86-632 - 15142

08/87

KANGELD RESOURCES LTD
RISE RESOURCES LTD.

DIAMOND DRILLING SURVEY ON THE

DECEPTION CREEK PROPERTY

Clinton Mining Division

British Columbia

N.T.S. 92P/15E

GEOLOGICAL BRANCH
ASSESSMENT REPORT

by

L.D. HOLMGREN

J.M. KOWALCHUK

15,142

September 1986

FILMED

Claims Worked

Claim Name	Units	Record No.	Anniversary Date
W-1	20	1094	Sept. 2
W-2	20	1095	Sept. 2
W-3	20	1096	Sept. 2
W-4	20	1097	Sept. 2
C-1	18	1726	April 11
C-2	4	1727	April 11
C-3	2	1728	April 11

LOCATION: 51° 55' North Latitude 122° 36' West Longitude

OWNER: ARCHEAN ENGINEERING LTD.

OPERATORS: KANGELD RESOURCES LTD. AND RISE RESOURCES LTD.

GEOLOGISTS: L.D. HOLMGREN AND J.M. KOWALCHUK

SUMMARY

The Deception Creek Property is a copper-zinc prospect located 55 kilometres northeast of 100 Mile House in the Cariboo District of Central British Columbia. Field work in 1986 was aimed at testing two elongate VLF-Em conductors and coincident zinc soil anomalies. Two diamond drill holes were drilled into each of the conductors. The conductors were thought to be indicative of potential massive sulphide mineralization at depth.

Intermediate volcaniclastic rocks underlain by locally graphitic black argillites were intersected in all drill holes. Analysis of diamond drill core detected anomalous zinc values within unmineralized sections of the graphitic black argillites. These graphitic sediments are the source of the VLF-Em conductors.

No further work is recommended on this property.

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TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 GENERAL

A three week program was undertaken on the Deception Creek Property to assess the potential of surface VLF-Em conductors coincident with zinc anomalies obtained in soil sampling. The 1986 program entailed the drilling and sampling of four diamond drill holes; two holes to intersect a southern north/south trending VLF-Em conductor, and two holes to intersect the northern NE/SW trending VLF-Em conductor. The program was carried out during the period July 11 - August 5, 1986 by Mark Management geologist L.D. Holmgren. Ms. Holmgren's work was supervised by senior geologist J.M. Kowalchuk.

1.2 LOCATION AND ACCESS

The Deception Creek Property lies adjacent to the northeast corner of Canim Lake, 55 kilometres northeast of 100 Mile House (Figure 1). Work was conducted from a tent camp located on the northeast corner of Christopher Lake.

Access to Christopher Lake is by a paved and then gravel road which extends from 100 Mile House to the Cariboo Canim Ranch Airstrip, at the east end of Canim Lake. A logging road extends north approximately one kilometre from the airstrip with final access to the southeast corner of Christopher Lake by a one kilometre foot trail. The camp and drill were moved onto the property from the Cariboo Canim Ranch Airstrip by helicopter.

1.3 CLAIM INFORMATION

The Deception Creek Property consists of 7 modified grid claims for a total of 104 units (Figure 2).

The claim information is as follows:

Claims Worked

Claim Name	Units	Record No.	Anniversary Date
W-1	20	1094	Sept. 2
W-2	20	1095	Sept. 2
W-3	20	1096	Sept. 2
W-4	20	1097	Sept. 2
C-1	18	1726	April 11
C-2	4	1727	April 11
C-3	2	1728	April 11

1.4 TOPOGRAPHY AND VEGETATION

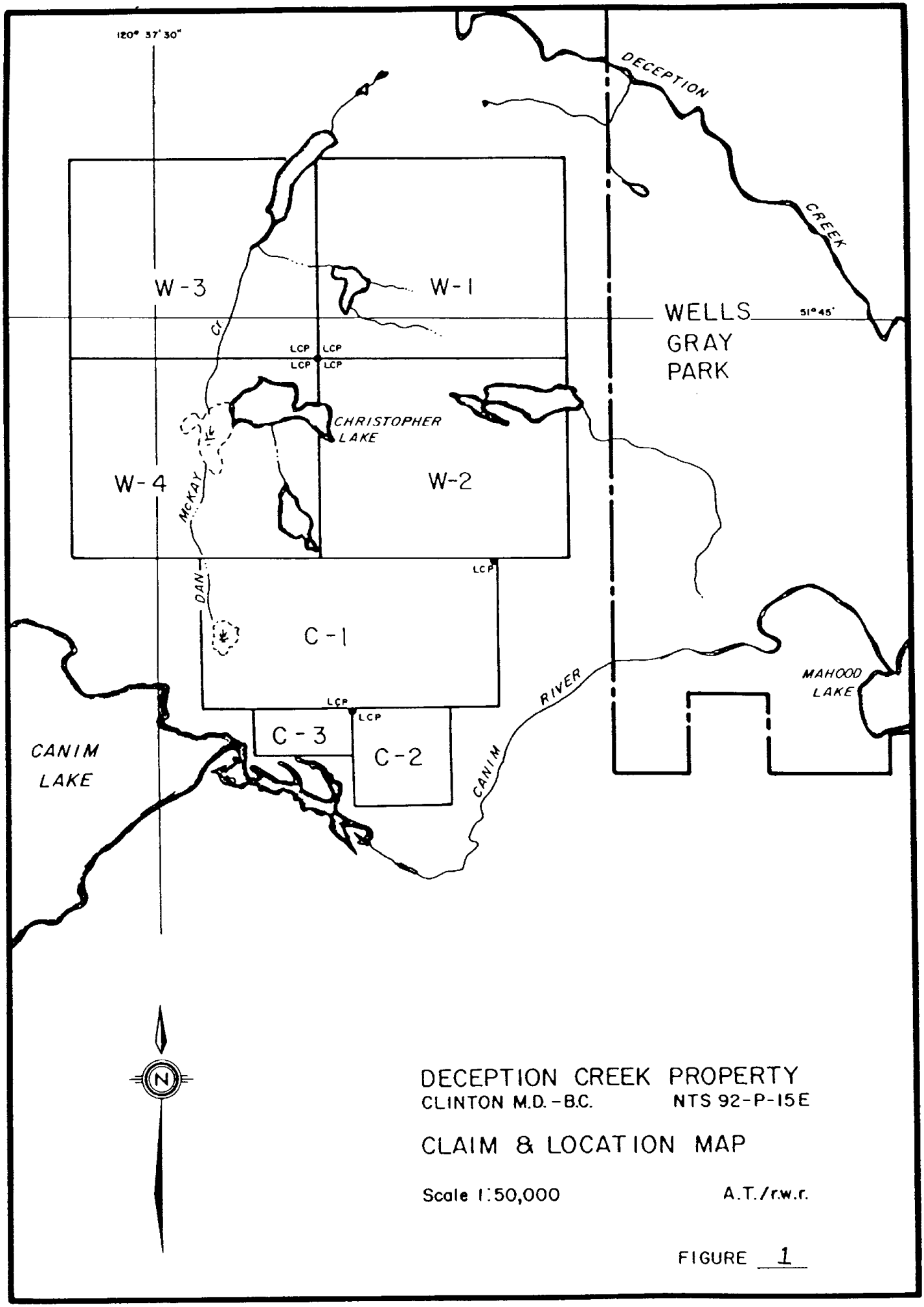
The claims are located within the Quesnel Highland, and cover a thickly forested area, which ranges in elevation from 765 m to 1280 m. A series of rounded ridges are separated by several small lakes and swamps. The area is drained primarily by Dan McKay Creek, which flows south through the west central portion of the property into Canim Lake. Wells Gray Provincial Park is just east of the eastern boundary of the property.

Vegetation on the property consists of a dense, mature forest of cedar, fir, birch and pine. A thick undergrowth of alder and young evergreens occurs along streams and low lying areas.

1.5 HISTORY

The first recorded work done in the area was by Pickands Mather and Co. in 1973, when the property was held as the Chris Claims. Pickands Mather conducted a program of geological mapping and soil sampling in the search for porphyry copper and molybdenum mineralization.

The present W claims were staked in 1981 on the basis of anomalous copper reported in soil samples collected by Pickands Mather. Exploration was carried out in 1982 and 1984 by Archean Engineering Field programs consisted of reconnaissance geological mapping, stream sediment sampling, heavy mineral concentrate sampling, and VLF-Em surveys. A few soil lines were run across two of five anomalous Em areas. In 1985, field work consisted of geological mapping and soil sampling over three areas in which VLF-Em anomalies had been previously defined. The VLF-Em survey was extended in one of the anomalous areas.

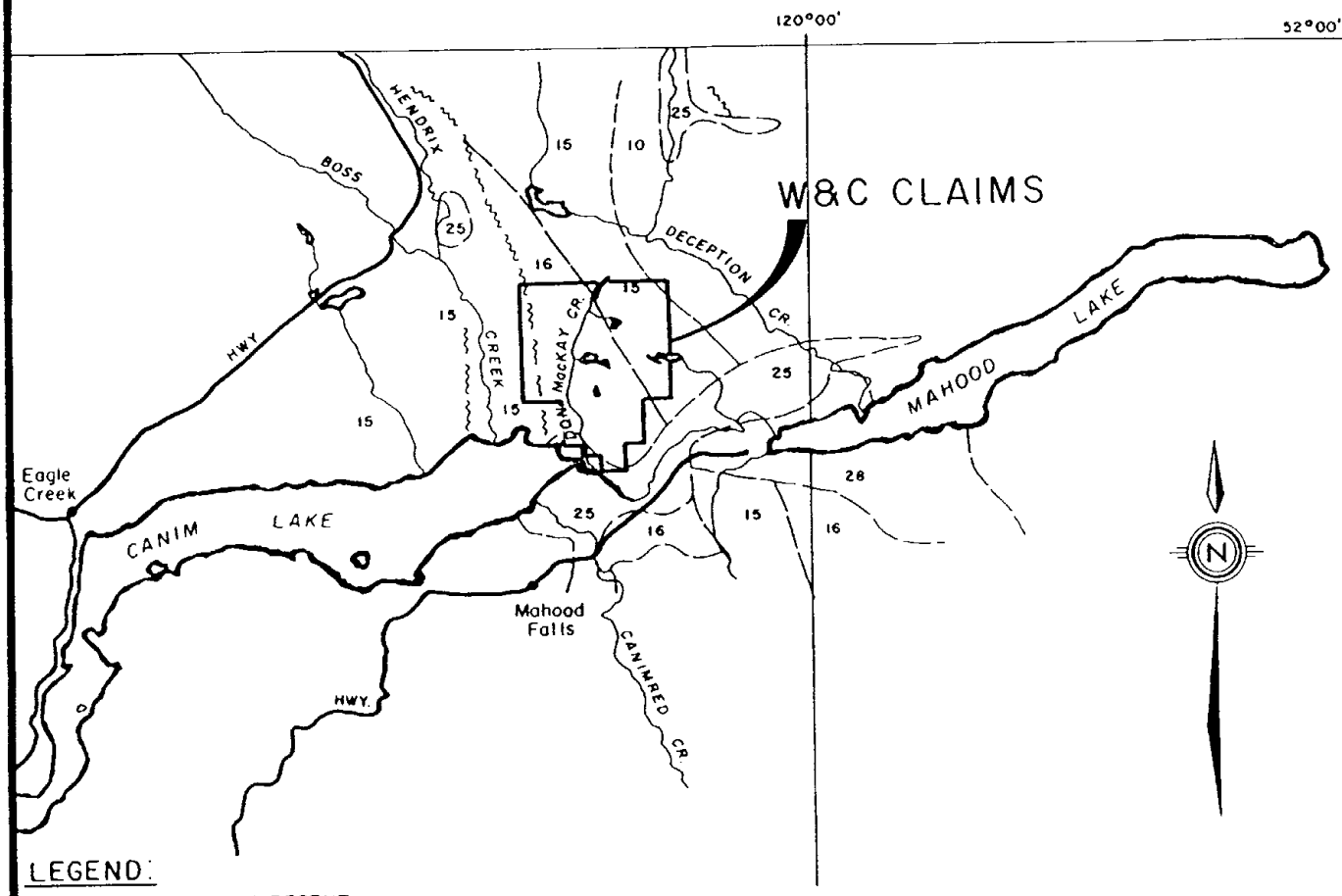


DECEPTION CREEK PROPERTY
CLINTON M.D. - B.C. NTS 92-P-15E

CLAIM & LOCATION MAP

Scale 1:50,000 A.T./r.w.r.

FIGURE 1



LEGEND:

PLEISTOCENE and RECENT

28 TILL, GRAVEL, SILT, CLAY, ALLUVIUM

TERTIARY - MIOCENE and/or PLIOCENE

25 PLATEAU LAVA

JURASSIC - SINEMURIAN TO (?) MIDDLE JURASSIC

16 PORPHYRITIC AUGITE ANDESITE BRECCIA AND CONGLOMERATE; MINOR ANDESITE, ARENITE, TUFF, ARGILLITE, AND FLOWS (MAY INCLUDE SOME 11, 16a, ISOLATED AREAS OF HORNBLENDE ANDESITE - MAY BE ALL OR PARTLEY INTRUSIVE) SEE MAP 1278A.

15 ANDESITIC ARENITE, SILTSTONE, GRIT, BRECCIA AND TUFF; LOCAL GRANITE BEARING CONGLOMERATE, GREYWACKE; MINOR ARGILLITE AND FLOWS (MAY INCLUDE SOME 11)

TRIASSIC - KARNIAN - NORIAN (NICOLA GROUP)

10 BLACK SHALE, ARGILLITE, PHYLLITE, SILTSTONE AND BLACK LIMESTONE.

DECEPTION CREEK PROPERTY

W & C M.C., CLINTON MD. - B.C.

REGIONAL GEOLOGY

4 0 4 MILES

KILOMETRES

6 0 6

NTS 92-P-15

DATE /r w.r.

FIGURE 2

After GSC MAP 1278A (1964/65)

2.0 GEOLOGY

2.1 REGIONAL GEOLOGY

The geology of the area was mapped by R.B. Campbell and H.W. Tipper of the Geological Survey of Canada in 1964-65 and published as Map 1278 A in Memoir 303. The eastern half of the property is underlain by Jurassic age andesitic arenite and siltstone overlain on the west by slightly younger porphyritic augite andesite breccia and flows.

2.2 PROPERTY GEOLOGY

Mapping in 1985 indicated the presence of a sequence of andesitic agglomerates and tuffs in the western and northern parts of the area northeast of Christopher Lake. These rocks are bordered to the southeast by pyroclastics of a more dacitic nature. Fragments range in size from agglomerate to lapillic and tuff size, set in a black argillaceous matrix. Altered, carbonatized and silicified agglomerates occur along strike on the northeast side of Christopher Lake, and may be equivalent to the dacites. Along the ridges to the south of the andesites and dacites, black argillaceous sediments outcrop. Minor amounts of grey chert and argillaceous tuff are interbedded with the black argillites.

The area to the southeast of Christopher Lake is predominantly covered by erratic boulders of agglomerate. Local outcrops of dacitic agglomerates are noted.

3.0 DIAMOND DRILL SURVEY

3.1 GENERAL

Four BQ holes totalling 465.43 m were drilled between July 11 and August 5, 1986, to test VLF-Em conductors coincident with zinc in soil anomalies for the potential massive sulphide mineralization over two areas of the property. Drill site locations are plotted on Figure 6, and drill logs are attached as Appendix B. Drill sections at a scale of 1:500 are shown on Figures 3-6.

Drilling was performed by Phil's Diamond Drilling Ltd. of 108 Mile House, B.C., using a Longyear Hydracore '28' drill. Mobilization of the drill on and off the property, and between drill sites was by Bell 206 helicopter. Drilling charges are given in the costs statement. (See Section 5.0)

Drill core was logged on site, with samples split in one meter sections where veining was noted, where the percentage of mineralization increased, where alteration was noted, where shears/fractures were noted and/or where a different rock type was encountered. Half of the split core was placed in numbered plastic sample bags and shipped to Chemex Laboratories in North Vancouver, B.C. for geochemical analysis. All samples were pulverized and the resulting fraction sieved to minus 100 mesh. A 0.5 gram portion of each sample was extracted by digestion with nitric acid aqua regia followed by 13 element ICP analysis. Gold values were determined by fire assay preparation of a 10 gram sample followed by atomic absorption analysis of the dissolved bead.

The results of drill core sampling are given in Appendix A. The core is stored on the property at each drill site.

Drill hole data is summarized below:

DDH	Length (m)	Angle	Azimuth	Collar Elevation (m)	Grid Co-ordinates
1	119.79	45°	090	935.7	0+36E, 4+50S
2	118.26	45°	090	944.7	0+52E, 5+50S
3	116.78	45°	135	1048.5	4+06E, 2+98N
4	110.60	45°	135	1040.0	4+88E, 4+18N
	465.43				

3.2 RESULTS

3.2.1 Southeast Conductor

Two diamond drill holes, DDH-1 and DDH-2, were drilled in an attempt to intersect at depth a north/south trending 1700 m long VLF-Em conductor with coincident moderately high values of zinc in soils, thought to be indicative of massive sulphide mineralization. Both holes were comprised of a variable package of dacitic pyroclastic rocks, ranging from tuff to agglomerate, which were interbedded with locally graphitic black argillite. Underlying the dacitic volcanics were pyroclastics of a more andesitic composition.

The matrix of the dacitic rocks ranged from fine to coarse grained, and was pale to medium grey green in color. Sub-angular to angular fragments ranged in size from 2 mm to 9.0 cm. Fragments were comprised mostly of dark brown/black mudstone, black argillite and acid volcanics. Subtle bedding or layering was noted locally within the dacitic rocks. The volcanics commonly contained trace - 3% disseminated pyrrhotite, and locally contained trace to 2% disseminated pyrite was noted.

Within the massive black argillite, 1 to 3% disseminated pyrite was common. Locally, well defined bedding was preserved and was predominantly at 135° to 160° to the core axis.

Veining within both units was limited to calcite veinlets, (<1-55 mm in size), containing disseminated pyrrhotite blebs, disseminated cubic pyrite and a trace of chalcopyrite. Chloritic alteration was noted along fractures and shears. Pyrite and calcite were common along fractures.

Zinc values within these two holes are only locally anomalous, but probably explain the zinc in soil anomaly obtained on surface. Anomalous zinc values occur predominantly within massive black argillite, but are also found within black argillite with interbeddid dacitic tuff and within locally clay altered dacitic tuff. A few scattered high silver values up to 7.6 ppm are found within DDH-1, but there are no significant values for any other elements.

3.2.2 Northeast Conductor

Two diamond drill holes, DDH-3 and DDH-4, were drilled to test the NE/SW trending approximately 1000 metres long VLF-Em conductor coincident with zinc in soil anomalies up to 1460 ppm.

The upper portions of these two holes intersected intermediate volcanics which commonly contained 2 to 3% disseminated pyrite blebs, and trace to 1% disseminated pyrrhotite. In DDH-3, the volcanic unit was limited to fine to medium grained, pale grey green andesitic tuff. In DDH-4, the volcanic package was more variable with intersections of

andesitic lapilli tuff, argillaceous tuff, and andesitic tuff. Within the volcanic units in both holes, 1 to 2 mm and up to 2.5 cm argillaceous interbeds were common. The lower sections of each hole were comprised mainly of massive and bedded/banded fine-grained black argillite, which contained up to 5% disseminated pyrite, and trace to 2% pyrrhotite blebs and small sulphide stringers. Trace amounts of chalcopyrite, associated with veining, were noted within both units.

Three types of veining occurred commonly throughout both drill holes. These included calcite veinlets with quartz grains and interstitial quartz veinlets; calcite veinlets with minor quartz grains, and milky white quartz veinlets. Pyrite occurs along the selvages, and disseminated within the veinlets. Pyrrhotite occurs as disseminated blebs and along selvages. Trace amounts of crystalline sphalerite were noted within quartz/calcite stringers. The core is locally moderately graphitic along fractures and shears.

Anomalous values obtained for zinc (>390 ppm) are found within unmineralized black argillites. Values appear to be greater where the argillites are graphitic. Silver values up to 1.0 ppm were obtained, but as in DDH-1 and DDH-2 there were no significant values for any other elements.

270°

090°

Elev.
940 m

DDH 1 (-45°, Az 090)

0+25E (El. 935.7m)
Casing

0+50E

0+75E

1+00E

rubble/subcrop

900 m

855 m

119.8 m

LEGEND:

- DACITIC AGGLOMERATE
- DACITIC LAPILLI TUFF
- DACITIC TUFF
- BLACK ARGILLITE
- ANDESITIC TUFF

KANGELD RESOURCES LTD.
RISE RESOURCES LTD.

DECEPTION CREEK PROPERTY
W-CLAIMS
CLINTON M.D.-B.C. NTS:92P/15E

CROSS SECTION DDH-1
LOCATION L4+50S, 0+36E

DATE: OCT.,1986
BY:L.H./rwr

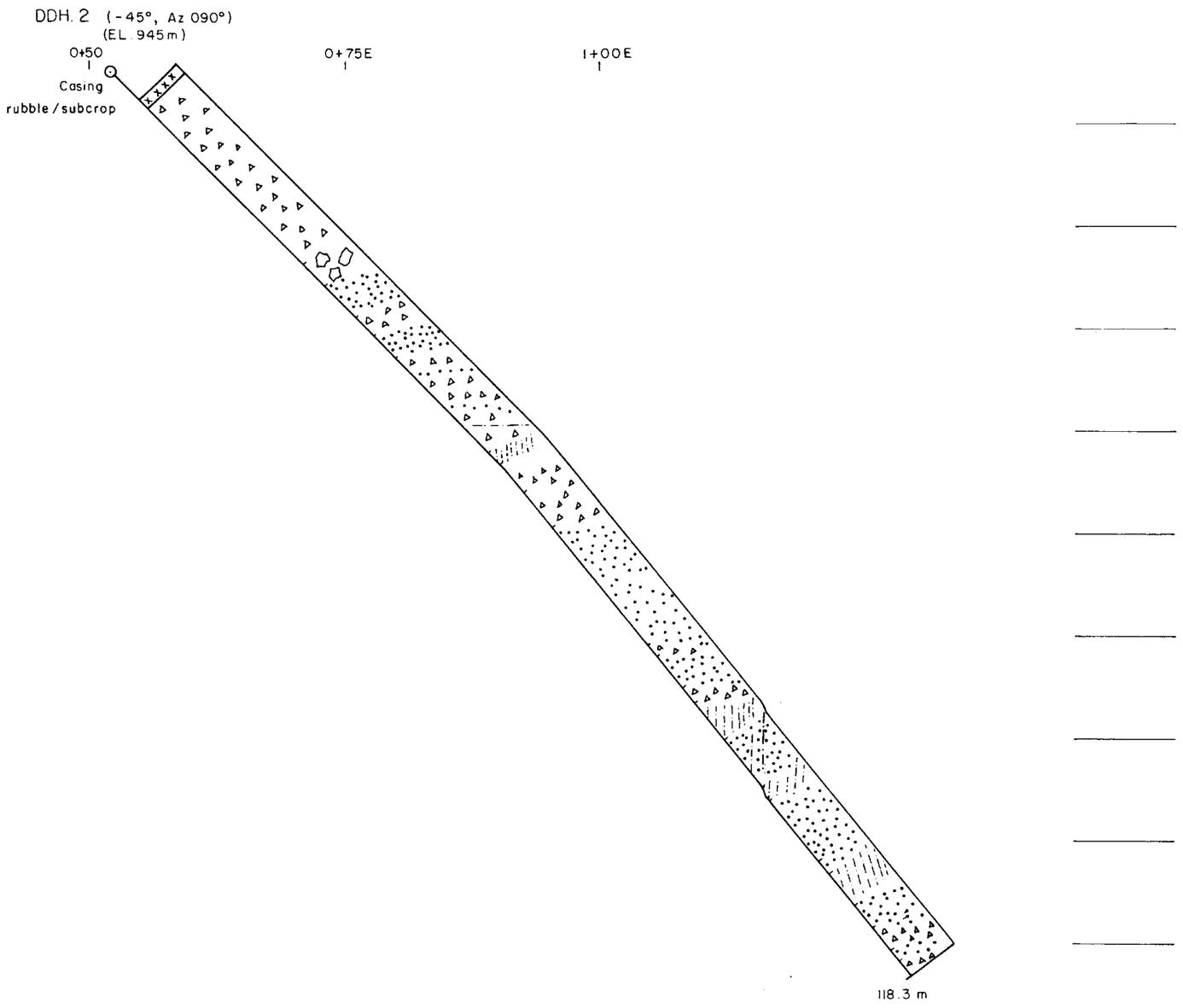
FIGURE: 3

270°

090°

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,142



LEGEND:

- DACITIC AGGLOMERATE
- DACITIC LAPILLI TUFF
- DACITIC TUFF
- BLACK ARGILLITE

KANGELD RESOURCES LTD.
RISE RESOURCES LTD.

DECEPTION CREEK PROPERTY
W-CLAIMS
CLINTON M.D.-B.C. NTS:92P/15E

CROSS SECTION DDH-2
LOCATION L5+50S, 0+52E

DATE: OCT.,1986
BY:L.H./rwr

FIGURE: 4

315°

135°

Elev.
1050 m

DDH 3 (-45°, Az. 135°)
(El. 1048.5m)

Casing
rubble/subcrop

1000 m

970 m

116.8 m

LEGEND:

ANDESITIC TUFF

BLACK ARGILLITE (MASSIVE, BEDDED)

BLACK ARGILLITE GREY/BLACK INTERBEDS

TUFFACEOUS ARGILLITE

KANGELD RESOURCES LTD.
RISE RESOURCES LTD.

DECEPTION CREEK PROPERTY
W-CLAIMS
CLINTON M.D.-B.C. NTS:92P/15E

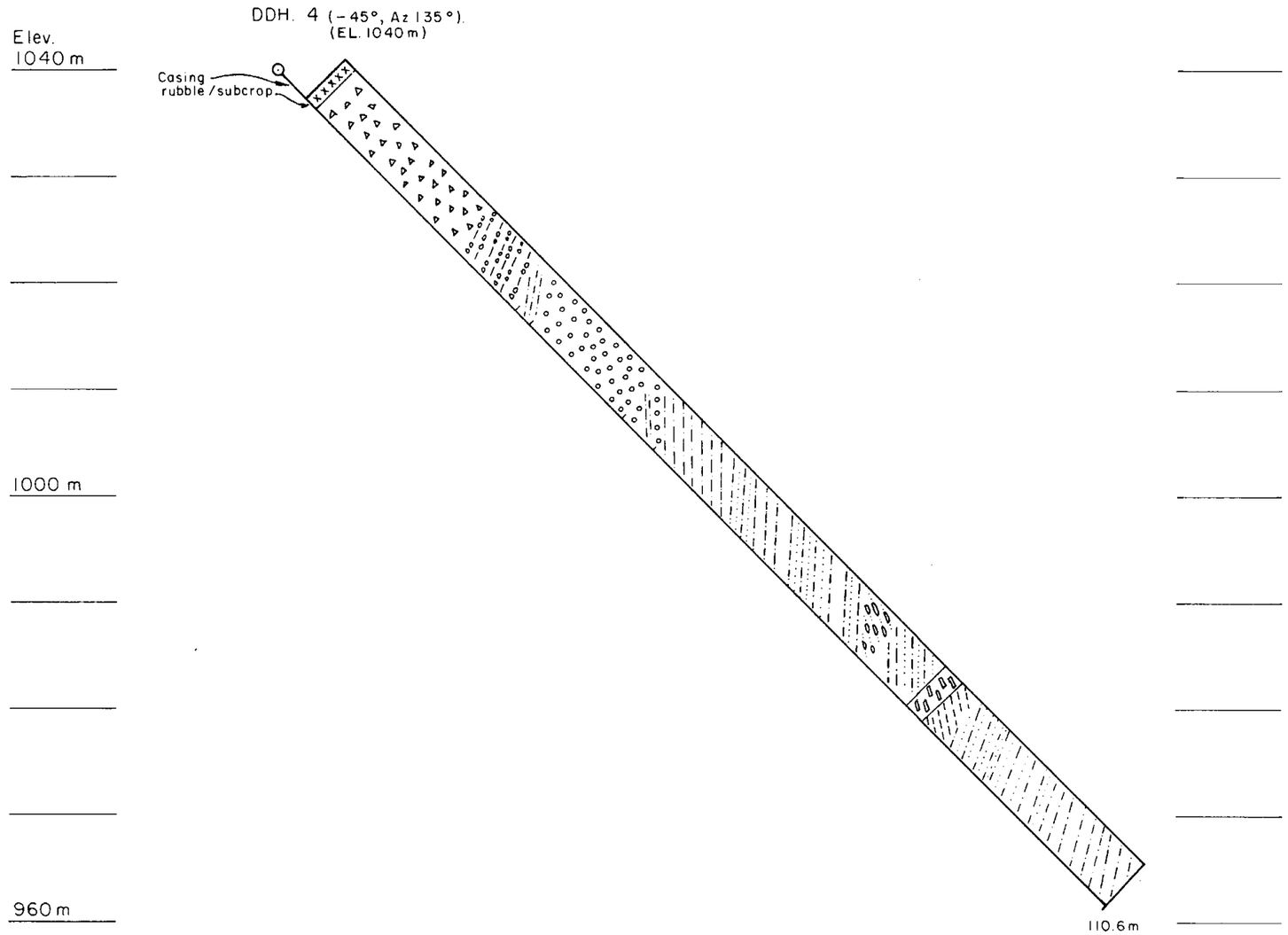
CROSS SECTION DDH-3
LOCATION L4+06E, 2+98N

DATE: OCT.,1986
BY:L.H./rwr

FIGURE: 5

315°

135°



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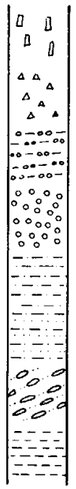


- FELDSPAR PORPHYRY DYKE
- ANDESITIC LAPILLI TUFF
- ARGILLACEOUS TUFF
- ANDESITIC TUFF
- MASSIVE BLACK ARGILLITE
- BANDED / BEDDED ARGILLITE
- WELDED TUFF
- ARGILLACEOUS MUDSTONE

KANGELD RESOURCES LTD.
RISE RESOURCES LTD.

DECEPTION CREEK PROPERTY
W-CLAIMS
CLINTON M.D.-B.C. NTS:92P/15E

CROSS SECTION DDH-4
LOCATION L4+88E, 4+18N

DATE: OCT.,1986
BY:L.H./rwr

FIGURE: 6

4. CONCLUSIONS

The two elongate VLF-Em conductors with coincident anomalous zinc in soils anomalies were thought to be representative of potential massive sulphide mineralization. Drilling of two diamond drill holes into each of these conductors has shown that while massive sulphide mineralization was not encountered, the anomalies can be explained.

Graphitic argillite is conductive enough to produce the VLF-Em conductors on surface. A relatively short intersection at depth of locally graphitic argillites in DDH-1 and DDH-2 resulted in a moderate conductor. Both DDH-3 and DDH-4 were comprised mostly of argillite, the source of a much stronger conductor on surface.

Anomalous zinc geochem values obtained in unmineralized sections of drill core suggest that the zinc anomalies obtained in soils on surface can be attributed to the black argillite unit, which locally contains zinc values up to 1214 ppm where unmineralized, and to 1374 ppm where trace amounts of sphalerite were noted. Scattered anomalous values of silver up to 7.6 ppm were obtained in all drill holes, but there are no corresponding anomalies of any significance for any of the other elements.

Respectfully submitted,

J. M. Kowalchuk, B.Sc., F.G.A.C.

GEOLOGICAL ASSOCIATION OF CANADA
JOHN KOWALCHUK
FELLOW

5.0 COSTS STATEMENT

KANGELD RESOURCES LIMITED
RISE RESOURCES LIMITED
W. CLAIMS
DIAMOND DRILLING
29 MAY - 10 AUGUST 1986

GENERAL COSTS

SALARIES & WAGES		
2 Pers, 29 May-7 Aug, 58 Man days @ $88.34		$5,123.67
BENEFITS @ 20%		1,024.73
FOOD & ACCOMMODATION		
54 Man Days @ $ 33.36/day		1,801.37
SUPPLIES:		363.53
FUEL:		
HELICOPTER:		
Okanagan, 206, 31 Jul, 5 Aug		
6.6 hrs @ $556.92	$ 3,675.66	
Northern Mtn. 206B, 8-18 Jul		
14.4 hrs @ $522.00	7,516.80	
		11,192.46
FIXED WING:		
CP Air, 1 Pers, 17 Jul VCR-PGE, RTN		249.00
RENTALS:		
Kangeld 4-WD Jeep:		
9 -20 Jul, 3 days @ $43/day	$ 129.00	
Gabriel Field Equipment:		
54 Man days @ $6/day	324.00	
		453.00
MAINTENANCE & REPAIRS:		451.34
SHIPPING/POSTAGE:		86.47
TELEPHONE SERVICE:		66.00

Costs Statement cont'd.

CONSULTANT FEES:		
Archean Engineering Ltd.	$1,937.50	
Adder	1,120.00	
JMK	780.00	
		3,400.00
DIAMOND DRILLING:		
Phil's Diamond Drilling, 11 Jul-10 Aug, 467 m @ $72.04		33,644.00
DRILL SITE PREPARATION:		
Alionis		3,150.00
ASSAYS & ANALYSES - CHEMEX LAB:		
95 Core for Au & 30 ele. ICP @ $15.75		1,496.25
REPORT PREPARATION:		2,500.00
TOTAL COSTS:		**$65,081.98**

6.0 REFERENCES

Campbell, R.B., Tipper, H.W., 1971; Geology of Bonaparte Lake map area (92-P). G.SC. Memoir 363.

Cooke, D.L., 1985; Geological, Geochemical and Em-16 Survey on the Deception Creek Property, Clinton Mining Division. D.L. Cooke and associates Ltd., pp. 9.

Gonzalez, R.A., 1984; Summary Geological Report on the Deception Creek Property, W-2 and W-4 Mineral Claims, Clinton Mining Division. Private report for Rise Resources Ltd., pp. 17.

Troup, A.G., 1982; Deception Creek Property, Clinton Mining Division, B.C., Geology, Geochemistry and Geophysics. Archean Engineering Ltd., pp. 15.

7.0 STATEMENT OF QUALIFICATIONS

L.D. HOLMGREN

ACADEMIC:

1982 B.Sc. Geology (Honours) University of British Columbia

PRACTICAL

May - August 1986	Hughes-Lang Group	Project Geologist, Quesnel area, B.C.
May - October 1986	Rio Algom Expl. Inc.	Geologist, Central and South Central, B.C.
May - September 1984	Rio Algom Expl. Inc.	Geologist, Southern B.C.
May - September 1983	DuPont of Canada Expl.	Geologist, Swift River, Y.T.
May - October 1982	DuPont of Canada Expl.	Geologist, Newfoundland
June - August 1981	DuPont of Canada Expl.	Senior Geological Assistant, Northern B.C.
May - August 1980	DuPont of Canada Expl.	Junior Geological Assistant, Northern B.C and the Yukon.

CERTIFICATE OF QUALIFICATIONS

J.M. KOWALCHUK

I, J.M. Kowalchuk, do hereby certify that:

1. I am a geologist and reside at 3086 Mariner Way, Coquitlam, British Columbia.

2. I am a graduate of McMaster University in Hamilton, Ontario with a B.Sc. in Geology (1970).

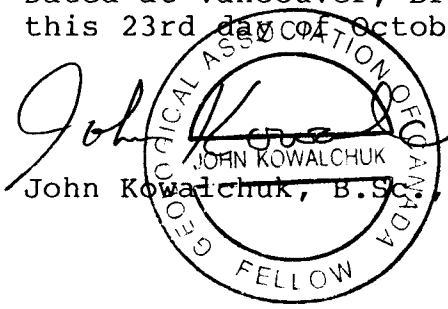
3. I have practiced my profession continuously in British Columbia and across Canada since 1970.

4. I am a Fellow of the Geological Association of Canada.

5. I have been involved in the planning of this drill program and personally supervised Lisa Holmgren in her management of the program.

6. The drill program was performed as is stated in the reports. I am satisfied with and take full responsibility for the results and conclusions mentioned in this report.

Dated at Vancouver, British Columbia,
this 23rd day of October, 1986.



John Kowalchuk, B.Sc., F.G.A.C

APPENDIX A
DIAMOND DRILL ASSAY RESULTS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER TR20595

Chemex Labs Ltd.

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

•Analytical Chemists •Geochemists •Registered Assayers

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 2W2

CERT. # : A8616180-001-A
INVOICE # : I8616180
DATE : 19-AUG-86
P.O. # : NONE
DECEPTION CREEK

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
CC: L. HOLMGREN

Sample description	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
8368	<5	2.27	0.2	20	40	<0.5	<2	3.52	<0.5	28	266	105	4.40	20	0.01	<10	2.13	711	<1	0.02	121	1470	16	<10	211	0.24	<10	<10	143	<10	82	--
8370	<5	2.49	0.2	20	40	<0.5	<2	1.73	<0.5	34	314	119	5.20	10	0.03	10	2.37	748	1	0.03	155	1580	16	<10	97	0.26	<10	<10	162	<10	92	--
8371	<5	1.93	0.2	10	50	<0.5	<2	3.18	<0.5	25	140	136	4.54	20	0.05	<10	1.72	650	<1	0.01	66	1540	14	<10	240	0.22	<10	<10	153	<10	64	--
8372	<5	1.56	0.2	20	50	<0.5	<2	3.89	<0.5	24	155	179	3.27	10	0.08	<10	1.64	517	1	0.03	150	990	14	<10	207	0.25	<10	<10	111	<10	80	--
8373	<5	1.49	0.2	10	50	<0.5	<2	2.87	1.5	21	130	139	4.39	10	0.03	<10	1.37	529	3	0.07	55	1150	14	<10	104	0.31	<10	<10	194	<10	222	--
8374	<5	2.45	0.2	20	160	<0.5	<2	2.79	<0.5	26	86	99	5.34	10	0.24	<10	1.84	933	<1	0.03	38	1120	14	<10	120	0.36	<10	<10	191	<10	86	--
8375	25	2.03	0.2	490	90	<0.5	<2	5.55	1.5	23	87	71	4.98	20	0.20	<10	2.07	1170	<1	0.02	31	1150	142	10	262	0.17	<10	<10	133	<10	176	--
8376	5	1.76	0.2	50	150	<0.5	<2	4.76	1.5	17	104	80	3.93	20	0.33	<10	1.29	592	8	0.04	47	950	30	<10	261	0.02	<10	<10	133	<10	192	--
8377	<5	1.61	0.2	20	330	<0.5	<2	3.63	3.5	16	75	76	4.11	20	0.58	10	0.99	473	22	0.02	65	930	22	<10	183	<0.01	<10	<10	100	<10	366	--
8378	<5	1.59	0.2	20	220	<0.5	<2	3.14	3.0	15	73	77	3.89	20	0.60	10	0.95	494	7	0.03	56	950	20	<10	182	<0.01	<10	<10	86	<10	272	--
8379	5	1.57	0.2	10	210	<0.5	<2	3.54	1.0	14	78	63	3.64	20	0.57	<10	1.00	515	4	0.03	45	990	22	<10	163	<0.01	<10	<10	71	<10	208	--
8380	<5	1.51	0.2	20	190	<0.5	<2	8.02	0.5	11	118	47	2.75	30	0.50	<10	0.89	511	5	0.04	32	830	16	<10	466	<0.01	<10	<10	71	<10	136	--
8381	<5	2.11	0.2	10	250	<0.5	<2	2.65	3.0	17	97	82	4.47	20	0.64	10	1.20	446	6	0.03	58	930	26	<10	153	<0.01	<10	<10	122	<10	320	--
8382	<5	1.61	0.6	30	150	<0.5	<2	6.29	2.0	16	124	83	3.39	30	0.34	<10	1.24	668	7	0.01	50	1000	16	<10	345	<0.01	<10	<10	95	<10	212	--
8383	<5	0.74	1.0	80	150	<0.5	<2	4.17	12.5	17	82	115	3.07	20	0.45	<10	1.10	539	11	0.01	62	1080	52	30	288	<0.01	<10	<10	66	<10	640	--
8384	<5	1.12	0.6	90	260	<0.5	<2	2.90	10.5	19	84	136	4.36	20	0.70	10	0.89	363	19	0.02	77	1100	42	40	208	<0.01	<10	<10	97	<10	662	--
8385	<5	0.91	0.4	60	240	<0.5	<2	5.89	16.0	16	72	104	3.45	30	0.60	<10	0.78	439	22	0.01	84	1050	24	40	422	<0.01	<10	<10	126	<10	1106	--
8386	<5	1.84	0.2	40	440	<0.5	<2	6.91	4.5	17	162	89	3.89	30	0.89	<10	1.25	793	5	0.02	41	1560	20	10	461	<0.01	<10	<10	109	<10	372	--
8387	<5	0.99	0.6	60	290	<0.5	<2	4.04	12.5	13	78	97	3.48	20	0.50	<10	0.94	360	18	0.01	80	830	14	30	307	<0.01	<10	<10	130	<10	928	--
8388	<5	1.46	0.4	50	350	<0.5	<2	5.26	7.5	13	98	97	3.47	30	0.84	<10	0.94	433	17	0.02	57	910	16	30	412	<0.01	<10	<10	122	<10	584	--
8389	<5	4.20	0.2	1350	50	<0.5	<2	4.38	<0.5	51	399	285	7.06	30	0.02	<10	4.99	1119	<1	0.01	94	1530	4	<10	325	0.16	<10	<10	198	<10	80	--
8390	<5	2.86	0.2	50	210	<0.5	<2	3.82	<0.5	33	182	100	4.39	20	0.34	<10	2.90	791	8	0.02	69	1200	10	<10	215	0.20	<10	<10	154	<10	108	--
8391	<5	1.50	0.2	30	220	<0.5	<2	6.63	2.5	14	73	73	3.03	30	0.48	<10	1.03	551	7	<0.01	47	910	18	<10	375	0.11	<10	<10	69	<10	260	--
8392	<5	1.95	0.2	30	340	<0.5	<2	7.69	0.5	17	80	101	4.26	30	0.64	<10	1.21	804	4	<0.01	43	1080	18	<10	383	0.04	<10	<10	62	<10	158	--
8393	<5	1.82	0.2	30	320	<0.5	<2	5.37	7.5	13	87	88	3.14	20	0.75	<10	0.71	415	14	<0.01	62	1150	16	<10	256	0.12	<10	<10	156	<10	584	--
8394	<5	2.25	0.6	30	350	<0.5	<2	5.60	7.5	12	129	88	3.14	20	0.89	<10	1.12	367	17	<0.01	67	1510	16	10	308	0.10	<10	<10	159	<10	630	--
8395	<5	1.14	0.4	40	280	<0.5	<2	14.91	8.0	6	79	56	1.38	50	0.66	<10	0.30	232	17	<0.01	59	4460	20	10	906	<0.01	<10	<10	104	<10	574	--

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,142

Chemex Labs Ltd.

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•Analytical Chemists •Geochemists •Registered Assayers

CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

1900 - 999 W. HASTINGS ST.
VANCOUVER, B.C.
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CERT. # : A8615841-001-A
INVOICE # : I8615841
DATE : 12-AUG-86
P.O. # : NONE
DECEPTION CREEK

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
ATTN: A. TROUP CC: LISA HOLMGREN

Sample description	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
8301 D	<5	2.84	1.2	10	10	<0.5	<2	3.25	<0.5	34	282	92	4.29	20	<0.01	<10	3.49	548	<1	0.03	205	960	12	<10	281	0.24	<10	<10	88	<10	66	--
8302 D	<5	2.89	7.6	<10	10	<0.5	<2	2.47	<0.5	36	289	134	4.59	10	<0.01	<10	3.52	561	<1	0.03	208	1070	22	10	185	0.25	<10	<10	99	<10	80	--
8303 D	<5	3.10	0.2	10	10	<0.5	<2	3.22	<0.5	25	77	140	5.41	20	0.02	<10	1.90	863	1	0.05	50	1420	12	<10	242	0.32	<10	<10	198	<10	74	--
8304 D	<5	3.53	0.2	10	10	<0.5	<2	3.21	<0.5	29	72	139	6.21	20	0.02	<10	1.88	976	2	0.05	52	1450	12	<10	157	0.34	<10	<10	248	<10	78	--
8305 D	15	2.28	1.2	20	20	<0.5	<2	2.75	<0.5	29	177	131	5.43	20	0.03	<10	1.91	772	4	0.06	98	1400	14	<10	257	0.33	<10	<10	220	<10	106	--
8306 D	5	2.25	0.2	10	10	<0.5	<2	3.35	<0.5	29	175	115	5.65	20	0.02	<10	2.04	796	3	0.04	94	1400	12	<10	319	0.35	<10	<10	235	<10	100	--
8307 D	<5	2.17	0.6	10	20	<0.5	<2	2.71	<0.5	26	121	106	5.44	10	0.04	<10	1.97	789	2	0.06	67	1300	12	<10	242	0.36	<10	<10	244	<10	80	--
8308 D	<5	1.41	0.2	10	10	<0.5	<2	2.23	2.0	21	155	128	5.19	10	0.04	10	1.50	555	8	0.08	62	1300	12	<10	146	0.36	<10	<10	258	<10	310	--
8309 D	<5	1.94	0.4	20	20	<0.5	2	5.78	4.5	30	250	107	4.94	30	0.03	<10	2.14	733	5	0.05	157	1150	16	<10	485	0.28	<10	<10	229	<10	554	--
8310 D	<5	1.58	0.2	20	10	<0.5	<2	3.36	5.0	35	193	116	4.54	10	0.02	<10	1.63	594	11	0.04	127	1200	16	<10	237	0.27	<10	<10	246	<10	546	--
8311 D	<5	2.50	0.2	10	10	<0.5	<2	3.35	<0.5	34	328	97	4.50	20	0.03	<10	3.14	604	<1	0.04	205	1110	8	<10	352	0.22	<10	<10	101	<10	74	--
8312 D	<5	2.18	0.2	10	10	<0.5	<2	3.19	<0.5	27	230	92	3.99	20	0.04	<10	2.75	548	<1	0.04	123	1000	10	<10	350	0.21	<10	<10	101	<10	64	--
8313 D	<5	2.05	0.2	<10	10	<0.5	2	2.66	<0.5	28	254	98	4.41	10	0.02	<10	2.42	567	2	0.04	132	1060	14	<10	271	0.25	<10	<10	127	<10	80	--
8314 D	<5	1.75	0.2	10	10	<0.5	<2	4.65	<0.5	30	226	100	4.39	20	0.02	<10	2.22	587	4	0.04	179	1060	12	<10	398	0.24	<10	<10	152	<10	88	--
8315 D	<5	1.82	0.2	10	10	<0.5	<2	5.44	1.5	29	231	129	5.51	20	0.01	<10	2.27	690	10	0.05	162	1180	14	<10	360	0.30	<10	<10	229	<10	292	--
8316 D	<5	2.21	0.2	10	20	<0.5	<2	2.76	<0.5	31	239	94	5.03	10	0.04	<10	2.55	558	2	0.04	138	1140	12	<10	329	0.32	<10	<10	143	<10	84	--
8317 D	<5	2.87	0.4	10	10	<0.5	<2	2.15	<0.5	32	163	100	4.61	10	<0.01	<10	3.00	657	<1	0.06	135	970	8	<10	89	0.25	<10	<10	128	<10	66	--
8318 D	<5	2.64	0.2	10	10	<0.5	<2	2.99	<0.5	27	149	106	4.19	10	0.01	<10	2.53	575	<1	0.04	104	1050	12	<10	140	0.25	<10	<10	128	<10	60	--
8319 D	<5	1.90	0.2	10	20	<0.5	2	2.23	1.0	22	92	106	4.65	10	0.03	<10	1.47	616	6	0.04	67	1230	14	<10	185	0.30	<10	<10	198	<10	254	--
8320 D	<5	2.53	0.2	10	10	<0.5	<2	2.69	4.0	22	56	130	5.08	10	0.04	<10	1.57	849	2	0.04	45	1540	10	<10	175	0.29	<10	<10	232	<10	528	--
8321 D	<5	2.53	0.2	10	10	<0.5	<2	2.28	<0.5	31	64	109	4.88	10	0.10	<10	1.61	777	7	0.03	41	1310	8	<10	138	0.29	<10	<10	168	<10	80	--
8322 D	<5	2.88	0.2	<10	10	<0.5	<2	1.95	<0.5	24	49	144	5.77	10	0.28	10	1.81	669	<1	0.04	35	1540	12	<10	137	0.38	<10	<10	231	<10	76	--
8323 D	<5	2.42	0.2	<10	10	<0.5	<2	1.79	<0.5	23	56	127	4.87	10	0.05	<10	1.70	537	<1	0.03	39	1340	8	<10	142	0.32	<10	<10	186	<10	56	--
8324 D	<5	3.08	0.2	<10	10	<0.5	<2	2.35	<0.5	25	73	127	5.43	20	0.06	<10	1.95	794	<1	0.04	52	1410	12	<10	169	0.34	<10	<10	223	<10	74	--
8325 D	<5	2.41	0.2	10	10	<0.5	<2	3.15	<0.5	24	117	112	4.48	20	0.17	<10	1.64	675	<1	0.03	80	1190	8	<10	224	0.28	<10	<10	181	<10	124	--
8326 D	<5	1.77	0.2	10	10	<0.5	<2	2.20	0.5	24	108	120	5.57	10	0.03	10	1.58	720	3	0.07	48	1350	14	<10	151	0.40	<10	<10	281	<10	174	--
8327 D	<5	1.15	0.2	10	<10	<0.5	<2	2.91	5.5	18	143	121	4.62	10	<0.01	10	1.19	537	11	0.09	50	1110	16	<10	163	0.33	<10	<10	305	<10	646	--
8328 D	<5	1.41	0.2	10	<10	<0.5	<2	2.72	4.5	21	155	110	4.68	10	<0.01	<10	1.40	604	9	0.07	81	1100	14	<10	150	0.32	<10	<10	299	<10	542	--
8329 D	<5	1.68	0.2	10	20	<0.5	<2	3.40	<0.5	22	124	90	4.49	20	0.03	<10	1.48	577	5	0.05	80	1070	12	<10	236	0.28	<10	<10	188	<10	110	--
8330 D	<5	1.58	0.2	20	10	<0.5	2	3.62	<0.5	26	230	104	4.52	20	0.01	<10	1.89	625	2	0.05	122	1180	12	<10	218	0.25	<10	<10	168	<10	146	--
8331 D	<5	1.08	0.2	10	10	<0.5	<2	2.26	2.0	26	162	112	4.62	10	0.01	<10	1.31	445	17	0.07	136	1110	14	<10	110	0.29	<10	<10	221	<10	298	--
8332 D	<5	1.09	0.2	10	20	<0.5	2	3.15	12.0	19	131	107	3.85	10	0.01	<10	1.13	380	18	0.09	103	1130	14	<10	189	0.30	<10	<10	402	<10	1088	--
8333 D	<5	2.53	0.2	10	20	<0.5	<2	2.71	<0.5	35	380	102	4.64	10	0.01	<10	3.28	673	<1	0.07	216	1140	14	<10	180	0.25	<10	<10	125	<10	72	--
8334 D	<5	2.41	0.2	10	20	<0.5	<2	2.39	<0.5	33	354	93	4.42	10	<0.01	<10	3.16	626	<1	0.06	202	1060	10	<10	142	0.24	<10	<10	122	<10	64	--
8335 D	<5	1.42	0.2	10	20	<0.5	<2	3.15	2.5	21	124	109	4.75	10	0.04	<10	1.37	502	17	0.12	77	1130	14	<10	175	0.34	<10	<10	287	<10	374	--
8336 D	<5	1.73	0.2	<10	20	<0.5	<2	3.06	0.5	24	143	122	5.62	10	0.04	<10	1.51	589	18	0.11	123	1270	16	<10	165	0.35	<10	<10	279	<10	158	--
8337 D	<5	1.93	0.2	10	20	<0.5	<2	3.91	<0.5	22	127	96	4.56	20	0.04	<10	1.66	641	3	0.09	72	1150	12	<10	216	0.32	<10	<10	198	<10	84	--
8338 D	<5	2.31	0.2	10	60	<0.5	2	3.59	<0.5	22	75	110	5.10	20	0.07	<10	2.07	779	<1	0.04	47	1330	12	<10	377	0.35	<10	<10	229	<10	88	--

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CERTIFICATE OF ANALYSIS

TO : MARK MANAGEMENT LIMITED

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VANCOUVER, B.C.
V6C 2W2

CERT. # : A8616017-001-A
INVOICE # : I8616017
DATE : 14-AUG-86
P.O. # : NONE
DECEPTION CREEK

Semi quantitative multi element ICP analysis

Nitric-Aqua-Regia digestion of 0.5 gm of material followed by ICP analysis. Since this digestion is incomplete for many minerals, values reported for Al, Sb, Ba, Be, Ca, Cr, Ga, La, Mg, K, Na, Sr, Tl, Ti, W and V can only be considered as semi-quantitative.

COMMENTS :
ATTN: ART TROUP CC: L. HOLMGREN

Sample description	Au ppb FA+AA	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
8339 D	<5	2.18	0.2	20	20	<0.5	<2	1.85	<0.5	35	233	119	4.69	10	0.01	<10	2.32	681	<1	0.04	78	1060	8	<10	107	0.23	<10	<10	143	<10	54	--
8340 D	<5	2.33	0.2	20	20	<0.5	<2	7.18	3.0	28	331	102	4.25	20	<0.01	<10	2.90	810	6	0.01	100	1000	12	<10	693	0.11	<10	<10	171	<10	222	--
8341 D	<5	1.89	0.2	20	20	<0.5	<2	4.00	2.0	21	208	95	4.42	20	0.01	<10	2.14	610	5	0.03	80	1130	8	<10	263	0.01	<10	<10	192	<10	210	--
8342 D	<5	1.52	0.2	10	40	<0.5	<2	4.20	0.5	18	117	51	3.57	10	0.04	<10	1.58	672	3	0.04	32	1180	10	<10	226	0.15	<10	<10	141	<10	142	--
8343 D	<5	2.04	0.2	<10	90	<0.5	<2	0.67	<0.5	6	24	34	3.59	10	0.28	20	1.84	442	4	0.04	10	690	16	<10	37	0.09	<10	<10	20	<10	58	--
8344 D	<5	1.89	0.2	10	80	<0.5	<2	0.89	<0.5	7	36	26	3.19	10	0.27	20	1.70	418	4	0.03	14	670	12	<10	52	0.09	<10	<10	28	<10	78	--
8345 D	<5	1.32	0.6	10	90	<0.5	<2	4.46	0.5	16	69	76	3.61	10	0.26	<10	0.96	633	4	0.03	37	1110	8	<10	231	0.13	<10	<10	68	<10	122	--
8346 D	<5	1.44	0.6	10	90	<0.5	<2	6.26	<0.5	16	82	68	3.80	20	0.25	<10	1.22	790	2	0.02	35	1030	12	<10	330	0.13	<10	<10	63	<10	96	--
8347 D	<5	1.25	0.6	10	100	<0.5	<2	6.73	4.0	14	92	81	3.56	20	0.33	<10	0.90	633	13	0.02	55	1170	10	<10	353	0.10	<10	<10	140	<10	300	--
8348 D	<5	1.35	0.2	<10	110	<0.5	<2	4.16	5.0	9	45	52	2.48	10	0.42	<10	0.97	473	4	0.01	30	740	12	<10	204	0.03	<10	<10	63	<10	368	--
8349 D	<5	1.27	0.6	10	120	<0.5	<2	4.80	7.5	12	75	75	2.97	10	0.44	<10	0.83	518	8	0.01	43	1010	8	<10	259	0.05	<10	<10	109	<10	508	--
8350 D	5	1.56	1.0	10	130	<0.5	<2	3.57	19.5	11	84	77	3.41	10	0.53	<10	0.96	435	12	0.01	72	1370	10	<10	179	0.01	<10	<10	195	<10	1214	--
8351 D	<5	1.49	0.4	20	140	<0.5	<2	7.34	2.0	16	91	77	3.66	20	0.44	<10	1.07	839	5	0.01	43	1230	8	<10	375	0.08	<10	<10	88	<10	176	--
8352 D	5	1.29	0.6	<10	140	<0.5	<2	7.45	3.5	9	71	69	2.85	20	0.48	<10	0.75	552	8	0.01	45	960	8	<10	351	0.02	<10	<10	83	<10	296	--
8353 D	10	1.54	0.4	10	150	<0.5	<2	6.90	4.5	11	68	75	3.44	20	0.56	<10	0.88	582	12	0.01	51	990	6	<10	326	0.01	<10	<10	108	<10	362	--
8354 D	5	1.72	0.8	10	140	<0.5	<2	6.30	2.5	16	92	88	4.40	20	0.44	<10	1.22	773	6	0.02	51	1180	6	<10	319	0.01	<10	<10	106	<10	210	--
8355 D	15	1.70	0.8	20	160	<0.5	<2	6.60	3.0	17	107	80	4.21	20	0.50	<10	1.16	796	5	0.02	49	1260	10	<10	342	<0.01	<10	<10	96	<10	168	--
8356 D	5	1.59	1.0	20	160	<0.5	<2	4.35	13.5	16	82	106	3.83	10	0.54	<10	1.06	529	17	0.01	77	1100	10	<10	238	<0.01	<10	<10	214	<10	956	--
8357 D	5	1.25	1.0	20	160	<0.5	<2	4.54	6.5	17	78	132	4.14	10	0.53	<10	0.91	491	16	0.01	64	1130	12	<10	257	<0.01	<10	<10	104	<10	474	--
8358 D	<5	1.04	0.8	10	120	<0.5	<2	6.39	7.5	10	58	68	2.60	20	0.36	<10	0.71	558	13	0.01	50	760	8	<10	336	<0.01	<10	<10	106	<10	570	--
8359 D	<5	1.43	0.2	20	210	<0.5	<2	3.17	7.0	16	71	82	3.72	10	0.57	<10	0.95	483	13	0.01	69	1060	10	<10	189	<0.01	<10	<10	106	<10	520	--
8360 D	<5	0.90	0.8	10	170	<0.5	<2	7.43	1.5	13	57	65	2.82	20	0.44	<10	0.72	650	7	0.01	38	1020	12	<10	383	<0.01	<10	<10	44	<10	154	--
8361 D	<5	0.53	1.0	40	130	<0.5	<2	4.27	8.0	13	38	81	3.71	10	0.35	<10	1.02	509	14	0.01	59	820	38	20	333	<0.01	<10	<10	49	<10	530	--
8362 D	<5	0.65	0.6	50	150	<0.5	<2	5.10	18.5	12	51	73	3.29	10	0.43	<10	1.09	580	12	0.01	53	740	22	30	328	<0.01	<10	<10	60	<10	1010	--
8363 D	<5	0.56	0.6	30	140	<0.5	<2	6.18	2.0	16	43	88	3.60	10	0.39	<10	1.03	778	5	0.01	39	1120	16	20	375	<0.01	<10	<10	30	<10	162	--
8364 D	5	0.67	1.0	20	160	<0.5	<2	4.67	2.5	16	54	82	3.56	10	0.45	<10	0.83	590	6	0.01	47	1250	16	10	290	<0.01	<10	<10	39	<10	194	--
8365 D	<5	0.52	1.4	50	110	<0.5	<2	4.27	27.0	14	48	86	3.88	10	0.37	<10	1.07	709	12	0.01	51	820	64	10	261	<0.01	<10	<10	41	<10	1374	--
8366 D	5	0.59	0.8	20	150	<0.5	<2	4.63	12.0	18	47	117	4.53	10	0.39	<10	1.38	626	7	0.01	58	1060	10	10	310	<0.01	<10	<10	48	<10	784	--
8367 D	<5	0.54	1.2	20	180	<0.5	<2	9.00	1.5	15	48	99	3.33	20	0.39	<10	0.59	664	7	0.01	31	950	18	10	560	<0.01	<10	<10	25	<10	138	--
8368 D	<5	1.08	0.2	<10	160	<0.5	<2	0.48	<0.5	3	13	26	1.50	<10	0.49	20	0.69	168	1	0.01	6	410	8	<10	36	<0.01	<10	<10	5	<10	36	--

Certified by .....

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,142

SYSTEMS BUSINESS FORMS LIMITED VANCOUVER TR2010940

APPENDIX B
DIAMOND DRILL HOLE LOGS

Diamond Drill Record

LOCATION: L4+50S,0+36E			HOLE NO. DDH-1 | Page 1 of 4
AZIMUTH: 090°	DIPS - collar 45 °	CONTRACTOR: Phil's Diamond Drilling Ltd.	PROPERTY: DECEPTION CREEK
ELEVATION: 935.7 m (3070')	- 119.79 m 45 °	LOGGED BY: L. Holmgren	CLAIM NO.
LENGTH: 119.79 m	- m °	DATE: July 15-18, 1986	SECTION NO.
CORE SIZE: BQ	- m °		STARTED: July 14, 1986
PURPOSE: To explore VLF-Em conductor and coincident geochem anomalies at depth.			COMPLETED: July 18, 1986

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
0	1.52	Casing						
1.52	6.84	Incompetent, broken core. Subcrop/rubble of Dacitic Lapilli Tuff with argillaceous fragments and interlayers.			locally fragments may contain 2-3% diss. pyrr.			
1.52	30.5	Dacitic lapilli tuff with argillite interlayers. Extremely competent, pale to med. green grey dacite tuff with angular to subangular fragments up to 5.5 cm dark black fine grained argillite layers from 1mm to 9cm, trending 10-20° to CA, contains 1-2% diss pyrr. Core locally is tuffaceous containing no frag's greater then 1-2 mm minor chloritization of hornblende phenocrysts (1-3mm).			locally core contains tr-2% 1mm cubic pyrite also tr-3% diss pyrr minor rusty weathering is noted along fractures. Within the tuff, in contact with the argillite layers, tuff is slightly clay altered, less competent, more friable, and weakly carbonatized.			
30.5	33.19	Dacitic Agglomerate: med. to coarse grained green/grey crystal tuff matrix with large subangular to angular rock frag's (acid volcanics, mudstone and argillite) up to 33 cm. Contains tr-2% diss pyrr.	30.70	31.0	core crosscut by minor dark black veinlets-possibly sulphidic (?), 1mm.	10 18	065° 065°	calcite (milky white, cryptocryst.) calcite
33.19	46.10	Dacitic Tuff: fine to med. groundmass, locally see lapilli tuff with frag's up to 5 cm contains tr-1% diss pyrr.			minor 1mm-2mm black veinlets noted	4 15 7	115° 115° 110°	Calcite, minor rusty staining. Calcite Calcite

Diamond Drill Record

HOLE NO. DDH-1 | Page 2 of 4

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
46.1	47.89	Dacitic Lapilli Tuff: fine to medium grained grey green groundmass with fragments to 4.5 cm contains tr-1% pyrr.						
47.89	63.40	Dacitic tuff with local lapilli sections. Med. grained grey green groundmass with 1-4 mm frag's & crystals. Hornblende phenocrysts partly chloritized contains tr-1% diss pyrr.	48.49	51.56	Core crosscut by numerous (1-2%) 1-2mm dark black veinlets @ 95° and 140° to CA			
63.40	65.9	Dacitic tuff with black argillite interbeds up to 6 cm wide, argillite frag's to 3 cm, 1-2% diss. cubic py, tr-1% diss pyrr.						
65.9	73.6	Black argillite with tuffaceous interbeds. Large bands/beds of argillite up to 43 cm with dark black/grey dacitic (?) tuff orginal textures in tuff are prescribed, but are masked by dark grey color argillite shows subtle layering/bedding @150-160° to CA thin 1mm pyritic veinlets // laminations core is locally cross-cut by vey thin 1mm calcite veinlets that have fractured with cubic py along the salvages. Contains tr-1% diss. py, 2-5% diss pyrr in small 1-2 mm blebs. Unit is moderately magnetic.		68.95		6	120°	calcite, 2% diss cubic py.
			71.57	71.62	thin 1-2mm calcite veinlets cross-cutting and brecciating core, with many 1 mm pyritic veinlets associated within calcite veinlets and around brecciated frag's 1-3 mm py. blebs and cubes.			
73.69	75.69	Dacitic Tuff, 2% diss pyrr.	74.8	75.69	Core is slightly clay altered several fractures @ 135° to CA with 1-2 mm cubic pyrite lining fractures, locally tr. calcite along fractures.			
75.69	75.84	Broken core, brecciated tuff and argillite fragments (up to 2 cm) with corss-cutting calcite veinlets and calcite infilling between frags						

Diamond Drill Record

HOLE NO. DDH-1 | Page 3 of 4

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
		2-4 mm cubic pyrite within calcite (1%).						
75.84	76.28	Black Argillite, massive with no visible laminations, conchoidal fracturing. Crosscut by minor 1 mm pyritic/calcic veinlets, diss pyrr 1-2%						
76.28	76.88	Dacitic (?) Tuff: crosscut by minor thin, dark vlack veinlets 2-3% diss pyrr.						
76.88	79.70	Black argillite with interbedded (?) dacitic tuff. Subtle bedding/ laminations in argillite @ 55° to CA Contains 2-3% diss pyrr, core is moderately magnetic.			thin 1-2 mm calcite veinlets // CA and 150°CA f.g. py and pyrr within veinlets.			
79.7	83.79	Dacitic (?) tuff with minor black argillite frag's and up to 1.5 cm interbeds.			core crosscut by randomly oriented (minor) 1-1 mm dark veinlets.			
83.79	85.46	Massive black argillite, locally laminated/bedded @ 155° to CA, 2-3% diss pyrr.			84.67	55	110	Calcite, with 1 mm stringers along veinlet margin; tr. cubic py within stringers.
					87.78	5	150	Calcite
85.46	98.66	Dacitic Tuff: with local lapill tuff sections and minor argillite interbeds to 1.5 cm locally frag's to 4.0 cm. Contains tr-2% pyrr.	45.7	96.2	Broken, chloritized core brecciated and clay altered with calcite veinlets randomly oriented up to 0.5 cm.			
98.66	101.74	Dacitic tuff gradational with argillite; becomes increasingly dark black 2-4% diss pyrr, core moderately magnetic.	96.93	97.96	altered, broken core chloritized clay altered 1-2 mm calcite veinlets with tr-1% pyrite.			
101.74	102.75	massive and bedded argillite bedding/laminations @ 0-10° to CA; quite graphitic thin 1 mm calcite veinlets and pyrite veinlets // to laminations 1 mm cubic pyrite diss along fractures/veinlet selvages.						
102.75	110.34	Andesitic(?) Tuff with black argillite intervels to 1.2 cm; tuff med. grained, med grey/black. Argillite interbeds trend 005°-015°, locally crosscut by 1-2 mm calcite veinlets and 1 mm pyrite veinlets @ 10° to CA. 1-2% diss pyrr in argillite			104.91	5	155	Calcite

Diamond Drill Record

HOLE NO. DDH-1 | Page 4 of 4

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc. m	ALTERATION, MINERALIZATION etc. %	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance M	VEINLETS minerals in decreasing abundance %
		locally core is crosscut by 1 mm dark black veinlets.	1.52	2.0	.31	23	78.0	80.0	2.00	100
			2.0	4.0	1.10	55	80.0	82.0	2.00	100
110.34	119.79	Andesitic tuff, locally lapilli tuff with angular fragments up to 25 mm matrix is medium grained, dark grey green color contains 1-2% diss pyrr tr 1 mm dark black veinlets chloritization noted along minor shears with 1 - 1 mm calcite veinlets and tr. diss. cubic pyrite associated	4.0	6.0	0.77	38	82.0	84.0	1.80	90
			6.0	8.0	1.54	77	84.0	86.0	2.00	100
			8.0	10.0	1.95	98	86.0	88.0	1.98	99
			10.0	12.0	2.00	100	88.0	90.0	2.00	100
			12.0	14.0	2.00	100	90.0	92.0	2.00	100
			14.0	16.0	1.85	92	92.0	94.0	1.92	96
			16.0	18.0	2.00	100	94.0	96.0	2.00	100
119.79		End of Hole	18.0	20.0	1.94	97	96.0	98.0	1.85	92
			20.0	22.0	1.96	98	98.0	100.0	1.53	76
			22.0	24.0	2.00	100	100.0	102.0	2.00	100
			24.0	26.0	1.45	78	102.0	104.0	1.99	99
			26.0	28.0	1.97	98	104.0	106.0	1.86	93
			28.0	30.0	1.99	99	106.0	108.0	2.00	100
		SAMPLE NUMBER	30.0	32.0	2.00	100	108.0	110.0	1.99	99
			32.0	34.0	1.85	92	110.0	112.0	1.98	99
22.0	23.0	8301	34.0	36.0	1.95	95	112.0	114.0	1.94	97
23.0	24.0	8302	36.0	38.0	1.90	95	114.0	116.0	2.00	100
49.0	50.0	8303	38.0	40.0	1.94	97	116.0	118.0	1.96	98
50.0	51.0	8304	40.0	42.0	1.10	55	118.0	119.79	1.72	96
66.0	67.0	8305	42.0	44.0	1.48	74				
67.0	68.0	8306	44.0	46.0	1.93	96				
68.0	69.0	8307	46.0	48.0	2.00	100				
69.0	70.0	8308	48.0	50.0	1.92	96				
75.0	76.0	8309	50.0	52.0	2.00	100				
76.0	77.0	8310	52.0	54.0	1.97	98				
95.0	96.0	8311	54.0	56.0	1.95	97				
96.0	97.0	8312	56.0	58.0	2.00	100				
97.0	98.0	8313	58.0	60.0	1.96	98				
101	102	8314	60.0	62.0	2.00	100				
102	103	8315	62.0	64.0	1.94	97				
109	110	8316	64.0	66.0	1.98	99				
			66.0	68.0	1.96	98				
			68.0	70.0	1.95	98				
			70.0	72.0	2.00	100				
			72.0	74.0	1.96	98				
			74.0	76.0	2.00	100				
			76.0	78.0	1.71	86				

Diamond Drill Record

LOCATION: L5+50S,0+52E			HOLE NO. DDH-2 | Page 1 of 5
AZIMUTH: 090°	DIPS - collar 45 °	CONTRACTOR: Phil's Diamond Drilling Ltd.	PROPERTY: DECEPTION Creek
ELEVATION: 944.9 m (3100')	- 118.26m 45 °	LOGGED BY: L. Holmgren	CLAIM NO.
LENGTH: 118.26 m (388')	- m °	DATE: July 20-23, 1986	SECTION NO.
CORE SIZE: BQ	- m °		STARTED: July 19, 1986
PURPOSE: To intersect VLF-Em conductor coincident with soil geochem at depth.			COMPLETED: July 23, 1986

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
0	3.96	Casing						
3.96	5.11	Rubble/subcrop weathered, broken core-dacitic lapilli tuff with rusty weathering along fractures						
5.11	26.80	**Dacitic Lapilli Tuff:** medium grey green maatrix, med. grained with 1-2 mm hornblende phenocrysts. angular-subangular rock frag's from 1 mm to 36 mm, randomly oriented. There is 20% of them in a finer grained matrix. Where 2-6 mm frag's are concentrated there is between 30-40% rock frag's include dark brown/black mudstone, argillite/both with locally preserved bedding and volcanic fragments. Contains tr-1% diss pyrr. some sections are fine to med. grained with very few frag's possiblyflow sections, with bedding(?) at 145° to CA. apparent contact between sections is 120° to CA Minor argillite/ mudstone interbeds (1-11 mm) wide at 145° to CA.	5.11	13.73	rusty staining along fractures	10.05 10.55	6 4	145° 150°	Calcite, rusty staining along fractures Calcite, minor rusty staining
					patchy chloritic/clay alteration noted, also weak carbonatization noted locally			
			23.26	27.08	moderate carbonatization pervasive throughout core.			
26.80	29.72	**Dacitic Agglomerate** subangular to angular rock frag's up to 7.5 cm in a fine-med. grained grey green groundmass mafics (hornblende phenocrysts) are intensely chloritized within rock fragments. Contains minor diss pyrr. pyrite occurs along fractures and as tr diss within arg/mudstone fragments.			locally, weak to moderately carbonatized patches. Minor chloritic altered patches. Minor chloritic altered patched noted.			
					Crosscut locally by minor 1 mm randomly oriented dk black (?) veinlets with tr cubic py crosscut unit.			

Diamond Drill Record

HOLE NO. DDH-2 | Page 2 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.		VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
29.72	34.23	**Dacitic Tuff:** fine to med. grained grey green groundmass with 2-4 mm frags. locally some very fine grained sections. Subtle bedding @ 145-150° to CA			1-2 mm dark black veinlets noted locally // to CA.	29.99	2	125°	Calcite, pyrite
						31.61	1	125°	Calcite, pyrite
						33.16	2	155°	Calcite, 1-3 mm cubic pyrite
						33.19	1	130°	Calcite, pyrite
						34.19	2	130°	Calcite (crystalline, vuggy), py.
34.23	36.57	**Dacitic Lapilli Tuff:** 2-6 mm frag's in a fine to med. grained grey green goundmass, with frag's up to 3 cm common locally hornblende phenocrysts weakly chloritized.				34.78	3	130°	Calcite, 1 mm cubic pyrite
						35.62	2	135°	Calcite, 1-3 mm cubic pyrite
36.57	39.70	**Dacitic Tuff:** fine-med. grained, pale grey green tr-1% diss pyrr. Minor 2-4 mm arg. fragments.			locally get minor 1 mm black veinlets @ 115 and 135° to CA	37.03	3	120°	Calcite
39.70	52.73	**Dacitic Lapilli Tuff:** with dacitic tuff sections up to 75 cm as well as argillite beds. Tuff sections are fine-med. grained pale grey green lapilli sections contain angular to subangular fragments to 4 cm contains tr-2% diss pyrr, tr. diss. pyrite black/brown argillite noted in patches and interbeds up to 3 cm wide. Subtle bedding noted at 135° to CA tr.-1% diss pyrr and pyritic veinlets (lmm) // to bedding in thin argillite.				39.91	6	125°	Calcite
			47.11	47.42	Core crosscut by 1-2 mm calcite veinlets ar 145° to CA				
52.73	54.10	Massive and/or bedded black argillite, with bedding @ 135° to CA Contains 1-2% diss pyrr and 1 mm pyrite and pyrite/calcite veinlets // to bedding. Interbedded with minor dark grey lapilli tuff. Bedding @ 155° also noted.	53.37	53.72	locally corsscut by an intense network of 1 mm dark black veinlets with associated 1 mm pyritic veinlets @ 120° 2-4% diss pyrr noted here.	54.09	9	155°	Calcite, cubic pyrite
54.10	54.64	**Lapilli Tuff:** with interbedded black argillite beds to 4 cm (as above).							
54.64	57.73	**Dacitic Lapilli Tuff:** Med grey green goundmass, frag's 2-6 mm commonly, up to 2 cm Fine grained flows (?) within bedding @ 145° to CA. tr-1% diss pyrr, tr diss py.							
57.73	57.91	**Massive black argillite:** 2-3% pyrr. Contact with underlying volcanics is 160° to CA				57.90	1	160°	pyrite, calcite
						57.90	2	160°	pyrite, calcite

Diamond Drill Record

HOLE NO. DDH-2 | Page 3 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
57.91	62.23	**Dacitic Lapilli Tuff:** dark grey green-med. grey green with mostly 2-6 mm frag's, up to 2.5 cm fragments noted. tr-1% diss pyrr, tr diss pyrite.			thin fractures locally lined with minor calcite and 1-2 mm cubic pyrite @ 125° to CA			
62.23	72.23	**Dacitic Tuff:** med. grey green, med. grained with local lapilli sections 1-2 % diss pyrr. fining upwards noted, bedding @ 150° CA, minor angular argillite fragments to 0.8 cm, minor 1-2 mm argillite interbeds.			locally get minor 1 mm black crosscutting veinlets. Also 1 mm calcite veinlets & fracture coatings noted all @ 120° to CA			
						64.61	1	120°	Calcite, tr. diss cubic pyrite
						67.98	4	115°	Calcite, diss pyrr blebs to 3 mm
						68.23	2	120°	Calcite, diss pyrr.
						68.28	1	120°	
						68.93	1	120°	Calcite, diss pyrr.
						69.74	2	120°	Calcite, pyrite
						70.09	1	115°	Calcite, tr. pyrite
						72.17	1	130°	Calcite, tr cpy.
		@ 135° to CA	70.07	70.15	Intense 1 mm black veinlets	73.47	20	110°	Calcite (locally pale pink), cpy
					crosscutting core.	74.37	55	125°	Calcite (locally pale pink) quite granular
			73.40	73.64	Argillite interbeds	75.13	1	125°	Calcite, diss py
					chloritic/graphitic shears	75.17	1	145°	Calcite, diss py
					with cubic pyrite assoc.	75.85	1	115°	Calcite
						76.83	4	115°	Calcite
			74.21	74.32	intense crosscutting black veinlets with minor thin pyritic veinlets and greenish/ black chloritic/graphitic shears fractures.	77.20	5	135°	Calcite, 2-3% diss pyrr.
			75.01	75.30	intense black veinlets greenish black chloritic/graphitic shears.				
77.23	78.59	**Dacitic Lapilli Tuff:** med. grey green, med grained with 2 mm - 2.5 cm subangular-angular fragments- tr. diss pyrr.							
78.59	82.83	**Dacitic Tuff:** fine-med. grained matrix, med. grey green color; locally find minor 2-8 mm angular rock frag's.	79.39	79.60	large subangular arg. frag's to 3 cm and interbeds up to 5 cm argillite contains tr.-1% diss pyrr. crosscut by 1 mm calcite and pyrite veinlets @ 125° locally get 1-2 cm patches of diss pyrr.	80.24	2	120°	Calcite, pyrr, tr cpy.

Diamond Drill Record

HOLE NO. DDH-2 | Page 4 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
			79.76	79.99	core moderately carbonatized slightly fractured, tr-1% diss pyrite.			
82.83	84.61	**Dacitic Lapilli Tuff:** med. - dark grey matrix with up to 4 cm subangular to angular rock fragments tr-2% diss pyrr.			84.51	2	115°	Calcite, 2-3 mm cubic pyrite
84.61	89.34	**Black argillite** interbedded with dacitic tuff. massive and/or bedded f.g. dk black argillite sections up to 25 cm with fine grained med. grey green dacitic tuff sections to 30 cm. Conatacts between the two 140-150° to CA bedding within argillite 140-150° to CA	88.85	88.97	up to 1 mm pyrr veinlets // to bedding, also 1 mm calcite/py. veinlets. Contains 2-5% diss pyrr. tr.-1% diss py. local graphitic shears. calcite & pyrite veinlets also 90-100° to CA graphitic shear-very black, sooty, core friable.	87.70 87.70	2 6	085° 135°	Calcite, pyrite, tr. pyrr. Calcite, pyrite
89.34	95.18	**Dark grey green dacitic tuff:** with argillite interbeds up to 24 cm as well as containing angular argillite frag's to 4 cm. tuff locally med -fine grained argillite contact/bedding @ 150° to CA. Contains 2-3% diss pyrr.			1 mm calcite and/or pyrite veinlets // bedding within argillite. several 1 mm calcite veinlets throughout tuff @ 115° to CA Locally fractured.	91.15 91.21 91.86	2 2 2	120° 140° 080°	Calcite, 1-2 mm diss pyrite Calcite, py along selvages Calcite, tr. py.
95.18	96.73	**Massive black argillite** with very minor tuff interbeds bedding/contacts @ 155° argillite very well indurated, concoidal fracturing.			crosscutting 1 mm calcite and/or pyrite veinlets @ 95° and 155° to CA Locally graphitic along fractures.	95.49 96.10	6 3 110°	095° 150° Calcite, 2mm diss pyrite blebs.	Calcite, 1-2 mm cubic py diss. Calcite, 1-2 mm cubes, 4-6 mm blebs diss pyrr.
96.73	104.31	**Dark grey green dacitic (?) tuff:** mostly fine-med. grained matrix, locally very coarse grained minor local lapilli tuff sections with frag's up to 2.5 cm contains tr-2% diss pyrr.			locally see minor pervasive carbonatization and tr 1mm dark	100.06	2	
			99.70	99.97	fractured, broken core; chloritized along fractures, moderately clay altered.			
			102.31	102.57	core crosscut by randomly oriented 1-2 mm black veinlets, core moderately carbonatized.			
			103.89	104.11	**as above**			
104.31	105.95	**Dark grey dacitic tuff (as above):** with argillite with beds to 8 cm minor 1 mm pyrite veinlets @ 150° to CA within argillite.			minor local clay alteration with chlorite along fractures.			

Diamond Drill Record

HOLE NO. DDH-2 | Page 5 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
105.95	109.69	**Massive dark black argillite:** concoidal fracturing, very well indurated. Bedding where noted, is either 160° to CA, or 175° to CA. 2-5% diss pyrr in 1-2 mm blebs with very thin interbedded dark grey black tuff.	105.95	106.13	Graphitic shear-dark black, sooty, poorly undurated, carbonate altered with 1-2% 2-3 mm pyrite cubes. 107.37 108.25 108.90	11 3 4	005° 150° 155°	Calcite, pyrite Calcite, 1-2 mm blebs pyrr. Calcite
					1 mm pyrite and 1 mm calcite veinlets noted at 95° and 160° to CA.			
					fractures locally infilled with calcite with pyrite along selvages and tr diss cubes. Smeared pyrr occurs along fractures also.			
109.69	112.25	**Medium to light grey dacitic tuff:** crosscut by 1 mm calcite veinlets locally frag's up to 1.5 cm argillite interbeds to 2.5 cm contacts @ 60° to CA.	111.29	11.48	dark black argillite fragments with stockwork calcite veinlets between frag's 2-3% diss pyrr. 111.51	4	155°	Calcite, pyrr.
112.25	115.05	**Dacitic lapilli Tuff:** Med grey green matrix, frag's commonly 2 mm to 1.6 cm, subangular-angular. Stong chloritization of the hornblende. Tr.-2% diss pyrr.			115.03	2	160°	Calcite
115.05	116.47	**Dacitic Tuff:** med. grey green, med. grained matrix 1-2% diss pyrr.			crosscut by minor 1 mm calcite 115.04	1	155°	Calcite
116.47	118.26	**DAcitic lapilli Tuff:** dark-med. grey green matrix; minor argillite interbeds to 1.4 cm with associated 1 mm py veinlets. Frag's between 1 mm - 2.5 cm . 1 fragment is 8 cm hornblende altered to chlorite; tr-2% diss pyrite.			veinlets @ 145° Calcite & pyrite 116.12 commonly along fractures. 116.49	2 2	155° 150°	Calcite Calcite
118.26		**End of Hole.**						

DDH-2 Core Recovery

Diamond Drill Record

HOLE NO.	Page of

Section from m	Section to m	ROCK m	ROCK %	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.		VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
6.0	8.0	1.49	75		82.0	84.0	2.00	100			Sample Number
8.0	10.0	1.78	89		84.0	86.0	1.98	99	32.0	33.0	8317
10.0	12.0	1.85	92		86.0	88.0	1.94	97	33.0	34.0	8318
12.0	14.0	1.75	87		88.0	90.0	1.84	92	53.0	54.0	8319
14.0	16.0	1.93	96		90.0	92.0	1.77	88	54.0	55.0	8320
16.0	18.0	1.95	97		92.0	94.0	1.96	98	57.0	58.0	8321
18.0	20.0	1.78	89		94.0	96.0	1.97	98	73.0	74.0	8322
20.0	22.0	1.95	97		96.0	98.0	1.91	95	74.0	75.0	8323
22.0	24.0	1.90	95		98.0	100.0	1.78	89	75.0	76.0	8324
24.0	26.0	1.91	95		100.0	102.0	1.80	90	79.0	80.0	8325
26.0	28.0	1.99	99		102.0	104.0	1.88	94	86.0	87.0	8326
28.0	30.0	1.61	80		104.0	106.0	1.86	93	87.0	88.0	8327
30.0	32.0	2.00	100		106.0	108.0	1.78	89	88.0	89.0	8328
32.0	34.0	1.54	77		108.0	110.0	1.96	98	89.0	90.0	8329
34.0	36.0	2.00	100		110.0	112.0	1.78	89	94.0	95.0	8330
36.0	38.0	1.95	98		112.0	114.0	1.97	98	95.0	96.0	8331
38.0	40.0	1.80	90		114.0	116.0	1.75	87	96.0	97.0	8332
40.0	42.0	1.96	98		116.0	118.0	1.93	96	103.0	104.0	8333
42.0	44.0	2.00	100		118.0	118.26	0.26	100			8334
44.0	46.0	2.00	100						107.0	108.0	8335
46.0	48.0	1.92	96						108.0	109.0	8336
48.0	50.0	2.00	100						109.0	110.0	8337
50.0	52.0	1.84	92						111.0	112.0	8338
52.0	54.0	1.98	99								
54.0	56.0	1.82	91								
56.0	58.0	2.00	100								
58.0	60.0	1.93	96								
60.0	62.0	1.94	97								
62.0	64.0	1.78	89								
64.0	66.0	1.85	92								
66.0	68.0	2.00	100								
68.0	70.0	1.94	97								
70.0	72.0	2.00	100								
72.0	74.0	1.85	92								
74.0	76.0	1.99	99								
76.0	78.0	1.90	95								
78.0	80.0	1.79	85								
80.0	82.0	1.98	99								

Diamond Drill Record

LOCATION: L4+60E, 2+98N			HOLE NO. DDH-3 | Page 1 of 5
AZIMUTH: 135°	DIPS - collar 45 °	CONTRACTOR: Phil's Diamond Drilling Ltd.	PROPERTY: DECEPTION CREEK
ELEVATION: 1048.5 m (3440')	-116.78 m 45 °	LOGGED BY: L. Holmgren	CLAIM NO.
LENGTH: 116.78	- m °	DATE: July 26-30, 1986	SECTION NO.
CORE SIZE: BQ	- m °		STARTED: July 25, 1986
PURPOSE: To intersect surface VLF-Em conductor with scattered Zn soil anomalies at depth.			COMPLETED: July 30, 1986

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.		VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
0	3.66	**Casing**							
3.66	4.70	**Rubble/Subcrop**							
4.70	5.87	**Andesitic Tuff:** pale grey-green fine-medium grained 2-3% diss pyrite blebs			crosscubt by 2-3% 1mm dark black	5.03	9	130°	Calcite
					veinlets	5.19	4	120°	Calcite
					rusty staining along fract's	5.20	4	120°	Calcite
					locally thin calcite	5.26	2	130°	Calcite
					stringers, randomly oriented	5.59	1	120°	Calcite
5.87	7,82	**Andesite Tuff:** with interbedded dark black			minor rusty staining along fract's	7.29	2	135°	Calcite, py along selvage
frag's	up to	5 cm. Fragments are randomly oriented, almost breciated in appearance. 1-3% diss cubic pyrite within argillite, py and calcite along fractures, tr-1% diss pyrr, bedding within argillite is locally // to CA			1-2 mm calcite stringers randomly oriented throughout				
7.82	14.36	**Med to fine grained, pale to med. green andesitic tuff:** 1-2% diss py, tr-1% diss pyrr, locally greyish, weakly silicified patches; becomes coarser grained at depth.			crosscut by 2-5% randomly oriented	7.97	3	135°	Calcite, diss cubic pyrite
					1 mm black veinlets, locally this	8.11	1	135°	Calcite
					veining is intense; minor 1 mm	8.38	2	160°	Calcite, diss pyrr, tr cpy.
					calcite stringers randomly	9.49	2	135°	Calcite
					oriented	9.52	1	135°	Calcite
						9.56	1	010°	Pyrite
						10.16	3	150°	Calcite
			10.16	10.24	several 1 mm qtz veinlets	10.41	2	115°	Calcite, quartz, pyrite
					@ 150° to CA	10.42	3	115°	Calcite
						10.45	2	115°	Quartz
			11.02	11.64	moderately silicified, greyish tinge imparted to core; intense network of black veinlets, randomly oriented.				
			14.00	14.36	minor argillite interbeds within	13.08	3	140°	Calcite
					tuff (up to 1 cm)	13.86	2	115°	Calcite/quartz

Diamond Drill Record

HOLE NO. DDH-3 | Page 2 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.		VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
14.36	15.80	**Massive dark black argillite:** with minor andisitic tuff interbeds, strongly overprinted by dark grey color, and minor lapilli tuff interbeds, with frag's to 14 mm; 1-4% diss pyrite; tr-1% diss pyrr.			crosscut by 2-3%, 1-2 mm randomly oriented calcite and quartz veinlets and stringers containing diss pyrite; 1 mm pyrite stringers common.	14.39 15.52	22 2	025° 120°	Calcite, tr. diss pyrite calcite, tr. pyrite along selvag
15.80	109.12	**Massive/Bedded Black Argillite** with local grey-black bands/interbeds; bedding/veining btwn 135-155° to CA; contains 2-3% diss py. tr-2% diss pyrr.			crosscut by 1-4% calcite and/or quartz veinlets and stringers from 1-2 mm randomly oriented general trend is @ 135° diss 1-2 mm blebs of pyrr, pyrite along selvages, and 1 mm py. veinlets are common	16.55 16.65 16.69 17.32 19.54 20.07 20.23 20.34 20.81 21.37	3 1 1 3 3 3 3 3 6 4	140° 140° 140° 115° 075° 135° 125° 115° 150° 160°	qtz/calcite qtz/calcite quartz/calcite quartz/pyrr blebs quartz/diss pyrr blebs quartz calcite/quartz calcite/quartz clacite/quartz/ tr py/ tr pyrr. calcite/minor quartz
		3 main types of veining: 1) calcite margins with quartz grains & veinlets within 2) mostly calcite with occassional quartz 3) milky white/crypto crystalline quartz may be chloritic along shears/fractures also locally graphitic			pyrite & pyrr may be found smeared along fractures	21.50 21.52 22.97 23.06	10 10 16 9	155° 155° 165° 140°	calcite/quartz calcite/quartz calcite/quartz/pyrite along sel. pyrite/calcite/quartz
			23.40	27.92	only minor 1 mm calcite/qtz veinlets/stringers-core predominantly dark grey/black	23.09 23.21 23.26	5 4 7	145° 145° 145°	quartz quartz/calcite quartz/calcite
			26.65	26.83	core cut by 6 veinlets, all at 135° to CA veinlets are quartz with py along selvages, diss py and tr. diss cpy all veinlets 3 mm wide.				
			31.59	31.92	core crosscut by numerous calcite/quartz veinlets & stringers also fracture fillings that contain up to 50% pyrr. in blebs and veinlets pyrr blebs occur along selvages or diss within veinlet diss py and tr. diss cpy also noted.				
			33.51	33.73	diss. pyrr aligned // to bedding @ 145° to CA, up to 10% pyrr.				
			35.09	36.30	moderate calcite/quartz veinlets/stringers with assoc. pyrr blebs and veinlets				

Diamond Drill Record

HOLE NO. DDH-3 | Page 3 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
			37.15	39.02	core grey green/black only minor quartz/calcite veinlets, 1-2% diss py. tr-2% diss pyrr.			
			39.02	39.60	moderate calcite/quartz veinlets and stringers with 3-4% pyrr blebs and small veinlets.			
			39.60	40.05	pyrr aligned // to bedding @ 155° to CA, up to 10% pyrr.			
			40.47	42.21	pyrr aligned // to bedding @ 140° to CA			
			41.75	42.12	core fractured and sheared // to CA, moderately graphitic, f.g. diss pyrite along fractures, 1 mm py veinlets // fracture.			
			42.31	42.39	graphitic shear			
			42.71	42.86	1 mm quartz/pyrr veinlets @ 155° to CA 43.24	3	150°	quartz/diss pyrr blebs
			43.96	46.0	interbedded dark black/grey beds @ 155°, up to 8% diss pyrr blebs commonly aligned // to bedding			
			46.0	46.8	graphitic shear			
			46.70	78.52	very few calcite/quartz/stringers veinlets			
					core massive/dark black 47.07	2	130°	pyrr/calc/quartz
					47.23	4	010°	calcite/pyrr/tr cpy
			74.67	47.88	quartz, pyrr fracture infillings and veinlets to 6 mm @ 165° to CA, qtz along selvages pyrrhotite in centre.			
					48.60	7	160°	quartz/pyrr/calcite/tr cpy
					50.56	2	170°	pyrr/quartz/calcite
			50.89	51.17	core crosscut by numerous calcite quartz veinlets and stringers, // to CA			
					with diss pyrr blebs 51.87	4	140°	calcite, tr pyrr.
			52.17	52.46	core crosscut by numerous up to 6 mm calcite/pyrr/qtz veinlets/stringers-randomly oriented			
					53.04	6	140°	calcite/pyrr/quartz
					53.32	2	125°	calcite/quartz/pyrr
			54.15	59.72	bedded/banded argillite with 53.47	2	130°	calcite/quartz/pyrr
					grey black and dark black beds 54.15	4	015°	calcite/pyrr/quartz
					commonly 1-2 mm, locally up to 14 cm			

Diamond Drill Record

HOLE NO. DDH-3 | Page 4 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
					Bedding is at 015° to CA; 58.58 diss pyrr may be aligned // to bedding, tr.-2% locally, thin pyrr stringers also noted. minor calcite/quartz veinlets/ stringers, locally patchy minor thin pyrite stringers also.	3	015°	calcite/pyrr/quartz
			55.0	55.78	broken/fractured core, low recovery			
			49.85	60.85	fractured/broken core			
			60.95	63.02	moderate calcite/quartz veinlets/stringers more common here.			
			62.20	65.92	local grey/black interbeds within massive and bedded black argillite bedding @ 020°			
			65.95	66.25	locally graphitic			
			66.29	66.78	moderate calcite/quartz stringers/veinlets up to 15% diss py/pyrr locally py/pyrr veinlets and stringers common.			
			68.30	72.40	moderate to strong calcite/ 70.95 quartz stringers/veinlets minor inter-bedded dark grey black beds/argillaceous tuff? up to 10% diss py locally graphitic along fractures diss py aligned // to bedding @ 025°	8	125°	calcite
			75.40	76.67	as above, 2-7% diss py quite graphitic along fractures			
			76.67	77.75	massive black argillite with numerous pyrr/calcite/quartz/ pyrite stringers, tr. cpy noted possibly tr. sphalerite (crystalline red/orange, 1mm) Calcite/quartz sell around sulphide blebs			
			77.95	78.48	core fractured // to CA, moderately graphitic			
			78.52	96.54	massive black argillite with interbedded grey/black bands // to CA, 1-3 mm wide crosscut by numerous quartz and pyrite stringers, diss cubic py locally aligned // to bedding (005° to CA) bedding varies from 000-010°			

Diamond Drill Record

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Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
			79.4	80.23	core crosscut by numerous (2-3%) calcite/quartz veinlets between 1-6 mm, @ 165° to CA, with tr. diss pyrite.			
			83.79	85.46	fractured/broken/sheared core. Locally quite graphitic tr-1% crystalline sphalerite? within calcite/quartz stringers also containing diss py & pyrr			
			89.49	89.84	sheared/fractured/broken core 88.06 locally graphitic.	4	160°	calcite/quartz/tr. py.
			90.81	91.39	core crosscut by moderate stron calcite quartz veinlets/stringers tr. crystalline sphalerite?			
			96.54	97.32	moderate-strong calcite/qtz veinlets stringers with associated pyrite stringers			
			99.88	106.74	interbedded massive black argillite with grey black tuffaceous interbeds, locally convoluted bedding massive argillite fragments to 20 cm, small fractures infilled with f.g. pyrite.			
			106.74	109.48	massive black argillite 107.87	3	140°	calcite/pyrite
					many 1 mm calcite veinlets 107.94	2	140	calcite
					@ 135° to CA; pyrite stringers 108.01 fillings.	5	135°	calcite/tr pyrite
			108.76	109.12	moderate-strong calcite/quartz veinlets stringers.			
109.12	113.98	**Dark grey black-dark grey green fine grained tuffaceous argillite** very massive local minor 1 mm calcite veinlets tr-1% diss 1 mm pyrr blebs.	113.31	113.48	chloritic fractures 113.79	2	045°	quartz
113.98	116.78	**Black Argillite** as before; massive, with 1-2% 1-2 mm calcite veinlets, randomly oriented.			116.54	4	005°	quartz
116.78		**END OF HOLE**						

DDH-3 CORE RECOVERY

Diamond Drill Record

HOLE NO. | Page of

Section		ROCK		Interval		ALTERATION,		VEINLETS		
from m	to m	m	% DESCRIPTION	from m	to m	m	% MINERALIZATION etc.	Thickness mm	Angle to core	minerals in decreasing abundance
3.66	6.0	1.38	59	82.0	84.0	1.99	100			Sample Number
6.0	8.0	2.00	100	84.0	86.0	1.76	88	61.0	62.0	8356
8.0	10.0	1.88	94	86.0	88.0	1.96	98	68.0	69.0	8358
10.0	12.0	2.00	100	88.0	90.0	2.00	100	70.0	71.0	8359
12.0	14.0	1.77	88	90.0	92.0	1.90	95	71.0	72.0	8360
14.0	16.0	1.96	98	92.0	94.0	1.91	96	75.0	76.0	8361
16.0	18.0	2.00	100	94.0	96.0	1.92	96	76.0	77.0	8362
18.0	20.0	1.90	95	96.0	98.0	1.77	88	81.0	82.0	8363
20.0	22.0	1.84	92	98.0	100.0	1.54	77	82.0	83.0	8364
22.0	24.0	2.00	100	100.0	102.0	1.91	96	84.0	85.0	8365
24.0	26.0	2.00	100	102.0	104.0	1.99	100	91.0	92.0	8366
26.0	28.0	1.87	94	104.0	108.0	1.98	99	96.0	97.0	8367
28.0	30.0	1.86	93	108.0	110.0	2.00	100	111.0	112.0	8368
30.0	32.0	1.90	95	110.0	112.0	1.93	96			
32.0	34.0	1.96	98	112.0	114.0	1.99	100			
34.0	36.0	1.97	98	114.0	116.0					
36.0	38.0	2.00	100	116.0	116.78					
38.0	40.0	2.00	100							
40.0	42.0	1.98	99							
42.0	44.0	2.00	100							
44.0	46.0	1.96	98			Sample Numbers				
46.0	48.0	1.92	96	11.0	12.0	8339				
48.0	50.0	1.75	88	14.0	15.0	8340				
50.0	52.0	2.00	100	15.0	16.0	8341				
52.0	54.0	2.00	100	20.0	21.0	8342				
54.0	56.0	1.43	72	25.0	26.0	8343				
56.0	58.0	2.00	100	26.0	27.0	8344				
58.0	60.0	1.88	94	31.0	32.0	8345				
60.0	62.0	1.55	74	32.0	33.0	8346				
62.0	64.0	1.81	90	33.0	34.0	8347				
64.0	66.0	1.98	99	36.0	37.0	8348				
66.0	68.0	2.00	100	39.0	40.0	8349				
68.0	70.0	2.00	100	42.0	43.0	8350				
70.0	72.0	1.97	98	44.0	45.0	8351				
72.0	74.0	2.00	100	52.0	53.0	8352				
74.0	76.0	1.92	96	54.0	55.0	8353				
76.0	80.0	2.00	100	55.0	56.0	8354				
80.0	82.0	2.00	100	56.0	57.0	8355				

LOCATION: L4+88E, 4+18N	Diamond Drill Record		HOLE NO. DDH-4 Page 1 of 5
AZIMUTH: 135°	DIPS - collar 45°	CONTRACTOR: Phil's Diamond Drilling Ltd.	PROPERTY: DECEPTION CREEK
ELEVATION: 1040 m (3410')	- m °	LOGGED BY: L. Holmgren	CLAIM NO.
LENGTH: 110.60 m (363')	- m °	DATE: August 1-4, 1986	SECTION NO.
CORE SIZE: B.Q.	- m °		STARTED: August 1, 1986
PURPOSE: To intersect at depth surface VLF-Em conductor with associated scattered Zn in soil anomalies			COMPLETED: August 4, 1986

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.		VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
0	3.96	**Casing**							
3.96	5.26	**Rubble/Subcrop**							
5.26	23.13	**Andesitic Lapilli Tuff:** dark grey green locally balckish green med. grained matrix matrix may be locally silty (argillaceous) contains subangular to angular fragments from 1 mm to 4 cm, 1 fragment is 16 cm Stron alteration of mafics to hornblende. Larger fragments of a pale green fine grained volcanic with strongly chloritized hornblende phenocrysts are common (similar to fragments in DDH-1 and DDH-2). Black argillite fragments also noted. Locally sections with medium to dark grey green groundmass, fine to medium grained tuff (no fragments) also minor black silty argillacous interbeds.	5.26	14.31	rusty staining along fractures	7.65	4	160°	calcite, rusty staining
			11.62	11.75	core with numerous 1 mm parallel calcite/quartz veinlets @ 125° to CA	7.93	4	130°	calcite, tr. pyrite
						8.00	3	100°	calcite
						8.02	4	100°	calcite
			13.48	13.62	core with parallel calcite veinlets (1 mm) @ 125°	13.62	2	145°	calcite/qtz/py along selvages with associated rusty staining
					with 2-3 mm calcite stringers	14.05	6	140°	calcite/qtz grains/ py blebs along selvage/rusty staining
			14.17	14.27	core with parallel qtz/calcite veinlets @ 135°	14.17	75	135°	qtz/milky yellowish/white with (1mm) fibrous pale green crystals // aligned (talc?)
						14.46	7	130°	quartz
						14.78	5	120°	quartz/calcite.
			14.63	14.76	chloritic shear-core strongly chloritized-shear @ 160° to CA	15.30	11	130°	quartz (milky white/clear
						15.75	5	125°	crystalline), pyrr bleb (2mm)
			14.84	14.95	core with parallel quartz and	15.94	12	135°	clacite/qtz grains/ pyrite
						16.12	35	145°	calcite/qtzgrains/tr py & pyrr blebs, tr cpy
			15.51	15.66	graphitic/chloritic shear	16.26	25	90°	calcite/qtz grains/tr py
					solid graphite-up to 1.5 cm	16.50	11	125°	calcite/qtz grains/ pyrr blebs
					qtz stringers @ 15.66 Contain small veinlets, tr cpy	19.70	3	105°	calcite/minor qtz grains/ py along selvages.
						20.03	3	125°	calcite/ tr pyrite
			16.48	17.06	core with parallel calcite qtz veinlets (1 mm) @ 110°	20.19	2	145°	clacite/ minor qtz grains/ tr diss cubic pyrite
			20.70	22.78	strongly chloritized shears fractures	20.94	3	170°	calcite/qtz grains/tr. pyrr
						23.11	19	140°	quartz

Diamond Drill Record

HOLE NO. DH-4 | Page 2 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
23.13	31.91	**Dark blackish green to dark grey green, very fine grained argillaceous tuff** with 1-2% diss pyrr. Subtle bedding (due to color change of grains) @ 115° Becomes more massive at depth bedding not noticeable contains 1-2% 1-2mm calcite stringers randomly oriented within core with associated pyrr and py along selvages and forming thin veinlets, may be patchy and bleb like with stringers.						
31.91	33.60	**Argillaceous Tuff** with interbedded black argillite. Fine grained dark grey green argillaceous tuff with interbeds and frag's of dark black fine grained argillite, up to 5% diss pyrr within argillite. 2-3% diss pyrr, also pyrr bleb and small stringers within tuff beds may be thin (1-2 mm) @ 145°, up to 2.5 cm. All crosscut by 1-2 mm calcite stringers randomly oriented (1-2% tr. cpy noted within. locally minor graphite along fractures						
33.60	46.08	**Dark med. grey green fine grained massive Andesitic Tuff** 1-2% diss pyrr locally may have 1 mm calcite veinlets @ predominantly 135°	41.25			33.61	21	105°	clacite, minor qtz grains
						34.00	8	135°	calcite, tr pyrr
						35.07	1	005°	calcite
						35.39	2	005°	calcite
			45.75	45.95	intense crosscutting qtz with	35.86	2	005°	calcite
					minor calcite veinlets and	36.48	27	115°	calcite, tr diss pyrr
					stringers, randomly oriented	37.25	5	020°	calcite
					contain small 1-3 mm breccia	38.16	1	130°	calcite, diss pyrr blebs
					frag's of tuff. diss py/tr cpy/ tr. bornite?	38.85	2	110°	calcite, diss pyrr blebs, py along selvage
					broken /chloritized core here	39.62	9	130°	calcite
						41.29	1	165°	calcite/pyrite
						41.35	1	165°	calcite/pyrite
46.08	50.39	**Black argillite** with interbedded andesitic tuff; with beds 1-4 mm, larger bands up to 6 cm, massive locally tr.-1% py, thin pyrite veinlets and 1-2 mm fractures infilled with pyrite.	47.55	50.39	core crosscut by numerous 1 mm - 8mm calcite veinlets/stringers randomly oriented locally intense network of veinlets.				

Diamond Drill Record

HOLE NO. DDH-4 | Page 3 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
				49.52	pyrr blebs within veinlets within veinlet-dark black metallic mineral-cannot scratch.			
50.39	58.28	Massive fine grained dark black **argilite** concoidally fracturing 1-2 mm calcite veinlets/stringers with pyrite and pyrr	52.78	52.96	core with 1-2 mm randomly 52.18 oriented pyrr veinlets with py 52.48 blebs/patches within 56.25	3 14 3	170° 95° o2o°	calcite/pyrr blebs within calcite/diss pyrr pyrr/calcite selvage
		numerous 1-2 mm fractures infilled with calcite 1-2% diss pyrite, tr-1% pyrr blebs and stringers, tr. cpy. Locally quite graphitic.	53.35 56.52	53.44 56.66	graphitic shear/fracture @ 165° numerous (2-3%) crosscutting calcite veinlets, randomly oriented. Py and pyrr along selvages			
			57.98 58.18	58.11 58.30	calcite/qtz veins with associated stringers diss py and py blebs within veinlets.			
58.28	62.16	**Banded/beded Argillite**	59.26	59.41	core cut by 1-2 mm quartz and calcite veinlets, qtz stringers contain brxx; rock frag's with diss cubic py and pyrr blebs 58.90	4	10°	calcite/minor qtz grains/ pyrr
62.16	84.28	Massive dark **black argillite** with dark grey/dark black interbedded sections. massive argillite bands may be up to 2 m separated by banded argillite with beds from 1 mm - 15 mm.	63.04	63.23	core with numerous (1-2%) calcite with minor quartz grains veinlets to 5 mm, randomly oriented diss pyrite and pyrr within			
		bedding/fractures noted at 052°	63.58	64.35	graphitic/chloritic massive black argillite, fractured and broken.			
		1 mm calcite/qtz/pyrr veinlets/ stringers throughout.	66.91	67.15	core with numerous 1-2% calcite with minor quartz grains veinlets randomly oriented with pyrr blebs, pyrite stringers			
		1-2% diss py, locally may have up to 10% diss pyrite. Pyrite also occurs as veinlets along bedding and in thin stringers, pyrr blebs found within calcite/ quartz veinlets pyrite is fine grained along selvages and within calcite/qtz stringers may get patches of fg pyrite with minor pyrr up to 7 mm.	69.75	70.20	broken/fractured core; poor 69.23 recovery 69.25	3 8	75° 10°	calcite/quartz grains calcite/quartz
			70.58	71.32	core crosscut by quartz/minor calcite veinlet swarms (2-3%) containg brxx rock fragments pyrite blebs and fg py 72.84 minor chloritic/graphitic fractures	2	40°	calcite/qtz grains/py selvages
					fg pyrite may form bands up to 4 mm across			
			73.04	73.54	broken/fractured core chloritic/graphitic along fractures, fg pyrite along fractures			

Diamond Drill Record

HOLE NO. DDH-4 | Page 4 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
			73.77	74.59	numerous (2-3%) calcite/qtz/pyrr stringers and veinlets, randomly oriented.			
76.83	77.69	Interbeds of coarse grained dark green **welded tuff?** grains compacted, aligned parallel to bedding 3-4 % diss pyrr. angular argillite fragments 1-3 mm, up to 5.5 cm fragments aligned @ 150° to CA crosscut by minor 1 mm calcite veinlets.	76.41	76.55	2-3% calcite/quartz veinlets/stringers with pyrr and pyrite blebs within			
			78.61	78.94	argillite brxx by intense network of randomly oriented calcite/qtz veinlets and stringers frag's 1-14 mm, diss py within veinlets, quite graphitic.			
			78.94	79.55	graphitic shear-dark black massive, friable argillite graphite and minor chlorite along fractures; slickenside surface // to CA pyrite/calcite veinlets // to fractures.			
			80.15	80.58	core with 2-3% calcite/quartz stringers veinlets randomly oriented with associated 1 mm pyrite stringers			
					80.10	4	150°	calcite, py blebs along margin
					81.02	2	150°	calcite
83.60	83.71	**welded tuff (as before)**	83.97	84.23	3-4% calcite/qtz stringers/veinlets crosscutting core with diss cubic py within fractured, moderately graphitic			
84.28	86.20	Med. to coarse grained, pale grey green **feldspar porphyry dyke?** with 1-2% 2-3 mm feldspar phenocrysts; 1-2 % diss pyrr						
86.20	88.52	dark grey green **argillaceous mudstone** with minor **feldspar porphyry fragments** towards depth increasing number of 2-3% elongate, flattened 2-8 mm frag's; 1-2% diss pyrr blebs frag's aligned @ 150° to CA.						
88.52	101.80	interbedded massive **black argillite** with with dark grey/dark black banded/bedded argillite with 1% 1 mm calcite veinlets	88.64	88.89	graphitic along fractures/shears	89.63	2	125° fine grained cubic py/calcite
						89.69	2	125° fine grained cubic py/calcite
			90.52	90.81	2-3% qtz infilling fractures up to 6 mm wide with pyrr and py blebs	90.06	5	125° calcite, fg py along selvages and within vein
			90.93	91.04	5% 1 mm calcite veinlets with qtz grains and pyrr blebs within.			

Diamond Drill Record

HOLE NO. DDH-4 | Page 5 of 5

Section from m	Section to m	ROCK DESCRIPTION	Interval from m	Interval to m	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
		// to bedding @ 120° to CA; pyrite stringers and veinlets/ // to bedding. 1-6 mm quartz/calcite veinlets and stringers randomly oriented; coarser grained interbeds noted (up to 4.5 cm) a light to medium grey color, locally shows cross bedding.	92.03	92.17	2-3% crosscutting; 1-4 mm calcite veinlets with quartz grains & pyrr blebs.			
			93.36	93.73	2-3% crosscutting 1-2 mm randomly oriented calcite veinlets/stringers with pyrr blebs, pyrr stringers			
			94.87	95.68	5% quartz/calcite veinlets/stringers 2 mm-10 mm randomly oriented with 2-4 mm brxx argillite frag's within locally; 2-3% pyrr blebs within veinlets, qtz/calcite infilling fractures.			
			95.94	96.15	2-3% 1 mm crosscutting randomly oriented calcite/qtz veinlets/stringers			
			96.56	96.78	3-4% 1-5 mm randomly oriented calcite/ minor quartz grains veinlets/stringers.			
				98.45		3	110°	calcite/pyrr blebs
			97.05	97.33	2-3% 1-2 mm calcite/qtz veinlets 98.46	3	110°	calcite pyrr blebs
					randomly oriented with pyrr blebs 98.54	3	110°	calcite/pyrr blebs
					and small stringers			
			98.34	98.90	broken/fractured core			
			100.25	100.61	core with 1-2% 1-2 mm calcite veinlets @ 115° with pyrite blebs and veinlets; calcite stringers randomly oriented.			
			100.61	100.79	broken/graphitic core-very friable			
			101.60	101.79	2-3% randomly oriented calcite stringers with diss py and pyrr blebs.			
101.80	110.60	very massive, extremely competent dark greenish black **argillite** locally minor 1 mm calcite veinlets; minor 2-3 mm py blebs and fracture fillings; very fine grained diss pyrite (1%)						
110.60		**END OF HOLE**						

DDH-4 core recovery

Diamond Drill Record

HOLE NO. | Page of

Section		ROCK		Interval		ALTERATION.		VEINLETS		
from m	to m	m	% DESCRIPTION	from m	to m	m	%MINERALIZATION etc.	Thickness mm	Angle to core	minerals in decreasing abundance
3.96	6.0	1.19	58	86.0	88.0	1.82	91			Sample Number
6.0	8.0	1.78	89	88.0	90.0	1.87	93			
8.0	10.0	1.96	98	90.0	92.0	1.81	90			
10.0	12.0	1.82	91	92.0	94.0	1.84	92	14.0	15.0	8369
12.0	14.0	1.77	88	94.0	96.0	1.82	78	15.0	16.0	8370
14.0	16.0	1.97	98	96.0	98.0	1.56	78	16.0	17.0	8371
16.0	18.0	2.00	100	98.0	100.0	1.82	91	23.0	24.0	8372
18.0	20.0	2.00	100	100.0	102.0	1.48	74	32.0	33.0	8373
20.0	22.0	1.98	99	102.0	104.0	1.71	85	36.0	37.0	8374
22.0	24.0	1.94	97	104.0	106.0	1.90	95	45.0	46.0	8375
24.0	26.0	1.99	99	106.0	108.0	2.00	100	49.0	50.0	8376
26.0	28.0	2.00	100	108.0	110.0	1.87	93	52.0	53.0	8377
28.0	30.0	1.92	96	110.0	110.60	0.60	100	55.0	56.0	8378
30.0	32.0	1.99	100					57.0	58.0	8379
32.0	34.0	2.00	100					58.0	59.0	8380
34.0	36.0	1.97	98					63.0	64.0	8381
38.0	40.0	2.00	100					66.5	67.5	8382
40.0	42.0	1.87	92					70.0	71.0	8383
44.0	46.0	1.93	96					71.0	72.0	8384
46.0	48.0	1.85	92					73.5	74.5	8385
48.0	50.0	2.00	100					78.0	79.0	8386
50.0	52.0	1.96	98					79.0	80.0	8387
52.0	54.0	1.97	98					80.0	81.0	8388
54.0	56.0	1.95	98					85.0	86.0	8389
56.0	58.0	1.88	94					87.0	88.0	8390
58.0	60.0	1.98	99					93.0	94.0	8391
60.0	62.0	1.98	99					94.8	95.8	8392
62.0	64.0	1.77	88					96.0	97.0	8393
64.0	66.0	2.00	100					100.0	101.0	8394
66.0	68.0	2.00	100					108.0	109.0	8395
68.0	70.0	1.70	85							
70.0	72.0	1.83	91							
72.0	74.0	1.80	90							
74.0	76.0	1.93	96							
76.0	78.0	1.99	99							
78.0	80.0	1.82	91							
80.0	82.0	1.79	90							
82.0	84.0	2.00	100							
84.0	86.0	1.90	95							

INSET MAP

WI ST 05

WI ST 04

X WI R 02

X WI R 01

W3ST03

W3HM03

W3ST02

W3 HM02

W3ST01

W3HM01

109-42,51,10,58

5HMC

110-250,265,4,1130

MINK LAKE

L17+00N

L16+00N

L15+00N

L14+00N

L13+00N

12+00N

X W3R001

X W2 R001

W3 ST 05

W3 ST 06

111-52,177,2,112

WIST 01

WIST 02

WIST 03

L4E

L5E

L6E

L7E

L8E

L9E

L10N

L11E

L12E

OUTCROP?

BOULDER FIELD

L3E

L2E

L1E

L11N

DDH 4

DDH 3

W-3 M.C.

W-1 M.C.

W-4 M.C.

W-2 M.C.

LCP

L9+00N

L8+00N

L7+00N

L6+00N

L5+00N

L4+00N

105-8,25,3,36

5HMC

CAMP

HELICOPTER PAD

105-50,300,3,54

G-14

2 TALUSY, rusty Tuff & black argillite matrix

X W2 R001

Whale Lake

107-137,350,6,86

104-2,8,1,19

4HMC

103-15,59,3,69

BOULDER FIELD

L0+50S

L1+00S

L1+50S

101-89,84,6,105

PIT 01

PIT 02

L2+50S

L3+50S

102-42,94,5,107

106-35,71,2,58

G-12

G-8

L4+50S

L5+50S

L6+50S

L7+50S

L8+50S

L9+50S

L10+50S

L11+50S

L12+50S

L13+50S

L14+50S

L15+50S

WSTIO

WHL06

WST09

WHL05

Trail

W2 ST 11

W2 ST 12

W2 ST 13

CIST01

CIST20

CI ST06

CI HC 03

CI ST02

CI HC 01

CI ST07

CI HC 03

CI ST03

CI HC 02

CI ST04

CI ST05

LCP LCP

CANIM LAKE

C-1

C-2

C-3

3500

3400

2600

2800

2400

CANIM RIVER

LEGEND:

101-89,84,6,105 ○ Stream sediment sample site. - Cu, Ni, Pb, Zn results in P.P.M.

4HMC ⊕ Heavy mineral sample site.

G-12 × Rock sample site.

NOTE: SAMPLES PREFIXED WITH A W or C WERE COLLECTED IN 1984

3 Black argillite + grey chert layers ± grey siliceous tuff layers

2a Dacite agglomerate, altered & carbonatized

2 Dacite agglomerate, acid fragments in black argillaceous matrix + sulphides

1 Augite andesite agglomerate, augite andesite flow or tuff

Outcrop

Rubble, near outcrop

Geological contact inferred

Outline of boulder field

Rock sample No. - Cu, Pb, Zn (p.p.m.), Au (ppb)

DDH 1 Drill hole location

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,142

DECEPTION CREEK PROPERTY

GEOLOGY MAP AND DRILL HOLE LOCATION MAP

0 100 200 300 400 500

1:5000 Metres

NTS 92 F 5 E Rev. Oct., 1986 L.H./r.w.r.

DATE SEPT., 1985 D.C./r.w.r. FIGURE 7