E1

ESSO RESOURCES CANADA LIMITED

ESSO MINERALS CANADA

803747

DRILL LOG

PROJECT 2153	GROUND ELEV. 3495'
HOLE NO. 23	BEARING 090°
LOCATION Sulphuret Gold Zone	DIP -45°
	TOTAL LENGTH 324' (98.76m) core recovery to 318' 96.93m
LOGGED BY R. Baerg, D. Bridge	HORIZONTAL PROJECT based on 96.93 m: 68.54m
DATE July 11/81 - July 13/81	VERTICAL PROJECT 68.54m
CONTRACTOR Arctic Diamond Drilling	**ALTERATION SCALE** 0 1 2 3 absent slight moderate intense
CORE SIZE BQ	
DATE STARTED July 10/81	**TOTAL SULPHIDE SCALE** 0 1 2 3 4 traces only < 1% 1% – 3% 3% – 10% > 10%
DATE COMPLETED July 12/81	
DIP TESTS none	
COMMENTS hole broke out of cliff face at 324'. rods were lost down the hole.	LEGEND

Dave A Bailey

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 PROJECT: 2153 HOLE NO. 23

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION py <1cm A	ALTERATION ve 1-10 B	ALTERATION ns >10cm C	ALTERATION qtz v D	ALTERATION cal v E	FRACTURE INTENSITY	% VEIN QTZ.
0				0.00 - 4.80: overburden							
5.0			35 60 9cm py v 9.5cm py v	4.80 - 6.20: chl. and.; lt - med. gr.; abund. 1-5mm chl grains + frags, round to sub angular; locally silicified in zone of int. fract., fract. throughout py after chl locally	5	0 (3.6/m)	0	0	0	H	
10.0				6.20 - 9.62: silic. alt. and.; lt.-med. gry; mod silic, local zones w̄ dk gr chl frags, frags to 5mm, sub ang. to sub round; locally int. fract w̄ cal healing, qtz-cal veining throughout, hair line to 1cm wide; locally py after chl.	38	3 (12.0)	0	8 (2.3)	10		
			20 fault	9.62 - 45.0: chl. alt. and.; med gry-gr; local color var. from lt-pale gr to med gr-gry; chl grains + frags to 1.5cm, frags are med. to dk gr., chl locally on fracts, frags are sub ang. to sub round; locally	261	6	2	173	74	M	
15.0			25 mass. py-qtz vein (1.15 m)	ep after fs. frags to 6mm and sub ang.; locally some relic text, ep-chl after fs-hbl; qtz-cal veining throughout, hairline to massive patches, appears to be 3 vein systems, qtz-ep-cal-chl veins cut by qtz veins, cut by qtz-ep veins, some lger veins show brecciation of country rock, several veins		(7.6/m)		(4.9/m)			
20.0				have qtz walls w̄ py core.							

 PROJECT: 2153 HOLE NO. 23

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS oz/ton Au	ASSAYS ppm Ag	ASSAYS ppm Cu	ASSAYS ppm Mo	ppm As / ppm Sb / ppb Hg
4.80 - 6.20: py - 10%, f-m.g.,		4.80								
anhedral, mainly as				1.20	3838	.018				
sm mass. patches + on fracts,		6.00				.021	1.9	878	12	22 39 350
very Fe stained										Pb-136 Zn-492
6.20 - 9.62: py - 40-45%,										
f-m.g., anhedral				3.00	3839	.044				
to subhedral; mainly as veins						.041	4.8	678	14	116 71 820
+ mass. patches.										Pb-264 Zn-820
		9.0								
		9.62		0.62	3840	.040				
9.62 - 13.95: py - 15-20%,						.039	2.0	1280	6	43 39 310
f-m.g., mainly										Pb-112 Zn-540
sm veins, mass. patches,				2.38	3841	.026				
anhed. to subhed; trace to						.029	2.2	2040	2	33 41 500
minor chalco; vis. Au, 13.10-		12.00								Pb-268 Zn-700
13.25, halos around sm. py veins										
13.95 - 14.63: mass. py				1.95	3842	.079				
vein-patch,						.074	4.8	2800	4	138 68 1300
py - 75-80%, f-m.g.,		13.95								Pb-520 Zn-2040
mainly f.g., one obs. of sph.		14.63		0.68	3843	.054 .055	4.4	1200	4	65 63 1650 Pb-1020 Zn-2280
14.63 - 15.63: py - 10-15%,		15.00		0.37	3844	.036 .032	2.2	894	2	36 22 200 Pb-132 Zn-250
f-m.g., mainly		15.63		0.63	3845	.060 .061	2.8	858	8	53 9 380 Pb-180 Zn-340
dissem., anhed to subhed.										
15.63 - 16.78: mass py-qtz				1.15	3846	.102				
vein, py - 90%,		16.78				.110	4.0	1920	44	103 101 400
f-m.g., anhed to subhed				1.22	3847	.036				Pb-108 Zn-280
16.78 - 45.0: py - 15-20%,		18.00				.040	3.0	1240	24	120 72 400
f.-m.g., mainly										Pb-148 Zn-1040
dissem + sm. veins, trace										
chalco; py in many qtz				3.00	3848	.039				
veins						.040	3.2	1280	6	41 41 950
										Pb-520 Zn-1120
		21.00								

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION py <1cm A	veins HD B	veins >10cm C	qtz V D	cal V E	FRACTURE INTENSITY	% VEIN QTZ.
25.0											
30.0											
35.0											
40.0											
45.0											

 PROJECT: 2153 HOLE NO. 23

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS oz/t Au	ASSAYS ppm Ag	ASSAYS ppm Cu	ASSAYS ppm Mo
—				3.00	3849	.017			
						.019	1.2	1040	7
		24.0							
				3.00	3850	.011			
						.012	0.9	935	3
		27.0							
				3.00	3851	.028			
						.028	0.9	1025	1
		30.0							
				3.00	3852	.047			
						.042	1.0	2000	2
		33.0							
				3.00	3853	.016			
						.020	0.9	1000	2
		36.0							
				3.00	3854	.041			
						.030	1.0	1360	2
		39.0							
				3.00	3855	.015			
						.020	1.0	952	2
		42.0							
				3.00	3856	.034			
						.030	1.2	676	4
		45.0							

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION py <1cm A	veins 1-10 B	veins >10cm C	qtz D	cal E	FRACTURE INTENSITY	% VEIN QTZ.
45.0				45.00 - 53.30 : aph chl. and.; med - dk gr; well chloritized med - dk gr, locally chl on fracts, minor local ep. alt.; ext. qtz veining; 1mm to 5cm, veins locally have cal - chl - ep; fine grained - mottled text. overall; some veins contain angular chl frags; locally py after chl.	80	0	0	42	12	M	
						9.6/m		5.1/m			
50.0											
				53.30 - 54.20: massive qtz - py; qtz is lt - med gry, py throughout.	0	0	1	1	0	L	
55.0				54.20 - 56.76: alt chl and: lt gry, fine granular text; fine chl ground mass, weakly silic, local relic, larger chl patches; locally fract., minor qtz veining.	29	0	0	11	0	L	
						11.3/m		4.3/m			
			27cm qtz v	56.76 - 62.08: chl. and; med gr - gry; abund sm (1-2mm) chl grains, about 5-10%, chl ground mass, locally bleached w̄ minor ep alt., local chl grains after hbl + fs; minor qtz	52	0	0	20	4	M	
60.0				veining w̄ one 27 cm vein; locally fract. w̄ chl on fracts.		9.8/m		3.8/m			
				62.08 - 74.78 : aph. chl. and.; lt - med gr, fine grained mottled text; chl is pale - med gr, locally int fract w̄ qtz-cal healing, local ep alt along qtz veins + in fract zones, minor to ext qtz veining throughout.	44	0	0	38	7	H	
65.0						3.5		3.0			
				veins to 2cm; frags in fract zones very angular, locally sericite alt on fracts.							

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	TO	WIDTH	SAMPLE NUMBER	ASSAYS oz/ton Au	ppm Ag	ppm Cu	ppm Mo
45.00 - 53.30: py - 25%,		45.0							
f.-m.g., anhed									
to subhed, mainly as sm veins				3.00	3857	.020			
+ patches; trace - minor						.020	0.7	1320	1
chalco, fine grains to sm.									
patches in w the py., trace		48.0							
Ag sulfide? in qtz veins									
(3 observ.)									
				3.00	3858	.018			
						.019	0.8	1300	1
		51.00							
				3.00	3859	.110			
						.060	1.0	3000	48
53.30 - 54.20: py - 70-75%,									
f.-m.g., massive.		54.0							
54.20 - 56.76: py - 15%,									
f-m.g, mainly									
as sm veins + dissem.				3.00	3860	.022			
						.077	0.8	1380	2
56.76 - 62.08: py - 10-15%,		57.0							
f-m.g, mainly sm									
veins + dissem; trace chalco,									
f. grains + patches in py; 2 obs.				3.00	3861	.102			
of vis. Au, assoc. w sm. py						.084	1.6	1600	4
veins, v.f. grains.									
		60.0							
				2.08	3862	.041			
						.031	0.8	960	40
62.08 - 74.78: py - 10%,		62.08							
f-m.g., sm.				0.92	3863	<.001			
vein + patches; trace moly		63.0				.011	0.8	784	2
+ chalco, moly obs in qtz vein,									
chalco dissem in py.									
				3.00	3864	.003			
						.010	0.9	1230	2
		66.0							
				3.00	3865	.020			
						.021	1.1	1620	2

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION py <1cm A	ALTERATION veins 1-10 B	ALTERATION veins >10 C	ALTERATION D	ALTERATION E	FRACTURE INTENSITY	% VEIN QTZ.
			60 fract								
70.0											
75.0			10 shear	74.78 - 81.60: chl and; pale - dk gr, abund, 1-2m, chl grains, locally up to 30%, med to dk gr; minor qtz veining up to 1cm; local int fract - fault, ep - sericite alt, healing w̄ qtz-cal locally chl grains show alignment (flow structure?); cal - ep often assoc w̄ qtz veins; py - chl on fracts.	24	1	0	27	6	H	
						3.7		4.0			
80.0				81.60 - 84.53: chl. aph. and; med - dk gr; med gr. chl groundmass w̄ local dk gr chl frags, frags to 1cm, local py after dk gr chl; minor qtz - cal veining to 3mm.	9	0	0	2	2	M	
						3.1		0.7			
85.0				84.53 - 96.93: chl. alt. and; med gr - grey to dk gr; abund. chl. grains, up to 20% locally, grains are 1-3mm, sub angular to angular, (chl after hbl + fs?) grains are well spaced and very distinct in outline + color (dk gr.), apparent relic porphyry text, several remnant fs phenocrysts to 5mm; unit is weak to med. silic; ext. qtz veining, to 7cm veins, locally w̄ chl + ep + cal; chl + py	116	3	0	221	0	L	
						9.6		17.8			
90.0											

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS oz/ton Au	ASSAYS ppm Ag	ASSAYS ppm Cu	ASSAYS ppm Mo
		69.0							
				3.00	3866	.029			
						.011	0.9	996	1
		72.0							
				3.00	3867	.003			
						.031	1.0	1160	6
74.78 - 81.60: py - 10%, f-m.g., mainly sm. veins + dissem, 1-8 cm massive f.g. patch (vein?) in fract zone; trace chalco		75.0							
				3.00	3868	.044			
						.039	0.9	1880	1
		78.0							
				3.00	3869	.027			
						.028	1.0	2410	10
		81.0							
81.60 - 84.53: py - 5%, f-m.g., mainly dissem + sm patches, 1 obs. of vis Au? + Chalco + Bornite on a fract.		81.60		0.60	3870	.031			
						.030	0.9	1180	24
				2.40	3871	.023			
						.020	1.0	1920	1
		84.00							
84.53 - 96.93: py - 10-15%, f-m.g., mainly as sm veins; trace-minor chalco, usually assoc. w/ py. as dissem patches; 7 obs. of vis. Au, 6 obs were assoc. w/ sm py veins or patches, 1 obs of Au-py in 1.5cm qtz vein; trace Ag-grey mineral? in and around some qtz veins		84.53		0.53	3872	.058			
						.052	1.2	3050	24
				2.47	3873	.042			
						.052	1.1	3060	52
		87.0							
				3.00	3874	.011			
						.013	0.9	1180	2
		90.0							

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DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A	B	C	D	E	FRACTURE INTENSITY	% VEIN QTZ.
90.0				locally on fracts; local aph chl zone assoc with ext qtz veining.							
95.0											
100.0											

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MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES FROM	SAMPLES TO	SAMPLES WIDTH	SAMPLE NUMBER	ASSAYS oz/ton Au	ASSAYS ppm Ag	ASSAYS ppm Cu	ASSAYS ppm Mo	ppm As	ppm Sb	ppb. Hg
		90.0										
				3.00	38.75	.019						
						.019	0.8	1620	16			
		93.0										
				3.00	3876	.035						
						.021	0.8	1280	6			
		96.0										
				0.93	3877	.031						
		96.93				.031	1.6	3120	60	14	13	180
										Pb-30	Zn-56	

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