



41010NE0085 18 CUNNINGHAM

010

Dist. Long Br.

Township of CUNNINGHAM

11-1 19

work performed by Bio Canadian Exploration

Claim NO	Section	Area	Year	Notes
S 110814	2(11-1)	467'	Nov-50	
	3(11-2)	350'	Nov-50	

Notes:

REPORT ON DIAMOND DRILLING

CUNNINGHAM TOWNSHIP

ONTARIO

During the Spring of 1959, an airborne electromagnetic and magnetic survey of an area including most of Cunningham and Flamey Townships was completed by Gresham Exploration Limited on behalf of Rio Tinto Canadian Exploration Limited. As a result of this survey, many anomalies were located. One of these anomalies is located on claim S-110814.

A picket-line grid was cut on this anomaly and ground electromagnetic, magnetic and gravity surveys were carried out on this grid. These ground surveys confirmed the presence of the conductor and indicated that it had direct magnetic and gravity correlation.

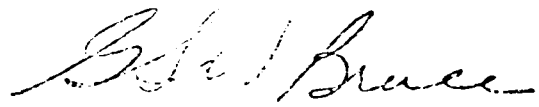
Immediately on completion of the geophysical surveys, the conductor area was mapped geologically. Geochemical soil sampling and sparse chalcopyrite mineralization seen during trenching further indicated that the conductor warranted drilling.

Two diamond drill holes, numbered two (11-1) and three (11-2) were drilled as shown on the accompanying plan. These holes, both of which were AXT size, were drilled to inclined depths of 467.0 feet and 350.0 feet, respectively. The casings were left in both holes and the core is stored at the hole collars.

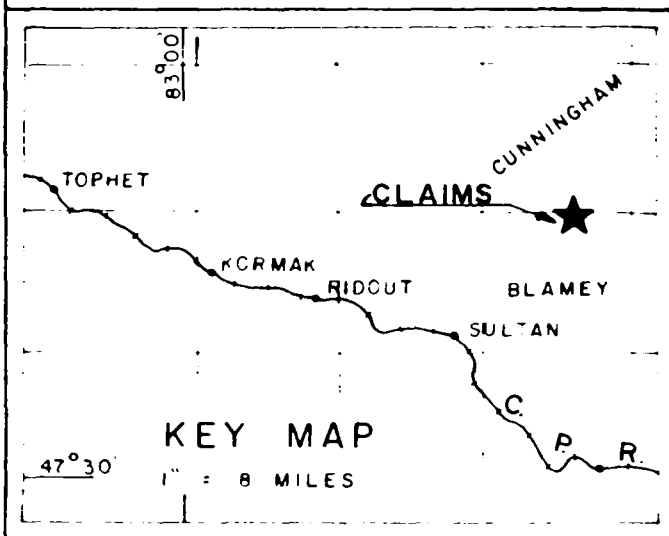
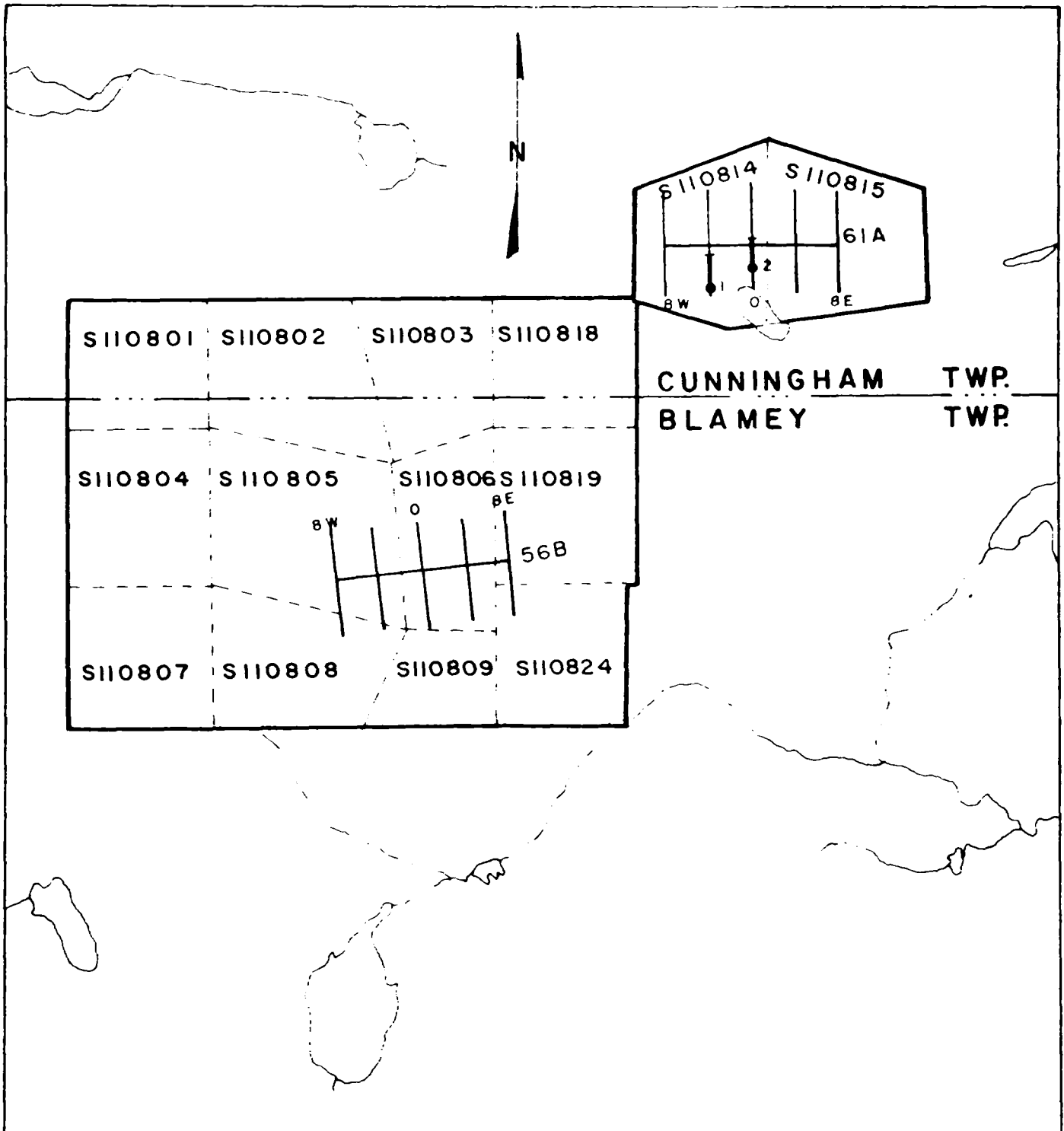
Both of these diamond drill holes penetrated a sulphide - graphite zone which has sufficient conductivity, inherent magnetism and density contrast with the enclosing rocks to account for the geophysical anomalies found during the ground survey.

Very minor amounts of chalcopyrite and sphalerite were observed in both holes, but the mineralization does not warrant further drilling at this time.

MAY 24TH, 1950.  
TORONTO, ONTARIO



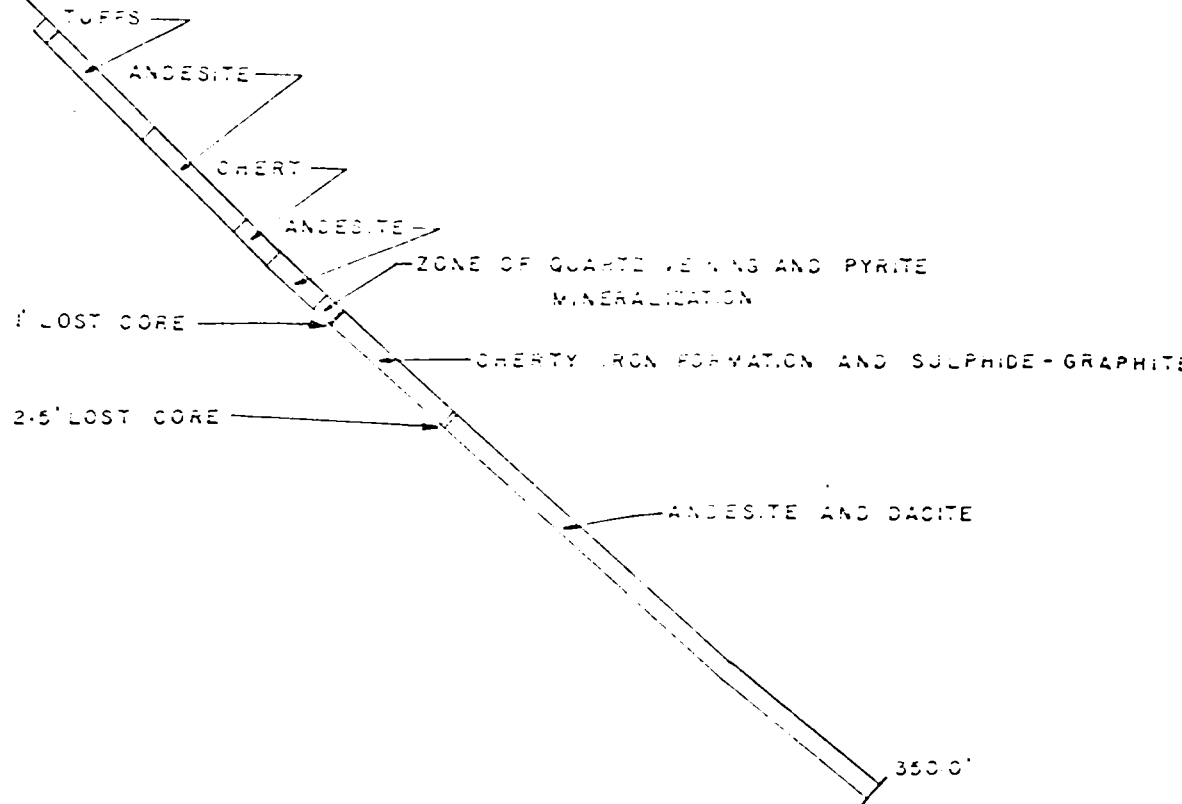
G. S. W. Bruce, P. Eng.



RIO TINTO CANEX LTD.		
CLAIM SKETCH SHOWING DIAMOND DRILL HOLES & GEOPHYSICAL GRID		
CUNNINGHAM & BLAMEY TWP'S. ONT.		
MAY 17, 1960	SCALE: 1" = 1320'	D.G.

345° ( )

LINE - C



RIO TINTO CANEX LTD.

LATERAL SECTION

D.D.H. (33-61A-2) ANOMALY

61A- CDR. SYSTEM - ..

AB-33

CUNNINGHAM TWP. ONTARIO

NOV. 1959 SCALE: 1"=50' G.S.M.B., J.

345° (T)

LINE 4W

Tuffaceous Sediments  
Dolerite Dyke

Tuffaceous Sediments

Andesite

Carbonated Tuffs

Andesite

Andesite

Sulphide-Graphite Zone

Iron Formation  
Sulphide Formation

Sulphide-Tuff-Agglomerate

Sheared Altered Andesite

Sulphide-Graphite Zone

Tuff-Agglomerate

Sulphide-Graphite Zone  
Tuff-Agglomerate

Andesite

Amphibole

Andesite

Amphibole

RIO TINTO CANEX LTD

LATERAL SECTION

CDR. (33-11), ANOMLY S.A

CONDUCTOR SYSTEM N.

AB-83

CUNNINGHAM TWP. ONTARIO

NOV. 1959

SCALE 1"=50'

(S. J.)

North 400° South  
 LOCATION East 345° (T) Line 48  
 BEAR -45° ELEVATION -  
 DIP 467.0 LENGTH 467.0

RIO CANADIAN EXPLORATION LTD.  
 DIAMOND DRILL RECORD

STARTED NOVEMBER 10, 1959  
 COMPLETED NOVEMBER 13, 1959

PROPERTY CUNNINGHAM TWP. - BLOCK 11  
 HOLE No. TWO (11-1) 53-11-1  
 SECTION Conductor System 11 - Anomaly 61A  
 LOGGED BY G. S. W. BRUCE  
 PLOTTED BY at 467.0 etched 50°, corrected 43°  
 DIP TESTS

FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	LOGGING WIDTH	Au. %	Cu. %	Pb. %	Zn. %	AVERAGES
0.0-45.0		OVERBURDEN sand and boulders casing to 48.01 casing above ground 3.0'; depth of overburden 42.0'							
48.0-52.0		TUFFS OR TUFFACEOUS SEDIMENTS pale grey to greenish-grey, fine grained, sericitic and siliceous. Slightly schistose at 70° - 80°, 4-5% fine cubic pyrite throughout.							
52.0-52.0		DOLERITE DYKE medium-fine-grained massive dark green intermediate & non-opilite TUFFS OR TUFFACEOUS SEDIMENTS similar to 48.0 - 52.0 with occasional quartz stringers.							
52.0-120.0		80.0 - 92.0 - local shearing: angle varies from 30° - 60°							
120.0-133.5		ANDESITE: fine-grained dark green near massive andesite with local faint schistosity.							
133.5-148.7		CARBONATED TUFFS (???) pale grey, sheared and banded, sericitic and highly orb-banded shear zone in lavas but more probably old tuffs. Shearing at 85°	211	1.0	Nil	0.10	-	Nil	
		144.0-145.0 - 20% sulphides: predom. po., minor py. & cp.; trace sphalerite.							
		147.7-148.7 - 10% po. & py. in silicified zone.	212	1.0	0.01	0.15	-	Nil	
148.7-168.0		ANDESITE: locally amygdaloidal, highly fractured and sheared. Numerous quartz and quartz-carbonate f.f.; shearing varies from 45° - 90° to core axis.							
		152.2-155.6 - Po., Py., magnetite and traces sp. in cherty zone. Approx. 15% sulphides	213	3.4	0.01	0.05	-	Nil	
		158.0-161.0 - local concentrations heavily dissem. po. & traces sp. in cherty sections	214	3.0	Nil	0.07	-	Nil	

FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	George Width	Au.%	Cu.%	Pb.%	Zn.%	AVERAGES
148.7-168.0 cont'd		156.0-157.0 - Lost core							
168.0-228.9		ANDESITE : near-massive, fine-grained, dark green andesite with oolite, quartz and quartz-carbonate stringers & local sparse dissem. py. (Possibly in part tuffaceous). After 200.0 slight schistosity @ 70 - 75°.							
228.9-230.6		"IRON FORMATION" : cherty and with 30% sulphides predominantly po., with interbedded magnetite and minor sphalerite.	215	1.2	0.01	0.05	-	N11	
230.6-231.5		ANDESITE : with heavily dissem. magnetite, minor po. and traces sphalerite.	216	0.9	N11	0.05	-	N11	
231.5-232.1		CHERT & ANDESITE : with 30% sulphides predominantly po., minor py., traces cp. and sphalerite, minor magnetite.	217	0.6	N11	0.02	-	Tr.	
232.1-236.1		"IRON FORMATION" : cherty magnetite iron formation with some intercalated black carbonaceous layers & some interbedded andesite; oolite, sections heavy po. with minor sphalerite and cp.	218	4.0	N11	-	-	N11	
236.1-239.5		SULPHIDE-GRAPHITE ZONE : (conductor) centered, fractured cherty and graphite phase of iron formation (?); contains 25% po. an irregular network blebs with minor pyrite and very minor cp. and sphalerite.	219	3.4	N11	0.15	-	0.35	
239.5-241.5		SULPHIDE-GRAWHITE ZONE : similar to, and continuous with, 236.1-239.5 but with 15% sulphides, mostly po. with minor cp. and sphalerite.	220	2.0	N11	0.11	-	N11	
241.5-245.3		SILICIFIED "TUFF-AGGLOMERATE" : grayish-green, highly silicified; scattered blebs po. with minor cp.	221	3.8	N11	0.10	-	N11	
245.3-248.0		SULPHIDE-GRAPHITE ZONE : similar to 236.1-239.5 with 10 - 15% sulphides, predominantly po. with minor pyrite, traces cp. and sphalerite.	222	2.7	0.01	0.07	-	0.43	
248.0-256.0		SILICIFIED ALTERED ANDESITE : (??) pale gray, schistose, variably carbonated schistosity to 80° (could be tuffaceous)							



FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	FOOTAGE WIDTH	AU.%	CU.%	PB.%	ZN.%	AVERAGES
256.0-265.0		<u>SULPHIDE-GRAPHITE ZONE</u> ; similar to 236.1-239.5; 15 - 20% sulphides, predominantly pe. with minor cp. and sphalerite; highly fractured and contorted.	223	9.0	-	0.10	N11	TF.	
265.0-301.2		* <u>TUFF-AGGLOMERATE</u> ; similar to 241.5-245.3; pale whitish-grey, fine-grained, with pale grey sphalerite fragments and an average of 10% disseminated blebs pe.; with minor py. 297.5-301.2 - highly altered zone with minor cp. & sphalerite	224	3.7	N11	0.12	-	N11	
301.2-313.0		<u>SULPHIDE-GRAPHITE ZONE</u> (conductor) similar to 256.0 - 265.0 301.2-308.4 - 10-15% pe., minor py., traces cp., sphalerite	225	2.2	N11	0.07	-	TF.	
313.0-319.0		* <u>TUFF-AGGLOMERATE</u> ; similar to 265.0 - 308.4-313.0 - 10-12% pe. and py. 301.2; very little sulphides after 317.0	226	4.6	0.01	0.10	-	N11	
319.0-346.0		<u>ANDSITE</u> ; dark green, chloritic, slightly schistose at 80°; may be tuffaceous in part.							
346.0-356.5		<u>RHYOLITE</u> ; (?) massive, fine-grained, yellowish-white and cherty; clay feldspar crystals present.							
356.5-379.0		<u>ANDSITE</u> ; similar to 319.0 - 346.0; numerous quartz D.P.							
379.0-382.5		<u>RHYOLITE</u> ; (?); possibly dacitic medium to fine-grained, greyish-green.							
382.5-467.0		<u>ANDSITE</u> ; similar to 319.0 - 346.0; possibly tuffaceous.							
467.0		END OF HOLE; 46 feet of casing left in and hole left open.							

North 200° South  
 LOCATION East Line 0

**RIO CANADIAN EXPLORATION LTD.**  
 DIAMOND DRILL RECORD

PROPERTY CUNNINGHAM TWP. BLOCK 11 - AB-33  
 HOLE No. TIBEE (11-2)

BEAR 345° (T) ELEVATION -  
 DIP -45° LENGTH 350.0'

SECTION Conductor System 11 - Anomaly 61A  
 LOGGED BY G. S. V. BRUCE

STARTED NOVEMBER 16, 1959  
 COMPLETED NOVEMBER 19, 1959

PLOTTED BY  
 DIP TESTS at 350.0 etched 47°, corrected 40°

FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	PYRITE	QU.	PB.	ZK.	Q <sub>1</sub> Q <sub>2</sub>	AVERAGES
0.0-54.0		<u>OVERBURDEN : sand, gravel and boulders; casing to 59.01 casing above ground 3.0'; depth of overburden 51.0'.</u>							
59.0-94.3		<u>TUFFS (?) : fine-grained grey gillstone and locally orenulated; similar to hole two 57.0-120.0; oolite, quartz fracture filling; Schistosity 70° - 85° to core axis.</u>							
		<u>66.0 - 67.5 - lost core</u>							
		<u>74.0 - 75.0 - lost core</u>							
		<u>88.5 - 90.0 - lost core</u>							
		<u>92.7 - 94.3 - fracturing and quartz injection with minor pyrite.</u>							
94.3-128.0		<u>ANDSITE : fine-grained, dark green and chloritic. Oolite. fine quartz. f.f. local shear zones and local fine accessory pyrite. faintly schistose 70 - 85°.</u>							
		<u>123.0 - 123.5 - lost core</u>							
128.0-140.0		<u>CHERT: very fine grained, massive and yellowish - white oolite. Pyrite grams; oolite. minor shears and fractures.</u>							
140.0-156.2		<u>ANDSITE : fine-grained, dark green, slightly schistose; considerably fractured with numerous quartz f.f.; schistosity varies locally but usually at about 90°.</u>							
156.2-162.0		<u>ZONE OF QUARTZ VEINING AND PYRITE MINERALIZATION :</u>	227	5.8'					
		<u>Predominantly injected quartz with oolite and andesite remnants; section contains about 15% pyrite as local heavily disseminated masses. Traces Qp.</u>							
162.0-163.0		<u>LOST CORE</u>							

RIO CANADIAN EXPLORATION LTD.

FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	FOOTAGE depth	CU.	PB.	ZN.	AVERAGES
16,0-201.0		CHERTY IRON FORMATION AND SULPHIDE-GRAPHITE ZONES :						
163.0 - 167.5		Iron formation with minor magnetite 10% sulphides predominantly pyrite with traces op. and sphalerite, occur. Graphitic silpns.	228	4.5'	0.05		Nil	0.25
167.5 - 169.0		lost core						
169.0 - 172.0		Black carbonaceous to graphitic argillite with 15% fine interlamellar stringers po. and py. i minor op. and sphalerite associated with silicified or cherty partings. Schistosity at 20° - 90°	229	3.0'	0.12	0.52	Nil	
172.0 - 172.6		lost core						
172.6 - 175.0		black carbonaceous argillite, oreminated and with minor pyrite.	230	4.5'	0.14	Nil	Nil	
175.0 - 179.5		predominantly cherty phase of iron formation with 10-12% pyrite.	231	2.2'	0.07	0.15	Nil	
179.5 - 187.2		argillaceous, sub-graphitic schistose at 60° - 90° with 15% sulphides, predominantly py.	232	2.2'	0.08	Nil	Nil	0.25
187.2 - 189.4		cherty phase with some graphitic argillaceous material somewhat over 15% pyrite as fine stringers and blebs.						
189.4 - 191.1		lost core						
191.1 - 195.3		black graphitic argillaceous phase with local heavy sulphide concentrations average 10% pyrite.	233	4.2'		0.3	Nil	
195.3 - 196.5		lost core						
196.5 - 201.0		(best portion as to conductivity) black carbonaceous graphitic zone with 30% sulphides, mostly pyrite.	234	4.5'			Nil	

FOOTAGE	SECTION	DESCRIPTION	SAMPLE No.	FOOTAGE DATE	CU.	ZN.	AU.	AVERAGES
20.0-202.5		<b>LOST CORE</b>						
201.0-350.0		<b>ANDSITE AND DACITE</b> : fine-grained grey to dark green massive to schistose and fractured andesite to dacite.						
		202.5 - 233.0 : andesite with numerous fine quartz f.f.; somewhat schistose @ about 70°; becoming <b>VERY</b> highly fractured after 219.0.						
		233.0- 247.7 : pale grey dacite, considerably fractured and with numerous slip shears.						
		242.0 - 255.3 : probably major fault zone. - 60% core recovery						
		243.0-247.9 - highly brecciated, fractured and carbonate-injected.						
		247.9-248.7 lost core						
		248.7-255.3 highly altered brecciated and fractured andesite. Many abt. f.f.						
		255.3 - 261.3 : Predom. very f.g. grey massive dacite						
		261.3 - 288.3 : highly altered and fractured dark green andesite with many fine qtz. and qtz.-abte. f.f. minor local silicified lenses occur. necessary py.						
		285.5-288.3 strong 40° shearing - probable fault						
		288.3 - 304.0 : grey moderately schistose orthomylonitic dacite; schistosity at 60°						
		301.5-303.5 strong 30° - 40° shearing.						
		304.0 - 350.0 : f.g. dark green, chloritic and sl. schistose andesite. Cons. fracturing and numerous minor shears;						

