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TASEKO PROJECT
 1986 DRILLING REPORT
 Clinton Mining Division, B.C.
 NTS 920/3W
 Lat: 51°06'54" Long: 123°28'18"48"

Owned by:
 Esso Resources Canada Limited
 Westmin Resources Limited

Operated by:
 Esso Minerals Canada
 for
 Esso Resources Canada Limited

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GEOLOGICAL BRANCH
 ASSESSMENT REPORT

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MAPS

Diamond Drill Hole Location Map		2196-01
20,000E Grid, West sheet, 1:5,000		
Drill Hole Section L20,820E, DDH 86-3	1:500	2196-02
Drill Hole Section L21,150E, DDH 86-2	1:500	2196-03
Location Map: Physical Work, 1:10,000		2196-04

RECOMMENDATIONS

1. Complete gravity and large loop GENIE test surveys along section 21,150E (D86-2) and adjacent lines. If results are favourable expand the survey to determine the extent of the massive sulphide horizon. Expand the magnetic survey to cover well beyond targeted areas. Map the area between the Quartz Breccia and Palisade Zones and the south facing slope of Rae Spur on a 1:5,000 scale and 1:500 scale in areas of major interest.

2. The exhalite - massive sulphide zone intersected in DDH86-2 warrants further testing with flanking step out holes. The location of these holes will be dependent upon geophysical results; a first hole positioned 50 m south of 86-2, and drilled 45-60^o north to test beneath the massive sulphide horizon is based on our current level of information.

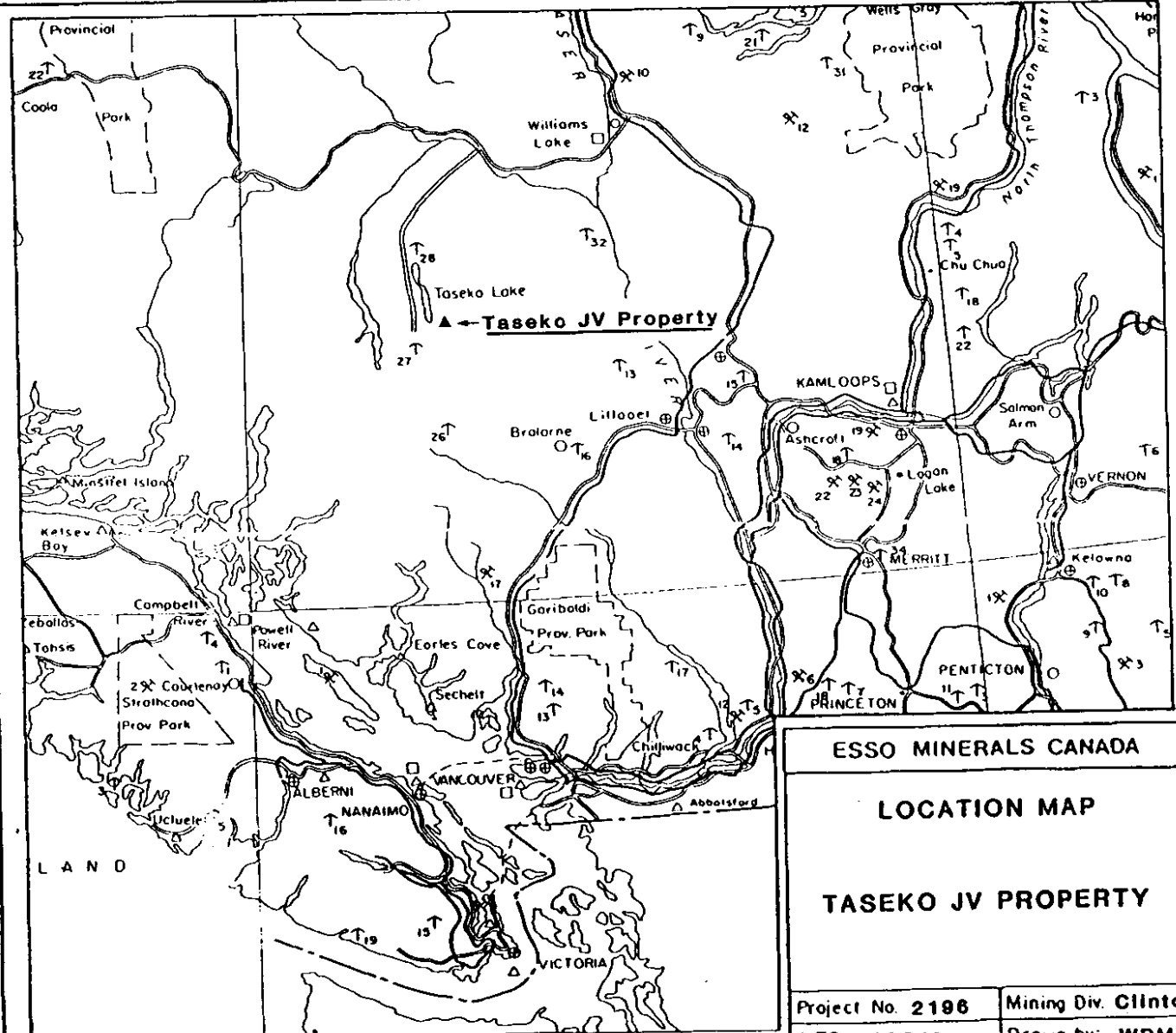
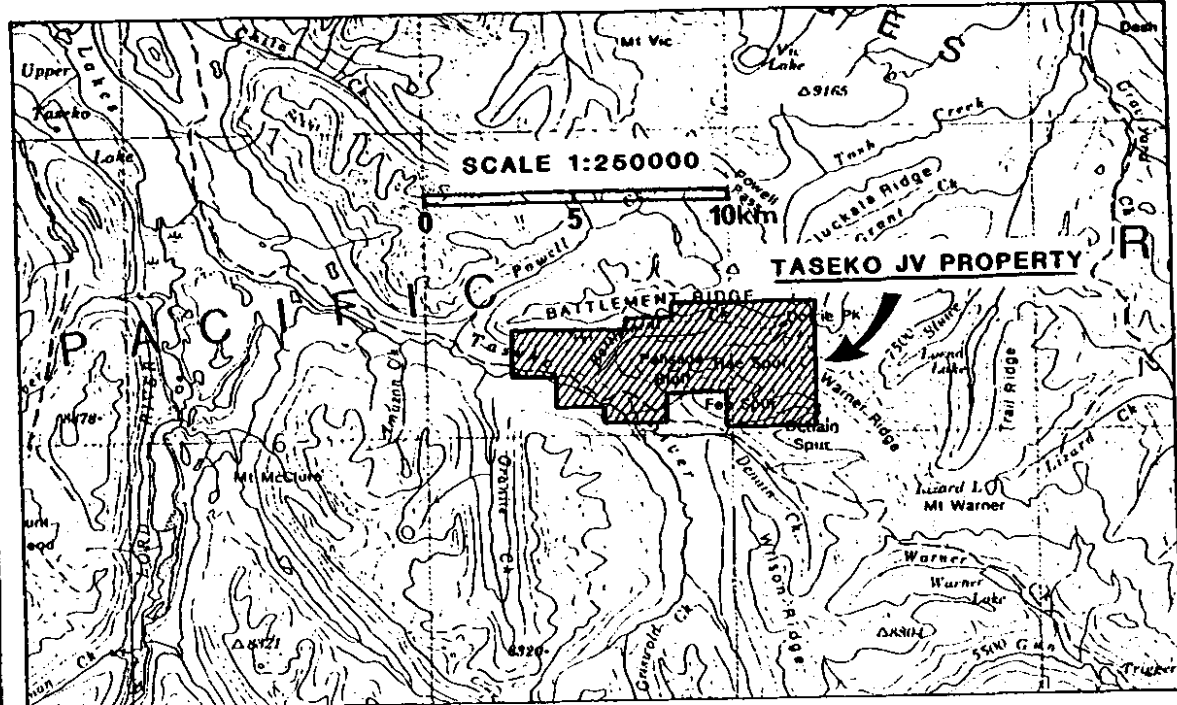
SUMMARY AND CONCLUSIONS

Two NQ drill holes totalling 434.94 m tested two target areas, the Lake zone and Quartz Breccia zone.

The main target on the property is a blind bonanza-type mineralization that is located between 50 to 200 m depth and perhaps deeper. Property characteristics similar to those at El Indio, Chile, Summitville, Colorado and Goldfields, Nevada indicate a potential between 0.5 to 5.0 million ounces of Au.

A single drill hole tested the quartz breccia zone and intersected rhythmically banded and locally contorted and brecciated quartz veins that contain elevated Cu, As and Sb values between 58 and 66 m. A 17.8 m sequence true thickness of locally banded massive pyrite and extensive zones of silicification and possibly exhalative material were intersected between 157 and 188 m. Enargite and sphalerite occur in this interval; sphalerite also occurs toward the bottom of the hole. Ag, As, Sb and Cu values reach 27.8, 1959, 418 and 5484 ppm, respectively in this interval, however Au values do not exceed 100 ppb.

The Quartz Breccia Zone is the prime drill target area on the Taseko property.



ESSO MINERALS CANADA	
LOCATION MAP	
TASEKO JV PROPERTY	
Project No. 2196	Mining Div. Clinton
NTS 920/3	Drawn by: WDM
Date Feb. 1987	Fig. No. 1

LOCATION AND ACCESS

The Taseko J.V. property is located 225 km due north of Vancouver and 140 km southwest of Williams Lake. The property lies near the Taseko River 12 km east from Lower Taseko Lake.

The property is accessible by road from Williams Lake, a distance of 260 km. The initial 200 km from Williams Lake to Hanceville, then south to Upper Taseko Lake consists of good paved and secondary all-weather gravel roads. The remaining 60 km consists of a winding, dirt, bush road requiring 3.5 - 4.0 hours driving time. Portions of the route tend to be very slippery when wet and necessitate the fording of four major creeks and negotiating one very steep boulder-strewn hill. The bush road varies in elevation from 1300 m at Upper Taseko Lake to 1950 m at "the pass", and 2150 m at the property.

HISTORY

1920's and early 1930's:

Taylor Windfall Mine produced gold from small high grade eluvial and near surface lode deposits. Total production was less than 1,000 oz. gold.

1930's:

Underground development of Taylor Windfall Mine was undertaken on two levels to test drill intersections. Only minor amounts of production were achieved.

1952-53:

Taylor Windfall Mine was rehabilitated by leasors, but subsequent production was minimal.

1982, October:

Westmin staked Bluff 1 and 2 claims surrounding and overlying Taylor Windfall Mine workings.

1983, July - August:

Westmin undertook a 5 week preliminary exploration program to determine the Taseko property's potential for an epithermal gold deposit.

1983, July 19:

Westmin Resources Limited optioned Windfall, Windfall 2 and Province Crown Grants from Taywin Resources Limited.

1983, November:

Westmin staked Bluff 3-8 claims.

1984, January 1:

Westmin Resources Limited and Esso Minerals Canada entered into a Joint Venture Agreement.

1984, June - September:

Westmin-Esso Minerals Joint Venture conducted an exploration program Taseko property including diamond drilling, 6 holes in the vicinity of the mine.

1984, August 31:

Bluff 9-10 claims were staked by the Westmin-Esso Joint Venture.

1985, August - September:

Westmin-Esso Minerals Joint Venture conducted an exploration program on the Taseko property including diamond drilling, 2 holes, near the Taseko River.

1986, August - October:

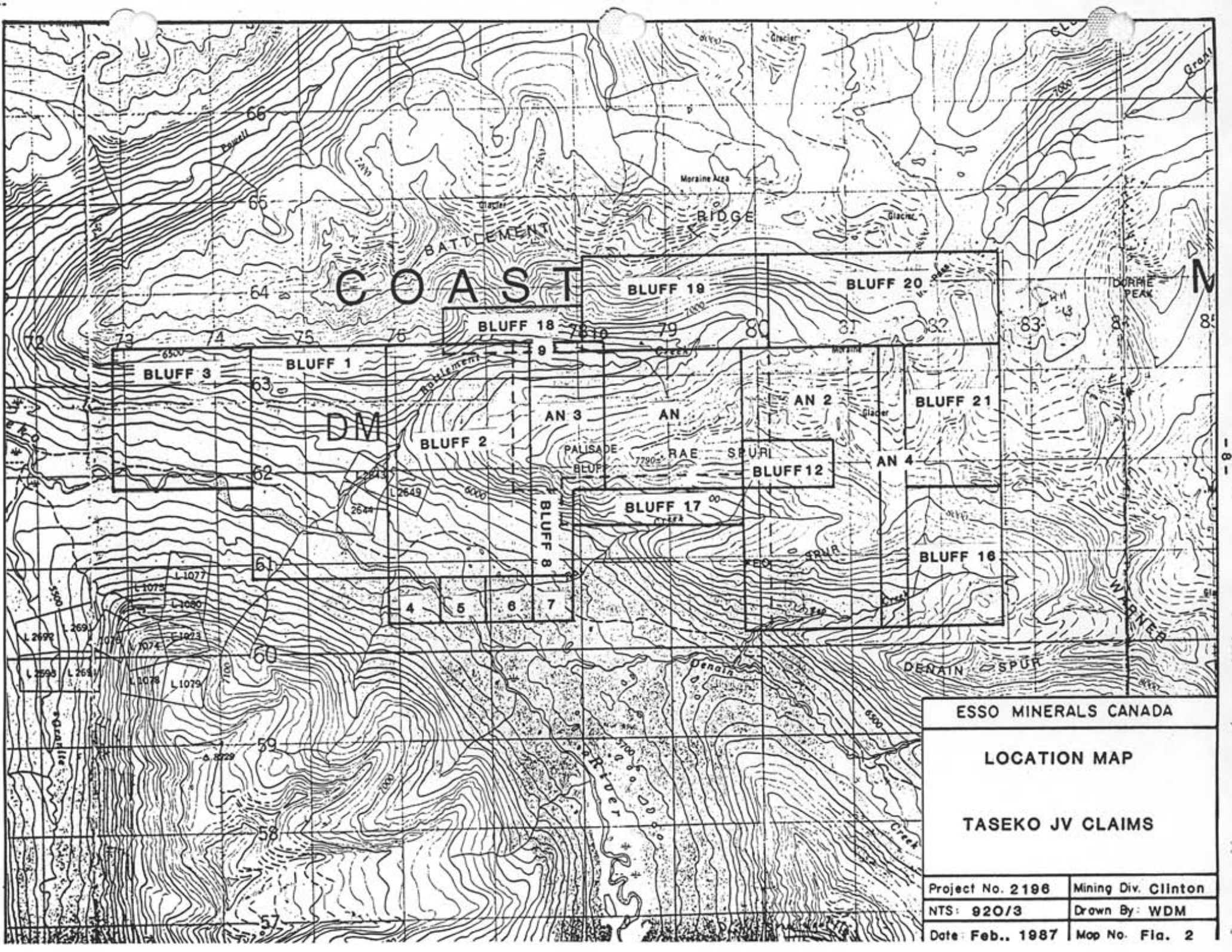
Esso Minerals becomes operator of the Joint Venture with Westmin. A six-hole diamond drill program was conducted in the Lake and Quartz-Breccia Zones.

CLAIM STATUS

<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Recording Date</u>	<u>Expiry Date</u>
Bluff 1	15	1283	Oct. 25/82	1994
Bluff 2	15	1284	Oct. 25/82	1994
Bluff 3	9	1686	Dec. 7/83	1994
Bluff 4	1	1682	Dec. 7/83	1994
Bluff 5	1	1683	Dec. 7/83	1994
Bluff 6	1	1684	Dec. 7/83	1994
Bluff 7	1	1685	Dec. 7/83	1994
Bluff 8	2	1687	Dec. 7/83	1994
Bluff 9	3	1828	Sept. 21/84	1991
Bluff 10	3	1829	Sept. 21/84	1991
Bluff 12	2	1923	Aug. 28/85	1996
Bluff 16	6	1924	Aug. 28/85	1991
Bluff 17 ¹	4	1925	Aug. 28/85	1996
Bluff 18	3	1931	Sept. 23/85	1991
Bluff 19	8	1932	Sept. 23/85	1991
Bluff 20	10	1933	Sept. 23/85	1996
Bluff 21	6	1934	Sept. 23/85	1991
Bluff 22	1	1935	Sept. 23/85	1991
An ¹	9	1219	July 27/83	1996
An 2 ¹	18	1454	July 14/83	1996
An 3 ¹	6	1455	July 14/83	1996
An 4 ¹	18	1456	July 14/83	1996
Windfall*	1	L2643		
Windfall 2*	1	L2644		
Province*	1	L2649		

• Taywin Resources Ltd. Crown Grants. Option Agreement terminated January 15, 1987.

¹ Work filed in 1986.



ESSO MINERALS CANADA	
LOCATION MAP	
TASEKO JV CLAIMS	
Project No. 2196	Mining Div. Clinton
NTS: 920/3	Drawn By: WDM
Date: Feb., 1987	Map No. Fla. 2

REGIONAL GEOLOGY

The Taseko property is located within the Intermontane Belt near the southwestern boundary of the Tyaughton Trough. The Trough contains a thick sequence of marine to subaerial volcanics and sediments that were intermittently shed into the basin from bordering highlands to the northeast and southwest (Jeletzky and Tipper, 1968) between the mid Jurassic and Upper Cretaceous. Granodiorite intrusions of the Coast Crystalline Complex bound the Trough to the south in the vicinity of the Taseko property boundary. Granodiorites and porphyries of intermediate to felsic composition intrude Jura-Cretaceous rocks; felsic quartz-eye dikes are probably related to felsic volcanics that disconformably overlie Upper Cretaceous lithologies to the north of the Taseko property.

DRILLING PROGRAM

Introduction

During the interval September 16 to September 27 inclusive, two NQ holes were drilled on the Taseko Property totalling 434.94 m. The drilling contractor was Tonto Drilling B.C. Ltd., Burnaby.

Two zones were drilled; one hole was drilled in the Lake zone, and one in the Quartz Breccia zone. The Palisade zone was also targeted for drilling, however access problems and a lack of water prevented drill testing of the zone.

Drill hole specifications are listed in Table 1. Drill logs are contained in Appendix I and analytical data are in Appendix II.

Table 1

<u>DDH #</u>	<u>Co-ordinates</u>	<u>Dip</u>	<u>Azimuth</u>	<u>Depth (m)</u>
2	L21,150E 19,775N	-60 ^o	360 ^o	219.76
3	L20,820E 19,750N	-60 ^o	360 ^o	215.18

All of the drill core was split and analysed by Acme Analytical Laboratories in Vancouver using ICP for Mo, Cu, Pb, Zn, Ag, Mn, Th, Sb and Bi. Au was fire assayed and finished by atomic absorption.

The drill core is stored near the drill camp at coordinates L19,950E, 20,050N.

LAKE ZONE

The Lake Zone was tested on section 20,820E. Drill logs and assays are contained in Appendices I and II.

Section 20,820E - DDH86-3

Drill hole 86-3 intersected variably altered andesitic tuffs, flows, conglomerates, cherty and graphitic argillites (Map 2196-02). The volcanic rocks are weakly pyritic, silicified and clay altered. Gouge is common throughout the entire length of the drill hole. The argillites are thinly bedded and laminated with intercalated wisps of pyrite. With depth, coarse polymictic clastic units contain abundant hematite and silica.

An intensely silicified, brecciated porphyritic unit occurs from 98.00 to 126.23 m. Disseminated grains of hematite, sphalerite, tetrahedrite (?) and pyrite occur through the interval. Values for arsenic, copper and zinc ranged to 320, 748 and 392 ppm. The highest values for arsenic and copper are coincident with a pyritic-argillite unit at a depth of 74.98 m. Arsenic values range up to 505 ppm and copper values vary to 2042 ppm. The silicified breccia unit is moderately anomalous in copper with values to 748 ppm. Other elements remain at background levels. Gold values maintain background levels of 1 to 5 ppb over the entire length of hole. Silver varies from 0.1 to 5.2 ppm. Maximum silver values are coincident with a cherty argillite unit at 68.0 m.

QUARTZ BRECCIA ZONE

Section 21,150E, DDH86-2

Drill hole 86-2 was collared on the south-central edge of the quartz-breccia zone and drilled north. The drill hole was designed to test the nature of the quartz-breccia and to test for blind bonanza type mineralization.

Lapilli tuffs, tuffs, and agglomerates were intersected in the upper 96 m (Map 2196-03) of the hole. These rocks are variably altered to assemblages of clays, quartz and pyrite. The intensity of silicification increases noticeably with depth. A 13 m fault zone separates the altered volcanics above from a 99.42 m zone of pyritic-exhalite beneath. The exhalite consists of vuggy and to a lesser degree laminated, chalcedonic silica which contains variable amounts of barite, minor kaolinite, and pyrite. A 9 m interval, from 179 to 188 m, consists of fine to medium grained, brecciated and contorted, laminated, massive to semi-massive pyrite.

The drill hole bottoms in an intensely silicified, weakly pyritic conglomerate containing small 0.5 cm ovoids of sphalerite.

Analytical data for drill hole 86-2 indicates a significant increase in silver, copper, lead, zinc, arsenic and antimony through the exhalite zone. In the upper section of the hole, coincident with clay and silica altered volcanics, silver, arsenic, antimony and copper values are typically 0.2, 30, 3, 100 ppm respectively. Values for the same elements through the exhalite increase dramatically to 27.8, 1959, 418 and 5484 ppm respectively. Gold values do not reflect a similar increase in magnitude. The highest gold value, 91 ppb, occurs in a conglomerate unit within the exhalite.

CONCLUSIONS

- a) "Feeder" structures were not drill intersected.
- b) Assays from core samples from drill hole 86-3 in the Lake Zone failed to detect any significant gold values.
- c) The source region for exhalative siliceous and pyritic bands in the argillites may be from the quartz breccia zone to the east where a thick massive sulphide body and quartz veins have been intersected.
- d) Drill hole 86-2 intersected a sequence of siliceous, pyritic rocks indicative of an exhalative-vent proximal environment. Features include a thinly banded, to massive, sulphide unit interlayered with chalcedonic frothy, vuggy silica. The exhalite is extensively brecciated over substantial drill core intervals.
- e) Strongly anomalous As and Sb, with traces of gold, and the presence of barite and massive sulphides suggest hole 86-2 intersected the upper reaches of an epithermal system.
- f) Drill results from DDH86-2 suggest that the area immediately south of this drill hole is a likely source area.
- g) To date only very low gold values have been obtained from the drilling and surface sampling. Analytical results and geological observations from DDH86-2 provide evidence of high level epithermal characteristics and a nearby source "plumbing system" or vent zone.

STATEMENT OF EXPENDITURES

A. PHYSICAL

1.	Roads	
	a) Road to exploration camp	\$ 503.25*
	b) Road to drillsite #2	396.00
	c) Road to drillsite #3	396.00
	d) Road to Palisade Zone	2,268.00
	e) Rehabilitation of main access road	997.02*
2.	Drill moves and drill pad construction	
	DDH 86-2	612.00
	DDH 86-3	306.00
3.	Mobilization/demobilization of cat (Williams Lake to Taseko Lake - Return)	1,994.85*
4.	Drill program mobilization/demobilization using cat (Taseko Lake to Property, return, 60 km each way)	<u>\$ 6,404.78*</u>
	SUB TOTAL	\$13,375.27

* These are apportioned costs which reflect the total cost multiplied by 0.66; representing the fraction of meterage drilled in holes DDH 86-2 and DDH 86-3 (434.94 m) versus the total meterage drilled, 657.0 m.

C. DRILLING

Diamond drill hole 86-2:	Drilling 219.76 m	\$14,337.27
	Moving, extra hrs., Supplies	3,288.75
	Materials lost in hole	5,984.29
Diamond drill hole 86-3:	Drilling 215.18 m	14,018.74
	Moving, extra hrs., Supplies	1,251.25

Additional Drilling Costs

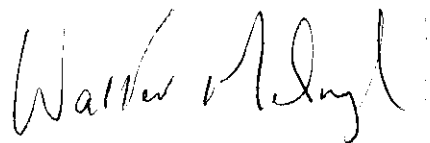
Diesel Fuel	508.26
Mob/demobilization (Kamloops to Taseko Lke, return)	3,300.00
Demobilization (Property to Taseko Lake, one way)	2,059.20
Extra Labour	1,584.00
Additional Meals	85.80
Additional Charges (consumable, mud, etc.)	2,640.00
Camp construction	<u>\$ 1,980.00</u>
SUB TOTAL	\$51,037.56

Additional Technical Drilling Costs

Salaries: Geologist - 12 days @ \$245/day	\$ 2,940.00
Assistant - 12 days @ \$100/day	1,200.00
Vehicle Rental: 4-wheel drive - 12 days @ \$1,100/mo.	440.00
Transportation: Fuel, maintenance	125.00
Equipment and Supplies:	100.00
Laboratory Analysis: 154 core samples @ \$12.00	1,848.00
Reproduction:	50.00
Report Preparation: Staff Geologist - 5 days @ \$245/day	1,225.00
Draftsman - 3 days @ \$235/day	<u>705.00</u>
	SUB TOTAL \$ <u>8,633.00</u>
TOTAL EXPENDITURES	<u>\$73,045.83</u>

STATEMENT OF QUALIFICATION

I received my Bachelor of Science degree in Geological Engineering from the University of Saskatchewan, Saskatoon, in 1972. I have been permanently employed as an exploration geologist since 1974. I am a member of the Association of Professional Engineers of Ontario and British Columbia.



Walter D. Melnyk

STATEMENT OF QUALIFICATION

I received a Bachelor of Applied Science Degree from the University of British Columbia (1974) and a Doctor of Philosophy from the Australian National University (1982). Between degrees I was employed as an exploration geologist for four years in Papua New Guinea. I have been employed for the past four years by Esso Resources Canada Limited, the last two years of that period as District Geologist for Southern British Columbia. I am a member of the Society of Economic Geologists and Geological Association of Canada.

R. M. Britten

R. M. Britten

APPENDIX I

**Diamond Drill Logs
DDH 86-2 and 86-3**

ESSO MINERALS CANADA DRILL LOG

HOLE NO. 86-2
PAGE 1 OF 20
PROJECT 2196
LOGGED BY: Walter Melnyk

COLLAR COORDINATES L 21150 E
19775 N
AZIMUTH 360° DIP -60°
HORIZONTAL PROJECTION 109.88

COLLAR ELEVATION 2158 m
TOTAL LENGTH 219.76 m
VERTICAL PROJECTION _____

CONTRACTOR Tanta Drilling CORE SIZE NQ

DATE STARTED Sept 16 DATE COMPLETED Sept 22

AVERAGE CORE RECOVERY 92.60 %

PURPOSE Testing large quartz-breccia zone.

COMMENTS: Exhalite horizon intersected over 52m, frothy silica, intensely pyritic.

ALTERATION SCALE



absent
slight
moderate
intense

TOTAL SULPHIDE SCALE



traces only
< 1%
1% - 3%
3% - 10%
> 10%

SUMMARY LOG

0-4.26 : Casing
4.26-58.60 : Lapilli tuff. Altered in clays.
pyrite and variable quartz.
58.60-65.71 : Tuff: Brecciated, rhythmically
banded quartz veins, py, cpy
65.71-96.36 : Agglomerate. Intensely silicified
Weak clays + pyrite
96.36-109.30 : fault breccia, poor recovery
109.30-131.20 : Quartz Breccia, extensively leached
broken, siliceous frothy rock.
131.20-140.33 : Siliceous Breccia. Weak clays
Moderate disc pyrite, hematite
140.33-157.08 : Conglomerate - "fining" with depth
157.08-173.90 : Exhalite: bedded frothy qtz.
bands of massive pyrite
173.90-208.72 : Exhalite - brecciated, much pyrite
177-188 : Semi-massive pyrite
208.72-219.76 : Conglomerate. Beach-type
No pyrite, poorly sorted.
219.76 : END OF HOLE

DIP TESTS

DEPTH	DIP	AZIMUTH	DEPTH	DIP	AZIMUTH

LEGEND

Walter Melnyk

PAGE 2 OF 20		PROJECT: 2196				
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
				0	4.26	Overburden - casing
5	42.62	87.54		4.26	58.60	LAPILLI TUFF / AGGLOMERATE 4.26-21.80 : LAPILLI TUFF ; Altered strong-pyritic clay, weak etc. Section is a uniform medium grey color, soft, speckled white, locally showing tuffaceous character. Short sections are agglomeratic, other short intervals indicate brecciation. 7.63-8.20 : short interval silicified, buff to light brown color weakly pyritic. 8.20-15.00 : Section is coherent but soft, locally has consistency of mud. Jointing is at 30:45° w.c.A. quite common. No limonite or bleaching along joints.
10	60.00	106.41				Entire unit is quite homogeneous in texture, color, alt ⁿ assemblages. Pyrite is fine grained disseminated 10-15%
	36.06	95.08				
5	57.56	100.65				15.00-21.80 : This interval is competent, solid with widely spaced joints. Strongly pyritic, much clay. Kaolinite, dickite. 16.55 : Tuffaceous bedding at 25° w.c.A.
	96.17	96.72				
	59.56	91.80				
20	45.90	94.09				21.80-23.93 : Shaded, leached zone, strongly limonitic. major joint direction is parallel with core axis.

PAGE 4 OF 20			PROJECT: 2196		GEOLOGICAL DESCRIPTION	
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	FROM		TO
25	49.18	91.14				23.93 - 25.85 : Solid competent rock - agglomerate again loaded with pyrite, clay minerals prominent. Quartz is weak but present.
						25.85 - 27.22 : Broken section, cemented with silica + limonite.
30	41.31	94.42				27.22 - 58.60 : Rock is substantially harder here. Short silicified zones increase in frequency and pervasive silicification increases. Jointing constant 30-45° W.C.A. carb. heated.
						28.15 - 28.40 : Short silicified zone cracked, vuggy, weakly pyritic.
	62.17	96.71				29.55 - 29.81 : silicified zone, cracked, vuggy, weakly pyritic.
35	86.22	99.01				33.34 - 33.51 : silicified zone, cracked, limonitic, vuggy, contacts at about 45° W.C.A.
						33.85 : Tuffaceous bedding 35° W.C.A.
						33.95 - 34.31 : Brecciated - silicified (Formational base) various lithic fragments, frag. supported, wide variety of sizes to 5cm.
40	71.96	98.13				34.31 - 38.12 : Solid competent tuff (?) moderately silicified, weakly jointed, loaded with diss. pyrite. Jointing 50-60° W.C.A. wide spaced.
						38.12 - 38.39 : silicified zone, cracked, vuggy, weakly pyritic.
	78.68	97.37				
						41.92 - 42.36 : silicified zone, cracked, vuggy, cavities are limonitic.
45	88.52	97.37				42.36 - 44.50 : Pervasively silicified tuff.
						44.50 - 45.10 : silicified zone, only weakly cracked, vuggy, not limonitic, strongly pyritic.

PAGE 5		OF 20		PROJECT: 2196				HOLE NO. 86-2					
ALTERATION				TOTAL SULPHIDE	SAMPLES			ASSAYS					
Qtz	Kao-Di	Pyrop.	Pyrite		FROM	TO	WIDTH	SAMPLE NUMBER	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
WMS	WMS	WMS	WMS										
✓	✓	✓	✓		21.80	23.93	2.13	17921	4	0.1	159	11	55/10
✓	✓	✓	✓		23.93	25.85	1.92	17922	1	0.1	24	5	146/8
✓	✓	✓	✓		25.85	28.15	2.30	17923	2	0.2	62	5	117/15
✓	✓	✓	✓		28.15	29.81	1.66	17924	3	0.1	24	2	109/7
✓	✓	✓	✓		29.81	33.34	3.53	17925	3	0.1	31	4	126/5
✓	✓	✓	✓		33.34	34.31	0.97	17926	11	0.1	77	8	77/5
✓	✓	✓	✓		34.31	37.00	2.69	17927	4	0.1	29	2	74/3
✓	✓	✓	✓		37.00	39.00	2.00	17928	7	0.2	43	3	146/4
✓	✓	✓	✓		39.00	40.80	1.80	17929	6	0.1	33	3	159/8
✓	✓	✓	✓		40.80	42.36	1.56	17930	12	0.1	38	5	137/8
✓	✓	✓	✓		42.36	44.00	1.64	17931	44	0.1	11	2	74/1

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
50	80.92	100.98			45.10 - 46.00: Pervasively silicified tuff, pyritic 46.00 - 47.04: Brecciated silicified, pyritic shattered, cracked 47.04 - 47.73: Pervasively silicified tuff 47.73 - 49.20: Brecciated silicified, pyritized tuff cracked.	
	72.13	95.73				
	38.03	100.32			49.20 - 58.60: Homogenous section, strongly silicified pyritized (3-6%). Pyrite is mainly disseminated, although clots do occur locally. This section is probably a tuffaceous sediment altered thoroughly, gray color with white 1-3mm speckles.	
	82.62	100.00				
60	85.90	98.68		58.60	65.71	BRECCIATED TUFF(?) This unit has undergone multiple episodes of brecciation and cementing. Unit for the most part is very strongly silicified locally veined with rhythmically banded quartz veins. Unit is strongly pyritic, when leached, rock is extremely vuggy. 58.60 - 65.71: This section of tuff(?) has been strongly veined and mineralized with pyrite and specks of chalcopyrite and possibly tetrahedrite. Black metallic mineral may be hematite. This section contains rhythmically banded quartz veins, con- tacted and locally brecciated. 61.58 - 62.78: Strongly leached section wholly intact about 15% vugs. Water lost here.
	113.68	129.47				
	77.03	89.95				
	90.81	98.36				
65	78.68	96.39		65.71	96.36	VOLCANIC AGGLOMERATE OR CONGLOMERATE section is extensively silicified and possibly brecciated in part. Unit is quite porous as a result much of the pyrite has been leached out, leaving vugs up to 1cm in diameter.

PAGE 7 OF 20		PROJECT: 2196		HOLE NO. 86-2										
ALTERATION					TOTAL SULPHIDE	SAMPLES			ASSAYS					
Qtz	Kao-Dic	Pyrop	Pyrite	Chalco		FROM	TO	WIDTH	SAMPLE NUMBER	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
V	V	V	V	V		44.00	46.00	2.00	17932	6	0.1	20	3	109/22
V	V	V	V	V		46.00	47.73	1.73	17933	7	0.1	26	5	165/7
V	V	V	V	V		47.73	49.20	1.47	17934	8	0.3	28	3	111/5
V	V	V	V	V		49.20	51.00	1.80	17935	5	0.1	34	2	158/5
V	V	V	V	V		51.00	53.00	2.00	17936	3	0.4	26	3	99/3
V	V	V	V	V		53.00	56.00	3.00	17937	1	0.1	47	3	205/5
V	V	V	V	V		56.00	58.60	2.60	17938	4	0.1	68	37	268/15
V	V	V	V	V		58.60	60.00	1.40	17939	17	0.2	204	45	622/17
V	V	V	V	V		60.00	61.58	1.58	17940	2	0.1	84	6	406/5
V	V	V	V	V		61.58	62.78	1.20	17941	9	0.1	87	8	66/3
V	V	V	V	V		62.78	64.00	1.22	17942	13	0.1	92	131	881/59
V	V	V	V	V		64.00	65.71	1.71	17943	6	0.1	151	77	751/41

PAGE 8 OF 20		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
70	71.60	99.67			Quite abit of limonite and possibly some hematite. Dense fine grained black fragments of argillite occur throughout interval, especially beyond 75.0m.
	85.57	99.01			Sulphides consist of v. fine grained pyrite in the quartz. Despite leaching, unit is coherent, jointing is present at parallel with core axis to 30° W.C.A., not significant. Rock has a frothy appearance. Contains minor clay minerals.
75	84.20	96.05			Uniform, homogenous section.
	84.26	97.04			
80	82.38	91.64			
	91.14	97.04			
85	95.40	101.31			
90					

PAGE 10 OF 20		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
	74.75	96.36			
95	95.73	100.65			
	5.62	87.32		96.36	109.30
				<p>FAULT / RUBBLE (NOT LEACHED) CONGLOMERATE Grey, rubble zone strongly broken up - not leached or oxidized. Some soft clay material.</p>	
	40.14	82.11			
100					
				98.75	101.00
				<p>Some what more coherent section - silicified, textures obliterated. Very vuggy. Grey, not leached.</p>	
	0	27.86			
	0	48			
	0	64.59			
105					
	3.27	73.44			
	19.78	67.03		109.30	131.20
				<p>QUARTZ BRECCIA: Fe-oxide debris. Extensively leached pulverized zone. Occasional pieces identified as same siliceous vuggy material as previously recorded.</p>	
110	0	50.00			
				<p>111.0 m: Drill bit crown lost in hole - Retrieved</p>	

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG			GEOLOGICAL DESCRIPTION
				FROM	TO	
115	0	12.40				QUARTZ BRECCIA (continued) 109.30 - 119.48: Rubble, gravel recovered, leached, oxidized Recovery in this section is very poor.
	0	3.29				
	0	58.4				
	0	102				
	0	156				
	0	28.57				
	0	0				
120	0	35.52				119.48 - 131.20: Rubble component is cemented by Fe-oxides. Brown, extensively vuggy but coherent stuff Recovery much better, leached, oxidized
	0	82.89				
	0	95.42				
125	0	51.64				
	0	52.45				127.40 - 131.20: Breccia texture. Fragments cemented by Fe-oxides
	0	97.81				
130	0	71.58				
	0	37.36		131.20	140.33	BRECCIA: Buff-tan color to dark grey. Rock is silicified intensely. Many small cavities contain white, v. soft mineral (kaolinite) Breccia initially is fragment supported, angular, shattered, to subrounded. With depth breccia is matrix supported, fragments are well rounded (calmest conglomeratic)
	0	88.52				
	0	102.17				131.20 - 134.21: light colored, buff crackle breccia, very siliceous. Minor sulphides < 1% py.
	81.96	97.26	102.17			
135						

PAGE 14 OF 20				PROJECT: 2196		
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
140	57	73		134.21 - 140.33 :	Section contains much pyrite to 25% by volume with locally to 2% specularite. Pyrite is both disseminated and in veinlet form.	
	100.36	112.40			with depth amount of buff siliceous fragments decrease. Silicification is intense. Rock is still quite vuggy but not oxidized or leached.	
	96.39	101.96		140.33	140.85	CHERTY ARGILLITE : Buff to dark grey, very fine grained. Small rounded siliceous pebbles widely scattered. Color banding is 50° W.C.A.
	53.44	100.00		140.85	157.08	CONGLOMERATE : Rock is a dull grey-black color due to high sulphide content in matrix. Pebbles & cobbles of buff aphanitic material up to 10cm. main component also bleached-silicified porphyritic volcanic clasts also occur. For the most part this unit is matrix supported. Matrix consists of frothy siliceous material and pyrite. 5% disseminated hematite.
	98.34	102.45				For most part unit is poorly sorted bedding is not evident.
	87.97	101.09				Pebble components get smaller in size with depth. on average pyrite is about 10-15% by volume.
	72.95	95.08				
	87.43	100.00				
	91.20	94.50				151.00 : short interval showing good sulphide banding, contorted.
	66.07	99.40				152.00 - 157.08 : weak, vuggy nature to rock. Pyrite has not occupied all pore spaces of siliceous froth.
155	94.37	95.00		157.08	173.90	SILICEOUS-PYRITIC EXHALITE :

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
160	42.51	104.79			Rock consists of well bedded sequence of interlayered pyrite and silica. Silica is generally frothy but locally quite dense. Pyrite is very fine to fine grained very well bedded and locally occurs as massive intervals. 159.50 : Excellent sulphide-silica banding at 35° w.c.a.
	80.35	110.71			
	14.25	99.34			
165	80.32	98.03			163.56 - 164.70 : massive bedded pyrite - 70% py. Bedding 40° w.c.a.
	64.23	91.24			
	88.02	110.17			
170	32.78	96.39			166.92 - 173.90 : Semi-massive well bedded/banded bands of pyrite (often times thinly laminated) and bands of frothy silica. thin sulphide-silica bands often contacted on cm scale.
	86.22	99.67			
	173.90	208.72			
175	0	93.44			SILICEOUS - PYRITIC EXHALITE BRECCIA Intensely siliceous, strongly pyritic interval. 173.90 - 178.90 : Extensively brecciated, mainly fragment supported by with pyrite forming the matrix. Siliceous pieces are v.f. grained + brittle. Pyrite - 10% specular hematite - <1%
	78.13	104.9			
	178.90	188.06			
180					

PAGE 17 OF 20		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
185	89.56	102.05			
	88.57	103.28			182.00: Flow banding at 45° w.c.a. Pieces of chert-like qtz through section minor clays sprinkled throughout Pyrite is thinly laminated & entrained - fumbled occasional grain of hematite.
	82.07	95.08			
190	90.10	99.34			188.06-205.70: Section contains much more frothy silica as veins above section. Unit is also fumble brecciated. Many Vugs in com - some up to 2cm diameter, most smaller. Banding is prominent - often contorted. Pyrite is much less significant in this interval occurring as widely spaced thin undulating bands. locally siliceous material shows good rhythmic banding.
	89.53	97.05			Rock is dull gray - off white color, dependent on pyrite content. 192.50m: banding at 35° w.c.a.
195	71.71	97.38			Rock also has significant black graphitic (?) content as well. Sphalerite is commonly disseminated through interval << 10%.
	86.31	100.98			
200	97.97				
	97.57				

PAGE 18 OF 20		PROJECT: 2196			HOLE NO. 86-2									
ALTERATION					TOTAL SULPHIDE	SAMPLES			ASSAYS					
Qtz	Kaolinite	Pyrox	Pyrite	Hematite		FROM	TO	WIDTH	SAMPLE NUMBER	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
✓	✓		✓	✓		181.00	183.00	2.00	17974	1	6.6	827	332	2232/263
✓	✓		✓	✓		183.00	186.00	3.00	17975	1	12.9	339	189	1057/116
✓	✓		✓	✓		186.00	188.06	2.06	17976	A	22.4	258	155	763/68
✓	✓		✓	✓		188.06	191.00	2.94	17977	4	18.9	344	321	1216/444
✓	✓		✓	✓		191.00	194.00	3.00	17978	1	6.5	111	52	355/1471
✓	✓		✓	✓		194.00	197.00	3.00	17979	4	21.1	372	283	1165/150
✓	✓		✓	✓		197.00	200.00	3.00	17980	1	25.5	557	418	1470/217
✓	✓		✓	✓		200.00	203.00	3.00	17981	1	13.3	280	192	803/141

PAGE 19 OF 20		PROJECT: 2196				
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
205	97.70	100.00			204.50 - 205.70: thin laminations pyrite, silica, shale(?) parallel with core axis.	
					205.70 - 206.95: crudely laminated parallel with core axis. siliceous, pebbly, some pyrite.	
					206.95 - 207.57: thinly laminated massive pyrite section laminated at 45° W.C.A.	
210	100.00	101.33			207.57 - 208.72: pyritic laminated zone, much dickite - bluish v. soft clay mineral. Bedding at 30° W.C.A.	
				208.72	219.76	<p>Conglomerate: Poorly sorted gravel - very siliceous, weakly pyritic graphitic whips throughout, pebbly. Components are mostly quartz pebbles of assorted sizes. Bedding is well developed and consistent at 35 - 40° W.C.A.</p>
						208.72 - 212.00: much interbedded thin whippy block graphitic material well bedded at 35 - 40° W.C.A.
215	83.71	100.99			217.74: lam. laminated pyrite vein at 20° W.C.A. Cross-cutting bedding. Bedding is consistent at 30° W.C.A.	
220				219.76	END OF HOLE*	
						* Drill rods snap at 109.73m. Attempts to retrieve rod - string not successful.

PAGE 20 OF 20		PROJECT: 2196			HOLE NO. 86-2								
ALTERATION				TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
Qtz	Koo-Dic	Pyrop	Pyrite		FROM	TO	WIDTH		Au (pph)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
✓	✓	✓	✓		203.00	205.00	2.00	17982	4	27.8	548	317	1354/272
✓	✓	✓	✓		205.00	207.00	2.00	17983	4	16.5	422	193	732/64
✓	✓	✓	✓		207.00	208.30	1.30	17984	4	13.0	275	50	617/46
✓	✓	✓	✓		208.30	212.00	3.70	17995	3	3.7	53	28	81/8
✓	✓	✓	✓		212.00	215.00	3.00	17996	1	3.2	47	36	140/5279
✓	✓	✓	✓		215.00	218.24	3.24	17997	3	4.3	116	50	110/442

ESSO MINERALS CANADA DRILL LOG

HOLE NO. 86-3
 PAGE 1 OF 21
 PROJECT 2196
 LOGGED BY: Walter Melnyk

COLLAR COORDINATES 20.820E
19.750N
 AZIMUTH 360° DIP -60°
 HORIZONTAL PROJECTION 107.59 m

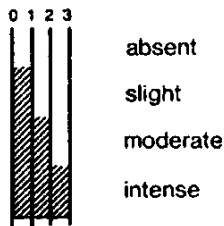
COLLAR ELEVATION 2158m
 TOTAL LENGTH 215.18 m
 VERTICAL PROJECTION _____

CONTRACTOR TONTO DRILLING CORE SIZE NQ
 DATE STARTED Sept 22 DATE COMPLETED Sept. 27
 AVERAGE CORE RECOVERY 79.19 %

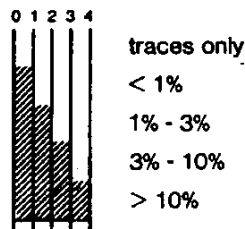
PURPOSE To drill test zone geochemically anomalous in gold, arsenic, antimony

COMMENTS: Intersected altered volcanics near surface, and mineralized breccia zone at depth

ALTERATION SCALE



TOTAL SULPHIDE SCALE



SUMMARY LOG

0-9.14 : overburden
 9.14-39.12: Andesite flows + tuffs. clay altered
 39.12-43.29: Conglomerate
 43.29-59.40: cherty Argillite - brecciated
 59.40-66.41: Pebble Conglomerate
 66.41-68.88: Grey tuffaceous sediment
 68.88-73.64: cherty Argillite
 73.64-74.98: Tuff
 74.98-95.02: Argillite
 95.02-98.00: Gouge
 98.00-126.23: Andesite Porphyry breccia
 126.23-158.80: Tuffaceous Argillite
 158.80-215.19: conglomerate
 215.19 : END OF HOLE

DIP TESTS

DEPTH	DIP	AZIMUTH	DEPTH	DIP	AZIMUTH
108.50m	56°				
215.18m	54°				

LEGEND

Walter Melnyk

PAGE 2 OF 21		PROJECT: 2196				
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
				0	9.14	Casing
10	19.6	75.40	✓ 45	9.14	39.12	<p>ANDESITE FLOWS AND TUFFS</p> <p>Entire section is variably porphyritic, extensively broken up and thus leached + oxidized. Portions of unoxidized core are limited.</p> <p>Rock is much cracked and loosely cemented by soft clay (gouge) material.</p> <p>9.14-12.80: light coloured - buff clay altered rock extensively jointed at 45° W.C.A. + 35° W.C.A.</p> <p>12.80-13.20: Brecciated section fragment supported black matrix - pyrite.</p> <p>13.68-14.22: Brecciated section same as last.</p> <p>14.22-16.06: Cracked but intact, jointed extensively at 45° W.C.A. oxidized.</p> <p>16.06-17.06: Strongly broken up at 50° W.C.A. gouge near 17.06.</p> <p>17.06-36.00: Intensely broken up, cracked, locally strongly leached. Several short unleached intervals show porphyritic flow rocks, pyritic, thin whorls of pyrite at ~ 50-60° W.C.A. feldspars as clay altered.</p> <p>17.70-18.50: Badly broken ground, gouge - clay oxidized.</p>
	34.09	97.70	✓ 35			
15	17.43	74.67	✓ 45			
	43.03	100.4				
20	16.4	104.9				
	22.06	84.13				
	0	11.61				23.01 - 24.99: Mismatch Rubby bleached, silicified, clay altered.
25	62.29	96.72				
	45.90	77.04				26.00 - 27.14: leached, oxidized, cracked, intact, cemented by Fe oxides.

PAGE 4 OF 21		PROJECT: 2176			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
30	0	98.84			29.26-31.85: Badly broken, oxidized, leached, cracked. Variable qtz and clays.
	33	100			31.85-35.55: Somewhat more intact, oxidized. Some hematite. Variable quartz & clays. Strongly jointed. Various 15° seams to 45° W.G.A.
35	0	90.49			
	0	101.4			35.55-39.12: Intensely broken, leached, much gouge. Totally incompetent section. Porphyritic textures still identified.
40	4.93	103.94		39.12	43.29 CONGLOMERATE Pebbly, crudely bedded, locally cemented, quite vuggy dark-graphitic-argillite concretions, badly leached & broken.
	23.43	86.56		43.29	59.40 CHERTY ARGILLITE (Brecciated) Gassy, light brown to black, very fine grained siliceous unit, cracked extensively, cemented by Fe-oxides or clays. Where broken v. poor core recovery & very abrasive.
45	53.2	96.1			
	27.23	62.91			
	63.73	40.65			
	0	31.52			47.54-52.60: Intensely broken ground, major jointing direction parallel with core axis. Short shaly 'lens'. Much pebbly debris - very little coherent core recovered.
50	5.63	26.76			

PAGE 5 OF 21			PROJECT: 2196				HOLE NO. 86-3								
ALTERATION						TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
Qtz	Kao Dic	Pyrite					FROM	TO	WIDTH		Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
WMS	WMS	WMS													
✓	✓	✓													
✓	✓	✓													
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					28.00	31.00	3.00	18004	2	1.0	122	47 76/4	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					31.00	34.00	3.00	18005	3	2.7	274	157 97/3	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					34.00	37.00	3.00	18006	5	0.5	266	74 113/4	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					37.00	40.00	3.00	18008	5	0.7	407	90 175/5	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					40.00	43.00	3.00	18009	3	1.1	82	15 37/4	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					43.00	47.00	4.00	18010	1	1.8	182	83 74/2	
✓	✓	✓													
✓	✓	✓													
✓	✓	✓					47.00	50.00	3.00	18011	2	1.9	181	56 36/3	

Sample tag # 18007 missed.

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
55	0	45.19				
	0	60.43				
	0	57.37				
	0	37.7				
	16.39	64.75				
	0	9.85			57.60 - 59.40: coherent brecciated section fragments cemented by Fe oxides. Final 0.50m is clayey - gouge.	
	44.39	72.42				
60				59.40	66.41	<p>PEBBLE CONGLOMERATE:</p> <p>Light brown - grey color locally intensely silicified - gray glassy. Generally pebbly - sandy crudely banded with short sections showing good bedding - thin grey muddy whips. No black cherty argillite this section except for several small rounded black pebbles. Most components are silicified unidentifiable.</p> <p>Core badly broken, major jointing direction 5°-15° W.C.A.</p> <p>62.90: Bedding 50° W.C.A.</p>
	23.07	74.17				
	10.65	57.37				
	6.18	83.27			65.00: Bedding 50° W.C.A.	
65				66.41	68.88	<p>GREY TUFFACEOUS SEDIMENT</p> <p>Grey-gritty unit, well bedded, with black whips. A cherty graphitic material. Section badly broken, very hard.</p> <p>67.40: Bedding - 40° W.C.A.</p>
	0	87.45				
	595	446			68.00: Bedding - 40° W.C.A.	
	4.69	54.46		68.88	73.64	<p>CHERTY ARGILLITE:</p> <p>Jet black, very fine grained siliceous rock cracked and cemented by Fe-oxides.</p>
70						
	50.00	73.91				
					72.00 - 73.64: somewhat softer, not as siliceous containing much pyrite (10%).	

PAGE 8 OF 21		PROJECT: 2196				GEOLOGICAL DESCRIPTION
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	FROM	TO	
	13.15	81.57				
15	24.18	76.42		73.64	74.98	TUFF (?) Grey, pyritic (leached) rock marked broken again shear direction parallel with core axis.
	0	72.45		74.98	95.02	ARGILLITE: Black dense very fine grained unit brecciated over entire interval clots of pyrite. Entire unit is badly sheared with many sections composed of clay gouge. 74.98-75.50: gouge - clay 77.60-79.0: gouge - clay 79.50-81.07: gouge - soft clay consistency
80	0	56.57				82.05-82.29: coherent vein basite weakly pyritic 82.29-85.50: gouge - soft consistency of clay oxidized for time almost parallel with core axis. Probably tuffaceous component, locally somewhat gray.
85	1.09	77.86				85.50-90.84: somewhat more coherent section, still blocky thin laminations of v fine grained pyrite in black argillite laminations are contorted and generally sub-parallel with the core axis.
	5.46	68.30				88.50: Bedding 15° W C.A.
90	0	61.97				laminated pyrite which is parallel with the core axis. 90.84-95.02: Badly broken section: minor clay material black graphitic.
	41.80	68.85				
	0	75.18				
	0	45.09				

PAGE 9 OF 21		PROJECT: 2196				HOLE NO. 86-3									
ALTERATION						TOTAL SULPHIDE	SAMPLES			ASSAYS					
Qtz	Kao-Dic	Pyrite					FROM	TO	WIDTH	SAMPLE NUMBER	Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
WMS	WMS	WMS													
							71.00	75.00	4.00	18019	2	1.7	457	85	200 / 3
							75.00	78.00	3.00	18020	1	0.6	223	10	493 / 4
							78.00	81.00	3.00	18021	2	0.6	410	15	603 / 5
							81.00	84.00	3.00	18022	1	0.3	201	14	841 / 1
							84.00	87.00	3.00	18023	1	0.2	385	11	1766 / 1
							87.00	90.84	3.84	18024	1	0.1	505	15	2042 / 142
							90.84	95.00	4.16	18025	6	0.2	355	19	1626 / 6

PAGE 10 OF 21		PROJECT: 2196				
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION		
				FROM	TO	
12.11	0	52.83	[Hand-drawn log symbols]	95.02	98.00	GOUGE: white soft clay
0	0	57.37				
0	0	60				
0	0	104.09	[Hand-drawn log symbols]	98.00	126.23	BRECCIA PORPHYRY. Medium to light grey breccia composed of silicified porphyritic fragments sharp angular, generally fragment supported matrix is composed of a brown mineral, soft - water albite (?) with dickite minor pyrite and a black very fine grained substance, could be hematite. Section contains spotty sphalerite and possibly tetrahedrite. 98.00 - 106.88: soft clayey, 40% in interval being solid core 98.00 - 100.88: Angular silicified fragments 4cm, 50% brown interfragmental mineral. Minor kaolinite - dickite. 100.88 - 109.0: porphyritic texture of rock clearly preserved quite soft crosscut by blocks of fine grained pyrite with quartz occasionally. Jointing parallel with core axis. 109.0 - 108.50: Rock is intensely pulverized, matrix supported fragments very ragged matrix jet black
29.50	0	61.47				
87.58	0	87.58				
0	0	56.39				
13.11	0	51.63				
18.13	0	54.39				
73.09	0	106.18	[Hand-drawn log symbols]			108.50 - 113.88: Zone is most promising of entire drill hole. Rock is brecciated, cracked. Fragments are bleached - silicified to dull grey. Fragments can be either separated by a thin band of hematite ± qtz ± dickite + pyrite or suspended in a matrix of above minerals. Traces of bluish metallic mineral are observed through section along with occasional speck of sphalerite. Pyrite 5% by volume
92.45	0	99.67				
52.74	0	90.10	[Hand-drawn log symbols]			113.88 - 123.20: Porphyritic flow unit. Pyritic - 7% dis. by volume. Phenocrysts of feldspar have been altered in part to clays. Section is cross-cut by thin bands of pyrite. Locally short sections of rock 10-30cm are bleached white. Section is solid, intact, quite hard. Jointing is not especially prominent. S:15° W.C.A.
79.73	0	108.49				

PAGE 12 OF 21		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
120	68.03	95.08			
	108	108			
	85.85	98.35			121.70 - 123.20: Rock is vuggy pyritic grey porphyritic.
	80.65	96.39			123.20 - 126.23: Similar to 108.50 - 113.88. Rock is porphyritic, bleached, pyritic, cracked with very fine grained hematite occupying breccia matrix.
125	61.31	84.91			126.23 - 158.80 TUFFACEOUS ARGILLITE: Entire section is well bedded generally thinly laminated to coarse. Black when graphitic usually varying shades of grey. Grain size varies considerably from very fine to shaly sections gravelly pebble size component.
	66.88	92.78			126.23 - 132.69: Black very finely laminated argillite and intercalated v.f. grained pyrite. Much pyrite to 12%.
	7.51	37.08			127.50: Bedding 20° W.C.A. 130.50: Bedding 65° W.C.A. 132.00: Bedding 50° W.C.A.
130	0	94.56			132.69 - 133.40: thinly laminated, pyrite not as abundant.
	37.82	95.72			133.40 - 135.89: v. soft, in part mud. One joint direction parallel with core axis. Transition to light grey colored sediment.
135					135.89 - 140.91: light grey well bedded gully unit - tuffaceous only occasional whiffs of pyrite occur increasing toward bottom of section.
					136.15: Bedding 45° W.C.A.
					138.10: Bedding 45° W.C.A.
140					139.50: Bedding 50° W.C.A.

PAGE 14 OF 21		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
145	40.65	95.08			140.91 - 142.92: Turbid unit, coarse pebbly component laminated character disturbed, much chaotic dumping minor contracted bands of pyrite
	0	74.31			142.92-144.78: finely laminated grey thin whorls of black graphitic sediment, thin bands of very fine grained pyrite. Section broken extensively.
	0	75.0			144.00: Bedding - 60° W.G.A.
	7.51	51.17			144.78 - 155.44: finely laminated occasional coarse sections, widely scattered bands of pyrite. Bedding is very well developed throughout.
	0	63.38			145.00: Bedding 52° W.C.A.
	0	73.85			148.00: Bedding 50° W.C.A.
150	0	50.0			151.00: Bedding 45° W.C.A.
	31.57	89.47			153.00: Bedding 40° W.C.A.
	59.15	97.18			155.00: Bedding 45° W.C.A.
	0	54.3			155.44-157.12: Broken ground: some soft clay gouges.
	0	78.65			157.12-158.80: Rhythmically banded somewhat darker than previous sections, thin bands pyrite.
155	0	82.23			158.00: Bedding 40° W.C.A.
	91.07	103.57		158.80	215.19 CONGLOMERATE:
	74.42	96.72			Coarsely sorted polymictic unit, varying texturally from coarse pebble conglomerate to finer better sorted unit. Unit is massive over it's entire length, weakly jointed, hard coherent.
					158.80-160.82: Coarse light colored section composed up to 1cm diameter - looks like fine gravel
160					

PAGE 16 OF 21		PROJECT: 2196			
DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
165	93.44	100.98			Component include volcanic pebbles - porphyritic, black argillite pieces, bluish-gray + milky white quartz pebbles - set in a finer matrix of same material. 162.82 - 163.56: finer - dark (black) section, siliceous - probably significant carbonaceous content.
	80.92	98.02			163.56 - 167.96: light to medium gray banded conglomerate, grain size varies through interval indicating some sorting occurred. 166.0: Bedding 45° W.C.A.
170	92.81	96.73			167.96 - 168.62: Coarse crude dumping of volcanic + black argillite fragments of rock. 168.62 - 172.15: Bluish-gray medium grained conglomerate with thin bands + clasts of pyritic - well bedded. 170.0: Bedding 40° W.C.A.
	74.34	91.44			172.0: Bedding 55° W.C.A. 172.15 - 175.60: Bluish - off white - gray very siliceous section could be dike.
175	79.91	88.52			172.15 - 172.51: Brecciated pyritic section. Pebbly component, resorbed: grades into unit below.
	106	131			175.60 - 182.12: Gravel pile. Crude dumping of well rounded pebbles and cobbles - poorly sorted. 176.50: Bedding 40° W.C.A.
180	91.80	98.03			178.0 → first observation of hematitic pebbles. intensity increases with depth.
	73.36	89.34			
185	95.72	98.02			

PAGE 17 OF 21			PROJECT: 2196				HOLE NO. 86-3								
ALTERATION						TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
Qtz	Kaol	Pyrite					FROM	TO	WIDTH		Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)
WMS	WMS	WMS													
							162.00	165.00	3.00	11525	3	0.1	162	10	140 5
							165.00	168.00	3.00	11526	1	0.2	114	5	307 3
							168.00	171.00	3.00	11527	1	0.1	142	20	409 9
							171.00	174.00	3.00	11528	1	3.2	277	39	660 13
							174.00	177.00	3.00	11529	2	0.3	29	4	57 58
							177.00	180.00	3.00	11530	1	0.1	8	2	45 1
							180.00	183.00	3.00	11531	1	0.1	20	2	53 2
							183.00	186.00	3.00	11532	1	0.2	13	3	80 4

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
190	72.45	100.00			Section varies considerably texturally. Unit may be silicified locally. Hematitic nature increases markedly with depth. Rock is solid. Jointing is infrequent at 30° and 45° W.C.A.
	95.08	101.63			Minor tension joints contain yellowish mineral is probably native sulfur.
	88.05	91.94			
	90.81	100.00			
200	99.01	100.65			
	88.85	100.98			200.50 - 210.47: Strongly hematitic section. Section appears to be a siliceous precipitate for the most part with occasional foreign rock fragments which are chalcidonic, black-gray, v. fig. Rock is strongly reddish in color very fine grained siliceous with contorted colour bands. No pyritic bands etc. 202.0: banding 40° W.C.A.
	89.25	91.34			
205					206.0: banding 45° W.C.A.

PAGE 19 OF 21			PROJECT: 2196				HOLE NO. 86-3							
ALTERATION				TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS					
Qtz	Kao-Dic	Pyrite			FROM	TO	WIDTH		Au (ppb)	Ag (ppm)	As (ppm)	Sb (ppm)	Cu Zn (ppm)	
WMS	WMS	WMS												
					186.00	189.00	3.00	11533	1	0.1	10	2	50/6	
					189.00	192.00	3.00	11534	1	0.3	9	4	3/3	
					192.00	195.00	3.00	11535	1	0.1	8	2	13/1	
					195.00	198.00	3.00	11536	1	0.1	6	2	10/1	
					198.00	201.00	3.00	11537	2	0.1	7	2	38/1	
					201.00	204.00	3.00	11538	1	0.1	8	2	10/1	
					204.00	207.00	3.00	11539	2	0.1	10	2	7/1	

DEPTH (m)	RQD	% CORE REC	GRAPHIC LOG	GEOLOGICAL DESCRIPTION	
				FROM	TO
210	93.77	101.63			
	93.44	100.00			210.47-215.19: coarse conglomerate, distinctly hematitic coarsely banded (?), pyritic veinlets to 1cm wide cross-cut this unit. Pyrite ~ 4-6%
215	98.68	100.00			
				215.19	END OF HOLE

APPENDIX II

Diamond Drill Hole Analytical Data Analytical Data

ACME ANALYTICAL LABORATORIES LTD.
 952 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 29 1986

DATE REPORT MAILED: Nov. 4/86.....

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: CORE AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ESSO MINERALS PROJECT-MA96 FILE# 86-3002

PAGE 1

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au** PPB
4.26 - 7.00	17913	1	62	14	58	.1	107	29	2	2	2	4
7.00 - 9.00	17914	3	80	5	121	.1	65	26	1	2	2	24
9.00 - 11.00	17915	2	52	14	63	.1	91	35	1	2	2	4
11.00 - 13.00	17916	3	98	11	17	.2	47	29	1	2	2	2
13.00 - 15.00	17917	1	69	12	122	.1	39	25	1	2	2	3
15.00 - 17.00	17918	2	90	10	233	.2	98	23	2	2	2	5
17.00 - 19.00	17919	3	76	52	537	.2	63	22	1	2	2	3
19.00 - 21.80	17920	4	163	40	163	.2	74	36	2	3	2	3
21.80 - 23.93	17921	5	55	28	10	.1	44	159	1	11	3	4
23.93 - 25.85	17922	3	146	9	8	.1	78	24	1	5	2	1
25.85 - 28.15	17923	3	117	22	15	.2	38	62	1	5	2	2
28.15 - 29.81	17924	3	109	9	7	.1	45	24	1	2	2	3
29.81 - 33.34	17925	3	126	11	5	.1	57	31	1	4	2	3
33.34 - 34.31	17926	10	77	20	5	.1	23	77	1	8	4	11
34.31 - 37.00	17927	3	74	5	3	.1	92	29	2	2	3	4
37.00 - 39.00	17928	4	146	11	4	.2	79	43	1	3	4	7
39.00 - 40.80	17929	2	159	9	8	.1	92	33	1	3	2	6
40.80 - 42.36	17930	4	137	14	8	.1	42	38	1	5	3	12
42.36 - 44.00	17931	3	74	8	1	.1	35	11	1	2	4	44
44.00 - 46.00	17932	3	109	7	22	.1	55	20	1	3	2	6
46.00 - 47.73	17933	4	165	10	7	.1	69	26	1	5	3	7
47.73 - 49.20	17934	3	111	15	5	.3	45	28	1	3	2	8
49.20 - 51.00	17935	3	158	10	5	.1	68	34	1	2	3	5
51.00 - 53.00	17936	2	99	3	3	.4	32	26	1	3	4	3
	STD C	20	58	37	130	6.9	1002	38	32	15	19	-

DDH 86-2

ESSO MINERALS

PROJECT-MA96

FILE# 86-3002

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au#1 PPB
53.00 - 56.00	17937	2	205	8	5	.1	66	47	1	3	2	1
56.00 - 58.60	17938	6	268	11	15	.1	59	68	1	37	2	4
58.60 - 60.00	17939	10	622	17	17	.2	50	204	1	45	2	17
60.00 - 61.58	17940	7	406	10	5	.1	23	84	1	6	2	2
61.58 - 62.78	17941	4	66	13	3	.1	18	87	1	8	4	9
62.78 - 64.00	17942	3	881	16	59	.1	17	92	1	131	5	13
64.00 - 65.71	17943	5	751	13	41	.1	21	151	1	77	2	6
65.71 - 69.00	17944	5	35	4	4	.4	11	16	1	11	5	44
69.00 - 72.00	17945	4	42	5	2	.1	10	7	1	9	3	12
72.00 - 75.00	17946	10	33	15	6	.1	13	49	1	36	3	27
75.00 - 78.00	17947	5	44	2	2	.4	13	12	1	69	2	1
78.00 - 81.00	17948	4	18	4	2	.2	10	4	1	38	2	24
81.00 - 84.00	17949	7	23	2	2	.3	12	6	1	49	2	8
84.00 - 87.00	17950	11	18	5	2	.4	11	7	1	21	2	5
87.00 - 90.00	17951	3	12	4	2	.4	12	3	1	10	2	2
90.00 - 92.00	17952	5	16	5	3	.5	12	7	1	27	2	13
92.00 - 96.00	17953	8	16	4	2	.3	14	10	1	24	4	4
131.20 - 134.20	17954	5	37	8	3	1.2	19	170	1	106	19	28
134.20 - 137.00	17955	13	6170	15	35	.4	35	1959	1	253	6	19
137.00 - 140.00	17956	10	3074	22	12	.6	56	929	1	94	17	22
140.00 - 143.00	17957	12	3126	13	10	.4	46	992	1	66	2	51
143.00 - 146.00	17958	9	1163	18	7	.9	51	263	1	32	11	91
146.00 - 149.00	17959	12	2204	31	10	1.3	56	429	1	43	12	46
149.00 - 152.00	17960	12	2114	59	10	1.5	63	380	1	36	18	24
	STD C	21	57	42	128	6.9	988	35	33	16	19	-
152.00 - 155.00	17961	11	3229	55	11	1.4	53	877	1	45	8	8
155.00 - 158.00	17962	10	3497	58	22	1.6	58	928	1	82	14	2
158.00 - 161.30	17963	21	4558	93	45	2.6	68	1162	2	140	21	9
161.30 - 161.80	17964	17	3227	93	50	2.3	67	855	2	130	22	10
161.80 - 163.56	17965	13	5484	75	94	1.6	46	1595	1	267	9	1
163.56 - 164.70	17966	15	2518	139	47	2.3	64	517	2	102	15	1
164.70 - 166.92	17967	7	3016	44	28	.5	28	899	1	85	2	2
166.92 - 170.00	17968	6	1289	130	40	1.7	49	292	1	76	10	1
	RE 17953	8	17	5	2	.3	15	13	1	25	5	-
170.00 - 172.00	17969	12	1224	261	55	2.9	59	335	2	106	32	2
172.00 - 173.30	17970	12	954	266	56	2.6	51	286	1	95	20	1
173.90 - 177.00	17971	8	782	222	49	2.5	41	249	2	77	11	2
177.00 - 178.30	17972	12	841	253	61	2.5	51	267	1	100	17	1
	STD C	20	57	38	132	7.0	1011	42	33	15	19	-

DDH 86-2

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au# PPB
178.90 - 181.00	17973	17	1558	723	150	4.7	63	519	2	267	44	8
181.00 - 183.00	17974	14	2232	747	263	6.6	62	827	2	332	46	1
183.00 - 186.00	17975	10	1057	607	116	12.9	62	339	3	189	53	1
186.00 - 188.06	17976	16	763	806	68	22.4	62	258	1	155	50	4
188.06 - 191.00	17977	15	1216	883	4444	18.9	38	344	1	321	24	4
191.00 - 194.00	17978	7	355	387	1471	6.5	30	111	2	52	10	1
194.00 - 197.00	17979	10	1165	544	150	21.1	42	372	2	283	37	4
197.00 - 200.00	17980	20	1670	1186	217	25.5	56	557	2	418	41	1
200.00 - 203.00	17981	6	803	470	141	13.3	21	280	1	192	17	1
203.00 - 205.00	17982	6	1354	520	272	27.8	33	548	2	317	28	4
205.00 - 207.00	17983	10	732	408	64	16.5	46	422	2	193	114	4
207.00 - 208.30	17984	7	617	188	46	13.0	26	275	1	50	76	4
	STD C	21	59	40	134	7.0	1033	42	34	16	19	-

DDH 86-2

ACME ANALYTICAL LABORATORIES LTD.
 352 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 29 1986

DATE REPORT MAILED:

Nov 7/86...

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: PULP AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ESSO MINERALS

FILE # 86-3058R

PAGE 1

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au# PPB
95.00 - 98.00	11501	3	546	202	6	.1	7	154	1	8	2	1
98.00 - 100.88	11502	3	303	155	8	.1	8	74	1	6	2	1
100.88 - 103.00	11503	4	748	26	121	.1	27	57	2	7	2	2
103.00 - 106.68	11504	3	628	51	85	.1	58	64	1	7	2	3
106.68 - 109.00	11505	3	357	54	83	.1	15	72	1	10	3	1
109.00 - 111.00	11506	3	299	103	116	.1	14	59	2	9	4	1
111.00 - 113.88	11507	2	75	267	201	.1	18	34	1	24	2	2
113.88 - 116.00	11508	3	322	84	289	.2	28	157	2	10	3	1
116.00 - 119.00	11509	1	142	84	29	.1	85	27	2	9	2	2
119.00 - 121.00	11510	3	150	87	23	.3	42	41	1	4	3	1
121.00 - 123.20	11511	3	207	96	8	.3	17	47	1	4	3	4
123.20 - 126.23	11512	2	82	56	392	.1	30	18	1	4	2	1
126.23 - 129.00	11513	7	335	212	26	.1	127	214	2	10	6	3
129.00 - 132.00	11514	7	270	94	149	.1	133	320	1	12	2	1
132.00 - 135.00	11515	4	112	36	3	.1	54	127	1	3	2	1
135.00 - 138.00	11516	3	60	16	7	.2	41	62	1	4	2	3
138.00 - 140.91	11517	4	57	16	46	.2	39	83	1	2	3	6
140.91 - 144.00	11518	3	49	12	144	.1	1766	69	2	2	2	2
144.00 - 147.00	11519	3	324	15	42	.1	43	77	1	4	2	1
147.00 - 150.00	11520	6	1201	39	20	.1	111	210	1	15	2	2
153.00 - 156.00	11521	5	372	36	6	.1	188	153	1	21	5	3
156.00 - 158.80	11522	10	780	61	15	.1	60	413	1	46	4	1
158.80 - 162.00	11523	3	273	13	13	.1	11	234	1	9	2	4
160.00 - 163.00	11524	5	531	37	7	.1	198	236	1	16	2	4
162.00 - 165.00	11525	2	140	15	5	.1	9	162	1	10	2	3
165.00 - 168.00	11526	1	307	7	3	.2	9	114	1	5	2	1
168.00 - 171.00	11527	2	409	94	9	.1	17	142	1	20	2	1
171.00 - 174.00	11528	2	660	166	13	3.2	17	277	1	39	2	1
174.00 - 177.00	11529	1	57	24	58	.3	12	29	2	4	2	2
177.00 - 180.00	11530	1	45	4	1	.1	9	8	1	2	2	1
180.00 - 183.00	11531	1	53	13	2	.1	7	20	1	2	2	1
183.00 - 186.00	11532	4	80	6	4	.2	8	13	2	3	2	1
186.00 - 189.00	11533	1	50	4	6	.1	10	10	1	2	2	1
189.00 - 192.00	11534	1	3	5	3	.3	7	9	1	4	2	1
192.00 - 195.00	11535	1	13	3	1	.1	11	8	1	2	2	1
195.00 - 198.00	11536	1	10	2	1	.1	6	6	1	2	2	1
	STD C	20	56	40	125	6.7	978	37	32	15	19	-

DDH 86-3

ESSO MINERALS

FILE # 86-3058 R

PAGE 2

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au# PPB
198.00 - 201.00	11537	1	38	2	1	.1	9	7	1	2	2	2
201.00 - 204.00	11538	1	10	2	1	.1	6	8	1	2	2	1
204.00 - 207.00	11539	1	7	2	1	.1	5	10	1	2	2	2
207.00 - 210.00	11540	1	10	2	1	.1	6	7	1	2	2	1
210.00 - 212.50	11541	1	81	4	3	.1	9	53	1	2	2	2
212.50 - 215.19	11542	1	10	4	1	.2	21	20	1	2	3	3

DDH 86-3

ESSO MINERALS

FILE # 86-3058R

PAGE

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au# PPB
96.00 - 98.75	17985	35	46	19	6	.5	32	131	1	44	12	15
98.75 - 103.02	17986	14	27	33	9	1.4	33	47	1	48	21	17
103.02 - 106.00	17987	5	8	28	3	1.7	20	29	1	73	15	16
106.00 - 109.72	17988	11	16	39	5	3.1	20	101	1	297	26	8
109.72 - 114.60	17989	65	249	41	11	1.7	54	1245	2	719	59	21
115.51 - 118.56	17990	6	73	44	6	2.0	38	227	1	391	25	16
119.48 - 121.00	17991	8	82	56	5	2.9	37	535	1	241	34	31
121.00 - 124.05	17992	6	115	50	3	2.1	44	364	1	156	24	26
124.05 - 127.40	17993	30	227	50	5	2.1	53	1253	1	827	65	52
127.40 - 131.20	17994	12	150	23	4	2.1	45	272	1	84	30	29
	RE 18012	21	34	16	4	1.2	43	104	1	64	17	-
208.30 - 212.00	17995	9	81	140	8	3.7	27	53	1	28	7	3
212.00 - 215.00	17996	9	140	643	5279	3.2	42	47	1	36	7	1
	STD C	21	58	39	127	7.1	1021	42	33	14	20	-
215.00 - 218.24	17997	7	110	257	442	4.3	39	116	1	50	5	3
9.14 - 12.00	17998	6	11	36	15	.4	22	22	1	7	9	1
12.00 - 15.00	17999	18	31	75	7	1.2	27	182	1	71	5	7
15.00 - 18.00	18000	3	74	19	4	.3	25	45	1	10	2	1
18.00 - 21.00	18001	4	83	27	2	.6	27	43	1	11	5	1
21.00 - 23.01	18002	8	34	18	3	.5	39	32	1	14	7	1
24.95 - 28.00	18003	6	158	16	4	.1	28	210	1	50	6	2
28.00 - 31.00	18004	10	76	17	4	1.0	27	122	1	47	9	2
31.00 - 34.00	18005	27	97	24	3	2.7	32	274	1	157	13	3
34.00 - 37.00	18006	18	113	30	4	.5	22	266	1	74	14	5
37.00 - 40.00	18008	45	175	51	5	.7	29	407	1	90	54	5
40.00 - 43.00	18009	4	37	15	4	1.1	22	82	1	15	5	3
43.00 - 47.00	18010	10	74	22	2	1.8	31	182	1	83	9	1
47.00 - 50.00	18011	9	36	19	3	1.9	34	181	1	56	4	2
50.00 - 53.00	18012	20	31	16	4	1.0	44	106	1	63	16	2
53.00 - 56.00	18013	8	35	17	3	.9	57	35	1	45	7	3
56.00 - 59.00	18014	8	59	21	3	1.6	40	66	1	43	12	1
59.00 - 62.00	18015	14	31	63	2	1.4	34	126	1	33	13	1
62.00 - 65.00	18016	6	77	18	2	3.4	33	170	1	43	10	1
65.00 - 68.00	18017	7	69	19	3	2.9	40	82	1	24	8	1
68.00 - 71.00	18018	9	107	33	3	5.2	37	178	1	35	16	2
	STD C	21	58	38	133	7.0	1024	42	33	15	19	-

DDH 86-2

DDH 86-3

8

ESSO MINERALS

FILE # 86-3058R

INTERVAL (m)	SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Th PPM	Sb PPM	Bi PPM	Au# PPB
71.00 - 75.00	18019	11	200	68	3	1.7	46	457	1	85	36	2
75.00 - 78.00	18020	3	493	169	4	.6	117	223	2	10	8	1
78.00 - 81.00	18021	5	603	211	5	.6	89	410	1	15	9	2
81.00 - 84.00	18022	3	841	210	1	.3	44	201	1	14	2	1
84.00 - 87.00	18023	4	1766	137	1	.2	207	385	1	11	2	1
87.00 - 90.84	18024	5	2042	142	2	.1	170	505	2	15	2	1
90.84 - 95.00	18025	6	1626	101	6	.2	161	355	2	19	2	6
	STD C	20	58	37	130	6.9	1003	41	33	15	19	-

DDH 86-3



BLUFF 19

AN

BLUFF 17

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,309

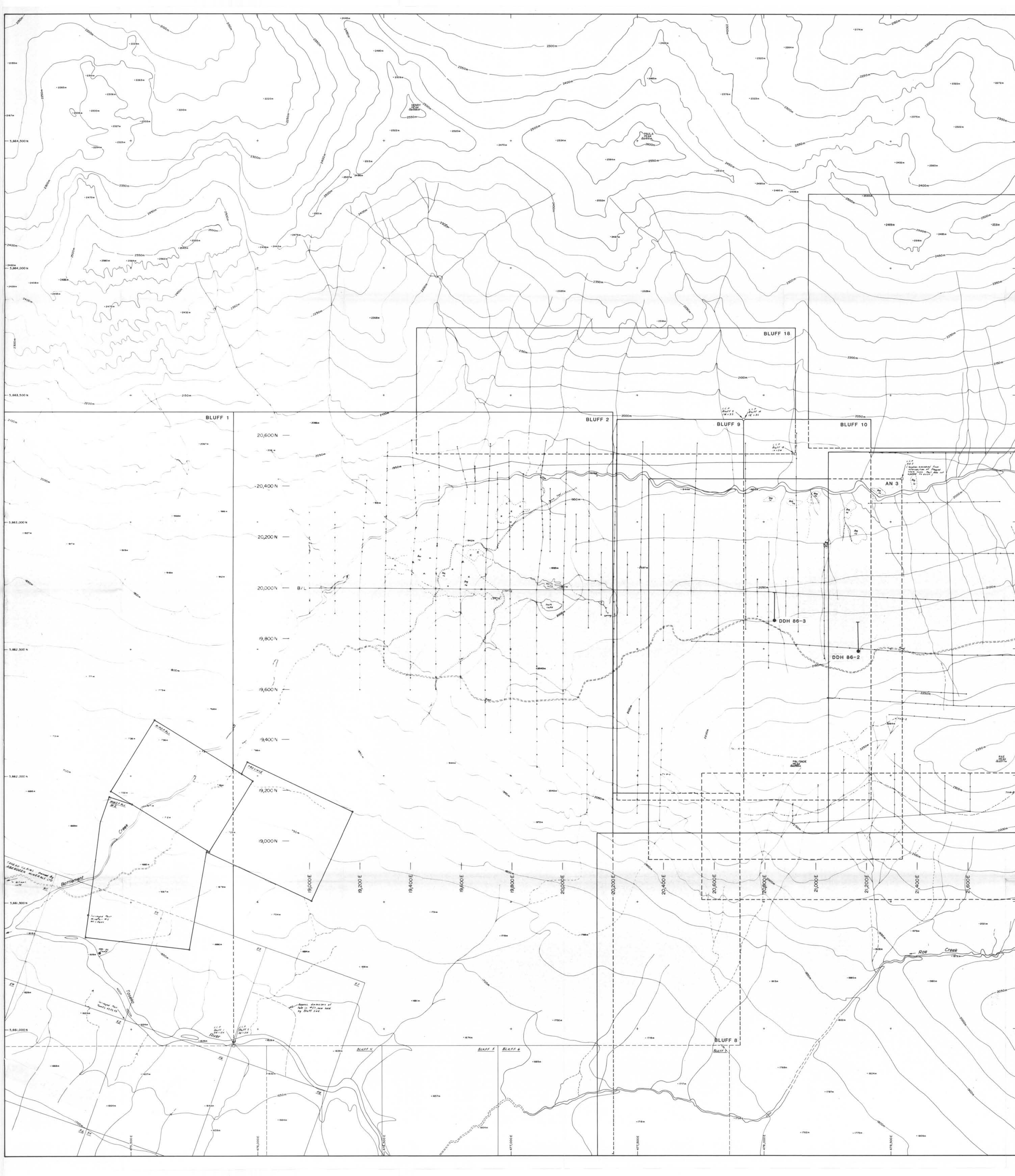
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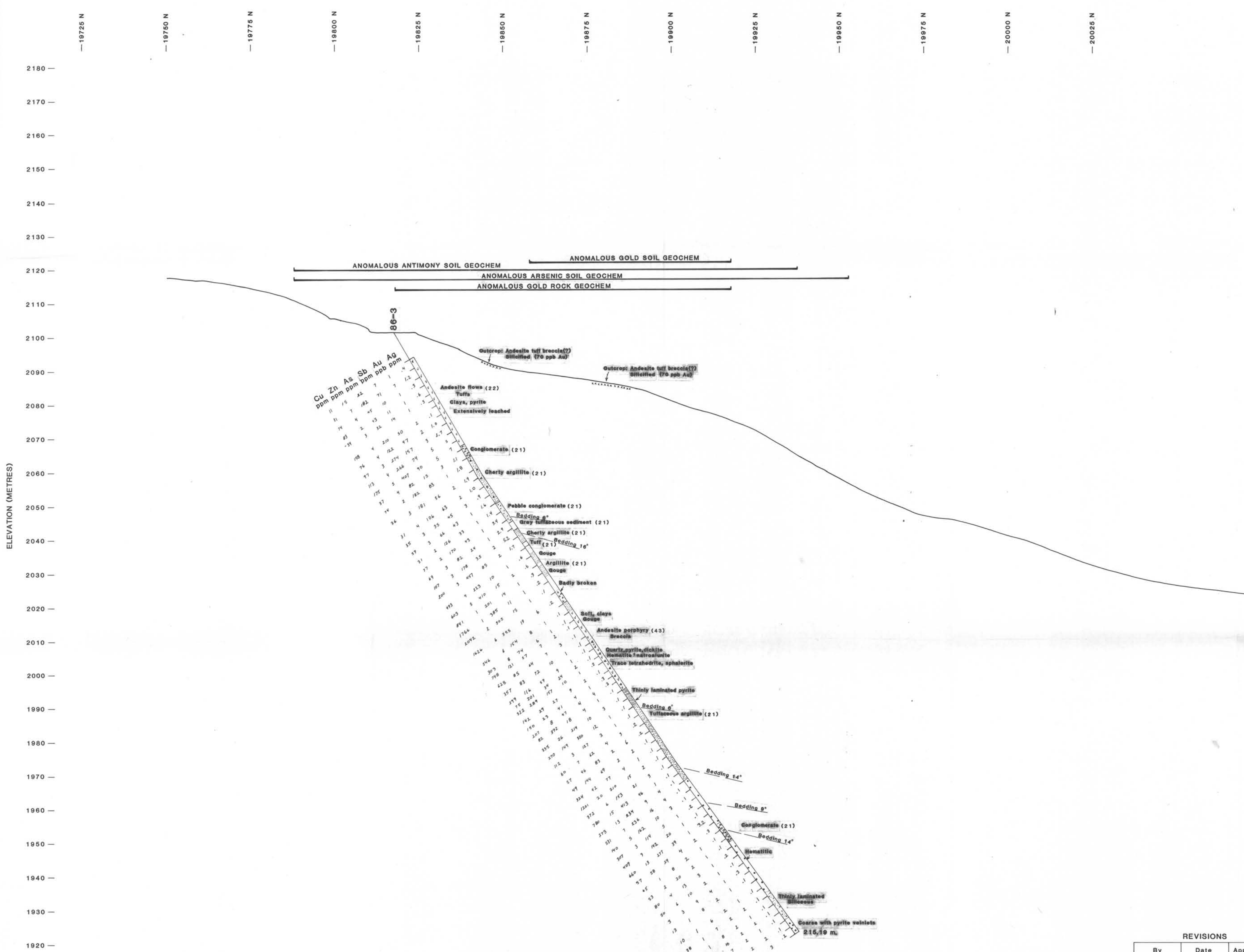
RL and/or E.S.
Date Drafted
April 1986
Drafted By
R.A. Ivony
Date Revised
April, 1987
Revised By
W. Mainyk
NTS Number
92 0/3

TASEKO PROJECT
20,000E GRID - WEST SHEET

DRILL HOLE LOCATIONS

SCALE 1:5,000
MAP No.
2196-01





**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,309
SCALE 1:500
0 5 10 15 20 25 Metres

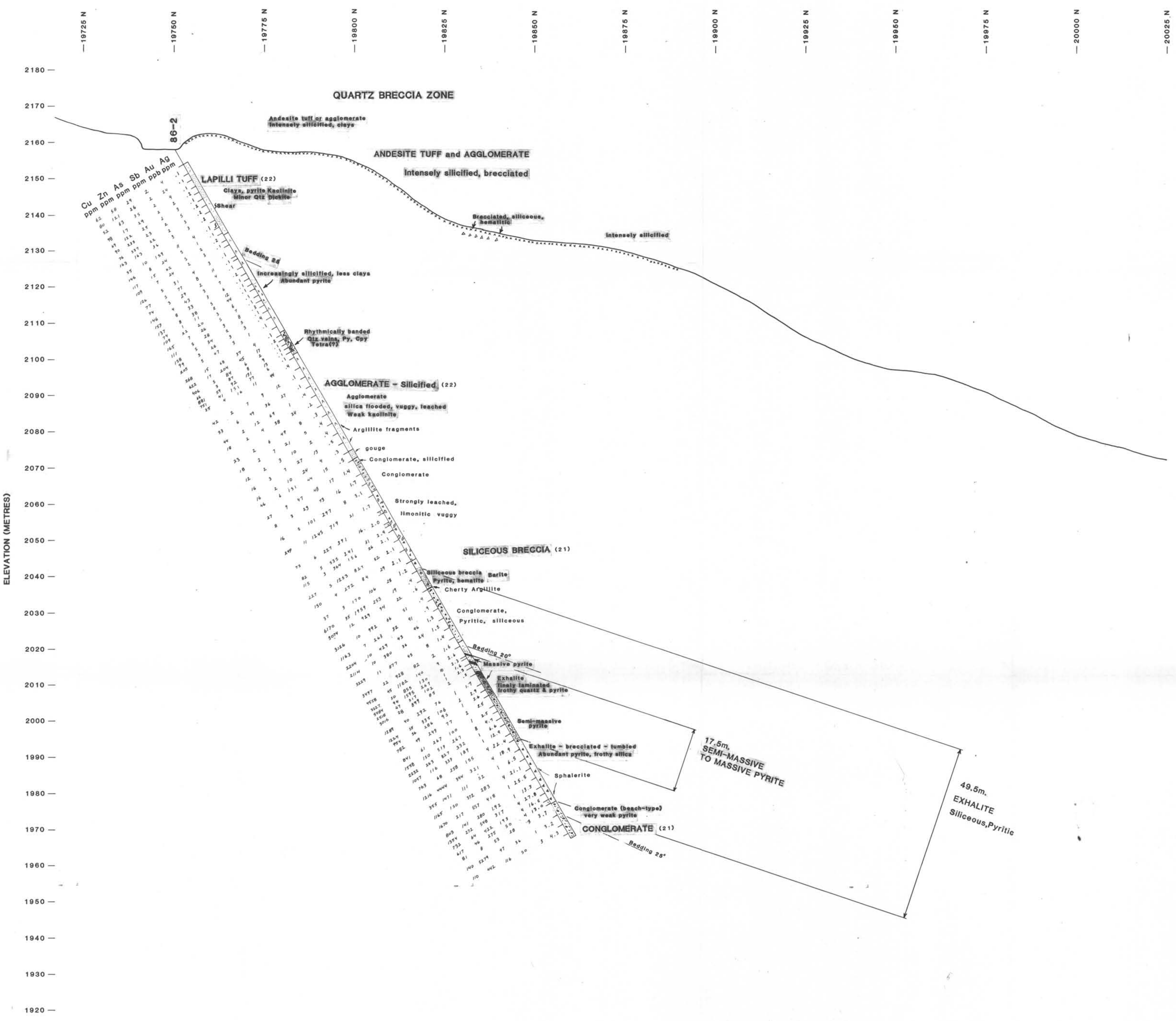
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TASEKO JV
SECTION 20820E
DDH: 86-3

REVISIONS

By	Date	Approv. By

To accompany a report by

Project No: MA96	Report No:
Mining Div: Clinton	NTS: 920/3W
Survey By: W. Melnyk	Drafted By: W. Melnyk
Date: Feb., 1987	Map No: 2196-02



LEGEND

IMPRESIVE ROCKS - LATE CRETACEOUS OR YOUNGER

- 16 FELDSPAR PORPHYRYTIC ANDESITE
- Characteristically dark green, dark grey and black.
- 15 ANDESITE
- fine to medium grained, iron rich - including minor botryoidal hematite in vesicles, weathers a distinctive dark purplish grey to maroon, source of bog iron deposits along the creek?
- 14 DACITE
- 13 FELDSPAR PORPHYRYTIC ANDESITE
- 12 FELDSPAR - PORPHYRYTIC GRANODIORITE
- rounded phenocrysts.
- 11 QUARTZ - FELDSPAR - PORPHYRYTIC GRANODIORITE
- contains quartz eyes averaging 1-2 mm in diameter.
- 10 PORPHYRYTIC GRANODIORITE
- Coast Crystalline Complex.

VOLCANIC ROCKS - LATE CRETACEOUS

- 22 ANDESITE PLUGS, TUFFS, LAPILLI TUFFS and AGGLOMERATE
[22a] thickness est. 100 - 100 (+) m, flows predominate in lower portion and immediately overlie Unit 21, pyroclastics predominate in upper portion.
- 21 ANDESITE TUFF, SUBORDINATE CARBONACEOUS SEDIMENTS (VOLCANICLASTICS)
[21a] thickness 50 (+) m (at Palliser Peak), appears to thicken to east (100 + m) although contact with overlying Unit 22 and underlying Unit 20 cones are uncertain due to intense advanced argillic alteration. The carbonaceous sediments contain late Cretaceous plant fossils.
- 20 FELDSPAR PORPHYRYTIC ANDESITE PLUGS, SUBORDINATE ANDESITE TUFF
[20a] thickness est. 200 - 300 m.
- 19 ANDESITE LITHIC TUFF - WINDY ANDESITE FLOWS
[19a] thickness 2-30 m.
- 18 FELDSPAR PORPHYRYTIC ANDESITE PLUGS
- thickness of individual flows 10 m, interbedded with Unit 7 tuffs.
- 17 ANDESITE LITHIC CRYSTAL TUFF
- thickness 1-25 m, fine to coarse grained tuff to lapilli tuff.
- 16 ANDESITE LITHIC CRYSTAL TUFF
- thickness 2-75 m, fine to coarse grained tuff to lapilli tuff.
- 15 FELDSPAR PORPHYRYTIC ANDESITE PLUG
- thickness 23 m.
- 14 ANDESITE LITHIC TUFF
[14a] thickness 3 m, fine to medium grained.
- 13 ANDESITE LITHIC CRYSTAL TUFF
[13a] thickness 10 m, fine to coarse grained tuff and subordinate lapilli tuff.
- 12 ANDESITE WELDED ASH TUFF
[12a] thickness 4-18 m, fine to medium grained.
- 11 ANDESITE LITHIC CRYSTAL TUFF
[11a] thickness 50 m, fine to medium grained, lower contact not exposed.

ALTERATION

Al	Alunite (50%+)	J	Jarosite
Al	Alunite (50%+)	JM	Magnetarosite
Al	Alunite	K	Kaolinite
And	Andalusite	Ksp	K-feldspar
As	Asbestos	Ls	Limonite
B	Biotite	Mg	Magnetite
C	Carbon	Plag	Plagioclase
Clay	Clay	Py	Pyrophyllite
Chl	Chlorite	T	Tourmaline
Cor	Corundum	Qtz	Quartz
Cr	Chromite	Py	Pyrite
Dk	Dioctite	S	Sphalerite
E	Exhalite	Ser	Sericite
Hem	Hematite		

GEOLOGICAL BRANCH ASSESSMENT REPORT

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SCALE 1:500

0 5 10 15 20 25 Metres

ESSO MINERALS CANADA

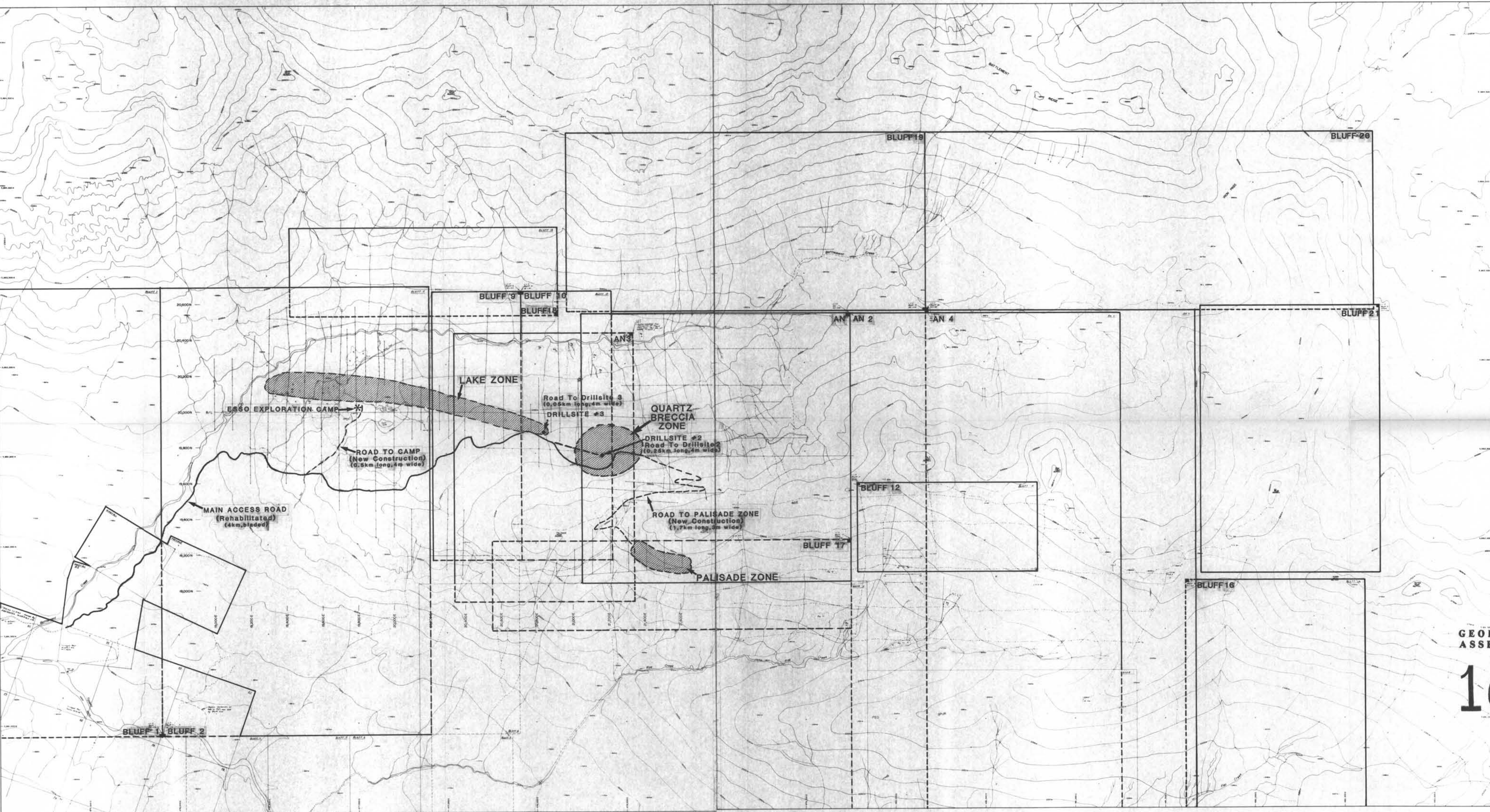
TASEKO JV
SECTION 21150E
DDH: 86-2

REVISIONS

By	Date	Approv. By

To accompany a report by

Project No: MA96	Report No:
Mining Div: Clinton	NTS: 920/3W
Survey By: W. Melnyk	Drafted By: W. Melnyk
Date: Feb., 1987	Map No: 2106-03



GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,309

ESSO MINERALS CANADA

TASEKO PROJECT
LOCATION MAP
PHYSICAL WORK

W.M.
1:10000
04