

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION			
				0-5.10 - CASINGS - OVERBURDEN				
			5.10m - 78.73m	OTZ SERICITE SCHIST				
5				- Med grained, Lt. grey				
				- Well foliated, Sericitized and friable.				
				- Sections of complete clay within fractures				
				- NO REMAINING PRIMARY TEXTURES OR STRUCTURES				
				- OTZ veins primarily < 1cm and // foliation				
				minor younger cross cutting veins				
				- py = 5% is disseminated throughout section				
				locally high concentrations with qtz veins +				
				as patches w/ or clots.				
		55		- IN GENERAL UNIT BLOCKY WITH VERY CRUMBLY & FRAGMENTED				
				SEGMENTS - EVIDENCE OF EXTENSIVE SHEARING				
				- POST FRACTURE HUMATITE AND LIMONITE COATING				
10		55		6.24 FRACTURE - RUBBY CORE - LIMONITE STAINED & ?				
				8.20 - 9.10 FRACTURE AND RUBBY CORE - LIMONITE STAINED				
				11.02 - 14.86 BLOCKY AND FRACTURED CORE				
				- FRAGMENTED generally consist of OTZ rich				
				horizons + fragmented qtz veins - width				
				and structural relation unknown				
		55						
20				19.73 - 23.58 WELL SERICITIZED - CLAY SEAMS WITHIN				
				FRAGMENTED SECTIONS				
25		60		26.60 - 28.96 WELL SERICITIZED - CLAY SEAMS WITHIN				
				BLOCKY AND FRAGMENTED ROCK				

DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION				
			68°						
				34.44 - 34.75 - WELL SERICITIZED, FRAG, CLAY SEAMS					
35			65°	34.95 - 35.98 - Irregular Xcutting OTZ vein - clean NO sulfide					
			65°						
				38.41 - 38.72 - Well Sericitized and fractured core: FRAGS PRIMARILY BROKEN OTZ VEINS STRUCTURAL ASSOCIATION? - moly in some OTZ FRAGS.					
40				39.10 - 39.30 - FRACTURE - CORE SERICITIZING + FRAGILE 39.68 - 39.82 - FRACTURED CORE // FOLIATION (LIMONITE MEMBRANE) 41.46 - 41.78 - FRAGMENTED CORE - FRACTURE // FOLIATION - Small frag at 41.52 contains gff vein rich in py < 1cm @ 30° to G.					
			65°						
45				44.91 - 45.31 - FRACTURE <? - RUBBY AND FRAG. CORE - URY FRAGMENTED CORE					
				47.85 - 48.25 - Buggy + RUBBY CORE					
			65°						
50				50.75 - 50.85 - SMALL SHEAR - WELL SERICITIZED - CORE MAY SOFT - CLAY SEAMS 51.80 - 52.42 - FRACTURE - RUBBY AND WELL SERICITIZED CORE V.G PY SEAM 51.80					
			65°						
				54.55 - 54.68 SHEAR - WELL SERICITIZED AND SOFT CORE 54.75 - 54.82 - OTZ VEINS // SUB // FOLIATION - Moly TRACE					
			65°						
55				56.65 - 56.70 - - CLAY SEAM - SMALL SHEAR. 57.40 - 57.52 - FRACTURE <? FRAGMENTED CORE					
			65°						

PAGE 6 OF 21		PROJECT:			HOLE NO.: 13			
DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION			
				60.05 - 60.45 FRACTURE - FRAG + RUBBLY CORE				
				61.16 - 63.10 - BROKEN AND CRUMBLY CORE - SOME NARROW CLAY SEAMS				
				63.55 - 63.98 - EXTENSIVELY SERICITIZED AND FRIABLE - LARGELY COMPOSED OF CLAY MINERAL? PROBABLY // FOLIATION				
65				66.24 - 66.94 - SHEAR ZONE - SERICITE CLAY WITH SMALL FRAGMENTS OF QZ-RICH VEINS PRESERVED WITHIN				
				69.25 - QZ VEINS ≈ 3-4cm WIDE - VIS MPLY AND CHALCO STRUCTURE? APPEARS // FOLIATION				
			60	69.46 - QZ VEIN ≈ 6cm WIDE // SUB // FOLIATION				
70			60	69.70 - 73.56 - VERY WELL SERICITIZED, WELL FOLIATED ROCK WITH NUMEROUS RUBBLY AND FRAGMENTED SEGMENTS - SMALL CLAY SEAMS NOTED WITH MORE SHEARED ZONES BUT NOT WELL DEVELOPED				
			45					
				74.39 - 74.49 - FRACTURE 20° TO CA				
			45					
75				76.51 - 76.61 - WELL SERICITIZED FRACTURE SORT AND EASILY CRUMBLED				
			40					
				78.33 - 107.40				
				OTZO - FELDSPATHIC ROCK				
				- LT TO MEDIUM GR TO PALE GREEN GRDY, FINE TO MED GRAINED.				
				- FOLIATION MODERATELY DEVELOPED AND MORE NOTICEABLY DETECTED ALONG THE FINER GRAINED HORIZONS				
				- QZ VEINS MODERATELY DENSE - GENERALLY // FOLIATIONS < 1cm - LOCALLY X CUTTING ≈ SOMEWHAT WIDER THAN 1cm BY BETWEEN 5-10% LOCALLY AS HIGH AS 15-20% FORMING MORE CONCENTRATED BLENDS AND PATCHWORKS.				
80				- HORIZONS OF MORE CHLORITIZED ALTERATION PRIMARILY IN FINER GRAINED SEGMENTS				
				- UNITS GRADGES FROM SERICITE SCHIST & PROBABLY REPRESENTS LESS SHEARED AND ALTERED EQUIVALENT.				
				- SOME ANGLAR RELECT FRAGS NOW STRETCHED ALONG FOLIATION PLANS				
85				- UNIT IS MORE COMPACTANT WITH LITTLE OR NO FRACTURES				

PAGE 8 OF 21		PROJECT:		HOLE NO. 13		
DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION	
				90.03 OTZ VEIN 10° TO CA SUB // FOLIATION * 1cm wide		
				93.47 OTZ VEIN // FOLIATION * 1cm wide.		
95				95.82 - 95.92 OTZ VEIN - IRREGULAR & PATCHY - GOOD BY ≈ 20%		
100				104.28 - 104.32 OTZ VEINS * 1cm wide - // to SUB // FOLIATION NO ASSOCIATED MINERALIZATION		
105				107.40 - 108.14m ALTERED TUFF = ?		
				- FINER GRAIN MORE CHLORITIC HORIZON FORMING IRREGULAR PATCHWORKS IN ALTERATION AND INTRODUCED BY SMALL OTZ STAINCLETS GENERALLY < 1cm wide		
				- PATCHWORKS CONFORM TO FOLIATION.		
				- POSSIBLE ALTERED TUFFALCOUS ROCK - SOME ELONGATE FRAGS. NOTED		
				- CONTACT WITH ABOVE UNIT GRADATIONAL AND APPEARS TO BE MASHED BY IRREGULAR OTZ VEINING NETWORKS BELOW		
110				108.14 - 109.6 ALTERED VOLCANICS (AS FOR 78.33 - 107.40m)		
				- SLIGHTLY MORE IMPREGNATED WITH OTZ VEINS NETWORKS		
				116.00 - 116.75 OTZ VEIN NETWORK - IRREGULAR - NO GOOD STRUCTURAL CHARACTERISTICS - TRANSGRESSIVE INTO MORE OTZ RICH HORIZON		
				- MASH FOLIATION		
115				119.96 FOLIATION BECOMES STEEPENING & OTZ VEINING BECOMES MORE PROLIFIC - VEINS GENERALLY < 1cm WIDE.		
				- OTZ VEINS @ 5-10° TO CA AND MASH FOLIATION - IN SOME CASES THEY APPEAR TO BE RELATED TO FOLIATION CHANGE ?		

PAGE 10 OF 21		PROJECT:			HOLE NO. 13			
DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION			
125		OTZ	20°	122.0 - 124.0 - OTZ VEIN OR VEINS? RUNNING NEAR // TO CA ~ 1CM WIDE WITH MINOR ASSOCIATED PY & S- 10% IN AND ALONG BOUNDARIES - SOME PATCHES AND PY. BUBBLES NOTED LOCALLY				
				124.05 - 124.12 OTZ VEIN, GREY WHITE WITH NO PY OR MIN. PALE GREEN ALTERATION ALONG FRINGE				
				126.0 - 133.0 - VERY GOOD OTZ VEINING AT 20° TO CA. GENERALLY < 1CM WIDE AND LACK GOOD SULFIDE CONTENT. - SOME CONTAIN MO				
130				129.6 - 230.75 ALTERED TUFFACEOUS Rx - (Lan. Tuff.?) - OTZ - FELDSPATHIC. - Lt. grey to medium grey patchy networks. - fine grained; some coarser grained segments. - some frags preserved in qtz vein network in upper segment - become more definite where qtz veining less intense. Frags usually 1.5cm long ± 0.5cm wide = Sinterized + Chloritized Py ~ 3-5% - above contact masked by Qtz Veining - lower contact gradational with more grainy + Qtz-feld Rx				
		15°		136.75 - 139.49 - DARK GREY TO LT (GREY GREEN) ROCK - OTZ FELDSPATHIC WITH GOOD CHLORITE ALTERATION IN CONJUNCTION WITH OTZ VEINS. OTZ VEIN FORM TREES, NETWORKS. - SOME RELECT FRAGS.?				
				135.80 - 135.85 - OTZ VEIN // FOLIATION - NO SULFIDE				
140			15°					
				142.92 - 142.54 - FOLIATION CHANGES TO BETWEEN 35-62° TO CA AROUND A WHITE CLEAN OF SULFIDES. OTZ VEIN BETWEEN 142.10 - 142.20m NO NOTED MO				
145		ALTERED VOLCANIC TUFFACEOUS		143.0 - 147.0 - DEFINITE ANGULAR FRAGS GREY GREEN DIFFERENT ALTERATION CHARACTERISTICS WITHIN FINE TO MED. GRAINED OTZ- FELDSPATHIC ROCK OF SLIGHTLY LIGHTER COLOR. GREY. FRAGS GENERALLY < 1 1CM AND PRIMARILY ELONGATE TO FOLIATION. - DIFFICULT TO TRACE DEEPER - APPEARS TO GRADE BACK TO OTZ FELDSPATHIC ROCK WITH LESS FRAGS AND GOOD QTZ VEINING NETWORK.				
			0-5°					
				0-5°				

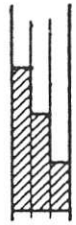
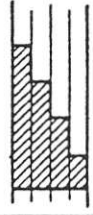
PAGE 12 OF 21		PROJECT:			HOLE NO. 13							
DEPTH (METRES)	%Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION				ALTERATION				
				149.8 - 154.1	- OTZ VEIN NETWORK LESS INTENSE - FRAGS MORE OUTWED FOLIATION STILL STEEP							
		10°	10°									
155		10°	12°	157.1	CROSS CUTTING OTZ VEIN - 1cm wide - CLEAN WHITE NO SULPHIDE CONTENT.							
		35°										
		8°	8°									
160												
			?		OTZ VEIN NETWORK GRADUALLY DIMINISHES and NOT AFFECTING HOST FOLIATION @ 164.54 - GRADATIONAL into Patchy ALTERATION SEGMENTS - OTZ VEINS MORE RANDOM and of STALLANCE to C.A.							
165			42°		FOLIATION OF HOST ROCK NOT INTENSE AND DISTINGUISHED IN FEW SEGMENTS							
170		62°		169.57 - 169.90	- Fine grained & Laminated Segment Related Folded & Ote quartzites - Possible Lepidolite Tuff? - CONTACT WITH MILKY WHITE OTZ. Foliation @ 62° to C.A.							
		40°		169.90 - 170.02	- Milky White Ote Vein cutting core at 85° to CA - contains very little Sulphides.							
			38°	171-								
175												
				177.15 - 177.22	Large Patchy Alteration - with irregular X cutting Ote Veins - Py content is irregular forming small blotchy pale CaS cm ² .							
		42°		178.25	- Milky white Ote Vein @ 42° to CA							

PAGE 14 OF 21		PROJECT:			HOLE NO. 13			
DEPTH (METRES)	%Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION			
185				178.92 - 180.42 - chl-sarctite patchy alteration - Some Relict Frags "Lular?"				
				183.49 - Small fracture 23° to CA - Appears // to Otr vein = 1.0cm wide with some py @ 10%				
				184.60 - 185.11 - Py in host increased @ ≈ 10-15% blotchy				
				185.22 - Small chl py blcks = 1.5cm ²				
190								
				191.0 - 191.1 Otr vein < 1cm wide py ≈ 10% - irregular to core Axis (Wetzel nature)				
				194.66 - small fracture 3° to CA				
200								
				200.15 - 200.45 - Fracture - Fault Gauge - 22° to CA. - core sensitized & friable				
205								
				203.30 - 203.92 - Fault Gauge 18° to CA - Very crumbly & well sensitized core. more // competent Otr being unaltered				
				206.38 - 207 - Patchy altered core with .py content Slightly increase within Ch zones ≈ 10% - locally blotchy at 15% - some frags? "Lular"				

DEPTH (METRES)	%Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION			
				240.50 - 240.70 - OTZ VEINS ^{40-60cm} forming IRREGULAR NETWORK py = 5-10%				
				243.30 - CHL OTZ VEIN < 0.5cm - falls within Fr.				
245				245.95 - FRACTURE < ? - GAUGE CORE WELL SCRATCHED SOFT - EASILY BROKEN IN HAND.				
250				252.68 - 254.50 - BLOCKY CORE, - py content increased to 5-10% and locally patchy blks ~ 2cm wide @ 15% - GOOD OTZ VEINING NETWORK.				
255		OTZ 3°		254.20 - FRACTURE 34° to CA.				
				255.20 - 255.34 NARROW OTZ VEIN with good py ~ 15% at 3-5° to CA				
260				259.97 OTZ VEIN CROSS CUTTING C.A @ 65° - py content ~ 15%.				
				264.52 - FRACTURE 24° to CA.				
265								
				268.40 - 270 CHL occurs as small blks pencil dot size giving core a salt & pepper look.				

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLE INTERVAL	SAMPLE WIDTH	ASSAY NUMBER	%	%	%		COMPOSITE ASSAYS
244.15 - Moly within OTZ vein irregularly x cutting		245							
		250							
252.68 - 254 - py content 210- 15% within and around OTZ veinlike network.		255							
262 - 268 - Small irregular blebs of chlorite material random through out some sections & contain 10-15% py.		265							

DRILL LOG

PROJECT <i>Sulphurats 2153</i>		GROUND ELEV. <i>5060' 1592m</i>																
HOLE NO. <i>DDH 14</i>		BEARING <i>045</i>																
LOCATION <i>IRON CAP AREA 31m at 320° from trench 16</i>		DIP <i>-45</i>																
LOGGED BY <i>L. Ferguson Esso Minerals</i>		TOTAL LENGTH <i>163.68</i>																
DATE <i>August 29/80</i>		HORIZONTAL PROJECT																
CONTRACTOR <i>Arctic</i>		VERTICAL PROJECT																
CORE SIZE <i>1BQ</i>		<p>ALTERATION SCALE</p>  <p>absent slight moderate intense</p>																
DATE STARTED <i>Aug. 23/80 Drill Move Aug. 26/80 Drill Start</i>		TOTAL SULPHIDE SCALE																
DATE COMPLETED <i>Aug. 28/80 (1 P.M.)</i>		 <p>traces only < 1% 1% - 3% 3% - 10% > 10%</p>																
<p>DIP TESTS</p> <table border="1"> <thead> <tr> <th>Depth (m)</th> <th>Dip</th> <th>Bearing</th> </tr> </thead> <tbody> <tr> <td><i>32.61</i></td> <td><i>-44</i></td> <td><i>042</i></td> </tr> <tr> <td><i>63.09</i></td> <td><i>-45</i></td> <td><i>051</i></td> </tr> <tr> <td><i>124.05</i></td> <td><i>-39</i></td> <td><i>045</i></td> </tr> <tr> <td><i>160.63</i></td> <td><i>-36</i></td> <td><i>047</i></td> </tr> </tbody> </table>		Depth (m)	Dip	Bearing	<i>32.61</i>	<i>-44</i>	<i>042</i>	<i>63.09</i>	<i>-45</i>	<i>051</i>	<i>124.05</i>	<i>-39</i>	<i>045</i>	<i>160.63</i>	<i>-36</i>	<i>047</i>	LEGEND	
Depth (m)	Dip	Bearing																
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COMMENTS		<p><i>[Handwritten notes and signatures in the legend area]</i></p>																

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DEPTH (METRES)	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION				
185			65						
			65 FI						
190			55 FI	194.60 - 194.77 OTZ VGN, CLSAN, WHITE, NO PYRITE CHLORITIC ALTERATION AREAS AND WITHIN.					
			55 FI						
195			/						
			/						
200			/						
			FI-35	206.86 - 210.00 OTZ SERICITE SCHIST LIKE SECTION 154.0 + 172.0 - PYRITE CONTENT INCREASED.					
205			FI-55	206.86 - 207.18 - SHEAR - CORE EXTENSIVELY SERIALIZED. SOFT & CRUMBLY.					
			FI-55						
				210 - END HOLE					