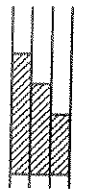
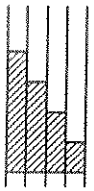
TOTAL ENERGOLD CORPORATION

DRILL LOG

PROJECT: CLEAR LAKE	GROUND ELEV.: 703.05m.
HOLE No.: 91-54	BEARING: 270 (not surveyed with theodolite; - Surveyor not present.)
LOCATION: 61390.30 N, 92029.98 E	DIP: -60 (" ")
	TOTAL LENGTH: 267.30m (877')
LOGGED BY: R. ZURAN	HORIZONTAL PROJECT: 131.6886
DATE: JULY 16th, 1991	VERTICAL PROJECT: -232.5891
CONTRACTOR: KLUANE DRILLING	ALTERATION SCALE
CORE SIZE: NQ	
DATE STARTED: JULY 3rd 9:00 PM.	
DATE COMPLETED: JULY 6th 6:00PM	TOTAL SULPHIDE SCALE
DIP TESTS (ACID.) 209', 63.09m -60.5° 407', 124.05m -61.0° 607', 185.01m -59.5° 807', 245.97m -61.3°	





DRILL CALCULATIONS/HOLE SUMMARY

PURPOSE: to intersect target: MASSIVE SULPHIDE UNIT "A" and confirm ore between holes 91-51, 82-34 and 91-52

REASON FOR SHUTTING DOWN: intersection successful (212.20 - 254.80m); no significant mineralization noted 12.5m past MASSIVE SULPHIDE UNIT A

PERTINENT GEOLOGY:

0 - 21.34 m	Overburden
21.34 - 51.70	C2c Argillite (many sand bands)
51.70 - 64.00	C2b Argillite (minor sand bands)
64.00 - 143.10	C2c Argillite (many sand bands)
143.10 - 144.10	C5 Lapilli Tuff
144.10 - 147.80	C2b Argillite
147.80 - 162.12	C5 Lapilli Tuff
162.12 - 176.00	C2a Argillite (massive, carbonaceous)
176.00 - 183.44	C5 Lapilli Tuff
183.44 - 186.52	C2a Argillite (massive, carbonaceous)
186.52 - 204.30	C2d Argillite (silicified)
204.30 - 204.95	A Massive Sulphide
204.95 - 209.30	C2d Argillite (silicified)
209.30 - 209.60	A Massive Sulphide
209.60 - 212.20	C2d Argillite (silicified)
212.20 - 212.60	A Massive Sulphide
212.60 - 215.94	C2d Argillite (weakly silicified)
215.94 - 254.80	A Massive Sulphide
254.80 - 262.50	C2d Argillite (silicified)
262.50 - 267.31	C2b Argillite (minor sand bands)
E.O.H. @ 267.31	

	PLAN PLOT			LONGITUDINAL PLOT				
					SECTION PLOT			
LENGTH	AZIMUTH	DIP	HORZ	ELEV	DIST FROM BL	SECTION	SEC OFFSET	DESCRIPTION
0.00	270.00	-60.00	0.00	703.05	29.98 E	~~95.0~~ N	0.30 N	COLLAR
31.55	270.00	-60.50	15.77	675.73	18.21 E	~~95.0~~ N	0.30 N	DIP CHANGE
93.57	270.00	-61.00	46.31	621.75	16.33 W	~~95.0~~ N	0.30 N	DIP CHANGE
154.53	270.00	-59.50	75.87	568.43	45.89 W	~~95.0~~ N	0.30 N	DIP CHANGE
215.49	270.00	-61.30	106.81	515.91	76.83 W	~~95.0~~ N	0.30 N	DIP CHANGE
267.30	0.00	0.00	131.69	470.46	101.71 W	~~95.0~~ N	0.30 N	END OF HOLE

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A (Si)	ALTERATION B (Ca)	ALTERATION C (Mg)	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAY
0				0 - 21.34m OVERBURDEN													
5																	
10																	
15																	

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A (Si)	ALTERATION B (ca)	ALTERATION C (org)	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE
15				OVERBURDEN (Cont'd)													
20																	
21				21.34 - 57.70 C2c ARGILLITE													
22	66		lam 85 22.75	Fine grain, dk grey to black and off white where silica injected, sand banded argillite. Sand bands avg 2-3 mm wide, planar bedded with local wavy & tangential cross-bedding. Local faulting, and silica injected zones.													
		C2c															
25	84																
			wavy lam 30 25.75	* 25.75 - 27.80 FAULT ZONE silica injected on Fwt HW. Graphitic matrix w sheared, bd argillite and white qtz frag. avg 4mm in size													
		LOST															
	91	C2c	Fw 35 27.80 0 bdd	- unit becoming more sandy after fault, less argillaceous material; bordering sst in places.													
30	93																

PROJECT CLEAR LAKE

HOLE No. 91-54

DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE		GEOLOGICAL DESCRIPTION	ALTERATION si A	ALTERATION ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
30					*2 C2c ARGILLITE (Cont'd)													
	93	C2c	30	30.15 – 30.54	30.15-30.54 FAULT ; sharp contacts, argillaceous matrix supported fault, competent with elongated clast avg. 3 x ½ mm.													
			tangential 78	31.95														
	100	C2c	lam 10															
35		LOST	lam 10	36.00														
	93	C2c	lam 5	37.00														
			lam 5	38.00														
		LOST	lam 39	39.00														
			lam 10															
40	96	C2c	lam 45	41.00	41.00 - 44.81 Local Convoluted sand bands													
				41.76														
	95				*3													
		LOST			44.81 - 51.70 FAULT ZONE ; sheared brecciated argillite with local silica injection along shear planes and laminae. Local black fault gouge and boudin structure.													
45		C2c		44.81														

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
45				C2c ARGILLITE (Cont'd)													
	96	C2c		(Fissures @ 5, cont'd)													
		LOST															
	92		50														
50		C2c															
				51.70													
	94	C2b	3	51.70-64.00 C2b ARGILLITE													
				Dk grey with local sections containing sand bands (avg 3mm wide) and laminae with local feather fractures with secondary silica (off white) fillings.													
			lam 15	Feather fractures (dewatering) ⊥ to laminae.													
55																	
	100		lam 25														
				57.30													
				Minute (3 x 4/10 mm) silica filled dewatering fractures; All ⊥ to laminae.													
	100																
			lam 60														
60				64.75													

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
60				C2b ARGILLITE (Cont'd)													
	95	C2b	tangential veins	61.30													
				63.09-64.00 interbed of massive carbonaceous argillite													
				64.00-145.10 C2c ARGILLITE													
			1cm 5	Dark grey, locally faulted, brecciated, sheared and silica													
	100			64.20 injected sand banded argillite. Transitional HW contact													
65				65.15													
				65.15-66.64 massive sandy interbed													
				66.64													
	100		1cm 20	68.00													
		C2c		#4													
				69.60													
70				69.60-78.33 FAULT ZONE with local bx, silica impregnation													
	94			dk grey dense + brown clasts graphitic argillite & silica													
				70.90 Convoluted - wavy laminae. Local fracture													
				filled by silica.													
	44		50	74.00													
				(sheared)													
75																	

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C2c ARGILLITE (Cont'd)

DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION arg C	FRACT INTENSITY
75	99				//			
	100				//			
					//			
				78.33	//			
				78.33 - 78.60 Chaotic silica stringers 35%	//			
			35	79.00				
	100			79.40 - 79.60 Chaotic silica stringers 70%				
80				80.00 wavy laminae				
			lam					
			25					
		C2c		82.00				
	100							
				*5				
			40	84.43 - 84.70 FAULT - sheared graphitic arg + 20% silica ppt.				
85				84.80 - 85.00 Folded laminations				
	100		lam 0	86.00				
			lam 0	87.00				
			lam 5	88.00				
	100		lam	89.00				
			lam 0					
90				90.00				

MINERALIZATION DESCRIPTION | TOTAL SULPHIDE | INTERVAL | WIDTH | ASSAY NUMBER | % | % | % | COMPOSITE ASSAYS

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE		GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
90	100		lam 5		C2c ARGILLITE													
91.0			lam 5															
92.0	100		30 lmr		*6													
93.0				93.00 6	93.00 - 94.00 FAULT / SHEAR ZONE Graphitic shear planes with elongated fragments of argillite (crushed), local black gouge & milky qtz frag.													
94.0		48	lam 15	94.00														
95	100		45															
96			wavy lam & band															
97		C2c	lam 10															
98	100		lam 5		98.00 - 98.30 Milky white injection zone; stockwork (10%) breccia.													
99																		
100	100																	
	100		tangential 48	104.00	103.90 - Milky white qtz veinlet. 3cm wide													
105																		

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION si A	ALTERATION ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
105				C2c ARGILLITE													
	100		10	106.00													
			25	107.00 (108.00m) leather fractures across laminations													
			65	108.60 Cleavage oblique to laminae & leather fractures													
110				110.00 (110.00) wavy laminae													
	100	C2c	5														
			65														
	100		60														
115				(115.00) wavy sand beds													
	100		35														
			XB	117.50 rising ripples cross lamination, well developed													
				118.85 - 121.00 m FAULT ZONE with black graphitic shear zones & local breccia and silica injection.													
	91		45	118.85													
120																	

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION A (Si)	ALTERATION B (Ca)	ALTERATION C (arg)	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
120				C2c ARGILLITE (Cont'd)													
	100			121.00					121.00 Small (½ cm wide) py bed, folded and boudin texture. V. fine grain py.								
			lam 66 / 88	123.00													
	100			(122.50) local arg. bx with milky white quartz injection (123.00 - 124.75) silica injection zone with 25% milky white network of feather fractures, stringers, predominantly across lam.													
125	100	C2c		* FAULT ZONE													
			45	127.00 127.00 - 143.10 Sand banded argillite with numerous local graphitic shear planes, faults and breccia with predominately subrounded argillite fragments Avg. 1cm in size Local convoluted lam, and silica injection - stringers, silica filled feather fractures. Also local black graphitic fault gouge*. Fault gouge with local argillite subrounded clasts is a grey colour containing ash 141.25 - 143.10.													
	100		convoluted lam	129.00													
130	100		100 / 66														
			lam 70	134.5													
	100		50														
135																	

PROJECT CLEAR LAKE

HOLE No. 91-54

DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION si A	ALTERATION ca B	ALTERATION arg. C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	% ppm Ag	% Pb	% Zn	COMPOSITE ASSAYS
135				C2c ARGILLITE (Cont'd)													
	100	C2c		138.85 Tangential cross laminations													
140	97																
	95	C5	40; bed. 80	143.10-144.10 C5 LAPILLI TUFF (143.10) Pale - moderated grey green strongly convoluted predominantly ash with strongly flatted lapilli clasts. HW. contains dk argillaceous laminae interbedded w grey green ash.					v. fine grain band (1cm wide) of py along contact between C2c / C5								
145	100	C2b		144.10-147.80 C2b ARGILLITE Fine grain dk grey to dk grey green with local silica injection stringers parallel to cleavage (<10%) + local areas containing angular clasts (3-4 cm) along laminae. Unit contains more ash towards end of interval. Transitional contacts.					147.26-147.95 35% irregular elongated masses, blebs of fine grain py.								
	93	C5	top. 70	147.80-162.12 C5 LAPILLI TUFF							149.00 - 149.11	0.11	6279	1.9	0.13	7.51	
150									149.00-149.09 v. light brown diss. sphalerite - med. grain ino band 5cm wide 15%								

 PROJECT CLEAR LAKE HOLE No. 91-54

DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION
150				C5 LAPILLI TUFF (Cont'd)
151	100	C5	lap. / 85	Pale grey-green ash-lapilli tuff - transitional HW contact with argillite. Ash locally wispy particularly near HW. Lapilli strongly flattened and locally contorted. Local intense carbonate & argillic alteration.
152			lap / 70	
153	100		lap. / 86	(153.50-157.98) 10% black argillite clasts in tuff. Avg size 4mm x 3mm, sub angular elongated along bedding
154			lap. / 85	
155				
156	100	C5	lap / 85	
157			lap / 85	
158				
159	98		lap. / 85	(159.00-159.20) wispy laminae
160			conv.	(160.40-160.65) contorted, convoluted laminae
161				
162	98	C2a	STOCKWORK	162.12-176.00 C2a ARGILLITE — Fine grain, dk grey, graphitic argillite with up to 40% sulphide stockwork/bx. and stringers. Gradational contacts.
163				
164				
165				

ALTERATION: Si (A), ca (B), arg (C); FRACT INTENSITY

MINERALIZATION DESCRIPTION

155.40-155.71 25% v. fine grain py along bedding of tuff as disseminations, bands and crackled reniform textures

155.90 fine grain blob 6cm in dia. py.

155.00-155.90 fine grain py as blebs / blobs / bands up to 3cm wide.

157.00 band of py. 3cm wide along bedding

157.75-158.00 Large blobs (2½×3½cm avg) of coarse grain crackled lt brown sphalerite, 15%

158.20-158.40 20% lt brown coarse grain, crackled sphalerite occurring as large blobs 2×3cm avg. with accessory fine grain euhedral py (2%)

158.40-159.25 5-10% fine grain diss. or in lam. & bands of py.

161.95-162.15 15% blobs (3×5cm) of coarse grain lt brown sphalerite

164.30-164.75 7% lt brown med-coarse grain sphalerite in py stockwork & stringers.

TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	Ag ppm	Pb %	Zn %	COMPOSITE ASSAYS
	157.00-158.00	1.00	6280	7.5	0.25	1.58	
	158.00-158.40	0.40	6281	52.1	0.80	13.80	
	161.96-162.20	0.24	6282	10.4	0.45	8.39	
	164.28-164.78	0.50	6283	3.0	0.08	4.31	

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION Carb C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	Ag ppm	Pb %	Zn %	COMPOSITE ASSAYS
165				C2a ARGILLITE (Contd)													
	100		SHEARED ZONE	(165.00-172.00) Sulphide stringer zone - silico stringers are a minor component. Stringers are sub-parallel to cleavage ; ~80°-72° Local stockwork 1-3%.					166.70-168.00 5% medium grain ll brown sphalerite crosscut with pyrite and milky white (minor <5%) Qtz stringers predominantly 50-80° TCA.		166.69 -169.92	1.23	6284	5.6	0.11	6.28	
	100								168.90 Small 1x1cm irregular patch of lt brown med. grain sphalerite.								
170																	
171	98	C2a	SILICIFIED ROCKWORK BRECCIA	#9 172.00 Fault - high α TCA; Black clay gouge 172.00-176.00 Stringer zone intensifies to stockwork + breccia up to 40% sulphides. Clasts are all low rotated or crackled argillite, injection material is Sulphides. Predominantly pyrite					171.15-172.00 3% ll brown fine to med. grain sphalerite + trace med grain galena associated with stringers.		171.15 -171.85	0.70	6285	6.5	0.39	0.62	
172																	
173									173.95-174.13 8% ll brown fine to med. grain sphalerite + 2% med grain galena associated with stringer stockwork network.		173.76 -174.13	0.41	6286	10.4	2.32	3.49	
174	98																
175																	
	100	C5	SHEARED	176.00-183.44 C5 LAPILLI TUFF Grey green ash-lapilli tuff with flattened lapilli and <3% 1mm-1cm wide white calcite stringers parallel to foliation cleavage					176.00 - 1-10% disseminated fine grains along beds & laminations								
	110																
180																	

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
180				C5 LAPILLI TUFF (Cont'd)													
				180.75-185.49 Predominantly a very pale grey-green													
181	100	C5		gsh tuff with moderate carbonate and argillic													
				alteration.													
182			log.														
			40														
				183.50													
183				183.16-183.20 White calcite veinlet 3½ cm wide													
	100		contact 70° TCA	* 10													
184			* 10	183.44-183.66 Fault with crushed milky white qtz													
		C2a		gypsum lined planes (1-4mm wide). Weak limonite													
185			50	staining along qtz													
				185.66-186.52 C2a ARGILLITE					185.66-186.52 Trace - 1% fl brown fine to med.								
186	100			Dk grey fine grain argillite exhibiting a uniform					grain sphalerite associated with small (1mm-3mm)								
				cleavage 50° TCA. Minor feather fractures cutting					wide pyrite stringers								
187				across cleavage and filled with white silica (<1mm													
				wide, avg.)													
188																	
				186.52-209.30 C2d ARGILLITE (silicified)													
189	100			Grey-dk grey v fine grain silicified argillite with local					186.52-186.80 3% fl brown disseminated fine								
				sulphide and/or silica/calcite stringer zones.					to medium grain sphalerite associated with py								
190																	
				Sulphides occur locally as fine (1-8mm) chaotic stringers,					stringers (3mm wide)								
191		C2d		patches of clusters/aggregates, and grain selvages associated													
				with calcite injections, infilling feather fractures.					187.00-187.15 5% pale fl brown fine grain class								
192				Stringers are 5-35% (avg 10%) volume of rock					sphalerite predominantly in argillite with minor								
	100								amounts within feather fractures <1.0mm x 5mm								
193																	
									191.32 Large blob (1x2cm) of med grain fl. brown								
194									sphalerite								
195	98																

SHEAR ZONE

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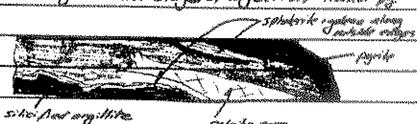
DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	Ca B	arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	ppm Ag	% Pb	% Zn	COMPOSITE ASSAYS
195				C2d ARGILLITE (Cont'd)													
196	98	C2d	STRINGER ZONE	# 11 (major)													
			11	196.50 - 200.85 FAULT ZONE													
197				Large fault with graphitic shear planes and crushed													
				argillite and milky qtz fragments (196.50 - 198.00); crushed													
198			198.00	and brecciated calcite fragments 80% (avg. size 3×3cm)													
	98		45°	and crushed argillite-dirty qtz matrix 20% (198.00 - 198.50)													
199			199.00	crushed black argillite and minor qtz fault gouge (198.5 -													
				199.00); Calcite injected fault breccia - stockwork with 40%													
200				white coarse crystalline calcite and angular clasts of silicified													
			11 200.85	argillite avg 1cm long with a 3/4 cm wide sideritic selvage					200.15 - 200.60 30% lt. brown fine grain sphalerite		200.14 - 200.74	0.60	6387	12.9	2.94	5.06	
201	84			on HW of this portion of fault (199 - 200.85). Up to 40%					+ 8% med. grain galena along and within								
		LOST		sulphides in the last interval					argillite clast surface of stockwork.								
202																	
	86	C2d	STRINGER ZONE	200.85 - 204.30 Stringer zone composed of 10-30%													
203				fine 1mm (avg) stringers and filled in feather													
				fractures of sulphide & silica. Sulphides (sp)													
204				also as blobs (avg. 1cm) irregular blebs and							204.15 - 205.06	0.91	6388	5.3	0.59	2.93	
	98	A		disseminations in 2×1cm (avg.) patches.													
205																	
		C2d	STRINGER, STOCKWORK BRECCIA ZONE	204.30 - 204.95 A MASSIVE SULPHIDE					204.30 - 204.95 15% lt brown - brown fine		205.30 - 207.00	1.70	6287	3.3	0.20	0.80	
206				Massive sulphide veinlet 4cm wide running down					grain sphalerite + 2% med. grain galena along								
				core with multistage selvages - coarse crystalline					outer selvages, as shown in diagram to the left								
207				calcite being the last stage of injection - coarse py.													
	100								204.95 - 209.30 5-20% lt brown v. fine sph to		207.00 - 209.00	2.00	6288	4.4	0.23	1.61	
208									med grain sphalerite associated with selvages and								
									injection stringers (avg. 5% sph.) Avg. 1% med								
209									grain galena.		209.00 - 209.60	0.60	6292	3.8	0.23	1.24	
	100	A	204.95 - 209.30	C2d ARGILLITE (silicified)							209.70 - 210.39	0.69	6289	9.2	0.76	4.48	
210	100	C2d		Stringer (avg. 1cm wide) network of sulphide averaging 20%					209.55 1 irregular patch 1cm long of lt brown sph.								

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION ca B	ALTERATION arg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	~~%~~ ppm Ag	% Pb	% Zn	COMPOSITE ASSAYS
210				C2d ARGILLITE (Cont'd)													
				py becoming oriented in masses ~ 70-90 rca as blobs					209.70 - 211.65 Fine grain lt. brown sph. and med. grain (15% avg)		210.39 - 211.06	0.67	6290	9.0	0.47	3.34	
211	100	C2d	STRINGER STOCKWORK BX ZONE	(3×1cm), disseminations in patches and bands ½ cm					galena (3%) associated with stringer network and								
				wide, and framboidal disseminations concordant with					as fine (1mm) disseminations. Near end of interval								
212				wispy (ash laminae) between 206.00 - 206.50.					sphalerite is wispy in bands 3-4mm wide @ 50-		211.80 - 212.60	0.80	6291	15.6	0.69	6.25	
		A		206.50 - 209.30. → Complex array of stringer networks,					70° rca.								
213				stockwork / breccia of sulphides (primarily py.), silica													
				and calcite which is the latest injection.													
	100								214.00 - 216.20 Finely diss. sph + ga (5% avg.)								
214		C2d	70	209.30 - 209.60 A MASSIVE SULPHIDE					along bedding planes ~ 90° rca.		214.35 - 215.25	0.90	6389	3.5	0.28	1.72	
			90 bed	Massive pyrite medium to coarse crystalline with minor													
215				colloform texture.													
			Contact														
216			60	209.60 - 212.20 C2d ARGILLITE (silicified)					216.00 - 218.00 8.2% lt. brown v. fine grain		216.00 - 217.00	1.00	6293	10.5	0.49	3.28	
				Dark grey fine grain silicified argillite with 30-40% irregular					sphalerite as blotches and irregular masses.								
217	100			masses of sulphide connected to sulphide stringer networks.													
				Sulphides (pyrite) also occur as selvages along calcite injection,							217.00 - 218.00	1.00	6294	11.3	0.38	3.91	
218				disseminations and framboids (1-2mm dia.). 5% calcite					218.00 - 218.59 3% lt. brown v. fine grain		218.00 - 219.00	1.00	6295	9.6	0.85	3.29	
				stringers					sphalerite as irregular masses.								
219		A									219.00 - 220.00	1.00	6296	8.7	0.64	2.45	
	100			212.20 - 212.60 A MASSIVE SULPHIDE					218.59 - 223.80 5% fine grain sphalerite								
220				Fine grain to coarse grain massive sulphide bearing a					4% galena - medium grain.		220.00 - 221.00	1.00	6297	9.5	0.78	3.49	
221				stringer network 70° rca on FW.													
				212.60 - 215.94 C2d ARGILLITE (weakly silicified)							221.00 - 222.00	1.00	6298	8.5	0.27	2.56	
222				Dk grey fine grain argillite with 15-20% sulphides							222.00 - 223.00	1.00	6299	8.7	0.26	1.93	
				(py) occurring as 1cm blobs, patches of disseminations							223.00 - 223.38	0.38	6351	4.5	0.07	0.41	
223	95			and framboids.					223.80 - 225.80 - High Grade section ~ 20%		223.38 - 224.36	0.98	6352	27.5	1.30	5.63	↑
									fine grain sphalerite								
224				215.94 - 254.80 A MASSIVE SULPHIDE							224.36 - 225.40	1.04	6353	27.9	0.62	7.55	
225	100																

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION Si A	ALTERATION Ca B	ALTERATION carg C	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	Ag ppm	Pb %	Zn %	COMPOSITE ASSAYS (width)
225				A MASSIVE SULPHIDE (Contd)													
				Fine grain massive sulphide averaging 95% locally							225.40 - 226.00	0.60	6354	37.6	2.78	9.26	
226	100			medium and coarse grain; local crackled and colloform							226.00 - 227.00	1.00	6355	53.8	2.22	12.40	223.38 - 230.25 (6.87m)
				textures present. Interstitial zones include white													
227				silica and/or calcite inclusion and/or silicified							227.00 - 228.00	1.00	6356	48.7	2.06	17.30	Ag 41.9
				argillite and make up 5-10% volume of rock and					223.00 - 230.25 High Grade section of								Pb 1.85
228				occur as irregular patches and occasional stringers					20% fine grain sphalerite, 1% medium		228.00 - 229.00	1.00	6357	43.6	2.43	14.30	Zn 12.50
									grain galena.								Flotation Test
229	100										229.00 - 230.00	1.00	6358	51.1	1.95	19.20	
230																	
									230.80 - 233.17 ~15% fine grain		230.00 - 230.25	0.25	6359	48.8	1.96	15.10	
231		A							sphalerite, 1% med. grain galena.		230.25 - 230.72	0.47	6360	4.7	0.10	0.39	
											230.72 - 231.57	0.85	6361	28.2	0.46	5.08	
232											231.57 - 232.55	0.78	6362	28.9	0.74	5.97	
											232.55 - 233.30	0.95	6363	27.3	0.73	5.69	
233											233.30 - 234.00	0.70	6364	25.6	0.72	7.45	233.30 - 238.80 (5.50m)
	100										234.00 - 234.80	0.80	6365	34.9	1.28	9.34	Ag 30.6
234																	Pb 1.02
											234.80 - 235.80	1.00	6366	19.2	0.89	5.38	Zn 9.46
235									235.65 - 240.15 <5% fine grain sphalerite,								
									<1% galena.		235.80 - 236.30	0.60	6367	10.5	0.70	2.52	223.38 - 235.80 (12.42m)
236	100			236.20 Colloform textured pyrite							236.30 - 236.50	0.20	6702	6.1	0.29	0.66	
				236.60 Colliform textured pyrite							236.50 - 237.00	0.50	6368	12.8	0.73	3.14	Ag 38.9
237											237.00 - 238.00	1.00	6369	8.9	0.62	2.55	Pb 1.36
																	Zn 9.54
238	100										238.00 - 239.00	1.00	6370	6.9	0.54	1.73	
											239.00 - 239.73	0.73	6703	3.5	0.32	0.53	
239											239.73 - 240.18	0.95	6371	21.3	0.46	6.48	
240											240.18 - 240.46	0.28	6704	7.6	0.22	1.90	

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Depth (meters): 240 – 255 | **% Core Recy:** 100, 100, 100, 96, 100 | **Lithology:** A | **Structure:** bed. 90 at 245.40; 40 / 248 / 12; CRACKLED; STRINGER ZONE; 254.80 B

GEOLOGICAL DESCRIPTION

A MASSIVE SULPHIDE (Cont'd)

245.45 - 245.60 Wispy laminae of sulphides

*12.

248.00 - 248.50 FAULT; Broken sub-angular clasts of pyrite averaging 3/4 cm in a crushed pyrite matrix. 5% silicified argillite clasts also subangular. 2% gypsum in interstitial areas

248.50 - 252.00 Crackled massive sulphide.

252.50 - 254.80 Stringer zone of qtz-carbonate (calcite) injection, several phases with diffuse boundaries. Sulphides are streaked 70-80° TCA; bedding?

254.80 - 262.50 C2d ARGILLITE (silicified)

*13 254.80 - 255.60 FAULT

Alteration: Si (A), Ca (B), arg (C) | **Fract. Intensity**

MINERALIZATION DESCRIPTION

240.23 - 241.35 High Grade: ~30% fine grain sphalerite, <1% galena; irregular masses.

241.35 - 243.40 15-20% fine grain sphalerite; irregular masses.

243.40 - 245.00 <5% fine grain sphalerite in irregular patches.

245.00 - 245.70 Wispy layers (3mm wide) of 20-30% v. fine grain sphalerite

245.70 - 249.00 5% fine grain sphalerite

249.12 - 250.35 10-15% fine grain lt brown sphalerite

250.35 - 254.80 <3% fine grain sphalerite, avg. 1%.

Total Sulphide

Interval	Width	Assay Number	Ag (ppm)	Pb (%)	Zn (%)	Composite Assays
240.46 - 241.55	1.09	6372	26.5	0.91	9.72	239.23 - 243.0
						(3.77 m)
241.56 - 242.35	0.80	6373	20.6	0.89	7.77	Ag 23.0
						Pb 0.66
242.35 - 243.00	0.65	6374	32.6	0.54	6.95	Zn 7.29
						239.23 - 246.0
243.00 - 243.50	0.50	6375	21.6	0.78	5.64	(6.77 m)
243.50 - 244.00	0.50	6376	7.8	0.66	2.56	Ag 29.1
244.00 - 245.00	1.00	6377	19.7	0.80	4.81	Pb 0.75
						Zn 8.02
245.00 - 246.00	1.00	6378	76.0	1.07	17.90	
246.00 - 247.05	1.05	6379	14.2	0.38	2.57	
247.05 - 247.29	0.24	6705	3.2	0.27	0.42	
247.29 - 248.00	0.71	6380	16.9	0.76	4.15	
248.00 - 249.00	1.00	6381	25.7	0.53	5.91	
						248.00 - 250.37
						(2.37 m)
						Ag 20.2
249.00 - 250.00	1.00	6382	14.7	0.56	3.77	Pb 0.39
250.00 - 250.37	0.37	6383	19.9	0.50	6.81	Zn 5.15
250.37 - 251.00	0.63	6384	10.7	0.31	2.51	
251.00 - 253.00	2.00	6385	9.6	0.26	2.12	
253.00 - 254.75	1.75	6386	1.8	0.02	0.03	

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DEPTH METERS	% Core Recy	LITHOLOGY	STRUCTURE		GEOLOGICAL DESCRIPTION	ALTERATION A si	ALTERATION B ca	ALTERATION C arg	FRACT INTENSITY	MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	INTERVAL	WIDTH	ASSAY NUMBER	%	%	%	COMPOSITE ASSAYS
255					C2d ARGILLITE (Cont'd)													
		C2d	STRINGER INJECTION ZONE 60	13 / 255.60	Intensely crushed, sheared and gouged silicified fine grain argillite with minor (10%) quartz and calcite material													
256	98			256.15 / 14														
257																		
					256.14 – 261.00 Intense stringer zone of quartz (white) and calcite (white) healing breccia and fault zones of silicified argillite. 20% Avg sulphides present as irregular fine grain masses.													
258			faults	258.34														
259																		
	100																	
260			re-healed		261.00 – 262.50 Crushed, sheared core – argillite ± sulphides and quartz.													
261		LOST																
262	39		45	262.50 – 267.31 E.O.H.	C2b ARGILLITE													
263		C2b			Dk grey, fine grain argillite with local occassional sand-silt bands (< 5%) particularly towards end of interval.													
264	93		lam.	264.70	262.50 – 265.00 Crushed, broken core; fault gouge noted at approx. 264.90.													
265		LOST	45 lam.	265.20														
266	91	C2b	45	266.00														
267			lam. 65	267.20														
				267.31 EOH.	End of Hole @ 267.31m.													
268																		