0	4.5	5.6	1.2	97	4.8	0.7	0.3	39	0.88	0.094
DL08 BKS-08	Silt		9.2	32.0	12.7	110	1.0	60.1	14.7	862	3.35	21.2	1.1	882.7	2.7	67	1.0	0.8	0.3	30	0.62	0.074
DL08 BKS-09	Silt		1.4	84.1	4.0	106	0.2	85.2	28.7	754	4.14	15.6	0.6	9.6	0.7	41	1.0	1.7	<0.1	96	0.89	0.102
DL08 BKS-10	Silt		0.5	108.3	3.4	56	0.2	84.6	23.3	583	3.13	9.6	0.3	1.3	0.2	53	0.5	0.7	<0.1	76	1.21	0.066
DL08 BKS-11	Silt		1.2	104.6	3.1	63	0.1	135.8	34.1	727	4.08	7.5	0.2	2.0	0.3	35	0.3	0.7	<0.1	88	0.89	0.086
DL08 BKS-12	Silt		0.3	88.8	1.7	59	<0.1	125.2	35.3	676	4.01	3.3	0.2	0.8	0.2	36	0.3	0.2	<0.1	69	0.89	0.080
DL08 BKS-13	Silt		1.2	67.5	5.1	92	0.2	60.6	23.0	677	3.45	15.1	0.8	3.8	0.5	43	0.9	1.5	<0.1	78	0.95	0.069
DL08 TRS-01	Silt		2.4	19.6	6.8	93	0.2	71.4	17.2	1310	3.05	9.2	0.9	2.6	2.1	45	1.0	0.5	0.1	44	0.44	0.081
DL08 TRS-02	Silt		14.1	53.2	20.3	280	0.6	95.7	19.9	1168	4.36	25.6	1.4	7.4	4.2	71	2.9	1.7	0.5	38	0.64	0.131
DL08 TRS-03	Silt		6.1	64.0	11.3	229	0.4	148.7	31.6	1507	4.80	53.7	1.2	8.0	1.9	59	2.7	3.5	0.1	83	0.77	0.132
DL08 TRS-04	Silt		6.1	63.0	9.4	185	0.3	187.1	36.0	1450	4.87	53.9	0.8	3.9	1.6	85	2.4	3.4	<0.1	86	1.19	0.121
DL08 TRS-05	Silt		3.3	42.3	7.5	74	0.2	255.7	45.2	2393	4.87	68.2	0.4	1.7	0.9	273	0.9	1.4	<0.1	99	1.77	0.095
DL08 TRS-06	Silt		4.4	59.7	8.0	129	0.1	212.9	39.9	1888	5.11	69.5	0.7	4.4	0.8	106	1.0	3.8	<0.1	122	1.24	0.126
DL08 TRS-07	Silt		2.9	36.4	9.2	122	0.3	115.4	22.4	1227	4.29	77.7	0.9	1.8	1.0	69	1.2	1.2	<0.1	67	0.88	0.104
DL08 TRS-08	Silt		5.0	48.8	11.8	164	0.3	117.0	25.0	1092	3.98	40.3	0.8	4.9	1.7	48	1.4	2.8	0.2	67	0.66	0.104
DL08 TRS-09	Silt		9.1	49.4	12.5	170	0.3	144.4	23.2	1026	3.72	42.6	0.8	3.1	3.3	41	1.4	3.0	0.2	58	0.52	0.098
DL08 TRS-10	Silt		1.8	148.9	5.9	80	0.3	65.0	21.9	717	3.87	22.5	1.0	3.5	0.2	55	1.6	2.0	<0.1	103	1.34	0.075
DL08 TRS-11	Silt		1.3	132.7	5.6	112	0.2	123.2	30.7	1131	4.45	44.5	0.5	11.0	0.3	53	0.9	2.2	<0.1	108	1.14	0.078
DL08 TRS-12	Silt		1.5	99.8	6.0	98	0.3	98.6	24.9	873	3.65	32.3	0.6	4.5	0.3	56	0.9	2.7	<0.1	87	1.23	0.095
DL08 TRS-13	Silt		1.2	112.4	4.9	107	0.2	79.2	26.5	791	4.31	16.1	0.4	4.0	0.4	51	1.2	1.7	<0.1	101	0.81	0.071
DL08 TRS-14	Silt		2.7	36.4	8.2	136	0.6	69.1	13.5	1721	2.63	14.4	1.7	3.6	0.5	71	3.1	1.5	<0.1	31	0.86	0.130
DL08 TRS-15	Silt		1.5	80.6	4.4	73	0.2	109.1	26.7	839	3.59	20.7	0.4	3.1	0.5	43	0.5	1.4	<0.1	80	0.83	0.091
DL08 TRS-16	Silt		3.4	77.1	7.9	110	0.4	96.5	23.8	2073	3.81	46.5	0.6	3.2	0.5	62	1.3	3.2	<0.1	80	1.04	0.101

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



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ACME ANALYTICAL LABORATORIES LTD.

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Project:

ART/DL

Report Date:

September 02, 2008

Page:

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Part 2

CERTIFICATE OF ANALYSIS

VAN08008651.1

Method	Analyte	Unit	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
			La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S		
			ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppm		
		MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	
DL08 BKS-01	Silt		7	460	2.62	112	0.053	<20	2.13	0.009	0.12	1.3	0.04	3.8	<0.1	<0.05	5	2.6
DL08 BKS-02	Silt		15	40	0.80	97	0.067	<20	1.24	0.018	0.12	3.6	0.02	2.5	0.1	<0.05	4	1.4
DL08 BKS-03	Silt		15	48	0.85	102	0.089	<20	1.30	0.026	0.15	0.4	0.01	2.4	0.2	<0.05	4	1.7
DL08 BKS-04	Silt		13	56	0.71	119	0.056	<20	1.66	0.016	0.13	0.3	0.04	3.0	<0.1	0.07	4	2.8
DL08 BKS-05	Silt		16	36	0.37	243	0.035	<20	1.73	0.011	0.15	0.3	0.07	2.7	0.3	0.07	4	3.0
DL08 BKS-06	Silt		15	44	0.53	153	0.074	<20	2.24	0.015	0.15	0.2	0.04	3.1	0.2	0.07	5	2.0
DL08 BKS-07	Silt		13	42	0.49	163	0.045	<20	1.67	0.013	0.14	0.3	0.08	3.1	0.2	0.07	4	2.8
DL08 BKS-08	Silt		14	23	0.47	77	0.040	<20	0.84	0.014	0.08	1.3	0.02	2.5	0.1	<0.05	3	1.9
DL08 BKS-09	Silt		6	122	1.85	52	0.173	<20	2.54	0.009	0.21	0.3	0.03	3.5	0.1	<0.05	7	0.8
DL08 BKS-10	Silt		4	148	1.96	26	0.171	<20	2.39	0.006	0.10	0.2	0.05	2.7	0.1	0.07	6	2.0
DL08 BKS-11	Silt		3	196	2.89	28	0.197	<20	2.78	0.008	0.22	0.2	0.02	2.6	0.2	0.05	8	0.6
DL08 BKS-12	Silt		2	135	2.74	17	0.234	<20	2.80	0.007	0.17	0.2	<0.01	1.7	<0.1	<0.05	6	<0.5
DL08 BKS-13	Silt		6	92	1.26	39	0.122	<20	2.03	0.009	0.13	0.3	0.03	3.0	0.1	0.07	5	1.9
DL08 TRS-01	Silt		12	111	1.05	100	0.068	<20	1.25	0.015	0.08	0.2	0.02	2.0	0.1	<0.05	3	0.8
DL08 TRS-02	Silt		16	48	0.69	98	0.041	<20	1.09	0.018	0.08	0.2	0.02	3.3	0.1	0.06	3	4.4
DL08 TRS-03	Silt		10	244	1.93	155	0.074	<20	2.05	0.017	0.18	0.3	0.03	4.9	0.2	0.09	5	4.1
DL08 TRS-04	Silt		8	346	2.35	163	0.076	<20	2.09	0.014	0.20	0.3	0.03	5.2	0.2	0.12	5	4.5
DL08 TRS-05	Silt		5	642	3.48	166	0.075	<20	2.26	0.010	0.19	0.2	0.03	8.6	0.2	<0.05	5	0.7
DL08 TRS-06	Silt		6	395	3.03	182	0.110	<20	2.71	0.022	0.31	0.5	0.03	6.2	0.3	0.08	7	2.0
DL08 TRS-07	Silt		10	190	1.46	178	0.078	<20	2.05	0.013	0.17	0.3	0.03	3.4	0.2	0.11	5	1.4
DL08 TRS-08	Silt		9	201	1.62	131	0.073	<20	1.61	0.016	0.16	0.5	0.02	3.7	0.2	0.09	4	2.5
DL08 TRS-09	Silt		11	244	1.32	100	0.054	<20	1.33	0.014	0.13	0.3	0.02	3.6	0.1	<0.05	4	2.6
DL08 TRS-10	Silt		5	102	1.44	86	0.104	<20	2.45	0.011	0.20	0.3	0.07	4.3	0.2	0.08	6	2.6
DL08 TRS-11	Silt		5	186	2.25	74	0.169	<20	3.02	0.011	0.27	0.2	0.05	5.5	0.2	0.06	8	1.7
DL08 TRS-12	Silt		6	161	1.81	65	0.143	<20	2.53	0.012	0.20	0.3	0.09	3.8	0.2	0.09	7	2.8
DL08 TRS-13	Silt		5	102	1.75	61	0.199	<20	2.63	0.012	0.30	0.5	0.04	3.3	0.2	<0.05	7	1.4
DL08 TRS-14	Silt		9	96	0.66	108	0.017	<20	1.16	0.008	0.07	<0.1	0.08	2.1	0.1	0.08	3	3.7
DL08 TRS-15	Silt		5	170	2.11	64	0.166	<20	2.33	0.010	0.20	0.2	0.02	3.1	0.1	<0.05	6	0.9
DL08 TRS-16	Silt		7	143	1.49	128	0.073	<20	1.99	0.010	0.17	0.3	0.07	4.1	0.2	0.09	5	2.5

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Project:

ART/DL

Report Date:

September 02, 2008

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QUALITY CONTROL REPORT

VAN08008651.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																				
DL08 BKS-05	Silt	12.5	26.0	16.4	290	1.4	79.9	22.1	6867	5.00	21.9	8.9	3.6	1.6	88	15.2	0.9	0.3	36	0.96 0.099
REP DL08 BKS-05	QC	12.9	25.2	15.5	266	1.3	74.9	22.3	6653	5.01	21.7	9.2	3.3	1.5	87	15.2	1.0	0.3	34	0.93 0.090
DL08 BKS-07	Silt	8.2	33.5	16.3	161	1.4	78.1	20.1	2188	4.59	15.0	4.5	5.6	1.2	97	4.8	0.7	0.3	39	0.88 0.094
REP DL08 BKS-07	QC	7.6	31.2	15.7	150	1.3	80.0	19.6	2018	4.37	14.1	4.1	5.3	1.3	89	4.8	0.7	0.3	38	0.83 0.097
Reference Materials																				
STD DS7	Standard	19.3	104.0	72.1	401	0.8	58.0	9.2	610	2.28	54.1	4.5	49.6	3.8	68	5.6	5.1	4.0	84	0.94 0.073
STD DS7	Standard	20.5	101.6	72.4	388	0.8	55.3	9.1	637	2.37	50.5	4.7	54.4	3.8	68	5.6	5.4	4.1	88	0.90 0.070
STD DS7	Standard	19.7	101.7	73.2	392	0.8	53.1	8.7	607	2.23	48.5	6.7	58.8	4.4	67	5.3	5.2	4.2	85	0.89 0.074
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93 0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<0.1	<1	<0.1	<0.1	<1	<0.01 <0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<0.1	<1	<0.1	<0.1	<2	<0.01 <0.001



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ART/DL

Report Date:

September 02, 2008

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Part 2

QUALITY CONTROL REPORT

VAN08008651.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																	
DL08 BKS-05	Silt	16	36	0.37	243	0.035	<20	1.73	0.011	0.15	0.3	0.07	2.7	0.3	0.07	4	3.0
REP DL08 BKS-05	QC	16	34	0.35	241	0.034	<20	1.61	0.010	0.14	0.3	0.07	2.6	0.3	<0.05	4	2.7
DL08 BKS-07	Silt	13	42	0.49	163	0.045	<20	1.67	0.013	0.14	0.3	0.08	3.1	0.2	0.07	4	2.8
REP DL08 BKS-07	QC	14	40	0.52	155	0.045	<20	1.70	0.013	0.13	0.3	0.07	3.1	0.2	0.07	4	3.1
Reference Materials																	
STD DS7	Standard	11	197	1.08	386	0.111	38	1.07	0.090	0.48	3.5	0.19	2.3	4.3	0.23	5	4.3
STD DS7	Standard	11	207	1.03	377	0.114	50	0.97	0.092	0.47	4.2	0.24	2.2	4.2	0.15	5	4.5
STD DS7	Standard	11	194	1.02	363	0.113	39	0.94	0.085	0.48	3.4	0.21	2.1	4.1	0.21	5	4.0
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

August 26, 2008

Report Date:

September 02, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08008650.1

CLIENT JOB INFORMATION

Project: ART/DL

Shipment ID:

P.O. Number

Number of Samples: 60

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT-SOIL Immediate Disposal of Soil Reject

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
	SS80	60	Dry at 60C sieve 100g to -80 mesh		
	Dry at 60C	60	Dry at 60C		
	RJSV	60	Save all or part of soil reject fraction		
	1DX	60	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed
	DIS-RJT	60	Warehouse handling / Disposition of reject		

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
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Vancouver BC V6E 3X2
Canada

CC: Bob Lane
Mark Ralph
D. Ridley



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Report Date:

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Page:

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Part 1

CERTIFICATE OF ANALYSIS

VAN08008650.1

Method	Analyte	Unit	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
			Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
			ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
		MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
L649800N 661900E	Soil		1.6	43.0	8.7	47	0.2	19.6	9.7	221	3.61	11.0	0.3	19.5	0.7	18	0.4	0.8	0.1	117	0.17	0.069
L649800N 661950E	Soil		1.2	44.8	8.5	85	0.2	27.9	14.6	291	4.44	13.7	0.4	3.1	0.5	27	0.4	1.1	0.2	142	0.28	0.132
L649800N 662000E	Soil		1.6	53.9	9.3	84	0.1	25.3	19.7	586	4.09	10.9	0.3	1.0	0.6	29	0.4	0.9	0.2	124	0.37	0.108
L649800N 662050E	Soil		1.5	37.5	8.3	59	0.2	16.4	11.9	277	3.68	8.6	0.4	3.5	0.3	28	0.4	1.1	0.2	115	0.28	0.056
L649800N 662100E	Soil		1.2	113.1	6.6	98	0.3	46.7	29.8	540	5.21	60.4	0.4	202.0	1.2	31	0.3	1.8	0.1	170	0.26	0.171
L649800N 662150E	Soil		1.2	68.1	8.3	102	<0.1	37.9	20.6	681	4.31	42.2	0.4	2.2	0.8	33	0.3	1.6	0.1	143	0.41	0.222
L649800N 662200E	Soil		1.9	45.2	8.4	64	0.3	18.7	11.9	478	3.55	21.0	0.5	1.3	0.3	14	0.5	1.3	0.1	114	0.12	0.082
L649800N 662250E	Soil		1.9	45.9	8.6	78	0.2	19.1	14.3	677	4.18	72.9	0.3	2.1	0.4	19	0.4	2.6	0.1	144	0.14	0.078
L649800N 662300E	Soil		1.8	109.5	8.0	79	0.2	35.6	20.7	841	4.34	29.0	0.7	1.7	0.3	27	0.5	3.2	0.1	154	0.39	0.058
L649800N 662350E	Soil		1.2	39.0	7.2	116	0.1	40.2	18.7	445	5.06	25.7	0.4	1.0	0.6	22	0.4	2.9	0.1	142	0.26	0.207
L649800N 662400E	Soil		1.5	29.8	7.8	68	0.1	26.3	11.2	283	4.03	24.3	0.3	1.8	0.6	19	0.3	2.2	0.1	143	0.19	0.107
L649800N 662450E	Soil		2.2	54.6	8.0	101	<0.1	32.9	16.0	325	5.08	37.8	0.4	2.4	0.9	17	0.4	1.4	0.1	171	0.16	0.062
L649800N 662500E	Soil		1.7	37.3	8.5	98	0.2	37.6	15.4	840	4.19	44.4	0.3	3.5	0.7	20	0.3	1.4	0.1	137	0.27	0.110
L649800N 662550E	Soil		1.2	46.5	7.9	74	0.1	38.5	14.8	305	4.06	17.6	0.5	3.0	1.4	15	0.2	1.3	0.1	114	0.16	0.155
L649800N 662600E	Soil		1.2	31.9	7.9	82	0.1	32.3	13.9	258	4.83	17.3	0.5	1.4	0.9	21	0.4	1.0	0.2	133	0.20	0.123
L649800N 662650E	Soil		1.3	51.4	6.6	124	0.1	48.7	20.3	340	4.90	12.8	0.6	2.4	1.4	24	0.5	0.7	0.1	136	0.28	0.108
L649800N 662700E	Soil		0.6	26.4	6.3	127	0.1	37.4	18.4	360	4.40	6.5	0.3	1.0	0.8	17	0.5	0.5	0.1	125	0.22	0.212
L649800N 662750E	Soil		0.5	17.5	6.4	132	0.1	27.5	16.9	863	3.39	2.5	0.2	0.8	0.6	24	0.5	0.3	<0.1	107	0.30	0.095
L649800N 662800E	Soil		1.0	33.7	7.6	125	<0.1	43.8	19.3	645	3.71	7.8	0.3	0.9	0.8	19	0.3	0.5	0.1	112	0.18	0.123
L649800N 662850E	Soil		0.7	175.9	5.0	115	0.3	47.4	22.1	459	4.63	3.9	0.2	<0.5	0.5	21	0.7	0.2	<0.1	128	0.32	0.140
L649800N 662900E	Soil		0.9	25.5	8.5	136	0.1	39.5	16.0	299	3.92	9.0	0.4	<0.5	1.0	13	0.5	0.6	0.1	100	0.16	0.292
L649800N 662950E	Soil		0.5	23.1	8.4	115	0.2	32.5	15.1	250	3.75	4.3	0.3	<0.5	0.8	28	0.9	0.2	0.1	91	0.29	0.229
L649800N 663000E	Soil		1.0	38.7	6.2	78	<0.1	55.3	25.8	629	5.44	12.1	0.4	0.7	0.6	38	0.3	0.7	<0.1	184	0.58	0.079
L649800N 663050E	Soil		1.0	38.6	4.9	102	0.1	63.3	28.6	492	6.10	20.5	0.3	1.2	0.8	34	0.3	0.8	<0.1	235	0.30	0.050
L649800N 663100E	Soil		0.6	26.8	5.9	113	<0.1	39.0	21.4	340	3.64	10.3	0.3	1.4	0.9	30	0.2	0.5	0.1	114	0.26	0.160
L649800N 663150E	Soil		1.1	30.8	9.7	63	<0.1	27.2	13.9	275	4.13	7.2	0.3	<0.5	0.8	28	0.1	0.9	0.2	115	0.22	0.077
L649800N 663200E	Soil		0.3	30.6	4.6	84	<0.1	19.0	14.7	483	3.77	6.7	0.2	<0.5	0.5	50	0.1	0.5	<0.1	117	0.47	0.188
L65000N 64700E	Soil		2.3	46.9	9.5	112	0.2	125.5	24.4	379	4.94	19.4	0.4	1.2	1.9	31	0.5	0.8	0.2	99	0.29	0.208
L65000N 64750E	Soil		0.9	73.2	15.2	164	0.1	65.3	22.8	871	5.13	9.4	0.3	<0.5	1.2	20	0.4	0.3	0.2	106	0.18	0.298
L65000N 64800E	Soil		1.8	24.7	11.7	81	0.1	62.8	14.8	855	3.41	6.9	0.2	<0.5	1.1	15	0.2	0.4	0.2	91	0.18	0.118

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Project:

ART/DL

Report Date:

September 02, 2008

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Part 2

CERTIFICATE OF ANALYSIS

VAN08008650.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L649800N 661900E	Soil	2	44	0.75	81	0.196	<20	1.55	0.012	0.07	0.6	0.03	2.1	<0.1	<0.05	9	<0.5
L649800N 661950E	Soil	3	56	1.12	120	0.196	<20	2.02	0.011	0.09	2.0	0.03	2.7	<0.1	<0.05	12	<0.5
L649800N 662000E	Soil	4	42	0.83	138	0.198	<20	1.87	0.016	0.10	0.4	0.04	2.5	<0.1	<0.05	10	<0.5
L649800N 662050E	Soil	2	40	0.72	97	0.159	<20	1.51	0.016	0.07	0.5	0.03	2.1	<0.1	<0.05	9	<0.5
L649800N 662100E	Soil	4	81	1.75	149	0.257	<20	3.44	0.016	0.40	1.1	0.03	4.0	0.4	<0.05	11	<0.5
L649800N 662150E	Soil	4	70	1.47	183	0.222	<20	2.43	0.013	0.30	0.3	0.02	3.2	0.1	<0.05	10	<0.5
L649800N 662200E	Soil	3	45	0.83	93	0.164	<20	1.97	0.013	0.20	0.3	0.05	2.6	<0.1	<0.05	9	<0.5
L649800N 662250E	Soil	3	41	0.82	67	0.223	<20	1.71	0.012	0.09	0.6	0.03	2.7	<0.1	<0.05	11	<0.5
L649800N 662300E	Soil	6	57	0.93	104	0.184	<20	2.16	0.013	0.12	2.0	0.06	3.2	<0.1	<0.05	10	<0.5
L649800N 662350E	Soil	3	82	1.16	172	0.167	<20	2.19	0.010	0.12	0.5	0.04	2.6	<0.1	<0.05	10	<0.5
L649800N 662400E	Soil	2	56	0.84	85	0.242	<20	1.73	0.011	0.12	0.7	0.04	2.2	<0.1	<0.05	10	<0.5
L649800N 662450E	Soil	4	77	1.22	119	0.273	<20	2.71	0.011	0.18	1.1	0.04	4.1	<0.1	<0.05	11	0.6
L649800N 662500E	Soil	4	83	1.23	141	0.205	<20	2.08	0.017	0.12	0.5	0.04	3.1	<0.1	<0.05	11	<0.5
L649800N 662550E	Soil	6	82	0.97	73	0.164	<20	2.37	0.011	0.08	0.7	0.05	3.1	<0.1	<0.05	9	<0.5
L649800N 662600E	Soil	4	77	1.00	133	0.196	<20	2.41	0.011	0.06	0.5	0.04	2.9	<0.1	<0.05	10	<0.5
L649800N 662650E	Soil	5	104	1.20	148	0.197	<20	3.16	0.012	0.09	0.5	0.04	3.6	<0.1	<0.05	9	<0.5
L649800N 662700E	Soil	3	87	1.22	131	0.192	<20	2.15	0.010	0.10	0.8	0.04	3.1	<0.1	<0.05	10	<0.5
L649800N 662750E	Soil	2	43	1.08	129	0.190	<20	1.91	0.015	0.11	0.3	0.02	2.4	0.1	<0.05	7	<0.5
L649800N 662800E	Soil	2	72	1.33	108	0.199	<20	2.79	0.010	0.05	0.2	0.04	2.8	<0.1	<0.05	9	<0.5
L649800N 662850E	Soil	2	85	1.53	218	0.235	<20	2.58	0.014	0.09	0.3	0.02	1.9	<0.1	<0.05	10	<0.5
L649800N 662900E	Soil	2	91	0.90	106	0.184	<20	2.70	0.007	0.06	0.5	0.04	2.6	<0.1	<0.05	10	<0.5
L649800N 662950E	Soil	2	97	0.80	105	0.216	<20	1.93	0.013	0.09	0.4	0.02	1.5	<0.1	<0.05	11	<0.5
L649800N 663000E	Soil	3	156	1.86	167	0.276	<20	3.15	0.012	0.20	0.4	0.03	3.4	<0.1	<0.05	11	<0.5
L649800N 663050E	Soil	3	161	2.53	350	0.314	<20	4.19	0.022	0.42	0.6	0.03	12.2	0.1	<0.05	12	<0.5
L649800N 663100E	Soil	3	62	1.37	88	0.196	<20	2.88	0.010	0.06	0.3	0.03	2.5	<0.1	<0.05	9	<0.5
L649800N 663150E	Soil	3	49	0.97	194	0.256	<20	2.00	0.013	0.12	0.2	0.02	2.7	<0.1	<0.05	12	<0.5
L649800N 663200E	Soil	2	50	1.76	209	0.220	<20	2.13	0.019	0.14	0.1	0.02	1.4	<0.1	<0.05	13	<0.5
L65000N 64700E	Soil	6	229	1.60	97	0.111	<20	2.23	0.006	0.12	0.1	0.02	3.4	<0.1	<0.05	8	0.6
L65000N 64750E	Soil	2	133	1.07	97	0.144	<20	2.42	0.005	0.10	0.2	0.02	2.2	0.1	<0.05	11	<0.5
L65000N 64800E	Soil	4	153	1.18	62	0.124	<20	1.80	0.011	0.06	0.1	0.01	1.6	<0.1	<0.05	8	<0.5

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Project:

ART/DL

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September 02, 2008

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Part 1

CERTIFICATE OF ANALYSIS

VAN08008650.1

Analyte	Method	1DX																			
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.001		
L65000N 64850E	Soil	3.4	43.8	14.7	170	0.2	50.7	15.5	385	4.57	17.2	0.7	2.5	2.3	11	0.5	1.0	0.2	93	0.09	0.222
L65000N 64900E	Soil	3.8	78.7	8.6	270	1.2	37.5	17.3	483	3.97	6.8	0.3	<0.5	1.5	22	1.4	0.9	0.1	86	0.12	0.109
L65000N 64950E	Soil	3.3	105.1	8.6	409	0.4	58.2	26.8	530	5.88	10.2	0.5	1.0	1.5	22	1.6	0.7	0.1	159	0.24	0.135
L65000N 65000E	Soil	3.4	225.4	15.0	256	0.5	109.1	23.4	453	4.30	22.2	0.7	0.9	3.1	17	1.2	1.3	0.3	73	0.23	0.184
L65000N 65050E	Soil	6.4	173.8	16.2	241	1.1	67.3	25.3	604	8.77	556.4	0.6	7.5	1.5	12	1.8	28.4	0.2	45	0.11	0.179
L65000N 65100E	Soil	2.1	28.2	12.2	118	0.3	24.8	9.2	177	3.62	10.2	0.5	<0.5	2.7	7	0.7	0.5	0.3	70	0.06	0.167
L65000N 65150E	Soil	2.1	27.2	11.4	165	0.3	23.2	13.0	241	3.33	8.1	0.5	1.8	2.0	14	1.3	0.5	0.3	68	0.15	0.262
L65000N 65200E	Soil	1.3	81.2	10.3	127	0.2	51.6	15.7	261	2.77	5.6	0.2	0.9	1.1	10	0.5	0.2	0.2	65	0.15	0.099
L65000N 65250E	Soil	2.0	125.4	8.6	172	0.9	79.2	27.5	339	3.58	5.4	0.4	1.6	1.3	12	0.7	0.3	0.1	92	0.16	0.061
L65000N 65300E	Soil	5.1	88.5	9.6	420	0.3	153.9	33.2	435	4.21	6.4	0.6	0.5	1.8	17	2.1	0.7	0.1	83	0.17	0.123
L65000N 662000E	Soil	1.2	113.7	6.5	94	0.2	49.0	21.9	643	4.67	15.5	0.3	0.8	0.8	18	0.3	1.0	0.1	164	0.20	0.070
L65000N 662050E	Soil	1.6	131.1	8.4	104	0.2	63.5	26.0	1803	4.80	22.6	0.6	7.4	0.7	33	0.4	1.8	0.1	159	0.45	0.066
L65000N 662100E	Soil	1.1	79.2	6.2	116	<0.1	42.2	24.0	483	5.27	40.8	0.3	5.7	0.8	31	0.2	1.3	0.1	184	0.30	0.155
L65000N 662150E	Soil	1.3	35.2	7.5	107	0.1	26.0	14.7	690	4.23	13.4	0.4	1.0	0.6	22	0.4	1.4	0.2	153	0.20	0.114
L65000N 662200E	Soil	1.4	19.5	6.5	47	0.2	12.3	6.2	173	2.53	26.9	0.3	24.6	0.5	16	0.2	1.1	0.1	102	0.08	0.037
L65000N 662250E	Soil	1.7	39.1	7.9	72	0.3	25.0	12.6	507	3.10	11.0	0.3	0.8	0.5	14	0.3	0.8	0.1	105	0.13	0.098
L65000N 662300E	Soil	0.7	33.8	5.9	64	0.1	17.7	12.9	258	4.06	8.1	0.3	0.5	0.5	23	0.3	0.5	<0.1	154	0.17	0.080
L65000N 662350E	Soil	1.2	22.8	6.7	77	0.1	22.5	11.2	302	4.00	8.9	0.3	1.1	0.5	20	0.2	1.0	0.1	121	0.24	0.171
L65000N 662400E	Soil	1.6	72.0	6.9	62	<0.1	38.6	15.3	288	4.31	18.7	0.4	1.7	1.0	21	0.3	1.3	0.1	130	0.27	0.061
L65000N 662450E	Soil	1.6	21.3	6.8	76	<0.1	25.3	11.4	240	4.31	10.0	0.4	1.5	0.9	18	0.4	0.8	0.1	131	0.18	0.065
L65000N 662500E	Soil	1.5	16.6	6.9	39	<0.1	14.8	8.1	269	3.33	10.5	0.4	1.9	0.3	25	0.2	0.8	0.1	154	0.47	0.041
L65000N 662550E	Soil	1.0	24.7	4.3	74	<0.1	29.7	19.0	388	5.73	6.9	0.4	11.1	0.8	16	0.2	1.8	<0.1	211	0.31	0.024
L65000N 662600E	Soil	1.6	25.4	7.7	56	0.1	22.3	9.8	244	3.67	9.9	0.3	<0.5	0.7	15	<0.1	0.8	0.1	140	0.14	0.048
L65000N 662650E	Soil	1.9	34.3	8.6	96	0.1	39.4	16.5	462	4.22	12.7	0.4	1.3	0.9	13	0.2	1.0	0.1	121	0.13	0.064
L65000N 662700E	Soil	1.4	61.4	6.3	56	<0.1	16.1	10.3	253	4.54	7.1	0.4	1.2	0.7	14	0.3	0.8	0.1	154	0.10	0.035
L65000N 662800E	Soil	1.1	19.4	5.1	72	0.1	29.6	13.6	268	3.23	7.9	0.4	<0.5	0.6	11	0.2	0.5	<0.1	115	0.16	0.041
L65000N 662850E	Soil	1.6	23.6	6.7	76	<0.1	48.9	17.7	248	4.72	11.8	0.4	0.6	0.6	19	0.6	0.6	<0.1	180	0.16	0.028
L65000N 662900E	Soil	1.5	62.5	6.0	74	<0.1	59.9	19.7	363	4.50	15.2	0.4	<0.5	0.7	17	0.3	0.9	0.1	146	0.17	0.050
L65000N 662950E	Soil	1.1	8.9	6.8	62	<0.1	22.4	9.7	221	2.95	4.3	0.3	<0.5	0.6	19	0.2	0.3	<0.1	92	0.21	0.122
L65000N 663000E	Soil	1.2	30.1	6.8	89	0.4	51.0	15.7	464	3.58	14.9	0.5	282.7	1.0	16	0.2	1.0	0.1	101	0.22	0.091

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Part 2

CERTIFICATE OF ANALYSIS

VAN08008650.1

Method	Analyte	1DX															
		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	ppm
		1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
L65000N 64850E	Soil	7	87	0.61	88	0.080	<20	2.77	0.006	0.08	0.3	0.04	3.5	0.1	<0.05	8	1.0
L65000N 64900E	Soil	5	48	0.85	81	0.081	<20	2.13	0.006	0.14	0.2	0.04	4.9	0.3	<0.05	6	2.8
L65000N 64950E	Soil	5	90	1.63	71	0.146	<20	3.34	0.008	0.11	0.3	0.04	3.7	0.1	<0.05	9	2.3
L65000N 65000E	Soil	8	79	0.87	99	0.117	<20	2.90	0.010	0.13	0.3	0.06	3.0	0.2	<0.05	7	1.1
L65000N 65050E	Soil	8	31	0.17	193	0.007	<20	0.99	0.004	0.06	0.1	0.13	3.6	0.2	<0.05	2	5.4
L65000N 65100E	Soil	7	50	0.37	63	0.082	<20	1.87	0.006	0.05	0.2	0.05	1.9	0.1	<0.05	8	<0.5
L65000N 65150E	Soil	4	45	0.29	77	0.087	<20	2.37	0.007	0.05	0.3	0.03	1.9	0.1	<0.05	8	0.7
L65000N 65200E	Soil	4	92	0.68	80	0.056	<20	2.17	0.005	0.06	0.2	0.02	1.2	0.2	<0.05	7	<0.5
L65000N 65250E	Soil	4	68	1.02	80	0.106	<20	2.58	0.010	0.09	0.2	0.02	3.4	0.2	<0.05	8	0.8
L65000N 65300E	Soil	5	198	1.14	63	0.100	<20	2.30	0.007	0.08	0.2	0.02	1.8	0.2	<0.05	5	0.8
L65000N 662000E	Soil	4	47	1.36	91	0.261	<20	2.92	0.016	0.15	0.2	0.03	4.1	<0.1	<0.05	11	<0.5
L65000N 662050E	Soil	7	74	1.46	153	0.190	<20	2.86	0.017	0.26	0.2	0.05	5.0	0.2	<0.05	10	0.7
L65000N 662100E	Soil	4	99	1.87	148	0.221	<20	3.08	0.017	0.19	0.3	0.02	4.3	<0.1	<0.05	10	<0.5
L65000N 662150E	Soil	4	58	1.06	159	0.191	<20	1.99	0.015	0.14	0.2	0.01	2.9	<0.1	<0.05	11	<0.5
L65000N 662200E	Soil	3	31	0.48	46	0.131	<20	1.43	0.013	0.06	1.4	0.02	1.8	<0.1	<0.05	9	<0.5
L65000N 662250E	Soil	3	52	0.79	87	0.155	<20	1.56	0.013	0.09	0.3	0.02	1.8	0.1	<0.05	9	0.8
L65000N 662300E	Soil	2	30	1.11	77	0.283	<20	1.77	0.014	0.18	0.3	0.03	1.7	<0.1	<0.05	10	0.7
L65000N 662350E	Soil	3	48	0.85	67	0.159	<20	1.81	0.011	0.09	0.3	0.03	1.8	<0.1	<0.05	11	<0.5
L65000N 662400E	Soil	5	69	1.10	81	0.194	<20	2.72	0.017	0.13	0.5	0.06	2.6	<0.1	<0.05	9	1.0
L65000N 662450E	Soil	4	63	0.74	76	0.169	<20	1.87	0.011	0.07	0.5	0.06	2.1	<0.1	<0.05	9	0.8
L65000N 662500E	Soil	3	48	0.60	80	0.325	<20	1.68	0.018	0.17	0.2	0.03	1.5	<0.1	<0.05	12	<0.5
L65000N 662550E	Soil	3	73	1.23	45	0.312	<20	2.11	0.016	0.16	0.5	0.03	3.7	<0.1	<0.05	9	0.6
L65000N 662600E	Soil	4	56	1.02	83	0.223	<20	1.98	0.014	0.15	0.3	0.02	2.1	<0.1	<0.05	10	<0.5
L65000N 662650E	Soil	5	82	0.91	97	0.175	<20	2.17	0.009	0.10	0.2	0.04	2.2	<0.1	<0.05	10	<0.5
L65000N 662700E	Soil	3	37	1.15	49	0.249	<20	2.57	0.019	0.07	0.5	0.04	1.9	<0.1	<0.05	10	0.5
L65000N 662800E	Soil	2	63	0.86	54	0.210	<20	1.28	0.008	0.06	0.2	0.02	1.6	<0.1	<0.05	8	0.7
L65000N 662850E	Soil	3	126	1.47	82	0.277	<20	2.59	0.018	0.10	0.6	0.03	3.0	<0.1	<0.05	10	0.7
L65000N 662900E	Soil	3	121	1.58	71	0.255	<20	2.65	0.009	0.09	0.4	0.03	3.2	<0.1	<0.05	10	<0.5
L65000N 662950E	Soil	2	63	0.61	51	0.162	<20	1.42	0.014	0.05	0.2	0.03	1.0	<0.1	<0.05	7	<0.5
L65000N 663000E	Soil	6	94	1.10	136	0.141	<20	1.92	0.009	0.11	0.1	0.03	2.8	<0.1	<0.05	8	<0.5

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ACME ANALYTICAL LABORATORIES LTD.

www.acmelab.com

Client:

Happy Creek Minerals Ltd.

Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2 Canada

Project:

ART/DL

Report Date:

September 02, 2008

Page:

1 of 1 Part 1

QUALITY CONTROL REPORT

VAN08008650.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
L649800N 662900E	Soil	0.9	25.5	8.5	136	0.1	39.5	16.0	299	3.92	9.0	0.4	<0.5	1.0	13	0.5	0.6	0.1	100	0.16	0.292
REP L649800N 662900E	QC	0.9	27.5	8.3	144	0.1	44.0	17.2	311	4.10	9.4	0.4	0.6	1.2	16	0.5	0.6	0.2	107	0.19	0.291
Reference Materials																					
STD DS7	Standard	20.4	115.9	77.2	404	0.8	54.1	9.7	605	2.28	50.9	4.9	55.6	4.0	68	6.1	5.8	4.9	82	0.84	0.076
STD DS7	Standard	20.4	113.4	83.1	417	0.8	57.8	10.0	634	2.40	53.8	5.6	70.4	4.5	77	6.4	5.7	5.3	88	0.94	0.077
STD DS7	Standard	20.5	101.6	72.4	388	0.8	55.3	9.1	637	2.37	50.5	4.7	54.4	3.8	68	5.6	5.4	4.1	88	0.90	0.070
STD DS7	Standard	19.7	101.7	73.2	392	0.8	53.1	8.7	607	2.23	48.5	6.7	58.8	4.4	67	5.3	5.2	4.2	85	0.89	0.074
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	0.08
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001



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ART/DL

Report Date:

September 02, 2008

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Part 2

QUALITY CONTROL REPORT

VAN08008650.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Pulp Duplicates																	
L649800N 662900E	Soil	2	91	0.90	106	0.184	<20	2.70	0.007	0.06	0.5	0.04	2.6	<0.1	<0.05	10	<0.5
REP L649800N 662900E	QC	3	96	0.97	116	0.195	<20	2.93	0.010	0.07	0.4	0.04	2.8	<0.1	<0.05	10	<0.5
Reference Materials																	
STD DS7	Standard	11	188	1.03	382	0.110	37	0.94	0.088	0.45	3.8	0.20	2.6	4.1	0.18	4	3.8
STD DS7	Standard	12	205	1.07	412	0.123	43	1.01	0.102	0.46	3.6	0.22	3.0	4.5	0.19	5	3.5
STD DS7	Standard	11	207	1.03	377	0.114	50	0.97	0.092	0.47	4.2	0.24	2.2	4.2	0.15	5	4.5
STD DS7	Standard	11	194	1.02	363	0.113	39	0.94	0.085	0.48	3.4	0.21	2.1	4.1	0.21	5	4.0
STD DS7 Expected		13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5



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Submitted By:

David Blann

Receiving Lab:

Canada-Vancouver

Received:

July 28, 2008

Report Date:

August 06, 2008

Page:

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CERTIFICATE OF ANALYSIS

VAN08007690.1

CLIENT JOB INFORMATION

Project: ARDL
Shipment ID:
P.O. Number 08-PX-0119
Number of Samples: 4

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	4	Crush, split and pulverize rock to 200 mesh		
1DX	4	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Bob Lane
D. Ridley



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Project:

ARDL

Report Date:

August 06, 2008

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Part 1

CERTIFICATE OF ANALYSIS

VAN08007690.1

Analyte	Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX			
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V		
		Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	2	0.01		
828513	Rock		1.01	0.6	24.2	10.6	72	<0.1	22.8	14.6	578	3.50	6.6	0.7	<0.5	9.2	17	0.2	0.2	0.2	8	0.10
828514	Rock		1.19	0.9	1.8	16.7	75	<0.1	2.2	0.8	273	0.68	91.2	2.2	<0.5	10.3	5	0.5	0.6	0.1	4	0.05
828515	Rock		2.96	0.5	114.7	2.7	27	<0.1	56.8	22.4	368	2.63	0.7	0.1	0.5	0.4	47	<0.1	0.3	<0.1	63	1.11
828516	Rock		1.02	18.3	31.7	9.4	135	0.1	17.2	3.4	428	3.91	18.7	1.5	<0.5	2.0	26	0.3	3.5	0.2	227	0.25



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Project:

ARDL

Report Date:

August 06, 2008

Page:

2 of 2 Part 2

CERTIFICATE OF ANALYSIS

VAN08007690.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
828513	Rock	0.064	27	8	0.16	39	0.004	<20	0.59	0.062	0.12	<0.1	<0.01	3.2	<0.1	0.05	1	0.6
828514	Rock	0.025	11	4	0.06	38	0.002	<20	0.30	0.058	0.10	<0.1	<0.01	1.0	<0.1	<0.05	2	<0.5
828515	Rock	0.139	1	76	1.48	341	0.157	<20	1.35	0.103	0.64	0.2	<0.01	4.5	<0.1	<0.05	4	<0.5
828516	Rock	0.097	5	108	1.40	43	0.138	<20	1.53	0.071	0.65	0.2	0.05	10.8	1.6	0.07	8	2.9



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Project:

ARDL

Report Date:

August 06, 2008

Page:

1 of 1 Part 1

QUALITY CONTROL REPORT

VAN08007690.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
Reference Materials																					
STD DS7	Standard	18.5	97.9	75.0	377	0.8	50.3	8.5	574	2.15	50.3	5.0	55.0	3.9	65	6.5	4.7	4.5	77	0.81	
STD DS7	Standard	19.8	103.2	79.0	397	0.9	52.7	9.0	616	2.37	52.6	5.3	45.5	4.6	73	6.4	5.1	4.9	81	0.88	
STD DS7 Expected		20.9	109	70.6	411	0.9	56	9.7	627	2.39	48.2	4.9	70	4.4	69	6.4	5.9	4.5	86	0.93	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
Prep Wash																					
G1	Prep Blank	<0.01	0.1	1.7	2.3	43	<0.1	4.9	4.2	499	1.61	<0.5	2.1	<0.5	3.7	53	<0.1	<0.1	<0.1	34	0.42



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Project:

ARDL

Report Date:

August 06, 2008

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Page:

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Part 2

QUALITY CONTROL REPORT

VAN08007690.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Reference Materials																		
STD DS7	Standard	0.073	10	175	0.98	366	0.103	58	0.91	0.079	0.43	3.6	0.20	2.0	3.7	0.06	4	3.5
STD DS7	Standard	0.077	12	188	1.02	402	0.118	52	1.00	0.089	0.47	3.6	0.21	2.3	4.2	0.15	5	3.7
STD DS7 Expected		0.08	13	163	1.05	370	0.124	39	0.959	0.073	0.44	3.8	0.2	2.5	4.2	0.21	5	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
Prep Wash																		
G1	Prep Blank	0.077	5	8	0.59	230	0.122	<20	0.88	0.058	0.53	<0.1	<0.01	1.7	0.3	<0.05	4	<0.5



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ACME ANALYTICAL LABORATORIES LTD.

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Prince George BC V2L 4V1 Canada

Submitted By:

Bob Lane
Canada-Vancouver

Receiving Lab:

Received:

July 09, 2008

Report Date:

July 16, 2008

Page:

1 of 2

CERTIFICATE OF ANALYSIS

VAN08007128.1

CLIENT JOB INFORMATION

Project: Hen-AC-AD

Shipment ID:

P.O. Number

Number of Samples: 24

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage

DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Happy Creek Minerals Ltd.
Suite 2300 - 1066 W. Hastings St.
Vancouver BC V6E 3X2
Canada

CC: Dave Ridley
Mark Ralph



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only.



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Project:

Hen-AC-AD

Report Date:

July 16, 2008

Page:

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Part 1

CERTIFICATE OF ANALYSIS

VAN08007128.1

Method	Analyte	Unit	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
			Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	
			kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	
		MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.01	
659660	Rock		1.42	1.8	663.7	1.8	102	0.3	9.2	18.0	1180	5.51	0.6	1.1	1.3	1.4	37	0.1	0.2	<0.1	180	1.49
659661	Rock		2.18	0.8	175.8	2.0	52	0.1	31.0	20.8	563	3.69	2.4	0.1	3.0	0.2	90	0.1	0.1	<0.1	118	2.14
659662	Rock		1.26	0.3	145.3	21.5	116	0.2	26.8	29.1	466	3.77	11.6	0.3	0.9	0.8	230	0.2	<0.1	<0.1	120	2.13
659663	Rock		1.56	0.4	157.3	1.6	26	<0.1	37.2	18.7	271	2.06	2.6	0.5	3.4	1.9	74	<0.1	0.1	<0.1	61	1.31
659664	Rock		2.08	0.3	114.4	2.1	28	<0.1	67.0	23.4	478	2.55	1.2	0.5	1.3	1.2	122	0.1	0.2	<0.1	67	5.79
659665	Rock		1.45	0.7	78.6	30.4	150	0.2	21.2	21.5	362	4.44	5.0	0.3	6.1	0.8	65	0.6	3.3	0.1	126	0.88
659666	Rock		1.67	0.4	58.3	2.7	72	0.1	13.5	18.7	857	4.76	10.0	0.3	<0.5	0.9	36	0.2	0.5	<0.1	138	1.75
659667	Rock		1.80	1.4	128.0	4.3	46	0.2	17.2	11.5	305	2.65	4.8	0.3	1.6	1.7	50	<0.1	0.8	<0.1	106	0.39
659668	Rock		1.11	0.2	375.0	0.5	29	0.1	14.2	16.6	450	3.18	2.4	0.1	6.1	0.2	49	<0.1	<0.1	<0.1	123	1.33
659669	Rock		1.10	0.7	15.1	1.5	22	<0.1	1.6	4.2	843	1.54	2.8	0.3	0.7	0.2	89	0.2	0.2	<0.1	79	2.01
828501	Rock		2.44	1.5	193.1	3.7	27	<0.1	21.9	20.2	271	3.13	2.3	0.3	1.0	0.6	75	<0.1	0.7	<0.1	69	1.29
828502	Rock		2.62	0.4	142.5	4.5	42	0.2	28.9	19.3	311	2.96	1.9	0.4	3.2	0.9	105	<0.1	0.4	0.1	84	1.74
828503	Rock		1.50	1.5	102.6	2.6	68	<0.1	134.5	26.7	337	3.44	0.5	0.5	1.5	0.6	78	1.7	<0.1	<0.1	73	1.96
828504	Rock		1.56	1.0	53.8	2.6	66	0.1	17.4	15.1	599	4.13	2.1	0.3	1.8	1.6	73	<0.1	0.7	<0.1	138	0.94
828505	Rock		2.17	0.6	45.4	1.7	48	0.1	9.7	10.4	346	2.64	2.1	0.2	2.1	1.0	25	<0.1	0.7	<0.1	79	1.01
828506	Rock		2.06	2.9	6.1	5.4	101	0.4	34.6	2.3	267	0.85	28.8	1.3	1.7	1.5	1642	3.1	0.9	<0.1	7	18.49
828507	Rock		1.57	2.5	139.1	7.2	52	<0.1	75.6	34.9	409	6.06	0.7	0.3	2.1	0.6	42	0.2	1.1	0.2	118	0.53
828508	Rock		1.44	0.9	74.1	1.7	26	<0.1	908.4	70.1	597	2.34	13.8	0.5	1.7	0.3	108	0.2	<0.1	<0.1	55	9.62
828509	Rock		1.37	0.3	54.5	4.0	65	<0.1	105.8	30.2	1374	5.96	22.3	0.2	2.2	0.7	646	0.2	4.2	<0.1	159	7.41
828510	Rock		1.67	0.6	51.0	9.3	183	0.1	37.9	14.7	281	7.42	1.4	0.5	1.2	7.6	13	0.3	0.3	0.2	34	0.13
828511	Rock		1.15	5.0	76.5	11.8	170	0.3	51.9	16.2	867	4.24	18.2	2.1	<0.5	5.7	23	1.0	0.8	0.1	30	0.20
828512	Rock		1.52	0.5	130.9	4.0	111	<0.1	6.8	31.0	1304	6.78	5.3	0.3	0.9	1.6	94	0.2	1.2	<0.1	199	1.25
826522	Rock		1.97	0.8	157.8	1.3	33	<0.1	20.6	21.9	387	2.80	1.8	0.7	1.2	2.5	81	<0.1	<0.1	<0.1	82	1.65
826523	Rock		2.60	0.4	852.3	2.7	50	0.7	7.8	13.1	460	2.85	3.1	0.7	32.8	2.2	44	<0.1	0.3	<0.1	102	0.87



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Part 2

CERTIFICATE OF ANALYSIS

VAN08007128.1

	Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
	Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se
	Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm
	MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5
659660	Rock	0.253	17	8	1.41	247	0.145	<20	1.83	0.034	1.04	<0.1	<0.01	7.6	<0.1	<0.05	7	<0.5
659661	Rock	0.128	2	57	1.71	211	0.202	<20	2.41	0.111	1.50	0.1	<0.01	3.0	0.3	0.16	6	<0.5
659662	Rock	0.074	3	35	1.49	414	0.222	<20	4.32	0.373	1.34	<0.1	<0.01	3.3	0.2	0.63	9	0.7
659663	Rock	0.128	7	72	0.83	88	0.152	<20	1.36	0.112	0.55	<0.1	0.01	2.7	<0.1	0.14	4	<0.5
659664	Rock	0.083	4	84	1.41	233	0.184	<20	2.04	0.163	0.85	<0.1	<0.01	3.4	0.1	0.10	5	<0.5
659665	Rock	0.123	4	51	1.35	71	0.155	<20	1.73	0.099	0.89	0.2	0.02	2.5	0.4	2.45	8	<0.5
659666	Rock	0.109	5	34	2.64	59	0.174	<20	3.08	0.040	0.51	0.2	0.02	7.4	0.5	0.54	7	0.8
659667	Rock	0.110	8	40	0.79	278	0.204	<20	1.36	0.139	0.81	0.2	<0.01	3.5	0.3	0.17	6	1.0
659668	Rock	0.121	1	31	1.19	44	0.162	<20	1.29	0.143	0.41	<0.1	<0.01	4.8	<0.1	<0.05	4	<0.5
659669	Rock	0.198	2	9	0.22	31	0.100	<20	0.72	0.045	0.12	0.2	<0.01	1.8	<0.1	<0.05	3	<0.5
828501	Rock	0.091	4	33	0.76	141	0.215	<20	1.61	0.189	0.42	0.1	<0.01	3.0	<0.1	0.80	5	1.7
828502	Rock	0.105	3	37	1.52	162	0.188	<20	3.04	0.342	0.50	<0.1	<0.01	3.4	0.2	0.14	7	<0.5
828503	Rock	0.135	3	184	2.10	253	0.183	<20	1.80	0.138	0.98	<0.1	<0.01	2.3	<0.1	0.89	5	0.5
828504	Rock	0.109	7	34	1.43	530	0.325	<20	2.99	0.279	1.58	0.1	<0.01	5.4	0.3	0.13	9	2.1
828505	Rock	0.078	4	35	0.74	298	0.172	<20	1.88	0.136	0.56	0.3	<0.01	3.9	<0.1	0.14	7	1.5
828506	Rock	0.096	4	13	0.17	98	0.002	<20	0.14	0.004	0.06	<0.1	<0.01	2.2	<0.1	0.06	<1	7.6
828507	Rock	0.169	3	148	2.03	292	0.310	<20	2.25	0.091	1.59	0.3	<0.01	2.6	0.3	1.17	10	5.1
828508	Rock	0.099	2	223	1.30	192	0.147	46	1.62	0.067	0.82	<0.1	<0.01	1.5	0.1	<0.05	4	<0.5
828509	Rock	0.162	4	244	3.73	184	0.065	<20	2.23	0.042	0.58	<0.1	<0.01	16.4	<0.1	<0.05	7	0.8
828510	Rock	0.055	17	35	1.42	40	0.005	<20	3.21	0.014	0.07	<0.1	<0.01	3.0	<0.1	<0.05	10	1.7
828511	Rock	0.091	16	33	1.24	96	0.003	<20	1.64	0.016	0.17	<0.1	0.05	1.8	0.1	<0.05	4	5.1
828512	Rock	0.266	6	5	3.11	119	0.089	<20	3.51	0.022	0.65	0.1	<0.01	7.2	<0.1	0.13	12	<0.5
826522	Rock	0.161	11	22	0.97	169	0.152	<20	2.31	0.237	0.74	<0.1	<0.01	2.8	0.1	0.17	6	0.7
826523	Rock	0.135	5	9	1.03	83	0.104	<20	1.52	0.047	0.32	0.2	0.01	2.0	<0.1	0.09	6	<0.5



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QUALITY CONTROL REPORT

VAN08007128.1

Method	WGHT	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	
Reference Materials																					
STD DS7	Standard	19.9	110.9	77.7	385	0.8	48.0	8.7	584	2.25	49.2	5.1	50.7	4.4	74	6.7	5.6	5.0	81	0.90	
STD DS7	Standard	19.3	107.5	71.1	362	0.9	49.0	8.5	550	2.15	43.9	4.9	79.6	4.4	65	6.4	5.4	4.7	75	0.87	
STD DS7	Standard	23.9	102.5	69.9	392	0.8	58.0	9.5	647	2.32	56.2	4.8	49.8	4.2	70	6.4	4.9	4.5	82	0.93	
STD DS7	Standard	21.2	103.4	69.4	407	0.8	57.1	9.2	621	2.29	51.3	4.4	51.4	4.0	65	6.3	4.9	4.6	86	0.89	
STD DS7 Expected		20.92	109	70.6	411	0.89	56	9.7	627	2.39	48.2	4.9	70	4.4	68.7	6.38	5.86	4.51	86	0.93	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	
Prep Wash																					
G1	Prep Blank	<0.01	0.6	19.2	3.2	47	<0.1	4.7	4.5	569	2.00	<0.5	2.3	0.6	4.0	67	<0.1	<0.1	0.1	42	0.56
G1	Prep Blank	<0.01	1.2	75.3	3.1	45	<0.1	6.8	4.3	530	2.03	0.6	2.5	0.8	4.3	73	<0.1	<0.1	0.1	38	0.66



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Part 2

QUALITY CONTROL REPORT

VAN08007128.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX		
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
Reference Materials																		
STD DS7	Standard	0.071	12	156	1.03	367	0.126	36	0.97	0.078	0.45	3.5	0.21	2.2	4.0	0.18	4	3.9
STD DS7	Standard	0.068	10	150	1.00	342	0.111	35	0.93	0.070	0.40	3.1	0.17	1.8	3.8	0.17	4	3.4
STD DS7	Standard	0.076	12	180	1.04	391	0.112	28	1.03	0.084	0.45	3.8	0.19	2.3	4.2	0.18	5	4.8
STD DS7	Standard	0.081	11	189	1.01	388	0.107	32	0.99	0.086	0.45	3.6	0.19	2.1	4.2	0.18	5	4.3
STD DS7 Expected		0.08	12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8	0.2	2.5	4.19	0.21	4.6	3.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.05	<1	<0.5	
Prep Wash																		
G1	Prep Blank	0.088	7	10	0.61	248	0.152	<20	1.07	0.095	0.56	<0.1	<0.01	2.0	0.4	<0.05	5	<0.5
G1	Prep Blank	0.080	8	13	0.60	219	0.145	<20	1.14	0.113	0.53	0.1	<0.01	1.9	0.4	<0.05	5	<0.5

