

Report Of The 1997 Diamond Drilling Program Allin Creek Property Allin 1-8 Claims

Omineca Mining Division British Columbia NTS 93L/01E Latitude: 54° 10' 08'' Longitude: 126° 11' 05''

Owner/Operator: Hudson Bay Exploration And Development Company Limited 405 - 470 Granville Street Vancouver, British Columbia V6C 1V5

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GEOLOGICAL SURVEY DRAMA

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<u>Summary</u>

The Allin Creek Property is located in central British Columbia, 49 kilometres southeast of Houston, at 54°10'08"north latitude and 126°11'05"west longitude. The property is owned by G.H. Klein of Prince George and is under option to Hudson Bay Exploration and Development Company Limited. The property comprises eight mineral claims totalling 128 units within the Omineca Mining Division.

The claims, Allin 1-8, fall immediately adjacent to and partially overlap the former Equity silver mine property. Operating between 1980 and 1994, the Equity Silver mine produced over 2 million kilograms of silver making it British Columbia's largest producing sliver mine at the time.

The property is underlain by early Cretaceous through Tertiary rocks that form part of the Stikine Terrane of the Intermontane Belt. Exposures on the Allin Creek property are limited to hilltops and creek banks. Known outcrops and previous drilling have identified lithologies including andesites, dacites, ash flows, basalts, argillites and intrusives.

Previous exploration on the Allin Creek property has outlined coincidental silvercopper soil geochemical, and induced polarization anomalies. More detailed work identified alteration and pyrite mineralization in outcrop and drill core, and located mineralized copper/silver float specimens. This work suggested that the possibility for an Equity Silver related system of mineralization may exist on the property.

The 1997 exploration program consisted of five BQ and six NQ sized diamond drill holes totaling 2177 meters. These holes tested IP and enzyme leach anomalies delineated and compiled during the 1996 exploration program. The results of the 1997 drill program failed to intersect any significant base and/or precious metal mineralization. The source of the mineralized float boulders remains unknown. The following report outlines the 1997 diamond drill program conducted by Hudson Bay Exploration & Development Co. Ltd. on the Allin Creek property.

Location & Access

The Allin Creek property, situated 49 kilometres southeast of Houston, immediately east of the former Equity Mine site, 34 kilometres southwest of Burns Lake and 585 kilometres northwest of Vancouver (Figure 1). The Allin claims are centred at 54°10'08"N latitude and 126°11'05"W longitude. The claims fall entirely within the 93L/01E map sheet of the NTS map series.

Access to the Allin Creek property can be made by helicopter based out of Houston or by a series of logging roads. The most direct route to the property using logging roads is from Houston via the Equity Mine, Buck Creek connector, Buck Creek, Colleymount and Allin Creek roads, a distance of approximately 68 kilometres (Figure 2). Alternatively, access from Houston along the Buck Creek, Colleymount and Allin Creek roads, a distance of approximately 80 kilometres (Figure 2). Previously other road access from the north and south was also available, however, these roads have since been deactivated or washed out.

Physiography, Vegetation & Climate

Topography on the property is moderate with elevations ranging from 1128 meters in the south to 1494 meters in the north. The property is generally well drained with swampy ground occurring along Allin creek and lessor tributaries. Vegetation consists of mature stands of subalpine balsam along the hillsides with lessor amounts of spruce and pine in the wetter regions. Alder occurs locally on slopes and with dwarf birch in marshy areas. Typically the area is subjected to warm wet summers and extended cold winters with snow depths of 1 to 1.5 meters. The property is generally free of snow pack between early-mid June and late October.

<u>Ownership</u>

The Allin Creek property is owned by Gerald H. Klein of Prince George, British Columbia and operated by through an option agreement by Hudson Bay Exploration and Development Co. Ltd.. Consisting of the eight claims, Allin 1-8, the property is comprised of 128 units, 3200 hectares located in the Omineca Mining Division (Figure 3). Listed below in Table 1 is the claim information and tenure status for the Allin 1-8 claims.





CLAIM NAME	UNITS	RECORD NUMBER	PROJECTED EXPIRY
Allin 1	20	316461	*March 8,2007
Allin 2	20	316462	*March 8.2007
Allin 3	20	316463	*March 8,2007
Allin 4	16	339852	Sept 19,1999
Allin 5	16	339853	Sept 17,1999
Allin 6	16	339854	Sept 18,1999
Allin 7	8	350311	Sept 7,2007
Allin 8	4	350312	Sept 8,2007

TABLE 1: CLAIM STATUS

(*pending acceptance of this assessment report)

History of Work

In brief, the Allin property has undergone numerous phases of exploration since the 1970's including prospecting, mapping, geochemical sampling and geophysical surveying (Anselmo, G.L. 1970; Anselmo G.L. et al., 1970; Bell, R.A. et al., 1970; Mark, D.G., 1987; Mark, D.G. 1989). Over this time a number of targets including low order coincident copper-silver soil anomalies and multiple number IP anomalies have been located and drill tested with largely inconclusive results (Garagan, T, 1988).

Prospecting in 1992 by Gerald Klein produced mineralized float boulders that contain similar copper/silver grades to those found at the then shutting down Equity deposit located some 5 kilometers to the northwest. Based on this information Equity Mines Ltd. optioned the Allin property from Gerald Klein and proceeded complete 7 drill holes on several IP targets and a coincident copper-silver soil anomaly. Results from this phase of drilling also failed to explain the sources of the anomalies (Wall, T.J 1993).

In 1996 Hudson Bay Exploration and Development Co. Ltd. optioned the Allin 1-3 claims and proceeded to stake the Allin 4-8 claims for G. Klein. A review of previous work suggested that a thick layer of overburden covered much of the property and that this overburden may cover blind deposits which are not amenable to conventional geochemical exploration techniques. Due to this possibility and some question as to the



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ice direction of the last glaciation in the area, a geochemical sampling program in the summer of 1996 was conducted that utilized enzyme leach techniques, which are said to be able to penetrate thick overburden (Jackson, R.G., 1995). From this work 10 enzyme leach anomalies and 1 IP target were selected for drilling during the 1997 exploration season.

Work Program

Work on the Allin property was conducted from June 23, 1997 to September 24, 1997. During this time personnel including Ed Fluskey, Dave Garratt, Mark Cruickshank, Mike Buchanan of Hudson Buay Exploration & Development Co. Ltd. and Beaupre Diamond Drilling of Princeton, British Columbia conducted a drilling program consisting of 4 road access and 7 helicopter supported diamond drill holes totaling 2177 meters. Access to the sites was accommodated by the creation of 3.4 kilometers of hand cut ATV trails and 0.18 kilometers of tractor trail. Each site and/or trail used in the diamond drilling program was subjected to the following steps:

Location, evaluation and cutting of the trails and drill sites

- Careful selection of sites which contained the fewest number of merchantable healthy trees.

- Photographs of areas before cutting thereby making a permanent record of the area prior to any disturbance.

- Assessment of the number, size and species of the trees to be cut down.

- Pre-cutting of all trees (if tractor is to be used).

- Cutting of branches and trees as prescribed by Ministry of Forests and the 'Guidelines for Mineral Exploration (1992).

- GPS control points taken as to facilitate mapping of the trails and sites for later reference.

Reclamation of trails and sites

- Clean trails and sites of garbage and debris.
- Back blade and smooth trail and site (if tractor was used).
- Spread fertilizer and grass seed on disturbed areas.
- Backfill any sumps used during the drilling.
- Throw and scatter logs and branches back onto trails and drill sites.

Regional Geology

The Allin Creek property lies central to the Buck Creek area. This area falls within a fault bounded Tertiary basin defined by a series of arcuate features and radial lineaments inscribed within points approximated by Houston, Burns Lake and Francois Lake. This basin has been described as a protocaldera structure (Van Damme V.P. 1996). The Buck Creek area is underlain by a diverse suite of



Mesozoic and Tertiary volcano-sedimentary rocks and a smaller number of igneous intrusions (Table 2) (Figure 4).

AGE	STRATIGRAPHY	THICKNESS (METERS)	INTRUSIVES
MIOCENE	POPLAR BUTTES FORMATION	60-90	FEEDER DIKES
EOCENE	FRANCOIS LAKE GROUP		
	BUCK CREEK FORMATION	400	FEEDER DIKES
	PARROT MOUNTAIN MEMBER		
	SWANS LAKE MEMBER		
	HOUSTON MEMBER		
	GOOSLY LAKE FORMATION	500	GOOSLY(48-54M)
	BURNS LAKE FORMATION		
U. CRETACEOUS	TIP TOP HILL FM-KASALKA GP	500	NANIKA(47-54M)
	ACIDIC VOLC FM-KASALKA GP	100	BULKLEY (64-84M)
L. CRETACEOUS	SKEENA GROUP -KASALKA GP	750	
	-SKEENA GP		
	-RED ROSE FM		
JURASSIC	HAZELTON GROUP		TOPLEY(133-178M)
	TELKWA FORMATION		
	MAXAN LAKE FORMATION		

TABLE 2: TABLE OF STRATIGRAPHIC FORMATIONS AND INTRUSIVE COMPLEXES

Modified after Church et al. 1990

Property Geology

Regional mapping of the Buck Creek area documents the Allin claims as being underlain by lithologies of the lower Cretaceous Skeena group, and younger Eocene formations. Allin creek has been defined as a regional boundary with Buck Creek Formations of andesite-basalt composition occurring to the east and Goosly Lake Formation trachyandesite to the west. A triangulated wedge of Equity sequence rock is indicated in the southwest limits of the claims.

Outcrops on the Allin property are very limited. Mapping, prospecting and drilling both past and present indicate much of the claims are covered by a thick compact blanket basal till with depths ranging from 6.5 meters to as much as 85.35 meters. The only known areas of outcrops are along a north-south trending ridge located east of Allin creek, where numerous outcrops of basalt occur and along the east flowing section of Allin creek between the Allin 1 & 2 claims where outcrops consist of altered volcanics and unaltered intrusives.

Although overburden is fairly thick and outcrops few, a total of 10 previous

diamond drill holes have provided much of the information as to the underlying geology found in the northwest portions of the property. This previous drilling on the Allin 2 claims indicates lithologies of ash flows, tuffs, andesites, dacites and diorites (Garagan, 1988 & Wall, 1993).

Drill holes ddh97-09 & ddh97-11 of the 1997 exploration program, located east of the previous drilling intercepted flows of andesite, dacite and ash crosscut by weakly altered andesite and dacite dykes. The remaining holes drilled during the 1997 program were located south and east of any previous drilling. These holes with the exception of ddh97-10 intercepted andesites and amygdaloidal basalts which are thought to belong to the Eocene Buck Creek and Goosly Lake Formations. Hole ddh97-10 located in the Allin 7 claim intersected black argillites and minor andesites. These lithologies are thought to belong to the Equity sequence of rocks.

Mineralization on the property as described in previous drilling (Garagan, 1988 & Wall, 1993) consists of pyrite and pyrrhotite occurring as fracture fillings, blebs/clots and disseminations volcanic flows and tuffs. Trace amounts of chalcopyrite, sphalerite, galena and tetrahedrite mineralization have been observed in veins, but occur in no significant amounts.

Drilling conducted during the 1997 exploration program intersected much of the same types of mineralization as recognized by previous drilling. Drill holes ddh97-09 and ddh97-11 contained significant amounts of pyrrhotite and pyrite as blebs and disseminations in ash flows but, upon assaying revealed no anomalous base or precious metal values. No other significant mineralization apart from pyrite and pyrrhotite was observed in any of the other holes drilled during the course of the 1997 drill program.

Diamond Drilling

The 1997 drill program drilled approximately 2177 meters of core. A total of 948 meters of BQ sized core was drilled over 5 sites ddh97-01 to ddh97-05 and 1229 meters of NQ sized core was drilled over the remaining 6 sites ddh97-06 to ddh97-11. All 2177 meters of core was logged. Logging and sampling of the core was completed in camp and the bulk of the core is currently being stored at the edge of the clear-cut on the Allin 3 claim (Map 1 back pocket), with the exception of ddh97-09 and ddh97-11 which have been removed from the property by G. Klein to Perow, B.C. for safer storage.

From 2177 meters of core drilled on the property, 258 meters of selected core was collected in 121 samples, averaging 1.5 to 3 meters in length. The samples were marked, logged, split in half using a hand operated core splitter. Half the sample was put back into the core box and the other half was placed into plastic bags for shipment to Chemex Labs in North Vancouver, B.C. Once at Chemex Labs the samples were

crushed to approximately 150 mesh and then analyzed using 32 element ICP followed Fire Assay + Atomic Absorption for gold.

Results and Discussion

A total of 11 diamond drill holes were drilled on the Allin property during the 1997 drill program. Drill holes ddh97-09 and ddh97-11 were the only holes to intersect interlayered ash flows, andesites and dacites. These lithologies are thought to be similar to the rocks hosting the Equity deposit. Mineralization in these two holes consisted of pyrrhotite and pyrite occurring as blebs and disseminations with visual estimates ranging from 3 to 10% (Appendix 2). No significant base or precious metal values were assayed (Appendix 3). However, trace levels of arsenic were found in two 3 meter intervals taken near the bottom of ddh97-11.

The remaining holes drilled on the property with the exception of ddh97-10 which consisted of black argillites, intersected young volcanics consisting of andesites and amygdaloidal basalts thought to belong to the Eocene aged Buck Creek and Goosly Lake Formations. Minor amount of visible pyrite were noted in the core but, random sampling and assaying of pyrite mineralization indicated no significant base or precious metal values.

Conclusion

Drilling of the enzyme leach anomalies outlined by the 1996 soil geochemical survey was inconclusive. Results suggest that significant amounts of overburden cover much of the property. Drilling on the east side of Allin creek indicate substantial thicknesses of Eocene aged volcanics of the Buck Creek and Goosly Formations. The source of the mineralized float boulders on the property remains to be found. No significant base and /or precious metal mineralization was encountered in any of the holes, however, favourable geology consisting of altered ash flows with disseminated pyrite/pyrrhotite does exist in the northern portions of the property. This favourable geology does remain open to the north and east of ddh97-09.

Statement Of Expenditures Allin Property

Personnel Costs			
Michael Buchanan, Project Geologist - 70 days @ \$	180/day	\$	12,600
Edward Fluskey, Geologist - 25 days @ \$200/day		\$	5,000
Dave Garratt, Assistant - 53 days @ \$150/day		\$	7,950
Mark Cruickshank, Assistant - 44 days @ \$150/day		\$	6,600
Troy Sims, Camp Cook - 58 days @ \$210/day		<u>\$</u>	12,180
	Total	\$	44,330
Room & Board			
6 Men (avg) - 70 days @ \$35/man/day		\$	14,700
Vehicles		•	
2 Trucks - 2 months @ \$2,000/month/truck (incl. fuel))	\$	8,000
11. Received			
Helicopter		ው	20 6 40
T Hugnes 500 - 24nrs @ \$860/nr (Incl. fuel)		Φ	20,040
Diamond Drilling			
1 LE 70 Hydraulic Drill and crew - 1911 maters @ \$6	7.50/meter	\$1	28 992
	r.oometer	ΨΙ	20,002
Analytical Charges			
<u>Analytical onalgoo</u>			
121 core samples @ \$15.54/sample		\$	1.881
	Total	\$	1.881
Report Preparation		т	.,
6 davs @ \$180/dav		\$	1,080
Drafting/Secretarial		\$	1,000
	Total	\$	2,080
Total Expend	litures \$220),62	23

STATEMENT OF QUALIFICATIONS

I, Michael Buchanan, of Vancouver, B.C. hereby certify that:

- 1) I am a graduate of the University of British Columbia, with a BSc (Hon) in Geology (1995).
- 2) I am currently employed as a Geologist for Hudson Bay Exploration & Development Company Limited.
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Geologist in Training).
- 4) The information contained within this report is based on published and unpublished reports on the property and work carried out in part or in full by myself and others.
- 5) I have no interest in the property or any other within a 10 km radius.

Signed this day $16^{\tau\mu}$ of January, 1998.

MDBuchun

Michael Buchanan Geologist Hudson Bay Exploration & Development Co. Ltd.

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Appendix 1

18-DEC-97 Hudson Bay Exploration And Develo 09:50:31 Diamond Drill Log Comprehensive Report For Hole	pment Co. Ltd. Page DDH97-01
Hole No.: DDH97-01 Depth: 150.29 m Horiz	contal Length:
Property: ALLIN Location: 49KM SOUTHEAST OF HOUSTON Pro	ovince: BC
Claim No.: 350311 Reference No Grid Name: ALLIN_1 Grid Type (Imperial/Me Grid North Azimuth Measured Clockwise From Tr	<pre>>.: Project: etric): Metric rue North: 30.000°</pre>
Grid Co-ordinates & Attitude Of Drill Hole Co Easting: -2,750.00 m Northing: 2,000.00 Elevation: Hole Angle: -60.0 Hole Direction Measured Clockwise From Grid N Hole Direction Measured Clockwise From True N	ollar: m 00° North: 60.00° North: 90.00°
Date Drilling Started: 27-JUL-97 Date Finish Drilled By: BEAUPRE DRILLING	ed: 30-JUL-97
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL)	
Target Type: ENZYME LEACH	Borehole PEM: No
Core Size: BQ Cemented: No Casing Depth: 26.52 m Casing Pulled: Yes Water Depth: Overburden Depth: 2	2.97 m
Level: Section: Drift:	
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 684,852.00 m UTM Northing: 6,	003,853.00 m
Assay Elements: AU AG CU ZN	
Data Entry Marked Complete: Yes	

General Comments About Hole

-vertical overburden depth 9.14m. -BQ core starts at 18.29m. -enzyme leach target. -all drill steel recovered. -casing recovered. -ground conditioning generally good. -overall core recovery 94%. -hole ddh-97-01 composed of andesite becoming vesiculated basalt??? near bottom of hole.

.

In Hole Survey Method: Dip Test

Distance (m)AzimuthDip0.0090.00-60.0051.200.00-61.00150.300.00-57.50

Comprehensive Report For Hole: DDH97-01

18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page09:50:32Diamond Drill Log

Comprehensive Report For Hole: DDH97-01

Depth (m)

.

- From To Description Of Core
 - 0.00 18.29 BW CASING

DW CREAKS Coded As: bw;bld,gt BW Casing, , . -NQ rods used in place for BW casing. -overburden composed of glacial till. -pebble to cobble sized clasts of trachyandesite and basalts.

18.29 38.71 ANDESITE FLOW

Coded As: 8p;fphy,frct

Andesite Flow: feldspar-phyric, light gray to light maroon, aphanitic.

-trachyandesite.

-bladed feldspar phenocrysts.

-fractures and viening of quartz-carbonate.

-brecciated gradational lower contact.

Major Rock Forming Minerals: 35% elongate feldspar, phenocryst 40 mm grains; 10% equant hornblende, phenocryst 10 mm grains.

18.29 30.48 WEATHERED ANDESITE

Coded As: 8;wth

Andesite Flow, maroon to gray,

brecciated.

-weathered andesite.

-aphanitic-porphyritic texture.

-secondary weathering of feldspar to clay and chlorite.

-iron oxide staining along fractures.

-sharp lower contact.

38.71 54.92 BRECCIATED ANDESITE

Coded As: 8p;frct,bxt;50D

Andesite Flow: feldspar-phyric, light maroon to maroon, brecciated.

-fault related?? brecciated andesite.

-non-uniform brecciation.

-abundant broken feldspar phenocrysts.

-subangular to angular fragments in marcon coloured clay matrix.

-fractures filled with calcite and minor kaolinite??.

-subtle leached lower contact.

Major Rock Forming Minerals: 30% elongate feldspar, phenocryst 40 mm grains.

54.92 73.66 TRACHYANDESITE

Coded As: 8p;fphy,frct

Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic.

-trachyandesite.

-fractures and viening of quartz-carbonate.

Comprehensive Report For Hole: DDH97-01

18-DEC-97 Hudson Bay Exploration And Development Co. Ltd. Page 4 09:50:33 Diamond Drill Log

Comprehensive Report For Hole: DDH97-01

Depth (m)

From To Description Of Core

-subtle leached upper contact.

-increased calcite fracture filling near lower contact. -ground/lost lower contact.

Major Rock Forming Minerals: 35% elongate

feldspar, phenocryst 40 mm grains; 10% equant hornblende, phenocryst 10 mm grains.

73.66 85.89 BRECCIATED ANDESITE

Coded As: 8p;frct,bxt;50D

Andesite Flow: feldspar-phyric, marcon to light gray, brecciated. 40% angular breccia averaging 20 mm with a maximum size of 45 mm. 60% clay -faulted andesite

-upper contact marcon grading to lt. gray near lower contact.

-heterolithic brecciated fragments.

-maroon coloured clay matrix.

-fractures filled with calcite and minor kaolinite.

-gradual bleached lower contact.

-brecciation fine grained at upper contact grading to coarse subangular fragments near the lower contact.

85.89 92.90 TRACHYANDESITE

Coded As: 8p;fphy,frct,bxt

Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic.

-fractured trachyandesite.

-fractures and viening of quartz-carbonate.

-weak alteration of feldspars to clay.

-moderately magnetic.

-gradational lower contact.

Major Rock Forming Minerals: 20% elongate feldspar, phenocryst 3 mm grains.

85.89 88.04 ANDESITE FLOW

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to dark gray, feldspar phyric. -no orientation of feldspars. -magnetic groundmass. -sharp lower contact. Major Rock Forming Minerals:

15% elongate feldspar, phenocryst 3 mm grains.

88.04 90.50 BRECCIATED ANDESITE

Coded As: 9B;bxt Andesite Breccia, gray to maroon, brecciated. 35% angular breccia averaging 5 mm with a maximum size of 12 mm. -feldspar phenocrysts 1-3mm no 18-DEC-97 09:50:34

Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log

Comprehensive Report For Hole: DDH97-01

Deptl	1 (m)	
From	То	Description Of Core
		orientation highly altered to clay. -matrix composed of clay. -non-magnetic. -sharp lower contact.
		<pre>90.50 92.90 FRACTURED ANDESITE Coded As: 8;frct Andesite Flow, light gray to gray, fractured. -fractured trachyandesite. -feldspar phenocrysts 1-3mm no orientation highly altered. -fractures filled with calcite. -sharp lower contact.</pre>
92.90	101.23	ANDESITE DYKE Coded As: 8 Andesite Flow, gray to dark gray, aphanitic. -fine grained intrusive dyke. andesite??? -oxididation in patches. -felpdspar with lesser amounts of quartz. -sharp lower and upper contacts 40 deg to CA. 95.75 98.17 CLAY FILLED FAULT Coded As: Clay, light gray to gray, fractured.
101.23	117.25	TRACHYANDESITE Coded As: 8p;fphy Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic. -trachyandesite. -bladed feldspar phenocrysts 1-5mm. -fine grained grey groundmass. -fractures and viening of quartz-carbonate. -moderate alteration of feldspars to clay. -magnetic -sharp lower contact. Alteration: 5% equant hornblende, phenocryst 3 mm grains.
		Major Rock Forming Minerals: 15% elongate feldspar, phenocryst 41 mm grains.
		101.23 104.43 TRACHYANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic. -andesite flow.

-feldspar phenocrysts 1-3mm no

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Hudson Bay Exploration And Development Co. Ltd. Diamond Drill Log

Comprehensive Report For Hole: DDH97-01

Depth (m)

From To Description Of Core

orientation. -unidentified altered mineral replaced by soft yellow mineral (zeolite??). -sharp lower contact.

104.43 105.13 CLAY FAULT

Coded As: Clay, gray to maroon, fractured. -bleached andesite fault. -highly fractured. -gradational lower contact.

117.25 121.37 CLAY FILLED FAULT Coded As: clay;50D Clay Fault, gray to green, fractured. -altered andesite to clay fault related??? -remnant feldspar crystals altered to kaolinite. -weak to no magnetism. -sharp lower contact.

121.37 150.29 VESICULATED BASALT

Coded As: 21

Basalt or Basaltic Flow, gray to light buff, amygdaloidal. 20% amoeba shaped amygdules averaging 10 mm with a maximum size of 30 mm. -vesiculated to amygduloidal basalt. -quartz, calcite and zeolite infilling of amygdules. -unit cut by numerous faults & qtz-carb veins. -magnetic.

124.05 132.47 CLAY FILLED FAULT

Coded As: clay Clay, gray to maroon, fractured. -bleached basaltic fault. -highly fractured & brecciated. -variale degrees of magnetism. -sharp upper & lower contacts.

134.25 146.44 CLAY FILLED FAULT Coded As: clay Clay, gray to maroon, fractured. -bleached basaltic fault. -highly fractured & brecciated. -varible degrees of magnetism.

-sharp upper & lower contact.

Comprehensive Report For Hole: DDH97-01

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SAMPLE	From:	To:	Interval	Au ppb	Ag	Cu	Zn
NUMBER	(m)	(m)		FA+AA	ppm	ppm	ppm
M695201	38.41	39.71	1.3	<5	<.2	51	86
M695202	96.48	97.98	1.5	<5	<.2	26	74
M695203	122.55	124.05	1.5	<5	<.2	42	154

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18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page09:50:53Diamond Drill Log

Comprehensive Report For Hole DDH97-02

Hole No.: DDH97-02 Depth: 183.18 m Horizontal Length: Property: ALLIN Location: 49 KM SOUTH OF HOUSTON Province: BC Claim No.: 316463 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000° Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -3,900.00 m Northing: 2,800.00 m Hole Angle: -65.00° Elevation: Hole Direction Measured Clockwise From Grid North: 240.00° Hole Direction Measured Clockwise From True North: 270.00° Date Drilling Started: 31-JUL-97 Date Finished: 01-AUG-97 Drilled By: BEAUPRE DRILLING Logged By: M.D. Buchanan/D.G. Garratt Legend For Core Logging Codes: BC (GENERAL) Target Type: ENZYME LEACH Borehole PEM: No Core Size: BQ Cemented: No Casing Depth: 6.10 m Casing Pulled: Yes Water Depth: Overburden Depth: 2.57 m Level: Section: Drift: NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 684,295.00 m UTM Northing: 6,005,005.00 m Assay Elements: AU AG CU ZNData Entry Marked Complete: Yes

General Comments About Hole

-overburden depth is 2.57m. -BQ core starts at 4.60m. -all drill steel recovered. -casing recovered. -generally good drilling conditions. -hole ddh97-02 generally consists of andesite, trachyandesite and basalts.

In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	<u>Azimuth</u>	<u>Dip</u>
76.20		0.00 -	-63.30
124.36		0.00 -	-63.00
182.27		0.00 -	-60.30

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Comprehensive Report For Hole: DDH97-02

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Comprehensive Report For Hole: DDH97-02

Depth (m) From To Description Of Core

0.00

4.60 <u>BW Casing</u>

Coded As: bw

BW Casing, ,

-true length of casing is 6.1m.

-bedrock begins at 4.6m.

-overburden composed of glacial clays/till with cobble sized stones of tertiary volcanics.

Coded As:

4.60 41.03 Feldspatic Andesite

Coded As: 8p;8m

Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic. -feldspatic andesite -grey to dark gray aphanitic groundmass.

-moderate amounts of calcite and clay alteration.

-minor chlorite, biotite.

-broken lower contact over 5cm.

Alteration: 5% groundmass chlorite,

subhedral 2 mm grains.

Major Rock Forming Minerals: 25% elongate

feldspar, phenocryst 2 mm grains; 5% equant hornblende, phenocryst 2 mm grains; trace phenocryst biotite, flake 1 mm grains.

4.60 10.08 Weathered Andesite

Coded As: 8p;8m

Andesite Flow: feldspar-phyric, light gray to light brown, weathered. -moderate alteration of feldspars to kaolinite. -minor limonitic staining along fractures. -graduational/subtle lower contact.

23.30 25.32 Clay Altered Andesite

Coded As: 8p;8m;50D Andesite Flow: feldspar-phyric, light gray to gray, friable. -weakly clay altered andesite. -weathering of feldspars to kaolinite. -calcite infilling of fractures. -subtle upper and lower contacts.

Comprehensive Report For Hole: DDH97-02

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18-DEC-97 09:50:55	Hudson Bay Exploration P Diamond D Comprehensive Report	n d Development Co. Ltd. Page 4 Frill Log For Hole: DDH97-02
Depth (m	N	
From To	Description Of Core	
	30.00 32.64 Clay Coded An gray -mode	Altered Andesite As: 8p;8m;50D desite Flow: feldspar-phyric, light to gray, friable. rately clay altered andesite.
	-weat -calc fract -mino	hering of feldspars to Kaolinite. ite veining and infilling of ures. r alteration of hornblende to
	-mino -shar -subt	r limonitic staining of fractures. p upper contact. le lower contact.
41.03 10	4.37 <u>Amygdaloidal Basalt</u> Coded As: 21 Basalt or Basaltic amygdaloidal. 10% ovo maximum size of 6 mm. -aomeba shaped amygdu -infilled with calcit (mesolite???). -strongly magnetic. -hornblende and minor -aphanitic groundmass -sharp lower conact @	Flow, gray to dark gray, id amygdules averaging 2 mm with a les ranging is size from 1-5mm. e, quartz, and zeolites plagioclase phenocrysts. 65 deg to CA.
	43.96 46.27 Brecc Coded Bas to lie brecc size -blead fault. -felds out. -rande -weak -sharp contac	iated Basalt As: 21;22B salt or Basaltic Flow, light green ght gray, brecciated. 75% subangular ia averaging 20 mm with a maximum of 60 mm. ched brecciated basalt related to ing??? spar and mafic crystals weathered om calcite veining. rate clay alteration. ly magnetic. o upper contact, subtle lower ct.
	48.30 48.70 Brecc: Coded Bas to lig brecc: size 4	iated Basalt As: 21;22B salt or Basaltic Flow, light green ght gray, brecciated. 75% subangular ia averaging 20 mm with a maximum of 60 mm.

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Comprehensive Report For Hole: DDH97-02

Depth (m)			
From <u>To</u>	<u>Descript</u> :	ion Of	Core
			<pre>faulting??? -feldspar and mafic crystals weathered outcalcite veiningweakly magneticsubtle upper contact, sharp lower contact.</pre>
	49.56	52.16	<pre>Brecciated Basalt Coded As: 21;22B Basalt or Basaltic Flow, light green to light gray, brecciated. 75% subangular breccia averaging 20 mm with a maximum size of 60 mm. -bleached brecciated basalt related to faulting??? -feldspar and mafic crystals weathered out. -Some areas strongly kaolinized. -friable. -gradual change in groundmass from dark areas to bight areas</pre>
		11 L.	gray to light gray. -calcite veining -weakly magnetic -subtle upper contact, subtle lower contact
	57.47	61.07	Brecciated Basalt Coded As: 21;22B Basalt or Basaltic Flow, light green to light gray, brecciated. 75% subangular breccia averaging 10 mm with a maximum size of 30 mm. -bleached brecciated basalt related to faulting??? -friable. -10mm wide calcareous layer approx 30mm from lower contact. -weakly magnetic -sharp upper contact, sharp lower contact.
	61.59	62.17	<pre>Brecciated Basalt Coded As: 21;22B Basalt or Basaltic Flow, light green to light gray, brecciated. 75% subangular breccia averaging 20 mm with a maximum size of 60 mm. -bleached brecciated basalt related to faulting???</pre>

-feldspar and mafic crystals weathered

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Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log

Comprehensive Report For Hole: DDH97-02

Depth	(m)			
<u>From</u>	To	Descript	ion Of	Core
				out. -calcite veining. -moderate clay alteration. -weakly magnetic. -sharp upper contact, sharp lower contact.
		63.85	73.48	<pre>Volcanic Breccia Coded As: 22B;9B Basaltic Breccia, light gray to dark gray, brecciated. 80% subangular blocks averaging 40 mm with a maximum size of 100 mm. -brecciated blocks of feldspatic andesite and amygdoidal basalt. -slickensides along fractures. -kaolinization of feldspars. -patchy silicification. -upper fault contact (shows slickensides), gradational lower contact becoming increasinly calcareous.</pre>
		91.56	98.14	Brecciated Feldspatic Andesite Coded As: 8p;9B Andesite Flow: feldspar-phyric, light gray to dark gray, brecciated. 85% angular breccia averaging 30 mm with a maximum size of 100 mm. -brecciated Feldspatic Andesite. -andesite angular-cobble with flow banding. -moderately kaolinized feldspars. -aphanitic groundmass. -calcite infilling of fractures. -sharp upper contact, subtle lower contact.
		98.14	102.47	Amygduloidal Basalt Coded As: 21 Basalt or Basaltic Flow, gray to dark gray, amygdaloidal. 5% ovoid amygdules averaging 4 mm with a maximum size of 10 mm. -amygduloidal basalt. -minor feldspar laths. -amygdules infilled with calcite. -moderately magnetic. -subtle upper and lower contacts. Major Rock Forming Minerals:

40% equant hornblende, phenocryst 2 mm grains.

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Comprehensive Report For Hole: DDH97-02

Depth (m)

From To Description Of Core

102.47 104.37 Brecciated Feldspatic Andesite

Coded As: 8p;9B

Andesite Flow: feldspar-phyric, light gray to dark gray, brecciated. 85% angular breccia averaging 30 mm with a maximum size of 80 mm. -fault-related brecciated feldspatic-andesite. -moderately kaolinized feldspars. -variable magnetism. -subtle upper contact, sharp lower contact.

104.37 111.98 Trachy Andesite

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to gray, aphanitic-porphyritic.

-trachyandesite.

-plagioclase lathes having minor kaolinite alteration.

- -weakly to moderate magnetism.
- -sharp lower contact.

Major Rock Forming Minerals: 25% elongate feldspar, phenocryst 5 mm grains; 15% equant hornblende, phenocryst 1 mm grains.

104.97 105.34 Mafic Flow

Coded As: 5m

Mafic Flow: Plagioclase and/or mafic-phyric, dark gray to black, aphanitic.

-dark coloured mafic sill/dike

-minor elongate Plagioclase phenocrysts within aphanitic groundmass.

-strongly magnetic.

-sharp upper and lower contacts. Major Rock Forming Minerals:

1% equant feldspar, phenocryst 1 mm grains; 2% equant hornblende, phenocryst 2 mm grains.

111.98 137.20 Feldspatic Andesitic Breccia

Coded As: 8;8p;50D;9B

Andesite Breccia, light gray to gray, brecciated. 45% angular breccia averaging 20 mm with a maximum size of 60 mm.

-brecciated feldspatic andesite. -various sizes of angular to subangular fragments in light-gray to light-green groundmass. -minor kaolinite alteration of feldspars. -weakly magnetic.

Comprehensive Report For Hole: DDH97-02

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18-DEC-97	Hudson Bay Exploration And Development Co. Ltd.	Page
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	Comprehensive Depart Days Haller Porton as	

Comprehensive Report For Hole: DDH97-02

Depth (m) <u>From</u><u>To</u> Description Of Core -spotty clay alteration. -alteration of footwall at lower contact. -sharp lower contact. 128.67 Quartz/Calcite veining 128.07 Coded As: 40A;40B Vein: carbonate, white to light gray, fractured. -Zone of Quartz/Calcite veining -Veins irregular between 2-10 mm in width 137.20 154.04 Feldspatic Andesite Coded As: 8p;8m Andesite Flow: feldspar-phyric, light gray to gray, phyric. -feldspatic andesite. -light gray to dark gray aphanitic groundmass. -moderate amounts of calicite and clay alteration. -1-3mm feldspar laths, 1mm pyroxene (hornblende crystals). -minor chlorite, biotite. -sharp lower contact. Major Rock Forming Minerals: 30% equant feldspar, phenocryst 1 mm grains; 15% equant hornblende, phenocryst 1 mm grains. 148.94 150.05 Quartz/Calcite veining Coded As: 40A;40B Vein: carbonate, white to light gray, fractured. -Zone of Quartz/Calcite veining -Veins irregular between 1-10 mm in width -Calcite > Ouartz154.04 183.18 Amyqduloidal Basalt Coded As: 21 Basalt or Basaltic Flow, gray to dark gray, amygdaloidal. 10% ovoid amygdules averaging 1 mm with a

> maximum size of 10 mm. -amyqduloidal basalt.

-oval-shaped amygdules filled with calcite.

-calcite crystals along fracture planes.

-minor calcite veining throughout.

-strongly magnetic.

SAMPLE	From	To	Interval	Auroph	10	0	-
NUMBER	(m)	(m)	HILCI VAL	FA+AA	ppm	ppm	ZN Dom
M695204	43.96	45.46	1.5	<5	<.2	89	78
M695205	65.40	66.90	1.5	<5	<.2	43	88
M695206	66.90	68.40	1.5	<5	<.2	43	80
M695207	148.94	150.44	1.5	20	0.2	17	92
M695208	150.44	151.94	1.5	10	<.2	38	122

18-DEC-97Hudson Bay Exploration And Diamond Dri09:51:17Diamond Dri Comprehensive Report F	Development Co. Ltd. Page 11 Log or Hole DDH97-03
Hole No.: DDH97-03 Depth: 139.60 m	Horizontal Length:
Property: ALLIN Location: 49 KM SOUTH OF HOUSTON	Province: BC
Claim No.: 316463 Reference Grid Name: ALLIN-1 Grid Type (Imperence Grid North Azimuth Measured Clockwise	ence No.: Project: rial/Metric): Metric From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill D Easting: -4,900.00 m Northing: 3,0 Elevation: Hole Angle Hole Direction Measured Clockwise From Hole Direction Measured Clockwise From	Hole Collar: 625.00 m : -65.00° Grid North: 240.00° True North: 270.00°
Date Drilling Started: 02-AUG-97 Date Drilled By: BEAUPRE DRILLING	Finished: 04-AUG-97
Logged By: M.D. Buchanan/D.G. Garratt Legend For Core Logging Codes: BC (GEN)	ERAL)
Target Type: IP	Borehole PEM: No
Core Size: BQ Cemented: No Casing Depth: 18.23 m Casing Pulle Water Depth: Overburden De	ed: Yes epth: 7.70 m
Level: Section: Drift:	
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 683,765.00 m UTM Northi	ng: 6,006,310.00 m
Assay Elements: AU AG CU ZN	
Data Entry Marked Complete: Yes	

General Comments About Hole

-hole ddh97-03 consists of andesite becoming basalt near the bottem of the hole. -overburden 7.70 meters deep. -hole abandoned due to poor drilling conditions. -approximately 91 meters of drill steel lost down hole. -all drill casing recovered.

In Hole Survey Method: Dip Test

Distance (m)AzimuthDip76.200.00-65.90

Comprehensive Report For Hole: DDH97-03
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Comprehensive Report For Hole: DDH97-03

Depth (m) From <u>To</u> Description Of Core 0.00 12.75 BW CASING Coded As: bw BW Casing, , . -BQ Casing -overburden composed of glacial till. -till 30% - Andesite subangular cobbles 15% - Basalt subangular cobbles 55% - Other (clay/sand) -hole cased to 18.28m. 12.75 53.06 ANDESITE FLOW Coded As: 8p;8 Andesite Flow: feldspar-phyric, brown to gray, feldspar phyric. 30% elongate phenocrysts averaging 5 mm with a maximum size of 10 mm. 10% altered phenocrysts averaging 3 mm with a maximum size of 10 mm. -primarily andesite flow with minor trachyandesite textures. -phenocyrsts of feldspar, hornblend, & magnetite in an aphanitic gray groundmass. -moderate alteration of feldspar to kaolinite and epidote. -calcite viening and infilling of vesicles common. -weakly magnetic. -sharp lower contact. 12.75 13.61 Andesite Flow Coded As: 8 Andesite Flow, gray to light green, weathered. 30% equant phenocrysts averaging 5 mm with a maximum size of 10 mm. -weathered andesite flow. -minor limonitic staining. -feldspars altered to kaolinite and epidote. -calcite infilling of weathered crystals 1 to 10mm wide. -calcite and epidote fracture fillings. -weakly magnetic. -sharp lower contact. 13.81 Trachyandesite 13.61 Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, feldspar phyric. 25% elongate phenocrysts averaging 5 mm with a maximum size of 13 mm. -andesite flow (Trachyandesite) -lath shaped plagioclase crystals in aphanitic groundmass.

Comprehensive Report For Hole: DDH97-03

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09:51:18	

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Depth	(m)			
From 7	Го	Descripti	ion Of	Core
				<pre>-mafic minerals consist of hornblend & magnetiteslighty magneticsharp upper contactsubtle lower contact.</pre>
		13.81	15.13	Andesite Flow Coded As: 8 Andesite Flow, gray to light green, feldspar phyric. 27% equant phenocrysts averaging 2 mm with a maximum size of 10 mm. -altered andesite flow. -feldspars altered to kaolinite and epidote. -calcite and epidote fracture fillings. -weakly magnetic. -sharp lower contact. -subtle upper contact.
	-	15.13	21.25	TRACHYANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, gray to dark gray, trachytoid. 25% elongate phenocrysts averaging 5 mm with a maximum size of 10 mm. 20% equant phenocrysts averaging 2 mm with a maximum size of 5 mm. -trachyandesite -lath shaped feldspars with subparallel orientation in gray coloured aphanitic groundmass. -unidentifiable phenocrysts of weathered yellowish mineral. -calcite veining 4mm wide CA=90 degrees. -magnetic. -sharp upper and subtle lower contacts.
		21.25	28.08	CLAY ALTERED ANDESITE Coded As: 8 Andesite Flow, maroon to light green, friable. -clay altered andesite flow. -strong alteration of feldspars to kaolinite and epidote. -calcite infilling of weathered crystals 1 to 10mm wide. -minor calcite filled amygdules. -non-magnetic. -subtle upper contact. -sharp lower contact.

Comprehensive Report For Hole: DDH97-03

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Hudson Bay Exploration And Development Co. Ltd. Diamond Drill Log Comprehensive Report For Hole: DDH97-03

Depth (m)

From <u>To</u> <u>Description Of Core</u>

28.08 33.70 Andesite Flow

Coded As: 8

Andesite Flow, gray to light green, feldspar phyric. 25% equant phenocrysts averaging 2 mm with a maximum size of 10 mm.

Page

5

-altered andesite flow.

-feldspars altered to kaolinite and epidote.

-calcite and epidote fracture fillings. -weakly magnetic.

-sharp lower contact.

-subtle upper contact.

33.70 34.55 TRACHYANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, gray to dark gray, trachytoid. 25% elongate phenocrysts averaging 5 mm with a maximum size of 10 mm. 20% equant phenocrysts averaging 2 mm with a maximum size of 5 mm.

-trachyandesite

-lath shaped feldspars with subparallel orientation in gray coloured aphanitic groundmass.

-unidentifiable phenocrysts of weathered vellowish mineral.

-calcite veining 4mm wide CA=90 degrees. -magnetic

-sharp upper and subtle lower contacts.

34.55 35.72 Andesite Flow

Coded As: 8 Andesite Flow, gray to light green, altered. 30% equant phenocrysts averaging 5 mm with a maximum size of 10 mm. -altered andesite flow. -feldspars altered to kaolinite -calcite infilling of weathered crystals 1 to 10mm wide. -calcite fracture fillings. -weakly magnetic. -sharp upper contact.

-gradational lower contact.

Hudson Bay Exploration And Development Co. Ltd. Diamond Drill Log

Comprehensive Report For Hole: DDH97-03

Depth (m)

From To Description Of Core

35.72 38.88 TRACHYANDESITE

Coded As: 8p Andesite Flow: feldspar-phyric, gray to dark gray, trachytoid. 25% elongate phenocrysts averaging 5 mm with a maximum size of 10 mm. 20% equant phenocrysts averaging 2 mm with a maximum size of 5 mm.

-trachyandesite

-lath shaped feldspars with subparallel orientation in gray coloured aphanitic groundmass.

-unidentifiable phenocrysts of weathered yellowish mineral. -magnetic

-gradational upper and sharp lower contacts.

53.06	94.93	CLAY	ALTERATION

Coded As: 50D

Alteration: clay, light gray to dark gray, altered. fine silt (< 1/16 mm)

-clay altered andesite likely chemical weathering. -feldspars, hornblend & other mafics weathered to clay. -occasional intact fragments feldspar phyric andesite. -minor brecclation. -non-magnetic.

-upper and lower contacts diffuse & gradational.

Coded As:

71.42 85.88 Andesite Flow

Coded As: 8 Andesite Flow, light gray to dark gray, altered. -strongly altered andesite. -consists mostly of 1-7mm loose broken-up andesite fragments. Intact andesite fragments are guite friable. -calcite infilling present along with carbonate infilling within fractures. -plagioclase is usually distinguishable as 1-3mm wide weathered grains, sometimes plag occurs as 1-6mm phenocrysts within intact andesite portions. -epidote alteration evident? -non-magnetic. -gradual upper, subtle lower contacts.

85.88 94.93 Andesite Flow

Comprehensive Report For Hole: DDH97-03

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Comprehensive Report For Hole: DDH97-03

Dep	th (m)		
From _	<u>To</u>	Description Of	Core
			Coded As: 8 Andesite Flow, gray to light green, feldspar phyric. 27% equant phenocrysts averaging 2 mm with a maximum size of 10
			mm.

-altered andesite flow.

-feldspars altered to kaolinite and

epidote. -calcite and epidote fracture fillings.

- -weakly magnetic.
- -sharp lower contact.

-subtle upper contact.

94.93 109.49 ANDESITE FLOW

Coded As: 8p;8

Andesite Flow: feldspar-phyric, light gray to dark gray, feldspar phyric. 30% elongate phenocrysts averaging 4 mm with a maximum size of 12 mm. 10% altered phenocrysts averaging 3 mm with a maximum size of 10 mm. - Primarily andesite flow with minor trachyandesite textures.

- Phenocyrsts of feldspar, hornblend, & magnetite in an aphanitic gray groundmass.

- Moderate alteration of bladed feldspars to kaolinite and epidote.

- Calcite viening and infilling of vesicles common.

- Magnetic.

- sharp upper contact.

- subtle lower contact.

99.09 102.42 Feldspar Phyric Andesite Flow Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to light gray, trachytoid. 20% elongate phenocrysts averaging 2 mm with a maximum size of 8 mm. -aphanitic gray groundmass. -lath-shaped plagioclase phenocrysts. -1-3mm elongate pyroxenes? -some carbonate infilling.

-sharp upper, sharp lower contacts.

102.42 108.65 TRACHYANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, gray to dark gray, trachytoid. 25% elongate phenocrysts averaging 5 mm with a maximum size of 10 mm. 20% equant phenocrysts averaging 2 mm with a maximum size of 5 mm.

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Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log Comprehensive Report For Hole: DDH97-03

Depth	(m)		
<u>From</u>	To	Description Of Core	
		-trachyandesite -lath shaped feldspars with subparall orientation in gray coloured aphaniti groundmass. -unidentifiable phenocrysts of weathe yellowish mineral. -magnetic. -sharp upper and subtle lower contact	el c ređ s.
109.49	119.39	CLAY ALTERATION Coded As: 50D Alteration: clay, light gray to dark gray, altered fine silt (< 1/16 mm) -strongly clay altered andesite. -feldspars, hornblend & other mafics weathered to cl -extremely friable with minor zones of brecciation. -weakly magnetic. -irregular calcite veining (up to 10mm thick) CA=60 degrees. -upper and lower contacts diffuse & gradational.	Lay.
		110.84 116.51 Brecciated Andesite Coded As: 9B Andesite Breccia, light gray to lig purple, breccia. 85% angular breccia averaging 3 mm with a maximum size of mm. -some carbonate infilling. -breccia fragments posses various lithologies, mostly felsic with trace mafics. -1-3mm lath-shaped plagioclase distinguishable. -sublte lower and upper contacts.	jht 20
		<pre>116.51 119.34 Feldspar-Phyric Andesite Flow Coded As: 8p Andesite Flow: feldspar-phyric, gra to light gray, altered. 20% elongate phenocrysts averaging 2 mm with a maxi size of 8 mm. -calcite infilling of fractures. -mostly very highly altered/weathered very friable. -unaltered, intact portions, contain plagioclase phenocrysts. -non-magnetic. -sublte upper, sharp lower contacts.</pre>	iy .mum and

Page 8 ---

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Comprehensive Report For Hole: DDH97-03

Der	th	(m)	
Evom		10	

From To Description Of Core

119.39 139.60 Basalt

Coded As: 21 Basalt or Basaltic Flow, light gray to light brown, amygdaloidal. 15% amoeba shaped amygdules averaging 5 mm with a maximum size of 30 mm. 5% ovoid vesicles averaging 1 mm with a maximum size of 3 mm. 10% elongate phenocrysts averaging 3 mm with a maximum size of 5 mm. -vesiculated amygdaloidal basalt. -phenocrysts composed of feldspars, hornblend & other mafic crystals (magnetite??) -vesicles and amygdules concentrated near the upper contact & decrease in number towards the EOH. -amygdules amoeba shaped at upper contact & become elongated towards the EOH. -calcite veining & infilling along fractures 30 to 70 degrees to CA. -gradational upper contact.

Comprehensive Report For Hole: DDH97-03

·	SAMPLE	From: (m)	To: (m)	Interval	Au ppb FA+AA	Ag	Cu opm	Zn
	M695209	102.64	105.35	2.7	<5	<.2	55	90
	M695210	46.54	49.54	3.0	<5	<.2	34	60

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18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page09:51:38Diamond Drill LogComprehengive Report For Vale DDV07 04

Comprehensive Report For Hole DDH97-04

Hole No.: DDH97-04 Depth: 210.01 m Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC
Claim No.: 316462 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -4,325.00 m Northing: 4,200.00 m Elevation: Hole Angle: -75.00° Hole Direction Measured Clockwise From Grid North: 60.00° Hole Direction Measured Clockwise From True North: 90.00°
Date Drilling Started: 05-AUG-97 Date Finished: 08-AUG-97 Drilled By: BEAUPRE DIAMOND DRILLING
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL)
Target Type: ENZYME LEACH Borehole PEM: No
Core Size: BQCemented: NoCasing Depth: 66.29 mCasing Pulled: YesWater Depth:Overburden Depth: 64.03 m
Level: Section: Drift:
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 684,673.00 m UTM Northing: 6,006,437.00 m
Assay Elements: AU AG CU ZN
Data Entry Marked Complete: Yes

General Comments About Hole

-BW casing from 0.00 to 65.23m. -BQ core starts at 66.24m. -BQ core ends at 210.01m. -casing pulled. -all drill steel recovered. -hole ddh97-04 generally consists of andesite becoming basalt near the bottem of the hole.

In Hole Survey Method: Dip Test

Distance (<u>m) Azimu</u>	th Dip
60.96	0.00	-76.00
179.21	0.00	-77.00

2

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18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page09:51:39Diamond Drill Log

Comprehensive Report For Hole: DDH97-04

Depth (m) From To Description Of Core 0.00 66.29 Glacial Till Coded As: gt Glacial Till, , . -glacial till. -till composed of pebble to cobble sized clasts. -35% andesite. -55% intrusive. -10% basalt. -hole cased with bw casing to 65.23 meters.

66.29 100.98 Feldspar Phyric Andesite

Coded As: 8p

Andesite Flow: feldspar-phyric, gray to dark gray, phyric. 30% elongate phenocrysts averaging 3 mm with a maximum size of 5 mm.

-aphanitic groundmass.

-minor oxidation along fractures.

-minor calcite.

-minor vesicles 1mm round filled with hematite.

-magnetic.

-gradational lower contact.

Major Rock Forming Minerals: 30% elongate feldspar, euhedral 5 mm grains; 25% equant hornblende, euhedral 4 mm grains.

100.98 112.02 FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, gray to dark gray, trachytoid. -aphanitic groundmass.

-magnetic.

-hornblend altering to chlorite.

-minor alteration of feldspar to kaolinite.

-gradational lower contacts.

Major Rock Forming Minerals: 35% elongate feldspar, euhedral 5 mm grains.

104.70 107.70 FFELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, red to maroon, weathered. 30% elongate phenocrysts averaging 5 mm with a maximum size of 6 mm. -strongly altered. -feldspars altered to kaolinite. -clay along upper and lower contacts.

-gradational lower contact.

112.02 143.79 AMYGDALOIDAL BASALT

Coded As: 21

Basalt or Basaltic Flow, dark gray to black,

Comprehensive Report For Hole: DDH97-04

comprehensive Report For hore.

Depth (m)

From To Description Of Core

amygdaloidal. 5% elongate amygdules averaging 10 mm with a maximum size of 15 mm.

-amygdules filled with quartz and calcite.

-aphanitic groundmass.

-fractures 45-CA

-difuse lower contact.

Major Rock Forming Minerals: 5% equant

feldspar, euhedral 3 mm grains; 30% equant hornblende, euhedral 3 mm grains.

143.79 179.12 AMYGDALOIDAL BASALT

Coded As: 21

Basalt or Basaltic Flow, gray to brown, amygdaloidal. 5% elongate amygdules averaging 10 mm with a maximum size of 15 mm.

-amygdules ovoid shaped filled with quartz, calcite and zeolite.

-aphanitic groundmass.

-minor fractures 60-CA, filled with calicte.

-brecciated clay altered lower contact.

Major Rock Forming Minerals: 2% elongate feldspar, euhedral 3 mm grains; 30% equant hornblende, euhedral 3 mm grains.

179.12 210.01 CLAY ALTERED ZONE

Coded As: clay

Clay, light gray to gray, friable. -highly weathered/altered basalt to clay. -minor brecciation in sections where basalts still competent. -non-magnetic. -minor calcite and quartz veining.

-major fractures @ 75 deg to CA filled with calcite.

180.10 185.62 Basalt

Coded As: 21 Basalt or Basaltic Flow, dark gray to black, aphanitic. -aphanitic groundmass.

-minor amygdules filled with calcite. -magnetic.

-fracture 75 degrees to CA.

-brecciated lower contact.

200.80 204.94 Basalt

Coded As: 21 Basalt or Basaltic Flow, dark gray to black, aphanitic. -aphanitic groundmass. -minor amygdules filled with calcite. -magnetic.

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	Comprehensive Report For Hole: DDH97-04	

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Depth (m) From To Description Of Core

-fracture 75 degrees to CA. -brecciated lower contact.

SAMPLE NUMBER	From: (m)	To: (m)	interval	Au ppb FA+AA	Ag ppm	Cu ppm	Zn ppm
M695613	91.20	94.20	3.0	<5	<.2	35	92
M695614	128.72	131.72	3.0	<5	<.2	32	82
M695615	180.10	183.10	3.0	<5	<.2	27	140

18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page09:51:59Diamond Drill Log

Comprehensive Report For Hole DDH97-05

Hole No.: DDH97-05 Depth: 265.48 m Horizontal Length: Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC Claim No.: 339852 Reference No.: Project: Grid Name: ALLIN 1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000° Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -3,790.00 m Northing: 4,200.00 m Elevation: Hole Angle: -90.00° Hole Direction Measured Clockwise From Grid North: Hole Direction Measured Clockwise From True North: Date Drilling Started: 09-AUG-97 Date Finished: 13-AUG-97 Drilled By: BEAUPRE DIAMOND DRILLING Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL) Borehole PEM: No Target Type: ENZYME LEACH Core Size: BQ Cemented: No Casing Depth: 51.82 m Casing Pulled: Yes Overburden Depth: 51.82 m Water Depth: Level: Section: Drift: NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 685,037.00 m UTM Northing: 6,006,221.00 m Assay Elements: CU AU AG ZN Data Entry Marked Complete: Yes

General Comments About Hole

-BW casing from 0.00-51.82m. -BQ core starts at 47.82m. -BQ core ends at 265.48. -casing pulled. -all drill steel recovered. -hole ddh97-05 consists of primarily of feldspar phyric andesites which become weathered/altered near the bottem of the hole.

In Hole Survey Method: Dip Test

Distance (m) Azimuth Dip 63.70 0.00 -90.00

00.70		20.00
127.71	0.00	-89.00
191.72	0.00	-88.90
264.87	0.00	-89.50

- 05

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Comprehensive Report For Hole: DDH97-05

Depth (m)

From To Description Of Core

0.00 47.82 BW CASING

Coded As: bw;gt,clay,blds
 BW Casing, , .
-cobble sized andesites and intrusives.
-bedrock at 47.82m

47.82 75.59 FELDSPAR PHYRIC ANDESITES

Coded As: 8p

Andesite Flow: feldspar-phyric, dark gray to black, feldspar phyric. 10% felsic fragments phenocrysts averaging 7 mm with a maximum size of 11 mm. -hornblend to chlorite alteration. -moderately magnetic (magnetite?). -subhedral feldspar phenocrysts. -diffuse crystal edges with no orientation. -wear alteration of feldspars. -minor calcite veining/infilling at 73.30.

Major Rock Forming Minerals: 10% elongate feldspar, phenocryst; 5% equant hornblende, phenocryst; 3% biotite, phenocryst.

75.59 88.93 FELDSPAR PHYRIC ANDESITES

Coded As: 8p

Andesite Flow: feldspar-phyric, light red to light gray, feldspar phyric. 10% felsic fragments phenocrysts averaging 7 mm with a maximum size of 11 mm. -subhedral to euhedral quartz. -groundmass is oxidized. -broken upper contact. -gradational lower contact.

Major Rock Forming Minerals: 10% elongate feldspar, phenocryst; 5% biotite, phenocryst.

88.93 116.72 FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, dark gray to dark green, brecciated. 10% felsic fragments phenocrysts averaging 7 mm with a maximum size of 11 mm. 10% mafic fragments phenocrysts

-epidote alteration in homogenous matrix.

-oxidation on fractures.

-magnetic.

-broken lower contact.

Mineralization: trace disseminated pyrite; trace disseminated pyrrhotite.

Major Rock Forming Minerals: 10% elongate feldspar, phenocryst; 5% equant hornblende, phenocryst; 5% biotite, phenocryst.

116.72 141.05 <u>CLAY ALTERED ANDESITE</u> Coded As: 9B

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Comprehensive Report For Hole: DDH97-05

Depth (m)

From To Description Of Core

Andesite Breccia, red to gray, brecciated.

-nonmagnetic clay.

-feldspars altered to kaolonite.

-minor cobbel sized fragments.

-weakly altered in comparison to adjoining units.

-fragments subangular to angular.

-broken lower contact.

-unit grades from red to gray.

141.05 209.50 FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, dark red to dark gray, vesicular. 30% felsic fragments phenocrysts averaging 3 mm with a maximum size of 7 mm. 10% mafic fragments phenocrysts averaging 2 mm with a maximum size of 4 mm. 20% rounded vesicles averaging 1 mm with a maximum size of 4 mm.

-non to weakly magnetic.

-minor epidote on fractures.

-aphanitic groundmass.

-amoeba shaped amygdules.

-10-15% calcite zeolites.

-mesolite infilling of zeolites??

-gradational lower contact.

Mineralization: 2% disseminated pyrite.

Major Rock Forming Minerals: 30% elongate

feldspar, phenocryst; 10% phenocryst hornblende, euhedral.

151.00 156.60 altered feldspar phyric andesite

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to gray, vesicular.

-kaolonite alteration.

-crystal boundaries gone.

-non magnetic.

-minor chlorite.

-zeolite infilling.

-minor calcite.

-broken/lost upper and lower contacts. Mineralization: trace

disseminated pyrite.

Major Rock Forming Minerals:

25% elongate feldspar, phenocryst.

158.90 163.23 altered feldspar phyric andesite

Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, vesicular. -kaolonite alteration. -crystal boundaries gone.

Comprehensive Report For Hole: DDH97-05

09:52:01	/ H)	Compreh	Explora Dia nensive	Report For Hole: DDH97-05
Depth	(m)			
From	To	Descript	ion Of	Core
				-non magnetic. -minor chlorite.
				-zeonce innining.
				-minor calcile.
				Mineralization: trace
				disseminated pyrite.
				Major Rock Forming Minerals:
				25% elongate relaspar, phenocryst.
		165.30	170.30	altered feldspar phyric andesite Coded As: 8p
				Andesite Flow: feldspar-phyric, light
				-kaolonite alteration.
				-crystal boundaries gone.
				-non magnetic.
				-minor chlorite.
			. • · · ·	-zeolite infilling.
				-minor calcite.
				-broken/lost upper and lower contacts. Mineralization: trace
			÷	disseminated pyrite.
				Major Rock Forming Minerals:
				25% elongate leldspar, phenocryst.
		193.85	200.40	altered feldspar phyric andesite Coded As: 8p
				Andesite Flow: feldspar-phyric, light gray to gray, vesicular.
				-kaolonite alteration.
				-crystal boundaries gone.
				-mon magnetic.
				-zeolite infilling.
				-minor calcite.
				-increased clay content relative to
				adjoinig units. -broken/lost upper and lower contacts.
				Mineralization: trace
				disseminated pyrite.
209 50	254 20	CT.AV		
203.30	201.20	Coded As:	clay:	
		Clay,	gray to	b dark red, .
		-almost a	all stro	cture is lost/altered.
		-nonmagne	etic.	
		-gradatio	onal upp	per and lower contacts.
		229.14	230.74	feldspar phyric andesite Coded As: 8p

Comprehensive Report For Hole: DDH97-05

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18-DEC-97 09:52:02	Hudson Bay Exploration And Development Co. Ltd. Page 6 Diamond Drill Log Comprehensive Report For Hole: DDH97-05
Depth (1 From To	n) Description Of_Core
	Andesite Flow: feldspar-phyric, gray to light brown, trachytoid. 30% felsic fragments phenocrysts averaging 10 mm with a maximum size of 25 mm. -spherical amygdules with zeolite/illmenite. -magnetic. calcite vein at 40° cax. -gradational upper and lower contacts. Major Rock Forming Minerals: 5% equant feldspar, phenocryst; 25% elongate feldspar, phenocryst.
•	<pre>244.24 246.67 feldspar phyric andesite Coded As: 8p Andesite Flow: feldspar-phyric, gray to light brown, trachytoid. 30% felsic fragments phenocrysts averaging 10 mm with a maximum size of 25 mm. -spherical amygdules with zeolite/illmenite. -magnetic. calcite vein at 40° cax. -gradational upper and lower contacts. Major Rock Forming Minerals: 5% equant feldspar, phenocryst; 25% elongate feldspar, phenocryst.</pre>
254.20 26	5.48 WEATHERED FELDSPAR PHYRIC ANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, dark gray to black, phyric. felsic fragments phenocrysts averaging 10 mm with a maximum size of 15 mm. -unit is weathered.

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-amoeba shaped vesicles. -magnetic. -gradational upper contact.

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	SAMPLE NUMBER	From: (m)	To: (m)	Interval	Au ppb FA+AA	Ag ppm	Cu ppm	Zn ppm
	M695608	77.00	80.00	3.0	<5	<.2	37	68
	M695609	105.60	108.60	3.0	<5	<.2	40	66
	M695610	202.50	205 50	30	~5	12	24	120

19-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page07:17:42Diamond Drill LogComprehensive Report For Hole DDH97-06
Hole No.: DDH97-06 Depth: 304.80 m Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC
Claim No.: 339853 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -4,400.00 m Northing: 4,620.00 m Elevation: Hole Angle: -90.00° Hole Direction Measured Clockwise From Grid North: Hole Direction Measured Clockwise From True North:
Date Drilling Started: 14-AUG-97 Date Finished: 21-AUG-97 Drilled By: BEAUPRE DIAMOND DRILLING
Logged By: M.D. BUCHANAN Legend For Core Logging Codes: BC (GENERAL)
Target Type: ENZYME LEACH Borehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 77.22 m Casing Pulled: Yes Water Depth: Overburden Depth: 77.22 m
Level: Section: Drift:
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 684,723.00 m UTM Northing: 6,006,935.00 m
Assay Elements: AU AG CU ZN
Data Entry Marked Complete: Yes

General Comments About Hole

-NW casing 0.00-48.77m. -NQ core from 48.77-304.80m. -all casing recovered. -all drill steel recovered. -hole ddh97-06 consists of dark to leached colored andesites. -1-5% disseminated pyrite from 178.60-196.70m. In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	<u>Azimuth</u>	<u>Dip</u>
152.40		0.00	-88.50
303.89		0.00	-85.50

Comprehensive Report For Hole: DDH97-06

2 Page

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Comprehensive Report For Hole: DDH97-06

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Depth (m) <u>From To</u> <u>Description Of Core</u> 48.77 NW CASING 0.00 Coded As: nw;gt NW Casing, , . -glacial till 0.00 48.77 glacial till Coded As: gt Glacial Till, , . -grain size varies from pebbles to cobbles. -40% andesite. -10% basalt. -50% other? 48.77 77.22 GLACIAL TILL Coded As: gt;mud,sand,clay Glacial Till, , . -overburden composed of mud, sand, clay, glacial till. -various compositions. 48.77 70.04 clay Coded As: clay Clay, light brown to dark brown, . -minor fragments. -strctureless. 70.04 77.22 basal till Coded As: gt Glacial Till, , . -subrounded to subangular pebbles to cobbles, -no matrix sand. -andesite 30%. -intrusives 20%. -vesicular basalt 5%. -other 45%? 89.07 FELDSPATHIC ANDESITE 77.22 Coded As: 8p Andesite Flow: feldspar-phyric, light gray to dark gray, phyric. -feldspars have no orientation and show alteration rings. -minor alteration of feldspars. -minor feldspar recrystalization/twinning. -moderately magnetic. -minor calcite veining(1-2mm) -gradational (brecciated) lower contact. -20° core angle. Major Rock Forming Minerals: 30% elongate

feldspar, phenocryst 10 mm grains; 10% elongate

Comprehensive Report For Hole: DDH97-06

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	demonstrated in the state and a	

Comprehensive Report For Hole: DDH97-06

Depth (m)

From To Description Of Core

> hornblende, phenocryst 02 mm grains; 10% elongate biotite, phenocryst 02 mm grains.

77.22 85.14 feldspathic andesite

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to light orange, phyric. -limonitic staining along fracturesaround feldspars.

-fractured.

-gradational lower contact.

Major Rock Forming Minerals:

30% elongate feldspar, phenocryst 08 mm grains; 10% elongate hornblende, phenocryst 02 mm grains; 10% biotite, phenocryst 02 mm grains.

89.07 102.23 CLAY ALTERED ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, gray to light red, phyric.

-weakly clay altered.

-minor brecciation near upper contact.

-becoming vesicular towards lower contact.

-gradational upper and lopwer contacts.

Major Rock Forming Minerals: 30% elongate feldspar, phenocryst 10 mm grains; 10% elongate hornblende, phenocryst 02 mm grains; 10% elongate biotite, phenocryst 02 mm grains.

102.23 110.00 FELDSPATHIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to dark gray, phyric.

-moderate alteration of feldspars to kaolonite. -moderate to strong alteration/weathering of hornblends. -minor vesiculation.

-chlorite??

-biotite uniformly distributed throughout.

-gradational upper contact.

-diffuse lower contact (becoming pink in color). Major Rock Forming Minerals: 30% elongate feldspar, phenocryst 10 mm grains; 10% elongate hornblende, phenocryst 02 mm grains; 10% elongate biotite, phenocryst 02 mm grains.

110.00 121.70 CLAY ALTERED ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, light pink to light brown, phyric. -weakly magnetic sections.

Comprehensive Report For Hole: DDH97-06

19-DEC-97 Hudson Bay Exploration And Development Co. Ltd. Page 07:17:45 Diamond Drill Log

Comprehensive Report For Hole: DDH97-06

Depth (m)

<u>From To</u> <u>Description Of Core</u>

> moderate chlorite alteration along fractures and slickensides.

-patchy zones of no alteration.

-strong alteration of feldspars.

-clay matrix.

-brecciated near upper and lower contacts.

Major Rock Forming Minerals: 30% elongate feldspar, phenocryst 10 mm grains; 10% elongate hornblende, phenocryst 02 mm grains; 10% elongate biotite, phenocryst 02 mm grains.

121.70 124.36 BRECCIATED ANDESITE

Coded As: 9B

Andesite Breccia, light pink to light brown, . -sub angular cobbles to block fragments in a chloritic groundmass (5-100mm). -alteration of feldspars. -irregular calcite veining. -sharp upper contact with clay. -lost lower contact.

124.36 137.25 BRECCIATED PHYRIC ANDESITE

Coded As: 9B

Andesite Breccia, brown to light pink, . -clasts are subangular to angular, approxiamtely 10-80mm. -zoned/weathered kaolonized feldspars. -calcite veining 5-15mm width, with a core angle of 60°. -slickensides atr 70°. -non magnetic.

-gradational upper contact.

-gradational (subtle) lower contact.

Major Rock Forming Minerals: 15% biotite,

phenocryst 01 mm grains.

137.25 172.06 FELDSPAR PHYRIC ANDESITE FLOW

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to gray, phyric.

-strongly magnetic.

-calcite veining 1mm width, at 55°.

-indication of sub parallel flow to feldspars.

-gradational upper contact.

gradational to sharp lower contact with clay unit.

Major Rock Forming Minerals: 45% feldspar,

phenocryst 02 mm grains; 20% biotite, phenocryst 02 mm qrains.

172.06 178.60 <u>CLAY</u> Coded As: 50D Alteration: clay, red to light green, . -non magnetic.

Comprehensive Report For Hole: DDH97-06

19-DEC-97 Hu 07:17:45		dson Bay Exploration And Development Co. Ltd. Page 6 Diamond Drill Log					
		Comprehensive Report For Hole: DDH97-06					
Depth	(m)						
<u>From</u>	<u>To</u>	Description Of Core					
		-remnant feldspars.					
		-minor chiorite/epidote alteration.					
		-red towards upper contact, green towards lower contact.					
170 60	100 66	WEGTOWINGED SWEDTER (SWEDDIATOL)					
1/8.60	199.00	VESICULATED ANDESITE (AMIGDALOIDAL?) Coded As: 8m					
		Andesite Flow: mafic-phyric, gray to dark gray.					
		vesicular.					
		-magnetic.					
		-black zeolites 2-3mm comprizing 35-40% of rock volume.					
		-disseminated pyrite throughout.					
		-massive infilling in breccia					
		-feldspar phenocrysts near lower contact.					
		-amygdaloidal and vesicular near upper contact.					
		-gradational upper contact.					
-		-snarp lower conatct. Nineralization: 5% discominated purito					
		Major Rock Forming Minerals: 30% feldsnar					
		phenocryst 03 mm grains.					
199.66	225.98	CLAY ALTERED ANDESITE					
		Coded As: 8;50D					
		-structureless except for occassional clasts of weathered					
		andesites.					
		-irregular calcite veins.					
		-non magnetic.					
		-chemical weathering.					
		-sharp upper contact.					
		-gradational to precented lower contact.					
225.98	242.06	BRECCIATED ALTERED ANDESITE					
		Loded AS: 9B Andesite Broccia light green to light gray					
		brecciated.					
		-matrix of sulphides and chlorite.					
		-fined grained pyrite.					
		Major Rock Forming Minerals: 70% feldspar,					
		phenocryst 99 mm grains.					
242.06	279.49	FELDSPATHIC ANDESITE					
		Coded As: 8p					
		Andesite Flow: feldspar-phyric, light brown to gray,					
		pnyric.					
		-aphanicic yrounumass. -non magnetic.					
		-minor disseminated pyrite and epidote.					
		-minor calcite veining.					

-colorless, layered mineral, fracture filling, non

Comprehensive Report For Hole: DDH97-06

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19-DEC-97	Hudson Bay Exploration And Development Co. Ltd.	Page
07:17:46	Diamond Drill Log	
	Comprohanging Dapart Ray Valas Davag ac	

Comprehensive Report For Hole: DDH97-06

Depth (m)

From To

<u>Description Of Core</u>

elastic.

-gradational upper contact.

-gradational lower contact.

Major Rock Forming Minerals: 20% elongate feldspar, phenocryst 10 mm grains; 10% elongate hornblende, phenocryst 02 mm grains; 10% elongate magnetite, phenocryst 02 mm grains.

274.30 279.49 brecciated feldspar phyric andesite Coded As: 8p,bxt

> Andesite Flow: feldspar-phyric, light gray to gray, . -clasts are angular to sub angular. -alteration of feldspars to kaolonite. -non magnetic. -sharp upper contact. -gradational lower contact.

279.49 304.80 ALTERED FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to gray, .

-matrix of clay, friable.

-non magnetic.

-structureless.

Major Rock Forming Minerals: 20% equant feldspar, phenocryst 02 mm grains.

SAMPLE NUMBER	From: (m)	To: (m)	Interval	Au ppb FA+AA	Ag ppm	Cu ppm	Zn ppm
M695211	181.47	184.47	3.0	<5	<.2	52	120
M695212	187.89	190.89	3.0	<5	<.2	44	94
M695213	190.89	193.89	3.0	<5	<.2	46	124
M695214	193.89	196.89	3.0	<5	<.2	36	90
M695217	226.06	229.06	3.0	<5	<.2	39	64
M695218	229.06	232.06	3.0	<5	<.2	30	54
M695219	232,06	235.06	3.0	<5	<.2	41	56
M695220	235.06	238.06	3,0	<5	<.2	44	42
M695221	245.06	248.06	3.0	<5	<.2	35	64
M695222	248.06	250.20	2.1	<5	<.2	26	134
M695223	258.32	261.32	3.0	<5	<.2	25	106
M695224	261.32	264.32	3.0	<5	<.2	28	76
M695225	263.11	266.11	3.0	<5	<.2	38	82
M695226	266.11	269.11	3.0	<5	<.2	40	94
M695227	269.11	272.11	3.0	<5	<.2	32	84

18-DEC-97 Hudson Bay Exploration And Development Co. Ltd. Page 10:02:08 Diamond Drill Log Comprehensive Report For Hole DDH97-07
Hole No.: DDH97-07 Depth: 219.15 m Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC
Claim No.: 316462 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -5,100.00 m Northing: 4,100.00 m Elevation: Hole Angle: -90.00° Hole Direction Measured Clockwise From Grid North: Hole Direction Measured Clockwise From True North:
Date Drilling Started: 21-AUG-97 Date Finished: 24-AUG-97 Drilled By: BEAUPRE DIAMOND DRILLING
Logged By: M. D. Buchanan Legend For Core Logging Codes: BC (GENERAL)
Target Type: ENZYME LEACHBorehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 27.43 m Casing Pulled: Yes Water Depth: Overburden Depth: 27.43 m
Level: Section: Drift:
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 683,956.00 m UTM Northing: 6,006,733.00 m
Assay Elements: AU AG CU ZN
Data Entry Marked Complete: Yes

General Comments About Hole

-NW casing from 0.00 to 27.43m. -NQ core starts at 27.43m. -all casing removed. -all drill steel recovered. -hole ddh97-07 consists of andesites which become increasingly vesiclulated and vuggy near the bottem of the hole. In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	<u>Azimu</u>	th Dip
109.42		0.00	-87.00
216.10		0.00	-87.50

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Comprehensive Report For Hole: DDH97-07

18-DEC-97 Hu 10:02:09	dson Bay Exploration And Development Co. Ltd. Page 3 Diamond Drill Log Comprehensive Report For Hole: DDH97-07
Depth (m) From To	Description Of Core
0.00 27.43	<pre>NW CASING Coded As: nw NW Casing, , . -overburden composed of glacial till. -estimated 70% silt, sand & clay. -20% feldspathic andesite pebbles & cobbles -10% intrusives pebbles and cobbles.</pre>
27.43 41.85	WEATHERED ANDESITE Coded As: 8 Andesite Flow, buff to light brown, weathered. -pervasive iron oxide staining. -completely kaolinized. -friable. -non-magnetic. -diffuse lower contact.

41.85 56.13 FELDSPAR PHYRIC ANDESITE

Coded As: 8;8p Andesite Flow: feldspar-phyric, light gray to gray, altered. -feldspars altered to kaolinite. -some calcite infilling. -much of the structure lost. -minor pyrite disseminated and along fractures. -sharp lower contact. Mineralization: 2% disseminated pyrite, cubic 1 mm grains. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 4 mm grains.

56.13 65.00 BRECCIATED ANDESITE

Coded As: 8;8p;9B Andesite Flow: feldspar-phyric, brown to gray, feldspar phyric. -subangular brecciated andesite clasts ranging in size from 20 to 65 mm. -feldspars altered to kaolinite. -some calcite infilling and minor veins. -10% vesicles 2-5mm in diameter. -sharp lower contact. Major Rock Forming Minerals: 30% elongate

feldspar, euhedral 6 mm grains.

65.00 72.55 WEATHER ANDESITE Coded As: 8p Andesite Flow, light gray to gray, altered. 25% elongate phenocrysts averaging 7 mm with a maximum size of 10 mm. -altered andesite. -feldspars altered to kaolinite.

Comprehensive Report For Hole: DDH97-07

Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log Comprehensive Report For Hole: DDH97-07 18-DEC-97 10:02:09

Depth	(m)	Description of game			
<u>From</u>	10	Description of Core			
		-aphanitic groundmass. -friable.			
		-non-magnetic.			
		-gradational lower contact.			
72.55	82.12	BASALT Coded As: 21			
		Basalt or Basaltic Flow, light gray to light brow altered. 10% amoeba shaped amygdules averaging 2 mm	vn, with		
		-hasaltic to andesitic composition			
		-minor alteration of feldspars to kaolinite.			
		-magnetic.			
		-amygdules filled with calcite and yellowish zeolite	••		
		Major Rock Forming Minerals: 20% elongate			
		feldspar, euhedral 4- mm grains; 15% equant feldspar euhedral 2 mm grains.	,		
00 10	05 00				
02.12	99.00	Coded As: 8p			
		Andesite Flow, light gray to gray, altered. 25%	•		
		elongate phenocrysts averaging 7 mm with a maximum s	ize		
		or 10 mm. -altered andesite/basalt.			
		-strong weathering of feldspars to kaolinite.			
		-minor epidote and chlorite.			
		-friable.			
		-weakly magnetic. -gradational lower contact.			
		gradulinar lower compace,			
95.00	101.47	FELDSPAR PHYRIC ANDESITE			
		Andesite Flow: feldspar-phyric, light brown to li	aht		
		gray, feldspar phyric. 25% elongate phenocrysts aver	aging		
		3 mm with a maximum size of 4 mm.			
		-minor alteration of feldspars.			
		-iron oxide oxidation and calcite along fractures.			
		-fractures 45 degrees to CA.			
		-weakly magnetic.			
		-sharp lower contact.			
101.47	109.47	WEATHERED ANDESITE			
		Andesite Flow, red to light gray, altered.			
		-strongly altered andesite.			
		-feldspars altered to kaolinite.			
		-aphanicic groundmass. -irregular calcite veining 60 degrees to CA.			
			•		
comprenensive Report For Hole: DDH97-07 Page 4					

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18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page10:02:10Diamond Drill Log

Comprehensive Report For Hole: DDH97-07

Depth (m)

From To Description Of Core

-friable. -non-magnetic. -sharp lower contact.

109.47 123.26 AMYGDALOIDAL BASALT/ANDESITE

Coded As: 21

Basalt or Basaltic Flow, light gray to gray, altered. 35% amoeba shaped amygdules averaging 12 mm with a maximum size of 15 mm. -basaltic to andesitic composition. -complete alteration of feldspars to kaolinite. -calcite veining and infilling.

-non-magnetic.

-amygdules filled with calcite and quartz.

-gradational lower contact.

Major Rock Forming Minerals: 20% elongate feldspar, euhedral 4- mm grains; 15% equant feldspar, euhedral 2 mm grains.

123.26 131.57 AMYGDALOIDAL ANDESITE

Coded As: 8;8p

Andesite Flow, gray to dark gray, altered. 15% amoeba shaped amygdules averaging 7 mm with a maximum size of 10 mm.

-andesitic composition.

-complete alteration of feldspars to kaolinite.

-aphanitic groundmass.

-minor calcite veining.

-magnetic.

-amygdules filled with calcite, quartz and chlorite.

-gradational lower contact.

Major Rock Forming Minerals: 15% elongate feldspar, euhedral 6 mm grains.

131.57 169.46 AMYGDALOIDAL BASALT/ANDESITE

Coded As: 21

Basalt or Basaltic Flow, gray to dark gray, altered. 35% amoeba shaped amygdules averaging 4 mm with a maximum size of 5 mm. -basaltic to andesitic composition. -complete alteration of feldspars to kaolinite.

-calcite veining and infilling.

-spotty magnetism.

-amygdules filled with calcite and quartz.

-gradational lower contact.

Major Rock Forming Minerals: 10% elongate feldspar, euhedral 3 mm grains.

142.23 146.20 AMYGDALOIDAL ANDESITE

Coded As: 8

Andesite Flow, gray to dark gray,

18-DEC-97 10:02:11

Depth	(m)			
<u>From</u>	<u>To</u>	Descript	ion Of	Core
				amygdaloidal. 10% amoeba shaped amygdules averaging 10 mm with a maximum size of 15 mm. -weathered. -aphanitic groundmass. -minor calcite/quartz veining -sharp upper and lower contacts.
169.46	219.15	BLEACHED Coded As Andes amoeba s size of with a m -altered -alterat -calcite -spotty -amygdul -iron ox -gradati Major feldspar	ANDESI ANDESI A PADESI A PADESI	TE w, light gray to buff, amygdaloidal. 10% mygdules averaging 3 mm with a maximum 20% elongate phenocrysts averaging 5 mm size of 10 mm. ized andesite. dspars to kaolinite. g and fracture fillings 15 degrees to CA. sm. ed with calcite and quartz. ining along fractures. ver contact. orming Minerals: 10% elongate ral 3 mm grains.
		191.20	194.60	CLAY ALTERED ANDESITE Coded As: 8 Andesite Flow, gray to dark gray, aphanitic. -clay rich aphanitic groundmass. -trace to 1% disseminated pyrite cubes. -chloritic alteration around pyrite. -non-magnetic. -friable. -diffuse upper and lower contacts.
		200.79	204.30	CLAY ALTERED ANDESITE Coded As: 8 Andesite Flow, gray to dark gray, aphanitic. -clay rich aphanitic groundmass. -trace to 1% disseminated pyrite cubes. -chloritic alteration around pyrite. -non-magnetic. -friable. -sharp upper and lower contacts.
		206.71	209.71	CLAY ALTERED ANDESITE Coded As: 8 Andesite Flow, gray to dark gray, aphanitic.

-clay rich aphanitic groundmass.

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10:02:11

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Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log Comprehensive Report For Hole: DDH97-07

Depth (m) From To	Description	Of Core
		-trace to 1% disseminated pyrite cubes. -chloritic alteration around pyrite. -non-magnetic. -friable. -gradational upper and lower contacts.
	211.26 21	 7.26 CLAY ALTERED ANDESITE Coded As: 8 Andesite Flow, gray to dark gray, aphaniticclay rich aphanitic groundmasstrace to 1% disseminated pyrite cubeschloritic alteration around pyritenon-magnetic3 to 5mm wide calcite veinsfriable.

-gradational upper and lower contacts.

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SAMPLE	From:	To:	Interval	Au ppb	Ag	Cu	Zn	
NUMBER	(m)	(m)		FA+AA	_ppm_	ppm	ppm	
M695700	170.38	173.38	3.0	<5	< 2	34	80	•
M695601	173.38	176.38	3.0	<5	<.2	56	86	
M695602	176.38	179.38	3.0	<5	<.2	51	78	
M695603	179.38	182.38	3.0	<5	<.2	47	116	
M695604	191.20	194.20	3.0	<5	<.2	42	62	
M695605	200.79	203.79	3.0	<5	<.2	28	38	
M695606	203.79	206.71	2.9	<5	<.2	39	106	
M695607	206.71	209.71	3.0	<5	<.2	36	68	

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19-DEC-97Hudson Bay Exploration And 107:18:02Diamond DrilComprehensive Report For	Development Co. Ltd. Page 1 Log r Hole DDH97-08
Hole No.: DDH97-08 Depth: 188.06 m	Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON	Province: BC
Claim No.: 316462 Grid Name: ALLIN-1 Grid North Azimuth Measured Clockwise Fr	nce No.: Project: ial/Metric): Metric rom True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Ho Easting: -5,300.00 m Northing: 4,80 Elevation: Hole Angle: Hole Direction Measured Clockwise From G Hole Direction Measured Clockwise From 7	ole Collar: 00.00 m -90.00° Grid North: Crue North:
Date Drilling Started: 25-AUG-97 Date F Drilled By: BEAUPRE DIAMOND DRILLING	Finished: 29-AUG-97
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENER	RAL)
Target Type: ENZYME LEACH	Borehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 39.62 m Casing Pulled Water Depth: Overburden Dep	l: Yes th: 85.35 m
Level: Section: Drift:	
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 684,091.00 m UTM Northin	g: 6,007,432.00 m
Assay Elements: AU AG CU ZN	
Data Entry Marked Complete: Yes	

General Comments About Hole

-NW casing to 39.62 meters. -overburden 85.35 meters. -all casing removed. -all drill steel recovered. -hole ddh97-08 consists of brecciated and altered andesites. In Hole Survey Method: Dip Test

<u>Distance</u>	(m)	Azimuth	<u>Dip</u>
91.44		0.00	-89.00
188.06		0.00	-86.00

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19-DEC-97Hudson Bay Exploration And Development Co. Ltd.07:18:03Diamond Drill Log

Comprehensive Report For Hole: DDH97-08

Depth (m) <u>From To</u> <u><u>Description</u> Of Core</u> 0.00 85.35 OVERBURDEN Coded As: gt Glacial Till, , . -galcial overbuden. -pebble to cobble sized clasts of iron oxide stained intrusives and andesites in a clay matrix. -hole cased down to 39.62 meters using NW casing. 85.35 109.42 ANDESITE BRECCIA Coded As: 9B:8 Andesite Breccia, light gray to black, brecciated. 30% angular breccia averaging 100 mm with a maximum size of 200 mm. -brecciated andesite with weathered clay matrix. -most of the rock is bleached. -remnant feldspar crystals highly weathered. -flow orientation 70 degrees to CA. -friable. -minor calcite veining in some clasts. -non-magnetic. -lower contact lost. 109.42 119.64 ALTERED ANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, dark gray to black, altered. 35% elongate phenocrysts averaging 3 mm with a maximum size of 5 mm. -highly weathered and fractured feldspar phyric andesite. -feldspars altered to kaolinite. -aphanitic clay rich groundmass. -friable. -non-magnetic. -broken lower contact.

119.64 153.47 ANDESITE BRECCIA

Coded As: 9B;8 Andesite Breccia, light gray to dark gray, brecciated. 30% angular breccia averaging 75 mm with a maximum size of 150 mm. -brecciated andesite with weathered clay matrix. -variable degrees of brecciation. -clasts range from subangular to angular. -pervasive clay alteration around feldspars. -minor silicification near lower contact -non-magnetic. -sharp lower contact.

125.89 128.00 ALTERED ANDESITE Coded As: 8 Andesite Flow: feldspar-phyric, light red to gray, phyric. 30% elongate

Comprehensive Report For Hole: DDH97-08

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Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log

Comprehensive Report For Hole: DDH97-08

Depth	(m)			
From T	<u> </u>	Descript	<u>ion Of</u>	Core
				<pre>phenocrysts averaging 4 mm with a maximum size of 5 mm. -altered andesite. -aphanitic groundmass -feldspars altered to kaolinite. -non-magnetic. -broken upper conact. -gradational lower contact. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 7 mm grains.</pre>
		135.13	136,95	ALTERED ANDESITE Coded As: 8 Andesite Flow: feldspar-phyric, light red to gray, phyric. 30% elongate phenocrysts averaging 4 mm with a maximum size of 5 mm. -altered andesite. -aphanitic groundmass -feldspars altered to kaolinite. -non-magnetic. -gradational upper and lower contact. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 7 mm grains.
		140.29	140.73	ALTERED ANDESITE Coded As: 8 Andesite Flow: feldspar-phyric, light red to gray, phyric. 30% elongate phenocrysts averaging 4 mm with a maximum size of 5 mm. -altered andesite. -aphanitic groundmass -feldspars altered to kaolinite. -non-magnetic. -gradational upper and lower contact. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 7 mm grains.
153.47 1	88.06	ANDESITE Coded As: Andes: angular k mm. -brecciat -variable	BRECCIA : 9B;8 ite Brec oreccia ted sili e degree	e cia, buff to gray, brecciated. 35% averaging 30 mm with a maximum size of 50 ceous andesite. s of brecciation.

-clasts are primarily angular. -clay alteration around feldspars.

Comprehensive Report For Hole: DDH97-08

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Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log Comprehensive Report For Hole: DDH97-08 19-DEC-97 07:18:04

Depth (m)		
From To	<u>Description</u>	Of Core
·	-aphanitic -minor vesi -1 to 5% di -fracture f -non-magnet Minerali cubic 2 mm Major Roo feldspar, en	groundmass. culation. sseminated cubic pyrite. illings of calcite. ic. zation: 3% disseminated pyrite, grains. ck Forming Minerals: 20% elongate uhedral 5 mm grains; 15% equant biotite, flake
	3 mm grains.	•
	157.00 15	 3.52 ALTERED ANDESITE Coded As: 8 Andesite Flow: feldspar-phyric, light red to gray, phyric. 30% elongate phenocrysts averaging 4 mm with a maximum size of 5 mm. -altered andesite. -aphanitic groundmass -feldspars altered to kaolinite. -non-magnetic. -gradational upper and lower contact. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 7 mm grains.
	160.32 164	 ALTERED ANDESITE Coded As: 8 Andesite Flow: feldspar-phyric, light red to gray, phyric. 30% elongate phenocrysts averaging 4 mm with a maximum size of 5 mm. -altered andesite. -aphanitic groundmass -feldspars altered to kaolinite. -non-magnetic. -gradational upper and lower contact. Major Rock Forming Minerals: 30% elongate feldspar, euhedral 7 mm grains.

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SAMPLE	From:	To:	Interval	Au ppb	Ag	Cu	Zn
NUMBER	(m)	(m)		FA+AA	ppm	ppm	ppm
M695629	167.37	170.37	3.0	<5	<,2	44	102
M695630	170.37	173,37	3.0	<5	<.2	42	64
M695631	173.37	176.37	3.0	<5	<.2	30	58
M695632	176.37	179.37	3.0	<5	<.2	39	80

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9-DEC-97 Hudson Bay Exploration And Development Co. Ltd. Page 7:18:24 Diamond Drill Log Comprehensive Report For Hole DDH97-09
Hole No.: DDH97-09 Depth: 212.14 m Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC
Claim No.: 316462 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -6,000.00 m Northing: 4,800.00 m Elevation: Hole Angle: -75.00° Hole Direction Measured Clockwise From Grid North: 330.00° Hole Direction Measured Clockwise From True North: 300.00°
Date Drilling Started: 30-AUG-97 Date Finished: 02-SEP-97 Drilled By: BEAUPRE DIAMOND DRILLING
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL)
Farget Type: ENZYME LEACH Borehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 19.08 m Casing Pulled: Yes Water Depth: Overburden Depth: 4.94 m
Level: Section: Drift:
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT JTM Grid Zone: 9 UTM Datum: NAD83 JTM Easting: 683,477.00 m UTM Northing: 6,007,783.00 m
Assay Elements: AU AG CU ZN
Data Entry Marked Complete: Yes

General Comments About Hole

-NW casing to 19.08 meters. -overburden 19.08 meters thick. -casing removed. -all drill steel recovered. -hole ddh97-09 consists alternating thicknesses of ash flow and andesites. ~ 1120

In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	Azimuth	Dip
91.44		0.00	-77.00
212.14		0.00	-73.50

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19-DEC-97 Hudson Bay Exploration And Development Co. Ltd. 07:18:25 Diamond Drill Log

Comprehensive Report For Hole: DDH97-09

Depth (m)

<u>From To</u> <u>Description</u> Of Core

0.00 19.08 OVERBURDEN GLACIAL TILL

Coded As: gt

Glacial Till, , . -glacial till consisting of subangular pebble to cobble sized clasts in a clay rich matrix. -hole cased with NW casing to 19.08 meters.

19.08

61.87 ASH FLOW

Coded As: af

Ash Flow, light gray to gray, bedded. ash -fine grained mottled ash flow. -crude bedding??/flow textures at 42 degrees to CA. -oxidized along fractures. -moderate amounts of chloritic alteration around sulphides. -minor amygdules filled with calcite, -1 to 5% disseminated pyrite and pyrrohtite throughout. -magnetic. -broken lower contact.

Mineralization: 3% disseminated pyrite, anhedral 2 mm grains; 3% disseminated pyrrhotite, anhedral 2 mm grains.

25.34 25.76 FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, light gray to gray, feldspar phyric. 25% equant phenocrysts averaging 3 mm with a maximum size of 5 mm. -andesitic flow??

-aphanitic groundmass.

-magnetic.

-1 to 3% disseminated pyrite and pyrrhotite.

-gradational upper and lower contacts.

Mineralization: 1%

disseminated pyrite, anhedral 2 mm grains; 1% disseminated pyrrhotite, anhedral 2 mm grains.

54.29 55.27 ANDESITIC DYKE

Coded As: 8

Andesite Flow, gray to dark gray, phyric. 15% equant phenocrysts averaging 3 mm with a maximum size of 5 mm. -andesitic dyke. -aphanitic groundmass. -calcite veining and infilling. -magnetic. -sharp chilled upper and lower contacts

Comprehensive Report For Hole: DDH97-09

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Comprehensive Report For Hole: DDH97-09

Depth (m)

From To Description Of Core

(CA - 50 degrees).

61.87 76.54 ANDESITE FLOW

Coded As: 8m

Andesite Flow: mafic-phyric, light gray to gray,

phyric.

-mafic phyric andesite.

-aphanitic groundmass.

-magnetic.

-disseminated 1 to 3mm blebs of pyrite and pyrrohtite along fractures with calcite.

-sharp/broken lower contact @ 15 degrees to CA.

Mineralization: 1% blebs pyrite, none noted

3 mm grains.

Major Rock Forming Minerals: 10% equant

feldspar, euhedral 3 mm grains; 25% replacement chlorite, subhedral 5 mm grains.

76.54 85.00 ASH FLOW

Coded As: af

Ash Flow, light gray to gray, mottled. crystal tuff

-fine grained mottled ash flow. -moderate amounts of fine grained chlorite alteration around sulphides.

-5% to 8% disseminated pyrite and pyrrohtite in mottled patches.

-magnetic.

-sharp lower contact @ 80 degrees to CA.

Mineralization: 3% disseminated pyrite, anhedral 2 mm grains; 5% disseminated pyrrhotite,

anhedral 2 mm grains.

78.94 79.62 DACITE FLOW/DYKE

Coded As: 10

Dacite Flow, gray to greenish light gray, phyric.

-aphanitic groundmass.

-moderate chloritic alteration.

-moderately magnetic.

-sharp lower contact @ 15 degrees to CA. Mineralization: 3%

disseminated pyrrhotite, euhedral 2 mm grains; 3% disseminated pyrite, euhedral 2 mm grains.

Major Rock Forming Minerals: 10% disseminated chlorite, flake 2 mm grains; 5% vug controlled quartz, subhedral 4 mm grains; 5% elongate feldspar, euhedral 2 mm grains.

19-DEC-97 07:18:27	Hudson Bay Exploration And Development Co. Ltd. Diamond Drill Log	Page
	Comprehensive Report For Hole: DDH97-09	
Depth (m)	

From To Description Of Core

83.41 84.10 DACITE FLOW/DYKE

Coded As: 10

Dacite Flow, gray to greenish light gray, phyric.

5

-aphanitic groundmass.

-moderate chloritic alteration.

-moderately magnetic.

-broken lower contact.

Mineralization: 3%

disseminated pyrrhotite, euhedral 2 mm grains; 3% disseminated pyrite, euhedral 2 mm grains.

Major Rock Forming Minerals: 10% disseminated chlorite, flake 2 mm grains; 5% elongate feldspar, euhedral 2 mm grains.

85.00 103.58 ANDESITE

Coded As: cfp

CROWDED FELDSPAR PHYRIC ANDESITE, light gray to gray, leached.

-aphanitic groundmass.

-magnetic.

-numerous amygdules filled with calcite, pyrite, and pyrrhotite.

-alteration of hornblende to chlorite.

sharp lower contact 30 degrees to CA.

Mineralization: 8% disseminated pyrite,

subhedral 7 mm grains; 2% disseminated pyrrhotite, subhedral 5 mm grains.

Major Rock Forming Minerals: 25% equant feldspar, euhedral 7 mm grains.

103.58 112.80 ANDESITE FLOW

Coded As: 8m

Andesite Flow: mafic-phyric, light gray to gray, phyric. -mafic phyric andesite.

-aphanitic groundmass.

-some small calcite filled vesicles.

-magnetic.

-disseminated 1 to 3mm blebs of pyrite and pyrrohtite along fractures with calcite.

-sharp lower contact 0 60 degrees to CA.

Major Rock Forming Minerals: 10% equant

feldspar, euhedral 3 mm grains.

112.80 113.60 ANDESITE

Coded As: cfp CROWDED FELDSPAR PHYRIC ANDESITE, light gray to gray, 19-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page07:18:27Diamond Drill Log

Comprehensive Report For Hole: DDH97-09

Depth (m)

From To Description Of Core

feldspar phyric. 20% elongate phenocrysts averaging 5 mm
with a maximum size of 10 mm.
-aphanitic groundmass.
-non-magnetic.
-alteration of hornblende to chlorite.
-sharp lower contact.
Major Rock Forming Minerals: 25% equant
feldspar, euhedral 7 mm grains.

113.60 156.36 ASH FLOW

Coded As: af

Ash Flow, light gray to gray, bedded. ash -fine grained mottled ash flow. -bedding/flow textures at 43 degrees to CA. -3-5% anhedral to subhedral blebs and disseminations of pyrite and pyrrohtite.

-moderate amounts of chloritic alteration around sulphides.

-minor amygdules filled with calcite.

-moderate amounts of silica in patches. -magnetic.

-magnetic.

-sharp lower contact.

Mineralization: 3% disseminated pyrite, anhedral 2 mm grains; 3% disseminated pyrrhotite, anhedral 2 mm grains.

118.57 124.86 ASHFLOW TUFF

Coded As: af

Ash Flow, buff to gray, mottled. -lapilli to block sized clasts within ash.

-mottled aphanitic groundmass.

-many lapilli replaced with pyrrhotite. -maqnetic.

-sharp lower contact.

Mineralization: 5% blebs pyrrhotite, rounded 3 mm grains.

124.86 126.13 ASHFLOW TUFF

Coded As: af Ash Flow, gray to dark gray, aphanitic. 10% equant phenocrysts averaging 2 mm with a maximum size of 5 mm. -thinly bedded ash. -aphanitic groundmass.

-few fragments.

-minor actinolite.

-moderately magnetic.

-gradational lower contact.

Mineralization: 1%

19-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page07:18:27Diamond Drill Log

Comprehensive Report For Hole: DDH97-09

Depth	(m)	
Debcu	/ m/	

From To Description Of Core

disseminated pyrrhotite, none noted 1 mm grains.

7

156.36 180.69 ANDESITE

Coded As: cfp

CROWDED FELDSPAR PHYRIC ANDESITE, light gray to gray, phyric.

-aphanitic groundmass.

-magnetic.

-numerous amygdules filled with calcite, pyrite, and pyrrhotite.

-alteration of hornblende to chlorite.

-chlorite along fractures associated with pyrrohtite and pyrite.

-sharp broken lower contact.

Mineralization: 1% disseminated pyrite, subhedral 2 mm grains; 1% disseminated pyrrhotite, subhedral 2 mm grains.

Major Rock Forming Minerals: 30% elongate feldspar, euhedral 3 mm grains; 20% equant actinolite, euhedral 4 mm grains.

180.69 205.41 ASH FLOW

Coded As: af

Ash Flow, light gray to light purple, mottled. ash -fine grained mottled ash flow.

-moderate amounts of chloritic alteration around sulphides.

-minor amygdules filled with calcite,

-1 to 5% disseminated pyrite and pyrrohtite throughout.

-concentrations of pyrrohtite in 10 to 20mm blebs.

-magnetic.

-broken lower contact.

Mineralization: 3% disseminated pyrite, anhedral 2 mm grains; 3% disseminated pyrrhotite, anhedral 2 mm grains.

189.44 190.10 **ASHFLOW TUFF** Coded As: af Ash Flow, light gray to gray, bedded.

> -thinly bedded ash flow. -bedding 60 degrees to CA. -alternating 1 to 3mm light and dark bands/layers. -aphanitic groundmass. -magnetic. -brecciated gradational lower contact. Mineralization: 3%

19-DEC-97 07:18:28	Hudson Bay Exploration And Development Co. Ltd. Page 8 Diamond Drill Log Comprehensive Report For Hole: DDH97-09
Depth (m)	
<u>From</u> <u>To</u>	Description Of Core
	disseminated pyrrhotite, laminated 1 mm grains.
	197.90 200.56 DACITE FLOW/DYKE Coded As: 10 Dacite Flow, gray to dark gray, phyric. -aphanitic groundmass. -moderate chloritic alteration. -chlorite occurs as anhedral replacements. -minor 2-4mm spherical vesicles/amygdules filled with calcite. -magnetic. -sharp upper and lower contacts @30 degrees to CA. Major Rock Forming Minerals: 5% disseminated chlorite, anhedral 2 mm grains.
205.41 212	2.14 DACITE FLOW Coded As: 10p Dacite Flow: feldspar-phyric, gray to dark gray, phyric. -feldspar phyric dacite flow. -flow banding 49-50 degrees to CA. -stretched elongate pyrite/pyrrohtite blebs 2-4mm wide 10-20mm long. -calcite along fractures and associated with sulphides. -weakly magnetic. Mineralization: 2% blebs pyrrhotite, none noted 3 mm grains.

Major Rock Forming Minerals: 15% elongate feldspar, euhedral 3 mm grains.

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SAMPI F	Erom.	To	Interval	Auroph	Αq	Cu	Zn
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	NUMBER	(m)	(m)		FA+AA	nom	nom	007
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M695230	25.75	26.75	10	<5	< 2	11	<u> </u>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M695231	26 75	27 75	1.0	<5	< 2	13	62
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M695232	27 75	28.75	1.0	<5	< 2	11	52
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M695233	28.75	20.15	1.0	<5	~.2	20	74
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	M605234	20.75	20.75	1.0	< <u>5</u>	~ ~ ~	12	56
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	M695235	20.75	31 75	1.0	~5	~.2	12	46
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	M695236	31 75	32 75	1.0	<5	<u>へ</u> 2	38	40 68
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M605237	32.75	33 75	1.0	<5 ~5	~.2	20	50
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M605238	22.75	34.75	1.0	<5 <5	~.2	33	68
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M605230	34 75	35.75	1.0	<5	►.Z ∠ 2	32	66
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M090209	34.13	35.75	1.0	<5 <5	N.Z.	33	400
	MCOED44	00.70 20 75	30.75	1.0	<5	< <u>.</u> 4	37	120
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	M090241	30.73	31.13	1.0	<5	<.Z	29	JZ 400
MOB95243 33,75 39,75 1.0 <5	M095242	31.13	30.75	1.0	<5	<.Z	31	108
MOBS244 39,75 40,75 1.0 <5		30.75	39.75	1.0	<5	<.Z	32	20
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M095244	39.75	40.75	1.0	<5	<.2	33	86
	M695245	40.75	41.75	1.0	<5	<.2	41	54
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M695246	41.75	42.75	1.0	<5	<.2	39	50
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M695247	42.75	43.75	1.0	<5	<.2	38	54
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M695248	43.75	44.75	1.0	<5	<.2	30	50
M69565145.7546.751.0<5<.23954M69565246.7547.751.0<5	M695249	44.75	45.75	1.0	<5	<.2	40	66
$\begin{array}{llllllllllllllllllllllllllllllllllll$	M695651	45.75	46.75	1.0	<5	<.2	39	54
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M695652	46.75	47.75	1.0	<5	<.2	44	114
M69565448.7549.751.0<5<23954M69565549.7550.751.0<5	M695653	47.75	48.75	1.0	<5	<.2	41	52
M695655 49.75 50.75 1.0 <5 $<.2$ 56 76 M695656 50.75 51.75 1.0 <5 $<.2$ 34 38 M695657 51.75 52.75 1.0 <5 $<.2$ 34 38 M695658 52.75 53.75 1.0 <5 $<.2$ 36 48 M695669 53.75 54.75 1.0 <5 $<.2$ 39 62 M695660 54.75 55.75 1.0 <5 $<.2$ 30 88 M695661 55.75 56.75 1.0 <5 $<.2$ 48 58 M695662 56.75 57.75 1.0 <5 $<.2$ 24 62 M695663 57.75 58.65 0.9 <5 $<.2$ 34 78 M695664 58.65 59.65 1.0 <5 $<.2$ 30 62 M695665 59.65 60.65 1.0 <5 $<.2$ 32 50 M695666 60.65 61.65 1.0 <5 $<.2$ 35 92 M695667 64.00 65.00 1.0 <5 $<.2$ 35 92 M695669 75.15 76.15 1.0 <5 $<.2$ 39 66 M695671 85.78 88.78 3.0 <5 $<.2$ 41 78 M695673 91.78 96.78 2.0 <5 $<.2$ 41 74 M695678 115.60 17.60	M695654	48.75	49.75	1.0	<5	<.2	39	54
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	M695655	49.75	50.75	1.0	<5	<.2	56	76
M695657 51.75 52.75 1.0 <5	M695656	50.75	51.75	1.0	<5	<.2	34	38
M695658 52.75 53.75 1.0 <5	M695657	51.75	52.75	1.0	<5	<.2	38	48
M695659 53.75 54.75 1.0 <5	VI695658	52.75	53.75	1.0	<5	<.2	35	56
M695660 54.75 55.75 1.0 <5	M695659	53.75	54.75	1.0	<5	<.2	39	62
M695661 55.75 56.75 1.0 <5	M695660	54.75	55.75	1.0	<5	<.2	30	88
M695662 56.75 57.75 1.0 <5	M695661	55,75	56.75	1.0	<5	<.2	48	58
M695663 57.75 58.65 0.9 <5	M695662	56.75	57.75	1.0	<5	<.2	26	62
M695664 58.65 59.65 1.0 <5	M695663	57.75	58.65	0.9	<5	<.2	34	78
M695665 59.65 60.65 1.0 <5	M695664	58,65	59.65	1.0	<5	<.2	30	62
M695666 60.65 61.65 1.0 <5	M695665	59.65	60.65	1.0	<5	<.2	32	50
M695667 64.00 65.00 1.0 <5	M695666	60.65	61.65	1.0	<5	<.2	39	56
M695668 69.65 70.65 1.0 <5	M695667	64.00	65.00	1.0	<5	<.2	35	92
M695669 75.15 76.15 1.0 <5	M695668	69.65	70.65	1.0	<5	<.2	35	92
M695670 76.62 77.62 1.0 <5	M695669	75,15	76.15	1.0	<5	<.2	39	66
M695671 85.78 88.78 3.0 <5	M695670	76.62	77.62	1.0	<5	<.2	41	78
M695672 88.78 91.78 3.0 <5 <.2 41 74 M695673 91.78 94.78 3.0 <5 <.2 41 142 M695673 91.78 94.78 3.0 <5 <.2 41 142 M695674 94.78 96.78 2.0 <5 <.2 49 112 M695677 113.60 115.60 2.0 <5 <.2 46 62 M695678 115.60 117.60 2.0 10 <.2 37 114 M695679 117.60 119.60 2.0 <5 <.2 38 126 M695680 119.60 121.60 2.0 <5 <.2 38 126 M695681 121.60 123.60 2.0 <5 <.2 38 108	M695671	85.78	88.78	3.0	<5	<.2	39	92
M695673 91.78 94.78 3.0 <5	M695672	88.78	91.78	3,0	<5	<.2	41	74
M695674 94.78 96.78 2.0 <5	M695673	91.78	94.78	3.0	<5	<.2	41	142
M695677 113.60 115.60 2.0 <5	M695674	94.78	96.78	2.0	<5	<.2	49	112
A695678 115.60 117.60 2.0 10 <.2	M695677	113.60	115.60	2.0	<5	<.2	46	62
A695679 117.60 119.60 2.0 <5	M695678	115.60	117.60	2.0	10	<.2	37	114
A695680 119.60 121.60 2.0 <5 <.2 38 126 A695681 121.60 123.60 2.0 <5 <.2 38 108	M695679	117.60	119.60	2.0	<5	<.2	31	70
A695681 121.60 123.60 2.0 <5 <2 38 108	M695680	119.60	121.60	2.0	<5	< 2	38	126
	M695681	121.60	123.60	2.0	<5	<.2	38	108

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SAMPLE	From:	Το:	Interval	Au ooo	Aa	Cu	Zn
NUMBER	(m)	(m)		FA+AA	ppm	ppm	ppm
M695682	123.60	126.20	2.6	<5	<.2	39	100
M695683	126.20	129.20	3.0	<5	<.2	39	72
M695684	129.20	132.20	3.0	<5	<.2	40	94
M695685	132.20	135.20	3.0	<5	<.2	41	48
M695686	135.20	138.20	3.0	<5	<.2	39	96
M695687	138,20	141.20	3.0	<5	<.2	32	80
M695688	141,20	144.20	3.0	<5	<.2	35	88
M695689	144.20	147.20	3.0	<5	<.2	37	130
M695690	147.20	150.20	3.0	<5	<.2	31	110
M695691	150,20	153,20	3.0	<5	<.2	25	70
M695692	153.20	156.20	3.0	<5	<.2	39	1 10
M695695	180,70	183.70	3.0	<5	<.2	55	114
M695696	183.70	186.70	3.0	<5	<.2	29	52
M695697	186,70	189.70	3.0	<5	<.2	38	84
M695698	189.70	192.70	3.0	<5	<.2	46	130
M695699	192,70	195.70	3.0	<5	<.2	45	102

18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page10:03:22Diamond Drill LogComprehensive Report For Hole DDH97~10
Hole No.: DDH97-10 Depth: 152.10 m Horizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON Province: BC
Claim No.: 350311 Reference No.: Project: Grid Name: ALLIN-1 Grid Type (Imperial/Metric): Metric Grid North Azimuth Measured Clockwise From True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Collar: Easting: -5,150.00 m Northing: 600.00 m Elevation: Hole Angle: -90.00° Hole Direction Measured Clockwise From Grid North: Hole Direction Measured Clockwise From True North:
Date Drilling Started: 03-SEP-97 Date Finished: 08-SEP-97 Drilled By: BEAUPRE DIAMOND DRILLING
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL)
Target Type: ENZYME LEACH Borehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 17.68 m Casing Pulled: Yes Water Depth: Overburden Depth: 17.68 m
Level: Section: Drift:
NTS Sheet Number: 093L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 682,047.00 m UTM Northing: 6,003,582.00 m
Assay Elements: AU AG CU ZN
Data Entry Marked Complete: Yes

General Comments About Hole

-NW casing to 17.68 meters. -overburden 17.68 meters. -casing removed. -all drill steel recovered. -hole ddh97-10 consists of interbedded sand seams with black argillite. - 14-

In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	Azimuth	<u>Dip</u>
76.20		0.00	-88,50
152.10		0.00	~88.50

18-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page10:03:22Diamond Drill Log

Comprehensive Report For Hole: DDH97-10

Depth (m)

From To Description Of Core

- 0.00 17.68 <u>GLACIAL OVERBURDEN</u> Coded As: gt Glacial Till, , . -glacial till consistin of pebble to boulder sized clasts of andesite and intrusive. -clay rich matrix. -hole cased with NW casing to 21.34m.
- 17.68 60.36 ARGILLITE

Coded As: ag

ARGILLITE, dark gray to black, bedded.

-argillite interbedded with medium grained sandstone.

-calcareous.

-bedding 55 degrees to CA.

-sandstone/grit seams range in thickness from 1 to 100mm thick averaging 5mm.

-minor pyrite in grit seams.

-minor quarz veins @ 15 degrees to CA.

-minor graphite along slickensides and fractures.

- -variable magnetism throughout.
- -fining of sediments downward.

-sharp lower conact @ 75 degrees to CA. Mineralization: trace disseminated pyrite, cubic 1 mm grains.

42.70 43.04 SAND SEAM

Coded As:

Sand & Clay, light gray to gray, friable. moderately sorted fine sand (< 1/16 mm) -fine grained sand. -minor faulting. -load structures. -micro faulting across bedding planes. -magnetic.

-sharp upper and lower conacts.

44.17 44.39 SAND SEAM

Coded As: Sand & Clay, light gray to gray, friable. moderately sorted fine sand (< 1/16 mm) -fine grained sand. -minor faulting. -load structures. -micro faulting across bedding planes. -magnetic. -sharp upper and lower conacts.

60.36 78.88 ANDESITIC DYKE

Coded As: 8

18-DEC-97 Hudson Bay Exploration And Development Co. Ltd. Page 10:03:23 Diamond Drill Log

Comprehensive Report For Hole: DDH97-10

Depth (m)

From	To	Description	Of	Core	

Andesite Flow, buff to gray, amygdaloidal. -aphanitic groudmass. -magnetic. -minor siliceous argillite zone @ 63.78m. -minor quartz veining. -numerous amygdules and vugs filled with calcite.

-minor flow texture @ 25 degrees to CA.

-broken lower contact parallel to bedding.

Major Rock Forming Minerals: 25% phenocryst

feldspar, euhedral 3 mm grains.

78.88 86.67 ARGILLITE

Coded As: aq

ARGILLITE, dark gray to black, bedded.

-argillite interbedded with medium grained sandstone.

-calcareous.

-bedding 55 degrees to CA.

-sandstone/grit seams range in thickness from 1 to 100mm thick averaging 5mm.

-minor pyrite in grit seams.

-minor guarz veins @ 15 degrees to CA.

-minor graphite along slickensides and fractures.

-variable magnetism throughout.

-fining of sediments downward.

-broken lower contact @ 10 degrees to CA.

Mineralization: trace disseminated pyrite,

cubic 1 mm grains.

86.67 93.46 ANDESITIC DYKE

Coded As: 8

Andesite Flow, gray to black, amygdaloidal. -aphanitic groundmass.

-magnetic.

-ameoba shaped amygdules 5 to 25mm in diameter filled with quartz.

-quartz filled fractures @ 40 degrees to CA. -sharp lower contact 75 degrees to CA.

Major Rock Forming Minerals: 5% phenocryst feldspar, euhedral 3 mm grains.

93.46 152.10 **ARGILLITE**

Coded As: ag

ARGILLITE, dark gray to black, bedded. -argillite interbedded with medium grained sandstone. -calcareous. -minor quarz veins @ 15 degrees to CA. -minor graphite along slickensides and fractures. -variable magnetism throughout. -fining of sediments downward. Mineralization: trace disseminated pyrite, cubic 1 mm grains.

SAMPLE NUMBER	From: (m)	To: (m)	Interval	Au ppb FA+AA	Ag ppm_	Cu ppm	Zn ppm
M695616	56.09	59.09	3,0	<5	<.2	33	60
M695617	79.94	81.94	2.0	<5	<.2	31	48
M695618	118.11	121.11	3.0	<5	<.2	39	132
M695619	42.70	44.39	1.7	<5	<.2	24	58

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19-DEC-97Hudson Bay Exploration And Deve07:18:55Diamond Drill LoComprehensive Report For Ho	elopment Co. Ltd. Page og ole DDH97-11
Hole No.: DDH97-11 Depth: 153.45 m Hor	cizontal Length:
Property: ALLIN Location: 49 KM SOUTHEAST OF HOUSTON F	Province: BC
Claim No.: 316462 Grid Name: ALLIN-1 Grid North Azimuth Measured Clockwise From	No.: Project: (Metric): Metric True North: 30.000°
Grid Co-ordinates & Attitude Of Drill Hole Easting: -5,500.00 m Northing: 4,175.0 Elevation: Hole Angle: -45 Hole Direction Measured Clockwise From Grid Hole Direction Measured Clockwise From True	Collar: 00 m 5.00° 1 North: 330.00° 2 North: 300.00°
Date Drilling Started: 10-SEP-97 Date Fini Drilled By: BEAUPRE DIAMOND DRILLING	shed: 13-SEP-97
Logged By: M.D. Buchanan Legend For Core Logging Codes: BC (GENERAL)	
Target Type: ENZYME LEACH	Borehole PEM: No
Core Size: NQ Cemented: No Casing Depth: 9.14 m Casing Pulled: Y Water Depth: Overburden Depth:	es 23.33 m
Level: Section: Drift:	
NTS Sheet Number: 092L01 NTS Sheet Name: COLLEYMOUNT UTM Grid Zone: 9 UTM Datum: NAD83 UTM Easting: 683,488.00 m UTM Northing:	6,007,013.00 m
Assay Elements: AU AG CU ZN	
Data Entry Marked Complete: Yes	

General Comments About Hole

-NW casing to 9.14 meters. -overburden 23.33 meters deep. -casing removed. -all drill steel recovered. -hole consists of altered andesite, diorites and ash flow. In Hole Survey Method: Dip Test

<u>Distance</u>	<u>(m)</u>	<u>Azimuth</u>	Dip
76.20		0.00	44.00
154.83		0.00	42.00

19-DEC-97Hudson Bay Exploration And Development Co. Ltd.Page07:18:56Diamond Drill Log

Comprehensive Report For Hole: DDH97-11

Depth (m) From To Description Of Core 33.00 OVERBURDEN TILL 0.00 Coded As: qt Glacial Till, , . -overburden consisting of pebble to boulder sized clasts in a clay rich matrix. -30% andesite . -70% intrusives and other. 33.00 37.50 FELDSPAR PORPHYRY Coded As: fp Feldspar Porphyry, brown to gray, porphyritic. -oxidized along fractures. -aphanitic groundmass. -pyrrhotite with quartz and chlorite alteration rings. -minor alteration of feldspars to kaolinite. -chlorite alteration around sulphides. -magnetic. -broken, gradational lower contact. Mineralization: 2% blebs pyrrhotite, anhedral 1 mm grains. Major Rock Forming Minerals: 15% equant feldspar, phenocryst 10 mm grains; 5% patches quartz,

feldspar, phenocryst 10 mm grains; 5% patches quartz, none noted 7 mm grains; 3% equant hornblende, phenocryst 2 mm grains.

37.50 42.26 ASH FLOW

Coded As: af

Ash Flow, light gray to gray, aphanitic. -overall texture structureless except for some weak bedding 55 degrees to CA. -dendritic manganese oxide along fractures.

-pyrite and pyrrhotite occur as blebs and disseminations along fractures.

-minor bleaching/alteration around sulphide blebs.

-lost/broken lower contact.

Mineralization: 3% blebs pyrrhotite, none noted 1 mm grains.

42.26 70.45 DIORITE

Coded As: di

Diorite, light gray to gray, porphyritic. -chlorite in groundmass and concentrated around pyrite grains. -calcite infilling along iron stained fractures. -slightly magnetic. -sharp lower conact 50 degrees to CA. Mineralization: trace disseminated pyrite, cubic 1 mm grains; trace disseminated magnetite, none noted 1 mm grains.

Major Rock Forming Minerals: 35% equant feldspar, phenocryst 3 mm grains; 20% equant quartz,

Comprehensive Report For Hole: DDH97-11

	Comprehensive Report For Hole: DDH97-11
Depth (m) From To	Description Of Core
	phenocryst 1 mm grains; 2% disseminated biotite, flake 1 mm grains.
	<pre>48.96 54.67 FELDSPAR PHYRIC ANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, porphyritic. -fractures filled with calcite, quartz and minor pyrite. -minor oxidation along fractures. -minor quartz veins. -1-3% pyrrhotite and pyrite along fractures. -broken upper and lower contacts. Mineralization: 3% fracture filling pyrrhotite, none noted 1 mm grains. Major Rock Forming Minerals: 15% elongate feldspar, phenocryst 15 mm grains; 5% equant hornblende, phenocryst 1 mm grains; trace groundmass chlorite, flake 1 mm grains.</pre>
70.45 82.46	<pre>FELDSPAR PHYRIC ANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, porphyritic. -aphanitic-porphyritic. -minor flow textures in sulphides 30 degrees to CA. -magnetic. -sulphides occur as blebs with concentric rings of quartz and chlorite around pyrrhotite. -sharp lower contact 45 degrees to CA. Mineralization: 3% blebs pyrrhotite, anhedral 1 mm grains. Major Rock Forming Minerals: 25% elongate feldspar, phenocryst 15 mm grains.</pre>
82.46 90.87	CHLORITIC ANDESITE Coded As: 8 Andesite Flow, light gray to gray, altered. -aphanitic groundmass. -hornblende altered to chlorite. -disseminated pyrrhotite within chlorite. -minor fractures. -moderately magnetic. -sharp lower contact 30 degrees to CA. Mineralization: 2% disseminated pyrrhotite,
	none noted 1 mm grains. Major Rock Forming Minerals: 5% equant foldspar phonograph 4 mm grains: 20% equant chlorite

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Hudson Bay Exploration And Development Co. Ltd. 19-DEC-97 Page 5 07:18:57 Diamond Drill Log Comprehensive Report For Hole: DDH97-11 Depth (m) From To Description Of Core subhedral 3 mm grains. 90.87 113.63 CROWDED FELDSPAR PORPHRY Coded As: fp Feldspar Porphyry, light gray to gray, porphyritic. -porphyritic texture. -flow alignment of feldspars. -pyrrhotite along fractures. -magnetic. -sharp lower contact 20 degrees to CA. Mineralization: 4% disseminated pyrrhotite, none noted 1 mm grains. Alteration: 20% equant chlorite, subhedral 5 mm grains. Major Rock Forming Minerals: 20% elongate feldspar, phenocryst 20 mm grains. 99.61 101.90 CHLORITIC ANDESITE Coded As: 8 Andesite Flow, light green to gray, altered. -aphanitic groundmass. -chlorite replacement of hornblende. -pyrrohtite occuring as disseminations and blebs. -blebs rimmed with chlorite. -sharp upper contact 45 degrees to CA. -sharp lower contact 20 degrees to CA. Mineralization: 2% disseminated pyrrhotite, none noted 1 mm grains; 1% blebs pyrrhotite, subrounded 3 mm grains. Alteration: 20% disseminated chlorite, none noted 3 mm grains. Major Rock Forming Minerals: 5% equant feldspar, phenocryst 4 mm grains. 103.68 105.95 CHLORITIC ANDESITE Coded As: 8 Andesite Flow, light green to gray, altered. -aphanitic groundmass. -chlorite replacement of hornblende. -pyrrohtite occuring as disseminations and blebs. -blebs rimmed with chlorite. -sharp upper contact 30 degrees to CA. -sharp lower contact 85 degrees to CA. Mineralization: 2%

19-DEC-97 07:18:58

Depth (m) From To Description Of Core disseminated pyrrhotite, none noted 1 mm grains; 1% blebs pyrrhotite, subrounded 3 mm grains. Alteration: 20% disseminated chlorite, none noted 3 mm grains. Major Rock Forming Minerals: 5% equant feldspar, phenocryst 4 mm grains. 113.63 120.25 FELDSPAR PHYRIC ANDESITE Coded As: 8p Andesite Flow: feldspar-phyric, light gray to gray, porphyritic. -aphanitic-porphyritic. -magnetic. -sulphides occur as blebs with concentric rings of quartz and chlorite around pyrrhotite. -sharp lower contact. Mineralization: 3% blebs pyrrhotite, anhedral 1 mm grains. Major Rock Forming Minerals: 25% elongate feldspar, phenocryst 15 mm grains. 120.25 132.60 CROWDED FELDSPAR PORPHRY Coded As: fp Feldspar Porphyry, light gray to gray, porphyritic. -porphyritic texture. -10% - 15-45mm spherical shaped amygdules filled with pyrrhotite and quartz. -pyrrhotite along fractures. -magnetic. -sharp broken lower contact. Mineralization: 2% blebs pyrrhotite, none noted 1 mm grains. Alteration: 20% equant chlorite, subhedral 5 mm grains. Major Rock Forming Minerals: 35% elongate feldspar, phenocryst 20 mm grains. 120.25 122.52 ASH FLOW Coded As: af Ash Flow, light green to gray, aphanitic. -3% - 5% disseminated pyrrhotite. -pervasive irregular fracturing infilled with pyrrhotite. -chloritic alteration. -magnetic. -sharp upper contact 40 degrees to CA. -lower contact lost.

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Page

19-DEC-97 07:18:58

Hudson Bay Exploration And Development Co. Ltd. Page Diamond Drill Log

Comprehensive Report For Hole: DDH97-11

Depth (m)

From To Description Of Core

Mineralization: 4%

disseminated pyrrhotite, none noted 1 mm grains.

7

132.60 137.75 FELDSPAR PHYRIC ANDESITE

Coded As: 8p

Andesite Flow: feldspar-phyric, light green to gray, porphyritic.

-aphanitic-porphyritic.

-pyrrhotite occurs as fracture fillings with quartz and chlorite and as disseminations.

-magnetic.

-sharp lower contact 30 degrees to CA.

Mineralization: 3% disseminated pyrrhotite,

anhedral 1 mm grains.

Major Rock Forming Minerals: 25% elongate feldspar, phenocryst 15 mm grains.

137.75 153.45 ASH FLOW

Coded As: af

Ash Flow, light gray to gray, bedded. -aphanitic groundmass.

-weak bedding?? @ 60 degrees to CA.

-alternating dark and light bands.

-dark bands contain disseminated pyrrhotite.

-minor blebs of pyrrohtite.

-minor chloritized amygdules filled with quartz and pyrrhotite.

-magnetic.

Mineralization: 5% disseminated pyrrhotite, none noted 1 mm grains.

SAMPLE	From:	To:	Interval	Au ppb	Ag	Cu	Zn	
NUMBER	<u>(m)</u>	(m)		FA+AA	ppm	ppm	ppm	
M695620	84.12	87.12	3.0	<5	<.2	36	62	
M695621	103.68	105.95	2.3	<5	<.2	43	50	
M695622	120.25	122.52	2.3	<5	<.2	41	72	
M695623	137.75	140.75	3.0	<5	<.2	31	82	
M695624	140.75	143.75	3.0	<5	<.2	29	70	
M695625	143.75	146.75	3.0	<5	<.2	39	76	
M695626	146.75	149.75	3.0	<5	<.2	34	62	
M695627	149.75	152.75	3.0	<5	<.2	35	60	
M695628	152.75	155.45	2.7	<5	<.2	42	84	

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Appendix 2

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Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page ...Imber :1-A Total Pages :1 Certificate Date:.17-SEP-97 Invoice No. :19741869 P.O. Number :2315 Account :T

Project : ALLIN Comments:

* PLEASE NO										CERTIFICATE OF ANALYSIS						A9741869				
SAMPLE	PREP	Ац ррђ ГА+АА	Ag ppm	A1 %	Ав ррш	Ba ppm	Be ppm	Bi ppm.	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe *	Ga	Hg	K %	La	Mg	Mn
M695201 M695202 M695203 M695204 M695205	205 274 205 274 205 274 205 274 205 274 205 274	< 5 < 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	0.77 0.61 0.45 2.38 2:42	46 < 2 < 2 6 6	30 160 100 170 160	0.5 1.0 1.0 0.5 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	1.67 2.67 1.90 3.48 3.07	< 0.5 0.5 < 0.5 0.5 0.5	23 18 12 18 23	31 19 20 65 72	51 26 42 89 43	6.01 4.42 4.45 3.60 4.65	< 10 < 10 < 10 10 10	<pre> 6 1 < 1 < 1 < 1 < 1 < 1</pre>	0.11 0.08 0.09 0.20 0.14	30 30 60 30	0.87 1.80 0.70 1.86	ppm 445 820 1140 865
M695206 M695207 M695208 M695209 M695210	205 274 205 274 205 274 205 274 205 274 205 274	<pre>< 5 20 10 < 5 < 5 < 5</pre>	<pre>< 0.2 0.2 < 0.2 < 0.2 < 0.2 < 0.2</pre>	2.15 0.73 1.14 0.71 0.70	2 190 34 2 < 2	170 480 260 140 960	0.5 0.5 0.5 1.0 1.0	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	5.72 7.27 1.95 1.94 4.56	0.5 0.5 < 0.5 0.5 0.5	19 17 29 11 6	66 13 27 22 15	43 17 38 55 34	4.13 2.74 3.91 2.83 2.15	10 < 10 < 10 < 10 < 10	< 1 3 1 < 1 < 1	0.17 0.16 0.20 0.16 0.13	30 10 30 40	2.18 3.73 1.14 0.42 0.78	965 1060 955 1220 425 530
M695212 M695213 M695214 X M695215	205 274 205 274 205 274 205 274 214 229	< 5 < 5 < 5 < 5 110	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.12 1.29 1.50 1.34 3.96	6 16 6 2 48	40 40 50 90 70 <	1.5 1.5 1.5 0.5 0.5	<pre>< 2 < 2</pre>	1.40 1.34 1.02 2.01 1.20	< 0.5 < 0.5 < 0.5 0.5 3.5	35 25 25 24 23	46 42 49 55 105	52 44 46 36 1435	3.96 5.46 4.85 4.38 8.69	< 10 < 10 < 10 < 10 < 10 10	1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.16 0.18 0.17 0.16 0.78	40 40 40 40	0.84 0.73 1.07 1.40	605 1055 365 1425
☆ M695216 M695217 M695218 M695219 M695219 M695220	214 229 205 274 205 274 205 274 205 274 205 274	935 < 5 < 5 < 5 < 5 < 5	9.0 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	3.38 1.15 1.13 0.87 1.15	160 4 12 6 16	30 < 260 150 160 100	0.5 1.0 1.0 1.0 1.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	0.83 1.88 1.00 1.15 1.08	16.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	38 12 9 9 9	106 18 15 12 10	7900 39 30 41 44	12.00 2.26 2.41 1.90 1.79	10 < 10 < 10 < 10 < 10	10 < 1 1 < 1	0.84 0.18 0.17 0.14	< 10 < 10 50 40 50	2.02 0.43 0.38 0.29	455 735 475 415
M695221 M695222 M695223 M695224 M695225	205 274 205 274 205 274 205 274 205 274 205 274	< 5 < 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	0.63 0.41 0.31 0.42 0.41	38 28 < 2 4 < 2	60 30 240 270 160	0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	0.77 0.71 1.61 0.88 0.78	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	17 13 7 12 12	21 19 15 17	35 26 25 28	2.72 2.61 2.43 2.33	< 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1	0.11 0.10 0.10 0.10 0.10	40 40 30 30	0.32	270 225 1020 790
м695226 м695227 х м695228 х м695229	205 274 205 274 214 229 214 229	< 5 < 5 110 8000	< 0.2 < 0.2 2.0 54.6	0.42 0.39 4.29 1.59	2 2 50 938	120 60 60 < 10 <	0.5 0.5 0.5 0.5	< 2 < 2 < 2 Intf*	0.72 2.33 1.31 1.13	< 0.5 0.5 3.5 75.0	13 12 23 158	20 20 109 52 >	40 32 1560 10000 >	3.02 2.78 9.34 15.00	< 10 < 10 < 10 10 10	< 1 < 1 < 1 , 16	0.11 0.12 0.13 0.84 0.25	40 40 < 10 < 10	0.22 0.24 0.25 1.84 1.01	835 780 1215 395 550
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* INTERFERENCES: Cu on Bi and P

CERTIFICATION: Hant

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Chemex Labs Ltd. Analytical Chemists * Geochemists * Registered Assayers

212 Brocksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5

Page Number : 1-8 Total Pages : 1 Certificate Date: 17-SEP-97 Invoice No. : 19741869 P.O. Number : 2315 Account : T

Project : Comments: ALLIN

* PLEASE NC	EASE NOTE								CERTIFICATE OF ANALYSIS						A9741	869		
SAMPLE	PREP CODE	Мо ррт	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	TI ppm	ש תכום	V	¥	Zn			
M695201 M695202 M695203 M695204 M695205	205 274 205 274 205 274 205 274 205 274 205 274	3 < 1 1 < 1 < 1 < 1	0.05 0.14 0.11 0.20 0.27	78 27 10 72 70	2240 1920 3160 1420 1970	6 6 4 8 2	< 2 2 4 < 2 < 2 < 2	5 8 10 4 8	147 304 177 536 385	0.02 < 0.01 0.04 < 0.01 0.10	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	51 58 96 59	< 10 < 10 < 10 < 10 < 10	вб 74 154 78			
M695206 M695207 M695208 M695209 M695210	205 274 205 274 205 274 205 274 205 274 205 274	< 1 3 < 1 < 1 < 1	0.24 0.18 0.25 0.23 0.15	5.6 29 42 15 7	1790 540 1790 1660 1770	4 14 10 4 8	< 2 12 6 < 2 < 2	8 4 8 6 3	467 1145 561 369 781	0.09 < 0.01 < 0.01 < 0.09 0.09 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	103 23 49 71 31	< 10 < 10 < 10 < 10 < 10 < 10	88 92 122 90	· .		
M695211 M695212 M695213 M695214 M695215	205 274 205 274 205 274 205 274 205 274 214 229	4 3 1 < 1 5	0.25 0.28 0.28 0.27 0.11	87 60 65 60 6	2520 2310 2190 2370 760	8 10 12 8 148	< 2 < 2 < 2 < 2 < 2 < 2	11: 10 12 12 12 14	135 155 150 167 34	0.03 0.03 0.04 0.08 0.07	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	74 67 80 91 19	< 10 < 10 < 10 < 10 < 10 < 10	120 94 124 90 546			
M695216 M695217 M695218 M695219 M695220	214 229 205 274 205 274 205 274 205 274 205 274	3 < 1 3 4 25	0.09 0.28 0.29 0.33 0.39	4 19 13 13 13	870 2270 1430 2190 1430	604 14 14 12 12	< 2 < 2 < 2 < 2 < 2 < 2 < 2	16 8 6 5 5	22 175 168 206 257	0.08 0.02 0.01 0.01 < 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	24 40 29 27 19	< 10 < 10 < 10 < 10 < 10 < 10	5560 64 54 56 42			
M695221 M695222 M695223 M695224 M695225	205 274 205 274 205 274 205 274 205 274 205 274	3 1 2 1 3	0.14 0.13 0.11 0.14 0.11	23 20 12 16 17	2150 2000 1810 1690 1850	2 6 2 2 2	2 < 2 < 2 < 2 < 2 < 2	5 4 3 5	93 81 114 152 92	0.04 0.07 0.04 0.03 0.04	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	54 58 53 42 57	< 10 < 10 < 10 < 10 < 10	64 134 106 76			
M695226 M695227 M695228 M695229	205 274 205 274 214 229 214 229	3 3 5 8	0.10 0.09 0.12 0.05	19 17 7 7	1890 1350 830 Intf*	2 8 176 3440	< 2 < 2 < 2 18	5 6 15 5	72 71 36 22	0.05 0.12 0.08 0.03	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	64 ⁻ 87 20 14	< 10 < 10 < 10 < 10 < 10 >	94 84 696 10000			
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CERTIFICATION: davis Suchla



Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218 To: HUDSON BAY EXPLORATION & DEVELOPMENT CO, LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5

AFRAILA

Page Number : 2-A Total Pages : 3 Certificate Date: 28-SEP-97 Invoice No. : 19743291 P.O. Number : Account : T

Project : 2315 Comments:

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* PLEASE NOTE

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•	SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	A1 %	Ав ррт	Ba ppm	Be ppm	Bi ppm	Ca	Cđ ppm	Co ppm	Cr ppm	נט בנסק	Fe %	Ga	Eg		La	Mg	Мл
-	M695620 M695621 M695623 M695623 M695624	205 276 205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.01 2.30 1.86 2.04 1.64	34 38 76 62 22	100 60 80 140 120	< 0.5 0.5 < 0.5 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	2.43 4.01 2.07 4.78 4.11	0.5 0.5 0.5 0.5 0.5	19 19 16 17 19	152 58 57 17 12	36 43 41 31 29	3.62 4.62 3.87 4.24	10 10 10 10	<pre>< 1 < 1</pre>	0.04 0.14 0.06 0.16	10 40 30 30	1.82 2.22 1.44 1.68	201 201 201 201 201 201 201 201 201 201
	M695625 M695626 M695627 M695628 M695629	205 276 205 276 205 276 205 276 205 276	<pre>< 5 < 5</pre>	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.66 1.74 1.74 2.24 1.66	762 426 40 26 18	180 180 150 140 50	0.5 0.5 0.5 0.5 0.5	< 2 < 2 < 1 < 2 < 2 < 2 < 2	3.52 3.23 3.45 4.73 0.95	0.5 0.5 0.5 0.5 < 0.5	17 19 16 20 13	9 10 13 15 15	39 34 35 42 44	4.45 4.69 4.37 5.19 4.21	10 10 10 10 10 10	< 1 < 1 < 1 < 1 < 1	0.17 0.22 0.22 0.25	30 40 40 40	1.43 1.21 1.12 1.10 1.59	710 610 525 430 770
	M695631 M695632 N695651 M695652	205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.52 1.37 1.87 2.52 2.52	38 40 24 24 18	40 40 50 150 100	0.5 0.5 0.5 < 0.5	2 < 2 < 2 < 2 < 2 < 2 < 2	0.51 2.40 2.59 3.54 3.27	< 0.5 < 0.5 0.5 0.5 1.0	15 19 17 18 19	20 19 22 132 132	42 30 39 39 44	3.62 3.24 4.29 4.07 4.67	< 10 < 10 < 10 10 10	4 3 6 <1	0.12 0.03 0.23 0.11	< 10 < 10 < 10 30 10	0.16 0.03 0.99 2.30	535 170 45 780 645
	M693654 M695655 M695656 M695656 M695657	205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.45 1.96 2.61 2.20 2.29	10 8 12 14 14	40 50 • \$0 40 50	< 0.5 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	3.84 2.78 3.10 3.11 3.15	1.0 0.5 1.0 0.5 0.5	19 17 22 18 20	113 64 142 135 132	41 39 56 34 38	4.66 4.10 5.28 4.20 4.51	10 10 10 10	< 1 < 1 < 1 < 1	0.08 0.12 0.09 0.10	10 10 10 10	2.38 1.75 2.42 2.02	630 645 495 650 535
	K695659 K695660 M695661 M695662	205 276 205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.37 2.55 2.85 2.81 3.20	22 16 24 20 48	30 30 20 40 30	< 0.5 < 0.5 < 0.5 < 0.5 0.5 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	3.73 3.67 3.73 3.97 5.92	0.5 1.0 0.5 1.0 1.0	16 18 18 20 20	125 132 134 143	35 39 30 48	3.98 4.27 4.30 4.99	10 10 10 10	< 1 < 1 < 1 < 1 < 1 < 1	0.07 0.08 0.11 0.13	< 10 < 10 10 10 10	2.38 2.48 2.77 2.66	605 695 720 770 785
	M693663 M695664 M695665 M695665 M695666 M695667	205 276 205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	3.11 2.75 2.77 2.73 2.89	36 26 34 42 64	80 490 280 310 60	0.5 0.5 0.5 0.5 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	4.79 4.59 5.09 4.57 4.73	1.5 0.5 1.0 1.0 1.5	18 17 18 18 20	134 131 128 130	34 30 32 39	4.56 5.03 4.16 4.19 4.38	10 10 10 10 10	< 1 < 1 < 1 < 1 < 1	0.10 0.15 0.20 0.16 0.21	10 10 10 10 10	3.04 2.85 2.46 2.61 2.35	905 835 760 815 735
	M695668 X695669 X695671 X695671	205 276 205 276 205 276 205 276 205 276 205 276	< 5 < 5 < 5 < 5 < 5 < 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	4.19 2.26 2.25 1.62 1.94	8 18 10 16 10	60 30 40 40 50	0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	3.73 2,99 2.88 1.94 2.10	1.0 0.5 0.5 0.5	18 17 20 15 16	37 114 115 42 48	35 39 41 39 41	4.54 4.11 4.44 3.81	10 10 10 10	< 1 < 1 < 1 < 1 < 1	0.09 0.06 0.03 0.04 0.05	10 30 < 10 10 10	2.56 2.18 1.96 2.00 1.24	860 660 775 710 410
R	4695673 1695674 1695675 1695676 1695677	205 276 205 276 214 229 214 229 205 276	< 5 < 5 9400 870 < 5	< 0.2 < 0.2 58.4 9.2 < 0.2	1.84 1.90 1.63 3.42 1.48	10 10 952 154 8	40 40 10 20 50	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	<pre>< 2 < 2 Intf* < 2 < 2 < 2 < 2 </pre>	2.07 2.24 1.18 0.85 2.37	0.5 1.0 96.0 20.0 0.5	15 17 155 36 25	49 55 62 > 121 98	41 49 10000 5 7680 46	4.15 4.66 15.00 12.10 4.91	10 10 20 10 < 10	< 1 < 1 13. 9 < 1	0.05 0.07 0.25 0.83 0.05	10 10 30 < 10 < 10 10	1.51 1.58 1.75 1.00 1.95 1.31	480 535 600 575 500 505

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Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page Number :2.B Total Pages :3 Certificate Date: 28-SEP-97 Invoice No. :19743291 P.O. Number : Account :T

Project ; 2315 Comments:

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* PLEASE NOTE

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SAMPLE	PREP CODE	Мо ррш	Na %	Ni ppm	P Ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	U	V Titom	W	Zn		<u> </u>
A695620 A695621 A695622 A695623 A695624	205 27 205 27 205 27 205 27 205 27 205 27	5 < 1 5 1 5 < 1 5 < 1 5 < 1 5 < 1	0.10 0.05 0.11 0.06 0.06	111 42 56 34 32	1380 2330 1880 2370 2310	16 10 12 18 24	< 2 < 2 < 2 < 2 < 2 < 2 < 2	6 7 6 5 4	247 333 224 430 412	0.27 0.08 0.22 0.03 0.02	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	102 107 134 108	< 10 < 10 < 10 < 10 < 10	62 50 72 82	· · ·	
1695626 1695627 1695628 1695629	205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 < 1 6	0.05 0.07 0.06 0.06 0.04	17 21 18 30 17	2660 2750 2660 2810 1700	28 20 22 20 20	2 4 < 2 < 2 2 2	3 3 3 3 7	304 292 305 380 34	0.01 < 0.01 < 0.01 0.04 < 0.01	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	97 101 93 113 47	< 10 < 10 < 10 < 10 < 10 < 10	70 76 62 60 84		
695631 695632 695651 695652	205 276 205 276 205 276 205 276 205 276	7 7. 1 < 1 < 1	0.04 0.01 0.05 0.03 0.03	25 39 31 73 83	820 270 1870 2190 2120	16 2 16 6 10	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	4 3 6 9	107. 175 76 10	0.01 0.01 0.01 0.17 0.19	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	33 26 57 123	< 10 < 10 < 10 < 10 < 10	64 58 80 54		
695634 695635 695656 595656 595657	205 276 205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 < 1 < 1 < 1	0,03 0.03 0.03 0.03 0.03	72 42 99 81 91	2140 1880 2320 2100 2180	6 8 14 < 2 12	<pre>< 2 < 2</pre>	9 8 10 9 1 9	02 50 75 88	0.21 0.17 0.22 0.18 0.17	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	127 120 137 118	< 10 < 10 < 10 < 10 < 10	52 54 76 38		
595658 595659 595660 595661 595662	205 276 205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 < 1 < 1 < 1	0.03 0.03 0.02 0.02 0.02	68 72 72 84 81	1950 2000 2070 2220 2020	4 4 10 6 6	< 2 < 2 < 2 < 2 < 2 < 2 < 2	8 2 9 2 8 2 9 2 8 9	38 37 34 64 05	0.16 0.18 0.20 0.23 0.23	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	115 125 123 133	< 10 < 10 < 10 < 10 < 10	48 56 62 88 58		
95663 95664 95665 95666 95667	205 276 205 276 205 276 205 276 205 276 205 276	1 < 1 < 1 < 1 < 1 < 1	0.01 0.02 0.01 0.02 0.03	84 75 77 76 80	2160 2110 2120 2070 2240	18 6 8 8 6	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	8 3 8 3 8 3 8 2 8 2	05 01 09 88 72	0.21 0.18 0.19 0.20 0.19	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	127 124 114 120 115	< 10 < 10 < 10 < 10 < 10	62 78 62 50 56		
95668 95669 95670 95671 95672	205 276 205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 2 < 1	0.09 0.05 0.06 0.09 0.10	67 72 91 41 42	2000 1880 1990 2000 2080	8 8 12 6 12	< 2 < 2 < 2 < 2 < 2 < 2 < 2	3 8 9 2 6 2 4 3 5 4	00 34 20 82 30	0.38 0.16 0.15 0.12	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	124 122 121 118 88	< 10 < 10 < 10 < 10 < 10	92 92 66 78 92		
95673 95674 95675 95676 95677	205 276 205 276 214 229 214 229 205 276	1 8 6 < 1 < 1	0.08 0.08 0.05 0.10 0.12	40 41 6 4 129	1800 1870 Intf* 860 1990	14 20 3530 604 14	< 2 < 2 12 < 2 < 2 < 2	6 3 6 2 5 15 6 1	06 31 21 21 21	0.13 0.16 0.03 0.08 0.24	< 10 < 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10 < 10	100 98 109 14 24 85	< 10 < 10 < 10 < 10 > 10 < 10 < 10	74 142 112 10000 5730 62		

CERTIFICATION:

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Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

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To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page Number: :3-A Total Pages: :3 Certificate Date: 28-SEP-97 Invoice No. :19743291 P.O. Number: Account :T

Project : 2315 Comments:

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* PLEASE NOTE

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	SAMPLE	PI CC	NEP DDE T	Au pj FA+J	pb AA 	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Со ррт	Cr ppm	Cu	Fe %	Ga	Eg	K	La	Mg	Mn
	4695678 1695679 1695680 1695681 1695682	205 205 205 205	276 276 276 276 276 276	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	10 5 5 5 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.83 1.23 1.86 2.09 1.86	8 8 12 20 20	20 40 30 20 30	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	3.16 1.77 2.81 2.92 2.70	1.0 0.5 1.0 1.0	24 22 23 25	145 91 143 152	37 31 38 38	5.15 4.34 5.12 5.10	10 < 10 10 10 10	<pre></pre>	0.02 0.04 0.04	10 10 10	2.25 0.91 2.05	ppm 785 .375 815
XXXX	1695683 1695684 1695685 1695686 1695687	205 205 205 205 205 205	276 276 276 276 276 276	~~~~	5 5 5 5 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.09 2.12 1.72 1.86 1.69	24 22 20 64 8	20 10 30 40 20	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	3.84 3.77 2.84 3.51 2.84	0.5	24 21 22 22 21	129 131 116 120 120	39 40 41 39	4.73 4.81 4.72 4.72 4.57	10 10 10 10	< 1 < 1 < 1 < 1 < 1	0.05	< 10 < 10 < 10 < 10 < 10	2.25 1.86 2.30 2.44 1.95	875 690 845 850 770
REEE	695688 695689 695690 695691 695692	205 205 205 205 205	276 276 276 276 276 276	~ ~ ~ ~ ~	5 5 5 5 5	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.60 1.96 2.38 1.74 2.18	10 18 44 66 118	30 30 10 20 30	<.0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 2 < 2 < 2 < 2 < 2 < 2	2.47 3.10 3.69 2.70 3.10	0.5 0.5 0.5 0.5 0.5	23 23 23 22 26 27	108 123 113 105	32 35 37 31 25	4.56 4.64 4.93 4.58 4.42	10 10 10 10 10	1 < 1 < 1 < 1 < 1	0.03	< 10 < 10 < 10 < 10 < 10 < 10	1.88	835 815 735 915 900
nn Nn	693693 693694 693695 695696 695697	214 214 205 205 205	229 229 276 276 276 276	122 730 < < <	0 0 5 5 5	9.0 54.4 < 0.2 < 0.2 < 0.2	2.96 1.41 2.22 1.75 2.16	138 852 134 58 234	10 10 150 140 310	< 0.5 < 0.5 0.5 < 0.5 < 0.5	< 2 Intf* < 2 < 2 < 2	0.73 1.03 3.60 3.00 3.44	18.0 85.0 0.5 0.5	32 145 19 21	78 40 > 32 29	6910 10000 ; 55 29	4.64 10.90 15.00 4.20 4.29	10 10 20 10 10	< 1 10 14 < 1 < 1	0.03 0.73 0.23 0.13 0.09	< 10 < 10 < 10 30	2.18 1.72 0.89 1.71	945 385 500 725
M	695698 595699 595700	205 205 205	276 276 276	۲ ۲	5	< 0.2 < 0.2 < 0.2	2.16 2.16 0.61	76 150 100	180 180 70	0.5 0.5 0.5	< 2 < 2 < 2	3.48 4.44 4.99	0.5 0.5 0.5	19 15 19 17	10 6 20	38 46 45 34	3.98 4.25 4.68 4.42	10 10 10 < 10	< 1 < 1 < 1 5	0.17 0.12 0.12 0.0B	30 40 30 30	1.53 1.53 1.71 1.69 2.02	865 915 950
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•• u	NTERFERENCES	Cu	on Bi	and P		ដ-C	Control Sar	npie	·			-				C	ERTIFIC	ATION:	9	aut	Par	chile	<u> </u>


Chemex Labs Ltd.

Anatytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave. North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page Number :3-8 Total Pages :3 Certificate Date: 28-SEP-97 Invoice No. : 19743291 P.O. Number : Account :T

Project : 2315 Comments:

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* PLEASE NOTE

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SAMPLE	PREP CODE	Мо ррт	Na %	Ni ppm	р тqq	Pb ppm	Sb ppm	Sc ppm p	Sr pm	Ti %	T1 ppm	U mqq	v . ppm.	W DDE	Zn		
M695679 M695680 M695681 M695682	205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 < 1 < 1	0.06 0.10 0.07 0.07 0:09	109 124 96 101 108	1820 2050 1700 1870 .1940	20 10 20 18 14	< 2 < 2 < 2 < 2 < 2 < 2	9 1 3 1 8 2 9 2 8 2	94 61 03 25	0.18 0.27 0.19 0.19	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	109 71 116 129	< 10 < 10 < 10 < 10 < 10	114 70 126 108		<u> </u>
2695683 2695684 2695685 2695685 2695686 2695687	205 276 205 276 205 276 205 276 205 276 205 276	<pre>< 1 < 1</pre>	0.04 0.06 0.05 0.05 0.05	88 100 89 85 97	2030 1910 1930 1890 1960	18 14 12 12 12	< 2. < 2 < 2. < 2. < 2. < 2.	8 2 8 2 8 1 7 2	33 38 92 24	0.18 0.11 0.08 0.09	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	111 118 102 93 99	< 10 < 10 < 10 < 10 < 10	100 72 94 48 95		
M695688 M695689 M695690 M695691 M695692	205 276 205 276 205 276 205 276 205 276 205 276	< 1 < 1 < 1 < 1 < 1 2	0.06 0.05 0.06 0.06 0.05	110 97 106 135 138	1980 2000 1850 2030 1850	12 12 8 14 18	< 2 < 2 < 2 < 2 < 2	6 1 8 1 8 2 6 1	74	0.11 0.14 0.16 0.13 0.13	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	99 93 113 107 94	< 10 < 10 < 10 < 10 < 10 < 10	80 88 130 110 70		
M695693 M695694 M695695 M695696 M695697	214 229 214 229 205 276 205 276 205 276	< 1 5 < 1 < 1 < 1	0.08 0.04 0.05 0.08 0.04	4 6 I 54 55 51	740 Intf* 2320 2380 2120	54B 3220 28 .18 14	< 2 26 < 2 < 2 < 2	13 1 4 1 5 46 7 35	17 18 53 <	0.15	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	102 21 13 109 112	< 10 < 10 < 10 > < 10 > < 10 < 10	110 5160 10000 114 52		·
M695698 M695699 M695700	205 276 205 276 205 276	< 1 < 1 < 1	0.04 0.04 0.09	24 14 29	2560 2590 2180	14 18 8	< 2 < 2 < 2	3 39 3 33 5 30	12 × 19 × 17 ×	0.01 0.01 0.01 0.01	< 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10	113 128 96 42	< 10 < 10 < 10 < 10	84 130 102 80		
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INTERFERENCES:	Cu on Bi a	and P) CE	RTIFIC		Stand	Zichler



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To: HUDSON BAY EXPLORATION & DEVELOPMENT CO. LTD.

405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page Number : 1 -A Total Pages : 3 Certificate Date: 28-SEP-97 Invoice No. : [9743291 P.O. Number : Account : T

Project : 2315 Comments:

* PLEASE NOTE

												<u> </u>	CE	RTIF		EOF		YSIS		A974	3291		
	SAMPLE	PRE; CODI	P E	λu ppb Fλ+λλ	· .	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd mag	Co	Cr	Cu	Fe	Ga	Eg	т	La	Mg	 . Mn
• .	M695230 M695231 M695232	205	276 276	· < S	< <	0.2	1.75	10	·310	0.5	< 2.	2.14	< 0.5	9				ppm	ррш	%	ррш	*	ppm
	M695233 M695234	205	276 276 276	< 5 < 5 < 5	* * *	0.2 0.2 0.2	1.68 1.68 1.71	6 10 10	330 180 360	0.5	< 2 < 2 < 2	2.53	< 0.5 < 0.5 < 0.5	9 8 8	44 41 39	13	3.12	10 10 10	< 1 < 1 < 1	0,25 0,23 0,21	30 30 20	1.23 1.28 1.27	345 355 345
1	M695235 M695236	205.2	276	< 5	<	0.2	1.90	24 .	410	0.5	< 2-	2.51	< 0.5	8	37	12	2.81	10	< 1 < 1	022 022	20	1.25	- 335 330
	M695237 M695238 M695239	205 2 205 2 205 2	176 176 176	< 5 < 5 < 5	* * * *	0.2 0.2 0.2	2.45 2.33 2.38 2.48	16 16 26 26	250 260 290 230	0.5	< 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4.40	0.5 0.5 0.5	12 16 19 18	63 119 125 119	18 38 39 37	3.08 4.23 4.02	10 10 10	< <u>1</u> < 1 < 1	0.19 0.17 0.17	20 30 30	1.54 2.21 2.15	440 695 685
	x695240 x695241	205 2	176	< 5	<	0.2	2.63	22	230	0.5	< 2 ; < 2	4.52	0.5	17	+.119	33	4.01	10	< 1	0.15 0.15	30 30	2.22	750 750
	4695242 4695243 4695244	205 2 205 2 205 2	76 76 76	< 5 < 5 < 5	,	0.2 0.2 0.2	2.50 2.35 2.72	16 16 16 36	230 180 370 340	0.5	< 2	4.49 4.46 5.12	0.5	14 16 18	127 125 127 120	37 29 31 32	4.32 3.81 4.06 3.88	10 10 10	< 1 < 1 < 1	0.19 0.18 0.18	30 30 30	2.36 2.22 2.24	740 775 825
	1695245 1695246	205 2 205 2	76 76	< \$		0.2	2.28	18	280	0.5	< 2	4.62	0.5	19	134	33	4.29	10	< 1 < 1	0.13 0.17	30 20	2.28 2.54	850 875
2 2 2	1695247 1695248 1695249	205 2 205 2 205 2	76 76 76	< 5 < 5 < 5	~ ~ ~ ~	0.2	2.25	14 16 46	210 110 140	0.5 0.5 0,5	< 2 < 2 < 2	4.09 4.07 3.43	0.5	19 18 17 16	129	41 39 38	4.42 4.24 3.99	10 10 10	< 1 < 1 < 1	0.14 0.16 0.14	10 10 10	2.17 2.08 2.15	780
22	1695250 1695601	214 2 205 2	29 76	7120	5	6.6	1.48	972	10	< 0.5	< 2 Intf*	4.16	1.0	18	. 125	40	3.84	10	< 1 < 1 ·	0.12 0.09	10 10	2.27	635 690
	1695602 1695603 1695604	205 2 205 2 205 2	76 76 76	< 5 < 5 < 5	<	0.2	1.36 1.45	12 160 22	180 60 240	0.5 0.5 0.5	< 2 < 2 < 2	2.74 4.85 3.74	0.5 0.5 0.5	24 17 26	63 : 29 26 42	×10000 x 56 51	15.00 3.99 3.97	10 < 10 < 10	12 43 11	0.23 0.24 0.19	< 10 50 30	0.92	535 755
. M	695605	205 21	76	< 5	< (0.2	1.14	42		1.0	< 2	3.00	0.5	28	28	47	4.31 3.81	< 10 < 10	3 1	0.16 0,40	40 30	1.06	820 420
223	695607 695608 695609	205 27 205 27 205 27	76 76 76	< 5 < 5 < 5 < 5	< 0 < 0 < 0 < 0	0.2 0.2 0.2 0.2	1.25 1.36 1.41 1.10	42 82 8 2	50 40 210 160	0.5 1.0 0.5	< 2 < 2 < 2 <	3.93 2.10 1.10	< 0.5 0.5 < 0.5 < 0.5	19 17 23 10.	32 42 34 37	28 39 36 37	3.76 4.42 4.01 2.68	< 10 < 10 < 10	< 1 1 1	0.42 0.21 0.49	20 30 20	0.93 1.28 0.66	315 675 285
a a a a a	695610 695611 695612	205 27 214 22 214 22	76	< 5 940	< (0.2	0.73	< 2 170	90 20	0.5	< 2	1.29	0.5	11	39 51	40	2.86	< 10	< 1	0.22	30 20	0.80	415 240
22	695613 695614	205 27 205 27	6	< 5 < 5	< (< (0.2	4.07 0.54 0.79	60 2 4	50 50 60	< 0.5 0.5 0.5	< 2 < 2 < 2	1.25	4.5	36 23 12	106 117 47	7180 1485 35	11.45 9.04 3.27	10. 10	11 1	0.80	< 10 < 10	0.51 1.82 1.72	885 440 410
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	695615 595616 595617	205 27	6	< 5 < 5	< 0	0.2	1.73	14 10	120	1.0.	< 2	1.41	0.5	15	52 15	32	3.71	< 10		0,12	40	0.74	675 435
Me	595618 595619	205 27	6	< 5 < 5 < 5	< 0 < 0 < 0	0.2 0.2 0.2	0.59 0.62 0.52	16 26 10	160 80 210	< 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2	4.00 14.00 7.12 12.10	2.0 2.0 1.5 1.5	8 7 9 7	6 8 12 6	33 31 39 24	2.22 1.81 4.42 2.88	< 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1	0,10 0.14 0.11 0.15 0.17	40 < 10 < 10 < 10	0.77 0.40 0.34 0.90	660 685 850 590
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* INTERFERENCES: Cu on Bi and P

超 - Control Sample

CERTIFICATION:_

Jan Kinchlen



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Chemex Labs Ltd.

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405 - 470 GRANVILLE ST. VANCOUVER, BC V6C 1V5 Page Number :1-8 Total Pages :3 Certificate Date: 28-SEP-97 Invoice No. :19743291 P.O. Number : Account :T

Project ; 2315 Comments;

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* PLEASE NOTE

										<u> </u>	CE	RTIF	CATE	OF	ANAL	YSIS		A9743291		
SAMPLE	CC	DE	Мо ррд	Na *	Ni ppm	р ррш	Pb ppm	Sb ppm	Sc ppm	Sr þým	TI %	T1 mqq	U maa	V	W	Zn	<u> </u>			
1695230	205	270	5 < 1	0.04	23	1680	16							РРщ	<u>₽₽¤</u>	ppa.				
M695232	205	276		0.04	23	1680	10	. < 2	1	198 <	0.01	< 10	< 10	39	< 10	58				
X695233	205	276		0.01	21	1630	10	< 2	1	.233 <	0.01	< 10	< 10	38	< 10	62				
M695234	205	276	i < i	0.03	20	1640	8 13	< 2	1	209 <	0.01	< 10	< 10	38	< 10	52				
1695235	205	276			·		· 14	< <u>/</u>	1	233 <	0.01	< 10	< 10	39	< 10	74 56				
4695236	205	276		0.03	41	1730	6	< 2	3	342 <	0.01	10	- 10					_		•
1695237	205	276	< 1	0.04	81	2130	6	< 2	6	408 <	0.01	< 10	< 10	58	< 10	46				
(695239	205	276	< 1	0.03	78	2150	⊥ R	< 2 2 5 ·	7	358 <	0.01	< 10	< 10	110	< 10	58				
	. 203	276	- < 1	0.03	7 Ģ	2160	·· 8	× .2	B B	400 <	0.01	< 10	< 10	108	< 10	58 68				•
695240	205	276	< 1	0.03	79	1070					0.01	< 10	< 10	108	< 10	66				
1695241 1695241	205	276	< 1	0.03	71	2210	. 16	< 2	6	292 <	0.01	< 10	< 10	112	1.10					
695243	205	276	< 1	0.02	75	2250	10		7	344 <	0.01	< 10	< 10	106	< 10	128				-
695244	205	276	< 1	0.03	82	2260	2	\$ 2	7	341 <	0.01	< 10	< 10	110	< 10	168				
			[_]	0.03	77	2330	10	< 2	8	350 < 351 <	0.01	< 10	< 10	109	< 10	 5в				
695245	205	276	< 1	0.03	85.	2250			i				< 10	120	< 10	86				
695245	205	276	· < 1	0.03	86	2170	2 R	× 2	B	304	0.01	< 10	< 10	119	< 10					
695248	205	276	< 1	0.02	72	2070	4	< 2 < 2	a B	270	0.0B	< 10	< 10	118	< 10	54				
1695249	205	276		0.01	69	2090	10	< 2	ĝ	207	0.12	< 10	< 10	115	< 10	54				
COLDED				V.VX	88	2120	8	< 2	8	264	0.15	< 10	< 10	120	< 10	50				
695601	214	229	5	0.05	7	Intf*	3250	1.4							< 10	65				
695602	205	276		0.16	39	2720	12	2	A	20 490 -	0.02	< 10	ʻ< 10	14	< 10	>10000		··		<u> </u>
695603	205	276		0.07	24	2050	10	< 2	3	605 <	0.01	< 10 c 10	< 10	62	< 10	86				
695604	205	276	5	0.08	44	2510	8	< 2	5	468 <	0.01	< 10	< 10	27	< 10	78				
695605	205	276						2	з.	256 <	0.01	< 10	< 10	36 -	< 10	116				
695606	205	276	. 4	0.08	27	2460	18	< 2	2	228 4	0.01	<u> </u>		<u> </u>						
695607	205	276	B	0.08	31	2460	12	< 2	4	377 K	0.01	< 10	< 10	26	< 10	38		· · · · · · · · · · · · · · · · · · ·		
2322002 2322002	205	276	< 1	0.10	33	1990	14	< 2	2	208 <	0.01	< 10	< 10	20	< 10	106				
	205	276	< 1	0.13	39	1760	4	< 2	87	130	0.12	< 10	< 10	52	< 10	68 68				
695610	205	276	< 1	0.15		0000				. ic.	0.20	< 10	< 10	75	< 10	66				
6956 <u>11</u>	214	229	< 1	0.09	47	2280	6	2	9	208	0.10	< 10	< 10	1.07						
079613 695613	214	229	1	0.13	7.	800	2/6 150	< 2	14	19	0,08	< 10	< 10	207	< 10	130				
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695615 695 <i>6</i> 1 <i>6</i>	205	276	< 1	0.31	15	1740						· 10	< 10	130	< 10	82				
95617	205	276	< 1	0,07	14	640	2	2	10	290	0.14	< 10	< 10	.117	< 10	140				
95618	205	276	3	0.06	13	1290	2	< 2	5	190 K	0.01	10	< 10	15	< 10	140				
95619	205	276	. 17	V.09 A A9	43	750	6	< 2	8	364 e	0.01	< 10	< 10	19	< 10	48				
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00000-2020 CERTIFICATION:

Appendix 3



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