E1

ESSO RESOURCES CANADA LIMITED

ESSO MINERALS CANADA

Electrum Zone Sulphurets Region 803675

104B/8

DRILL LOG

PROJECT: 2153	GROUND ELEV.
HOLE NO.: DDH 100	BEARING: 040°
LOCATION: Electrum Zone	DIP: - 45°
	TOTAL LENGTH: (103.9m) 341'
LOGGED BY: W. Melnyk	HORIZONTAL PROJECT
DATE: Aug. 19, 1982	VERTICAL PROJECT
CONTRACTOR: Ultra Mobile Diamond Drilling	
CORE SIZE: BDB	
DATE STARTED: Aug 18, 1983	
DATE COMPLETED: Aug 19, 1983	

DIP TESTS: Acid tests:

30.48m	read 51.5°	corrected 42.0°
60.96m	49.0°	39.5°
103.63m	49.5°	39.7°

ALTERATION SCALE

absent

slight

moderate

intense

TOTAL SULPHIDE SCALE

traces only

< 1%

1% – 3%

3% – 10%

> 10%

COMMENTS

Only one qtz vein with electrum at 30.00 - 30.18 . many grains, qtz stwk. not developed.

LEGEND

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
				stick-up 0 - 0.84 : casing 0.84 - : SYENODIORITE Med to pale grey green intensely altered intrusive. Texturally remnant feldspar							
			q.v./65	grains quartz eyeball from 1mm to 1cm commonly 3mm subhedral outlines. lath shaped alt'd crystals after amphibole. waxy green color to 3mm. Overall crystal content about 15-20% but locally as high as 50%							
5				Groundmass is fine grained sericitic, pyritic core surface is speckled with granular py disc and thin veinlets occupying fracture. 5mm v.f. grained py seams along microfracture.							
			q.v./55°	4.66: qtz-py vinlet, 8mm, 65° 7.75: qtz vn, mineralized, grayish bluish qtz granular, with vague irregular contacts							
10											
				14.09 - 17.73: Approx 15 thin qtz veinlets with minor pyrite. Most are 70-80° w.c.a. <1cm and contain variable py							
			q.v./parallel								
				18.17: 2mm q.v. // , Minor bx 18.33: 2mm q.v. // , Minor bx Arg(?)							
			q.v./parallel q.v./parallel	18.61 - 18.85: q.v. crudely banded minor chalcedonic material. at 80° w.c.a. contacts are not effected.							
20				19.75: qtz-sulf vn, 1.5cm, 80°							
			q.v./80°	20.54 - 20.65: chalcedonic qtz vein 80° with dark fine grained sericitic halo 6cm either side.							
			q.v./q.v./30°/85°								

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au oz/T	ASSAYS Ag oz/T
0.84 - Diss py with thin veinlets and fg. block py along micro fractures							
4.66 : q.v. .8mm . 65° . py							
		5.50	7.50	2.00	11048	.004	.09
7.75 : qtz-sulf vn : 3cm . 35° . sphal gal tet Ag(?).		7.50	8.00	0.50	11049	.012	.43
		8.00	9.00	1.00	11050	.013	.19
		12.50	15.00	2.50	11051	.008	.08
16.05 - 16.37 : Irreg qtz vns with traces of Tet and sphal - minor 16.70 : Trace sphal irreg qtz stringer 11° w.c.a.		15.00	18.00	3.00	11052	.011	.24
18.17 : 2mm q.v. 11° Minor tet 18.33 : 2mm q.v. 11°, Minor tet, Ag(?) 18.61 - 18.85 : q.v. 80°, sphal tet weak		18.00	18.85	0.85	11053	.033	4.57
19.75 : q-s Vn, 80°, 1.5cm . Tr. sphal		18.85	20.00	1.15	11054	.007	.16
20.54 - 20.65 : q.v. 80°, Barren 78 - 3mm q.v. 35° Tr. sph 22.10 - 1cm q-s Vn 85° sph tet		20.00	21.50	1.50	11055	.015	.18
		21.50	23.00	1.50	11056	.013	.41

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
				25.68 - 25.93 : silicified zone, a 3cm q.v and many narrow veinlets all at 70°							
25			q.v. / 70°								
			q.v. / 35°	qtz + pyritic veinlets at 27.00, 27.71 and 27.91 with traces of tetrahedrite and ephedrite.							
			q.v. 80° / q.v. 45° / 3.v. 75°	28.14 - 28.65 : qtz vn and s:l zone contacts irregular. weakly mineralized qtz is coarse crystalline.							
				1cm wide on fracture at 28.20 at 10° w.c.a.							
30			q.v. / 80°	29.00 - 29.50 : 8 q.vs 30 - 60° w.c.a two contain py. q.vs < 1cm.							
			q.v. / 45° / q.v. / 80	30.00 - 30.18 : q.v. coarse granular Fe-oxide fracture at 45° - electrum many grains.							
				30.89 - 31.05 : q.v. + s:l at 35° . Milky white							
			q.v. / q.v. 80 / 80	32.26 : q.v. 2.5cm, 75° , pyrite tet.							
				32.52 : q.v. 1cm, 80° , Pyrite + tet							
35				34.30 : q.v. : 1cm, 80° , Tr. Tetra							
			q.v. / 85°	34.37 : q.v. : 1cm, 80° , Tr. Tetra							
			q.v. / 80°	35.34 : q.v. : 2cm, 85° Tr. Tetra							
			q.v. / 80 / q.v. / 70°	35.95 - q.v. 1cm, 80° Tetra							
				36.48 - q.v. 1cm, 80° Tetra							
			q.v. / 75° / q.v. / 60° / 70 / qtz / 70°	Weakly mineralized veins at 37.60 38.00, 38.11 and 38.44							
				39.14 - 39.34 : Well mineralized q.v. with 6mm sphal, gal, tet, + Arg							
40				39.53 - 43.73 : quartz veining drops off considerably. rock maintains coarse granular character							
				43.73 - 47.00 : Grey, contains about 15% qtz veining, mostly ptygmatic and virtually all barren							
45											

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au g/T	ASSAYS Ag g/T
23.72: q.v. 5mm, 40° Tr. sphal							
		23.00	26.00	3.00	11057	.024	.13
25.68 - 25.73: sil q.v. 70°, oxy pyrite							
27.00 . 3mm qtz-py veinlet 35°		26.00	27.50	1.50	11058	.013	.17
27.71 - 1.5cm qtz vn 80° Tr. Tetra							
27.76 - 4mm q.v 45° Tr. Tetra		27.50	28.14	0.64	11059	.013	.09
27.91 - 1cm q.v. 75° Tr. tetra, sphal.		28.14	28.65	0.51	11060	.025	.24
* 28.14 - 28.65: q.v. +sil irreg. Tr Tet, sphal, possibly electrum at 28.52		28.65	29.80	1.15	11061	.033	.23
* 30.00 - 30.18: q.v. irreg @ 80° Electrum							
Many grains. Minor tetra.		29.80	30.30	0.50	11062	1.461	1.38
30.89 - 31.05: Sphal gal Tetra, Tr cov. Arg (?).		30.30	31.30	1.00	11063	0.018	.28
32.26: q.v. 2.5cm, 75°, pyrite, tet							
32: q.v. 1cm, 80° pyrite b.r.		31.30	33.00	1.70	11064	0.021	.15
34.30 : 1cm 80 , Tr. tetra		33.00	35.00	2.00	11065	0.010	.10
34.37 : 1cm , 80 , Tr. tetra							
35.34 : 2cm , 85° , Tr. Tetra							
35.95 : q.v. 1cm , 80 , Tetra							
		35.00	36.50	1.50	11066	0.004	.09
36.48 : q.v. 1cm 80° Tetra							
37.60 : q.v. 4cm 70° Tr. Tetra Arg.							
38.00 : q.v 2cm 75° Barren		36.50	38.00	1.50	11067	0.008	.16
38.11 : q.v .5cm 75° Tr. Tet sphal							
38:44 : q.v .4cm 60° Tr. tet sphal		38.00	38.80	0.80	11068	0.017	.56
38.50 : q.v. .4cm 70° Tr. Tet.							
38.86 : q.v. 2.5cm 70° Tet, sphal 10%		38.80	39.53	0.73	11069	0.025	3.78
39.14 - 39.34: q.v. 70°, sphal, Tet gal Ag(?) 15% sulfides.							
39.42 - 39.53: q.v. irreg. sphal tetra.		39.53	42.00	2.47	11070	0.015	.14
39.53 - 43.73: 7-9% granular diss py odd pyritic veinlet.							
43.73 - 47.00 : Pyrite 7-9% diss.		42.00	43.73	1.73	11071	0.017	.13
		43.73	45.50	1.77	11072	0.008	.15

N2/E2

 PROJECT: 2135 HOLE NO. 100

% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
			47.00 - 47.7: Intrusive strongly foliated esp. near bottom. at 30° to C.A.							
			47.7 - 54.10: Rock is intensely broken Recovery is poor. Great deal of shattering present. No clay. qtz-carbonate veining present, most is barren and irregular veining. Several specks of tetra.							
			51.2 - 52.27: Foliation parting very common in this interval at ~70° Crumbly.							
			54.10 - 76.67: Uniform, coarse grained, altd intrusive. Core surface is characterized by altd green feldspar crystals and elongate altd amphibole grains both variable 1 - 4 mm with occassional crystal to 1cm. Unit is weakly fractured with these being healed by carbonate. Groundmass is fine grained feldspathic now altd to sericite carbonate. Section is also sprinkled with coarse crumbly pyrite grains, often small ellipsoidal blebs to .7cm. Pyrite also occurs along carbonate veinlets in choppy veinlets. qtz veining is very weak in this section.							
			64.32 - 65.34: Veined silicified zone. Irregular qtz. blebs - containing a trace of tetra							

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au g/T	ASSAYS Ag g/T
		45.50	47.70	2.20	11073	0.015	.12
47.00 - 47.7: py diss 8%							
47.70 - 49.68: Trace ∧ Tetra contained in tension gash, infilled with qtz - carbonate							
Remainder of crushed interval is barren of sulfide except py							
54.10 - 76.67: 10-15% py by volume - as diss. Cubes broken mostly and elliptical aggregates of minerals							
		63.00	64.32	1.32	11074	0.007	.13
64.32 - 65.34: 9.V. - sil, irreg. Tr. Tetra and Trace MoS_2 at 64.35		64.32	65.34	1.02	11075	0.006	.26
		65.34	67.00	1.66	11076	0.004	.15

N2/E2

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
70				72.84 - 76.67 : Grey section : v.f.g py. in matrix + and along hairline fractures. Fabric of rock is distroyed or nearly obliterated. Rock appears to be sil. Several qtz veins at 25° w.c.a barren.							
			q.v. 25°								
75				73.66 - 73.88 : q. veining at 25° barren.							
				76.67 - 80.14 : Four separate q.v.							
			q.v. 45°	76.67 - 77.73 : Grey coarse qtz vn. at 45° mylhld only traces of sulfide.							
			q.v. 45°	78.11 - 78.24 : qtz vn at 45° minor py.							
			q.v. 80°	78.97 - 79.25 : q.v. milky white irreg contact mineralized throughout.							
80				79.96 - 80.14 : q.v. dull coarse milky white, weakly mineralized.							
			q.v. 45°	84.80 - 84.91 : q.v 45° weakly mineralized, coarse granular.							
85				84.91 : Intrusive maintains coarse granular porphyritic nature to bottom of hole.							
				84.91 - 98.75 : Only 5 qtz vns about 1 - 1.5 cm all barren. Rock is solid, not broken. Several hairline fractures healed with carbonate.							
90											

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au oz/T	ASSAYS Ag oz/T		
73.66 - 73.88 : q. Veining, 25°, Barren.									
		75.00	76.67	1.67	11077	.010	.14		
76.67 - 77.73 : q.v., 45°, Trace Tetra and Py Diffuse vein.									
		76.67	77.73	1.06	11078	.020	.19		
78.11 - 78.24 : q.v. 45°, only pyrite									
78.97 - 79.25 : q.v., 80°, irregular, Tetra. and trace sphal to 2%		77.73	78.60	0.87	11079	.017	.39		
		78.60	79.25	0.65	11080	.193	.71		
79.88 - 80.14 : q.v. irreg, Tr. Tetra.		79.25	80.14	0.89	11081	.038	.23		
		80.14	82.00	1.86	11082	.012	.23		
84.80 - 84.91 : q.v. 45°, Trace tetra.									

N2/E2

PROJECT: 2153

HOLE NO. 100

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
				93.68 : q.v. at 30° , barren							
95				97.39 - 97.78 : Three q.v. at 20° , 1-1.5cm all barren							
				98.75 - 100.13 : Moderately silicified zone . Vague qtz veining . Two regular veins . Traces of foliation at 45° .							
100				100.13 - 102.73 : 18 qtz - carb veinlets 3mm to 8mm . all barren 30 - 45°							
				102.73 - 103.15 : Veined section 30 - 45° other quite irregular . 30% qtz - carb .							
				103.89 : END OF HOLE .							
105											

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS Au oz/T	ASSAYS Ag oz/T
93.68: q.v. 30°, 1.5cm barren							
97.29-97.78: 3 q.v. 1-1.5cm 20° barren							
98.75-100.13: Silicified zone. Minor traces of tetra. Two q.v's near 100.00 at 25° 1.5cm and .8cm - barren.		97.29	98.75	0.96	11083	.017	.26
		98.75	100.13	1.38	11084	.017	.38
100.13-102.73: 1% q.v. - carb veinlets 2-8mm 30°-45°, barren.							
102.73-103.15: Veined section 30% q.v. - carb. 30-45°		100.13	102.73	2.60	11085	.011	.14
		~~102.73~~	~~103.15~~	~~0.42~~	~~11086~~	~~.022~~	~~.09~~
		103.15	103.89	0.74	11087	.019	.16

N2/E2

PAGE	OF	PROJECT:	HOLE NO.

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	ALTERATION B	ALTERATION C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.	