

## Reference

### Reference

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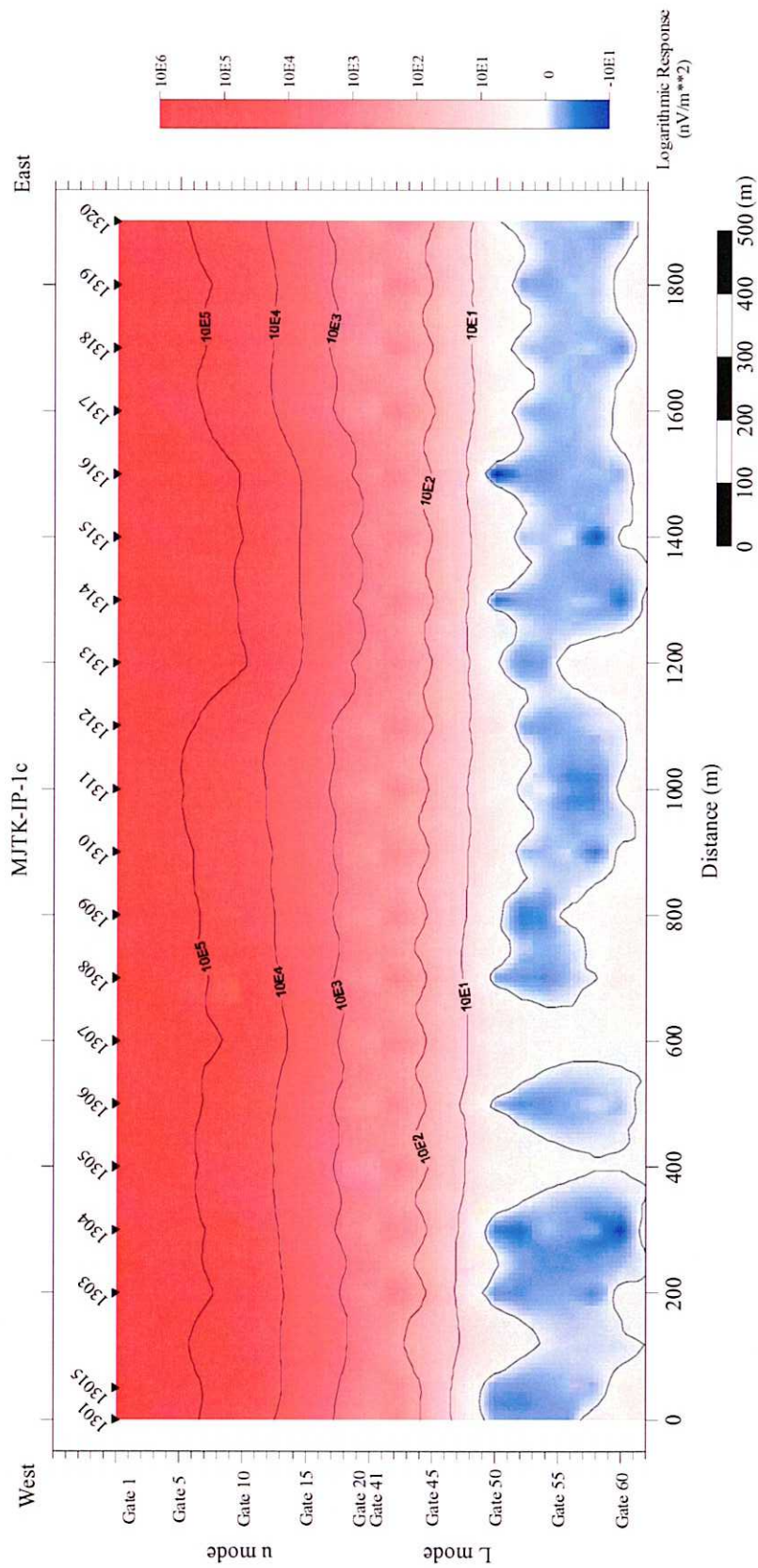
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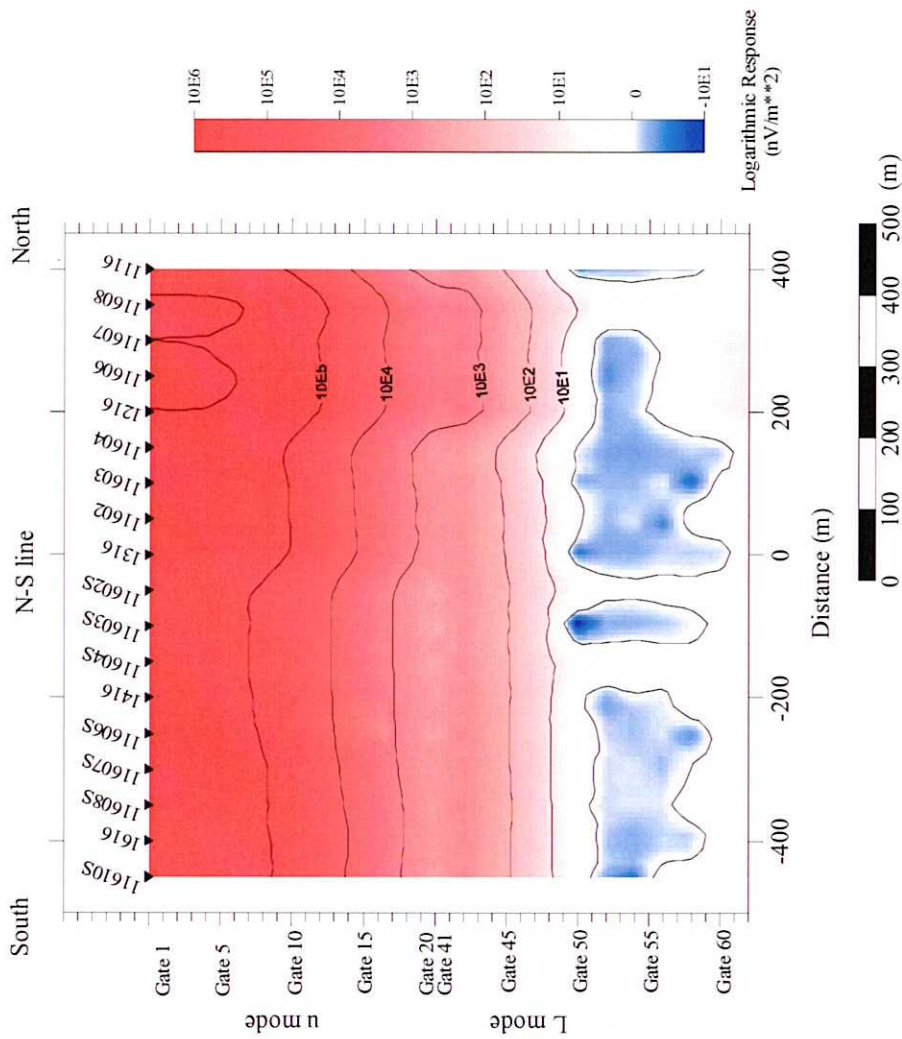
## Appendix

Appendix A Cross section of measurement results(TEM)

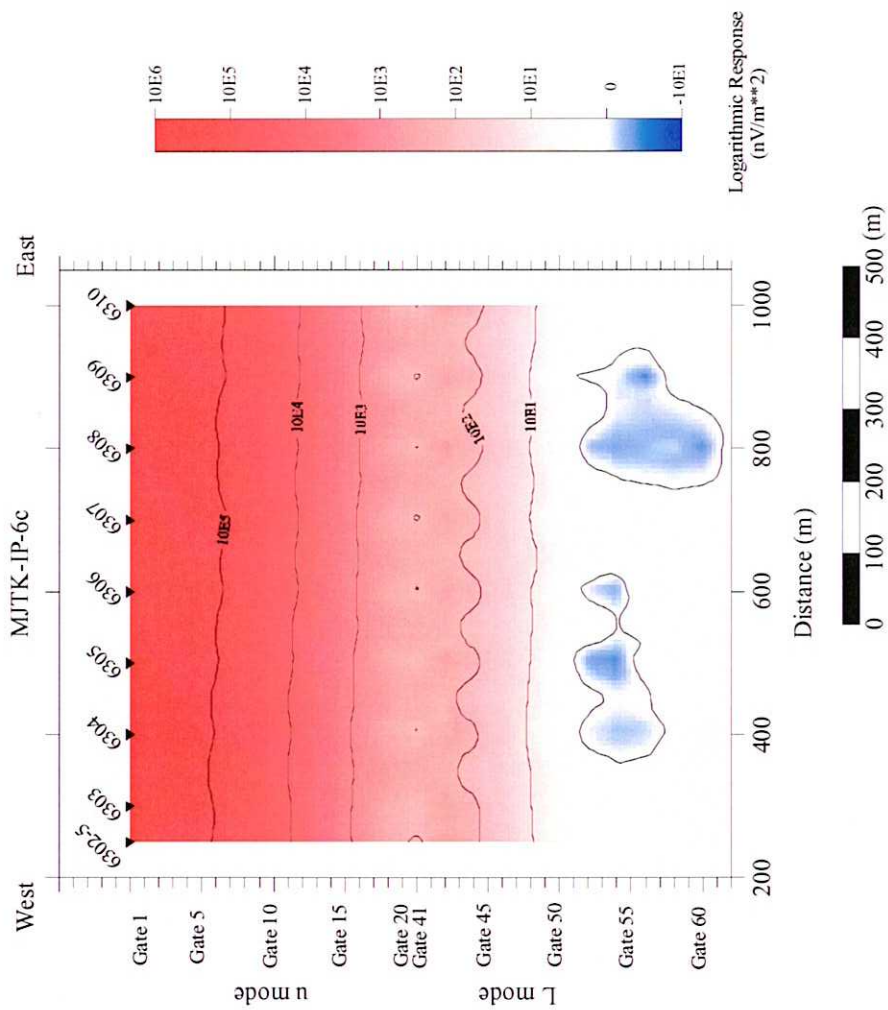


Observed response map along the Line MJTK-IP-1c

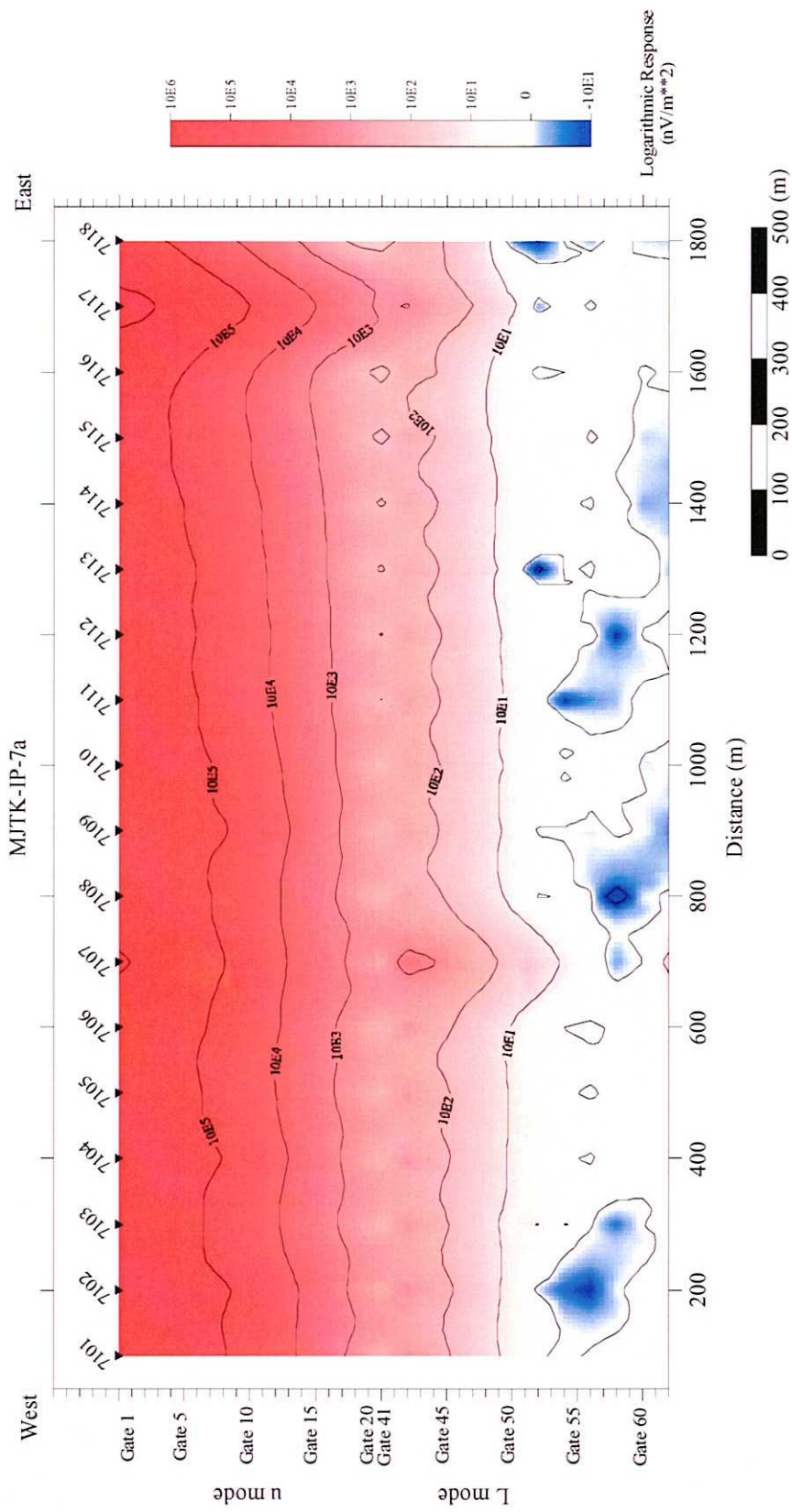
The response data sets were plotted by each gate times of TEM stations. Red shows the positive value and blue shows the negative value.



Observed response map along the N-S direction line which is crossing the line MJK-IP-1C at station 1316. The response data sets were plotted by each gate times of TEM stations. Red shows the positive value and blue shows the negative value.

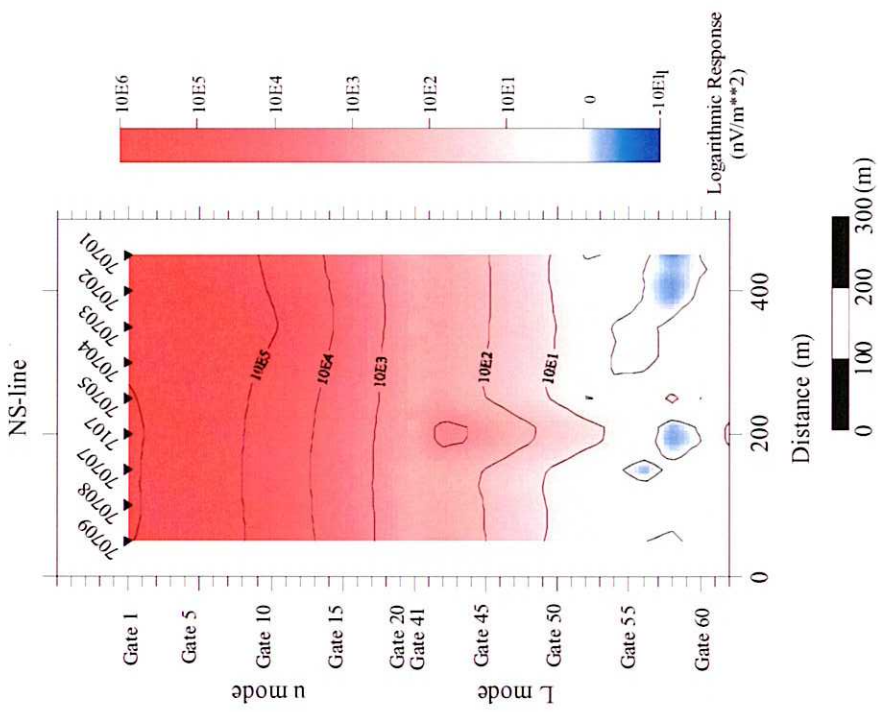


Observed response map along the Line MJTK-IP-6c  
 The response data sets were plotted by each gate times of TEM stations. Red shows the positive value and blue shows the negative value.



Observed response map along the Line MJTK-IP-7a

The response data sets were plotted by each gate times of TEM stations. Red shows the positive value and blue shows the negative value.



Observed response map along the N-S direction line which is crossing the line MJTK-IP-7a at station 7107

The response data sets were plotted by each gate times of TEM stations. Red shows the positive value and blue shows the negative value.

Appendix B Drilling results for Hole No.MJTK-1 and MJTK-2



DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE			CHEMICAL ANALYSIS									
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
5	○ ○ ○ ○ ○	Cenozoic Cagliometate			Wethered Lim													
10	○ ○ ○ ○ ○																	
15	○ ○ ○ ○ ○																	
20	○ ○ ○ ○ ○																	
25	○ ○ ○ ○ ○																	
30	○ ○ ○ ○ ○																	
35	○ ○ ○ ○ ○																	
40	○ ○ ○ ○ ○																	
45	○ ○ ○ ○ ○																	
50	○ ○ ○ ○ ○																	
55	○ ○ ○ ○ ○																	
60	○ ○ ○ ○ ○																	
65	○ ○ ○ ○ ○																	
70	○ ○ ○ ○ ○																	
75	○ ○ ○ ○ ○																	
80	○ ○ ○ ○ ○																	
85	○ ○ ○ ○ ○																	
90	○ ○ ○ ○ ○																	
95	○ ○ ○ ○ ○																	
100	○ ○ ○ ○ ○																	

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS								
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
105	○ ○ ○ ○ ○	Cenozoic sediment Conglomerate			Lim.													
110	○ ○ ○ ○ ○																	
115	○ ○ ○ ○ ○																	
120	○ ○ ○ ○ ○																	
125	○ ○ ○ ○ ○																	
130	○ ○ ○ ○ ○																	
135	○ ○ ○ ○ ○																	
140	○ ○ ○ ○ ○																	
145	○ ○ ○ ○ ○																	
150	○ ○ ○ ○ ○																	
155	○ ○ ○ ○ ○																	
160	○ ○ ○ ○ ○																	
165	○ ○ ○ ○ ○																	
170	■	Pelitic Schist	167.0m, Pelitic schist (Paleozoic).															
175	■		175.10m, Pyrite — Sphalerite — carbonate veinlets along schistsity(45'), width:3mm. 175.40m, Glens — Sphalerite — Pyrite — carbonate irregular veinlet, width: <4mm 176.20m, Pyrite veinlet along schistsity (35') with carbonate veinlets. Pelitic schist, schistsity 40-45. With Pyrite disseminated and carbonate veinlet.  Black-d-gray pelitic schist	Py, Sp, Gn		1	175.45	175.6	15	0.003	0.5	0.033	0.029	0.694	36.1	2.31		
180	■																	
185	■		191.45m, 193.90m, pyrite vein 2cm ∠ 45', non-magnetic. 195.4m, Fracture (40' width: 6cm) filled by Pyrite and clay. With fracture zone, Pyrite-disseminated, Graphite dominant.	Py														
190	■		197.0m-198.2m, Psamitic schist, bedded(45'), Pyrite disseminated. Graphite dominant.	Py														
195	■		198.2m-, Pelitic schist, bedded(45'), Graphite dominant. Pyrite disseminated along schistsity.															
200	■																	

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS							
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)	
205		Pelitic Schist	Pelitic schist, bedded(45). Graphite dominant. Pyrite disseminated along schistsity.														
210																	
215			211m, psamitic lamination. With silty psamitic lamina. 45-50'. Black- d gray Pelitic schist $\angle$ 45' lamina (partly psamitic) pyrite disseminated. Graphite dominant.														
220			213.50m. pyrite disseminated lens, width < 20mm.														
225			217.1m-221.5m, partly sandy-silty lamina $\angle$ 45-50'. graphite														
230			221.5-, graphite dominant. Fragile.														
235																	
240																	
245																	
250																	
255			254.60m, quartz vein porous, 70', width > 20mm.														
260			Black pelitic schist. Partly Quartz-dolomite? Network and pyrite disseminated along scistsity.														
265			259.90m-, very fragile. graphite dominant. Schistsity 40 -> 30'. Black Pelitic schist, graphite.														
270			269.40-270.00m, 40', Fault? brecciated. Fractured in the upper zone.														
275			270.25m, quartz vein 25' width: 70mm. 270.30m-, 25', psamitic schist. With $\angle$ 20 - 30' laminated. With quartz network.	Py													
280			274.5m-, Pelitic schist. 275m, silty - pelitic schist with graphite Partly lamina $\angle$ 40', pyrite disseminated. Hard and fragile. With graphite, sheared, pyrite-disseminated, carbonate dominant.														
285																	
290			285m, psamitic - silty - pelitic - schist. With graphite, fragile.														
295																	
300																	

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE			CHEMICAL ANALYSIS										
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)			
305	[Hatched Column]	Psamitic schist Pelitic Schist	301.20m-.Pelitic schist., Graphite dominant 302.15m., ∠40' quartz vein 3cm. chlorite imp. With quartz network. 302.25m-. ∠45', psamitic schist, Chlorite, silicified, pyrite (very fine). Partly pelitic schist thin layers. 305.1m-. pelitic schist-psamitic schist alternation. Graphite. ∠45'. Silicified. Fine pyrite and marcasite disseminated. Calcareous fossils. Partly silty. Partly quartz-carbonate veinlets.	Py	Chlorite														
310																			
315																			
320																			
325																			
330																			
335																			
340																			
345																			
350				344.1m-344.7m, pyrite disseminated layer. 1cm-2cm thick. ∠45'	Sp, Cp														
355																			
360			356.60m, quartz-sphalerite-pyrite veinlet. 358.85m, sphalerite-chalcopyrite-pyrite disseminated.	Sp, Cp															
365																			
370																			
375																			
380			375.90m-377.20m, sbered. Carbonate network.																
385		Sand stone -Psamitic schist	384.10-. Sand stone (Psamitic schist). Silicified. carbonate-quartz network with sphalerite. Graphite. Fractured. Pyrite disseminated. 384.85m-385.10m, quartz-carbonate-sphalerite-pyrite network. 386.70m-386.85m, sphalerite-pyrite disseminated. 387.00m-389.85m, sphalerite-pyrite network. Silicified. 390.40m, 390.45m, 392.00m, sphalerite-quartz veinlets ∠45'	Sili Chlorite		2 3 4 5 6 7 8 9 10 11	385.10 386.15 386.8 387.5 387.75 392.05 392.75 395.7 396.8 397.1	385.20 386.45 386.8 387.75 387.95 392.2 392.85 395.9 397.1 397.35	10 30 20 25 20 15 10 20 30 25	0.001 0.001 0.001 0.001 0.002 0.001 0.004 < 1 0.001 < 1	0.65 0.75 1.45 0.01 0.01 0.04 0.01 0.04 0.03 1.25	0.037 0.131 0.075 0.003 0.01 0.018 0.018 0.014 0.017 0.05	0.052 0.363 2.18 0.004 0.038 0.125 0.004 0.282 0.004 1.28	7.630 1.060 7.81 0.82 0.32 6.87 8.52 7.43 6.08 43.3	23.200 23.900 44.4 34.1 12.9 20.5 8.91 11.4 18.5 26.8	5.780 7.270 9.06 1.14 1.75 3.27 3.1 5.58 3.59 23.2			
390																			
395																			
400																			

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS								
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
405		Sand stone	Fine Sand stone (-Psamitic schist) Silicified. Chlorite. Pyrite disseminated. Graphite. 404.10m-404.70m, Sphalerite-quartz network. 408.55m-408.75m, medium-coarse sandstone. $\angle 70^\circ$ ? 410.90m-412.00m, laminated. $\angle 75^\circ$ . 412.90m, Quartz(-Galena-Pyrite) vein intrudes Chlorite vein. 413.80m-415.10m, Sheared.	Py Sp	Sill Ch													
410				Sp														
415				Sp			12	412.9	413.15	25	< 1	< 0.01	0.011	0.023	0.128	19.2	0.295	
420																		
425																		
430				426.40-, partly sphalerite-quartz veinlets. 427m, lamina (by graphite) $\angle 65^\circ$ . Quartz-K.feldspar network.														
435				431.9m, lamina (by graphite) $\angle 65^\circ$ .														
440																		
445				440.0m-440.3m, lamina (by graphite) $\angle 65^\circ$ . 446.45m, lamina (by graphite) $\angle 60^\circ$ .			15	443.9	444.1	20	< 1	0.3	0.008	0.005	0.679	15.4	0.52	
450				Graphite decreases. Silicified stronger.														
455					Ba													
460				455.00m, Hematite?-Barite veinlet $\angle 20^\circ$ .	Sp	Ch												
465							18	465.65	465.8	15	0.003	0.1	0.01	0.171	0.033	14.3	0.973	
470				463.40m, Quartz-chlorite-Sphalerite veinlet. $\angle 65^\circ$ . 465.70m, Quartz network with sphalerite in chlorite zone.														
475					Ba Sp													
480				475.7m-, Quartz-Barite veinlet. width < 3cm. -477.2m, Quartz network, with sp. and py.	Sp													
485				479.0m-480.1m, Quartz-network with sphalerite and pyrite. Chloritesated strongly. partly Py-Sp-Q veinlets (-481.7m)	Sp													
490				482.0m, Sp-Q network														
495			485.2m-485.5m, Quartz-Chlorite network. 489.6m, Quartz(-sphalerite) network. ch	Sill Ch		17	492.75	492.9	15	0.001	0.2	0.004	0.014	0.058	15.4	2.06		
500																		

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE			CHEMICAL ANALYSIS											
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)				
505		Sand stone	Fine sand stone. Graphite (rare). Silicified, Chlorite. Pyrite. 501.7m-502.8m, Quartz(-carbonate) network. 503.0m-503.45m, Coarse Sand stone, $\angle 55^\circ$	Py	Sili Ch															
510			515.20m, lamina by graphite $\angle 65^\circ$																	
515			Fine alkoose sand stone. Fine, partly medium - coarse. 520.3m, Calcareous sandstone layer. $\angle 55^\circ$ . Small sulfide grains. weakly magnetic. 520.9m, coarse gentle sand dyke. Weakly magnetic.																	
520			522.5m, Barite-Quartz network. Width < 9mm. 525.0m, Sphalerite-pyrite-quartz veinlet $\angle 75^\circ$ .	Ba																
525			529.3m-529.5m, Barite(-Carbonate) veinlets, with Galena $\angle 60^\circ$ . 533.8m-534.0m, Sbered.	Sp,Py																
530			535.9m, Carbonate (Chlorite) network. 536.1m, Sphalerite-pyrite-quartz(-carbonate) veinlets, $\angle 30^\circ$ . 536.85m, Graphite $\angle 65^\circ$ . 537.35m, Sphalerite-Barite-Quartz veinlet, $\angle 50^\circ$ .	Ba,Sp																
535			537.65m, Sphalerite(-Galena)-Barite-Quartz veinlet, $\angle 65^\circ$ , W=3mm. 537.8m, Sphalerite-Quartz-Barite veinlet, $\angle 50^\circ$ .	Sp,Py Sp,Ba			18	537.35	537.45	10 < 1	0.85	0.009	0.088	2.28	14.4	1.55				
540			538.04m, 538.1m, 538.23m, 538.39m, (Py-Sphalerite-Galena-Barite-) Quartz veinlets. 539.10m-541.6m, Strongly silicified and fractured.	Sp,Py Sp,Gn,Ba Sp,Gn,Ba	Sili Ch		19	540	540.2	20 < 1	1.55	0.014	0.162	3.9	5.94	2.38				
545			540.4m, Sphalerite Barite-Quartz veinlets-network. 540.7m, Sheared and argillitized.	Ba			20	546.35	546.6	25	0.003	6.3	0.068	4.42	18.1	32.6	13.8			
550			541.1m-541.2m, Barite-Quartz(-Galena) 541.8m-, Several Quartz-Barite(-Galena) 546.1m-546.3m, Barite vein. w:3cm, $\angle 60^\circ$ 548.1-2m, 548.3-6m, Graphite schist layer 550.1m-550.9m, Barite network.	Ba																
555			Pelitic schist	551.8m-552.1m, Graphite dominant. 552.1m-552.55m, Sbered. 552.8m, Barite vein, Sphalerite in edges with Barite-Chlorite(-Sphalerite) network.	Ba,Sp															
560				554.1m-, Pelitic schist. graphite rich. 558.4m, Barite(-Carbonate-Quartz) network.	Ba Po															
565				561.1m, Pyrrhotite dissemination. 561.3m-561.4m, Barite-Carbonate network.	Ba			21	566.15	566.35	20	0.001	1.1	0.083	0.278	0.019	102	27.5		
570				Pelitic schist, with graphite. 566.0m, barite-carbonate vein, width 2cm, with barite-quartz network. sphalerite 566.2m, pyrrhotite and pyrite dissemination $\angle 50^\circ$ concordant? 568.6m, barite veinlet. With calcopyrite. 568.75, (sphalerite-galena-barite?) quartz in pelitic schist. Massive, with graphite.	Ba,Sp,Gn															
575																				
580																				
585																				
590																				
595																				
600																				

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS									
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)			
5	○ ○ ○ ○ ○	Cenozoic sediment.	Cenozoic sediment.		Lim.														
10	○ ○ ○ ○ ○		Conglomerate																
15	○ ○ ○ ○ ○																		
20	○ ○ ○ ○ ○																		
25	○ ○ ○ ○ ○																		
30	○ ○ ○ ○ ○																		
35	○ ○ ○ ○ ○																		
40	○ ○ ○ ○ ○																		
45	○ ○ ○ ○ ○																		
50	○ ○ ○ ○ ○																		
55	○ ○ ○ ○ ○																		
60	○ ○ ○ ○ ○																		
65	○ ○ ○ ○ ○																		
70	○ ○ ○ ○ ○																		
75	○ ○ ○ ○ ○																		
80	○ ○ ○ ○ ○																		
85	# #	Gabbro	83.0m-, Gabbro. Black - dark gray. Massive. Partly magnetic. Carbonate veinlets-network, partly with chlorite.	Pyrite	Chlorite														
90	# #		86.6m, fracture with pyrite $\angle$ 30°. Carbonate veinlets.																
95	# #		96.20m-, Carbonate veinlets - network																
100	# #																		

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE			CHEMICAL ANALYSIS									
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
105	# #	Gabbro	Gabbro, dark gray, massive, magnetic. Plagio:2mm. Pyroxene->Chlorite. Massive, homogeneous, magnetic. Carbonate veinlets - network dominant. 104.60-85m fractured zone with carbonate network.	Pyrite	Chlorite													
110	# #																	
115	# #		116.85m $\angle 15^\circ$ carbonate veinlet.															
120	# #		121.65-122.10m, Fractured with carbonate. 124.00-124.80m, $\angle 70^\circ$ carbonate veinlet. 125.20m, $\angle 65^\circ$ carbonate-chlorite vein, 3mm width.															
125	# #																	
130	# #		133.45m, $\angle 75^\circ$ carbonate-chlorite- limonite veinlet, 7mm width. Carbonate veinlets dominant.															
135	# #		137.5-137.9m Carbonate-chlorite network, partly sheared.															
140	# #		141.20m, carbonate-chlorite network.															
145	# #		145.00m, 145.08m, carbonate-chlorite veinlets, 3mm width.															
150	# #		150.90m, $\angle 30^\circ$ carbonate-chlorite vein 3mm.															
155	# #		162.80m, $\angle 35^\circ$ carbonate vein 4mm															
160	# #		169.30m, 170.95 carbonate veins 1mm width															
165	# #																	
170	# #		183.7m, 183.8m carbonate-chlorite veinlets															
175	# #		186.1m $\angle 70^\circ$ carbonate veinlet 6mm width															
180	# #																	
185	# #		191.80m, $\angle 70^\circ$ carbonate-chlorite vein 1mm															
190	# #		196.2m, Chlorite network															
195	# #																	
200	# #																	

Geological columnar figures



DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS						
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)
205	# #	Gabbro	Gabbro. Grey-d-grey, massive, homogeneous, magnetic.	Pyrite	Chlorite											
	# #		Partly carbonate network, pyrite dissemination.													
	# #		201.0m-202.3m, fractured. Carbonate-limonite network.													
	# #		203.35m,206.60m, chlorite-carbonate veinlets.													
210	# #															
	# #															
215	# #															
	# #															
	# #		215.25m,217.90m,221.95m, carbonate veinlets.													
220	# #		Micro-Gabbro					Silicified								
	# #		219.2m-, Micro-gabbro, crystal size finer. Non-magnetic. Silicified													
	# #		220.85m-221.05m, fractured.													
225	# #		222.90m, carbonate veinlet.													
	# #															
230	# #		227.70m-232.00m, Brecciated, partly flow structure.	Pyrrhotite		22	229.3	229.4	10	0.007	0.2	0.044	0.069	0.157	49.5	2.33
	# #		229.40m, Pyrrhotite+Chalcopyrite film.													
	# #		230.60m-240.00m,flow structure ∠30'-50' silicified.													
235	# #		233.50m-235.00m, Fractured, carbonate network. Partly flow st.													
	# #															
240	# #		236.30m-239.00m, Brecciated.													
	# #															
245	# #		242.10m, Brecciated, δ=21cm													
	# #															
250	# #		248.49m-250.10m, Fractured.													
	# #		251.70m. ∠40', Carbonate vein 2mm wid.													
255			253.20m, stopped to drill.													
260																
265																
270																
275																
280																
285																
290																
295																
300																

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS						
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)
5	○ ○ ○ ○	Cenozoic Cglomerate			Wethered Lim											
10	○ ○ ○ ○															
15	○ ○ ○ ○															
20	○ ○ ○ ○															
25	○ ○ ○ ○															
30	○ ○ ○ ○															
35	○ ○ ○ ○															
40	○ ○ ○ ○															
45	○ ○ ○ ○															
50	○ ○ ○ ○															
55	○ ○ ○ ○															
60	○ ○ ○ ○															
65	○ ○ ○ ○															
70	○ ○ ○ ○															
75	○ ○ ○ ○															
80	○ ○ ○ ○															
85	○ ○ ○ ○															
90	○ ○ ○ ○															
95	○ ○ ○ ○															
100	○ ○ ○ ○															

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS								
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
105	○ ○ ○ ○	Cenozoic sediment Conglomerate			Lim.													
110	○ ○ ○ ○																	
115	○ ○ ○ ○																	
120	○ ○ ○ ○																	
125	○ ○ ○ ○																	
130	○ ○ ○ ○																	
135	○ ○ ○ ○																	
140	○ ○ ○ ○																	
145	○ ○ ○ ○																	
150	○ ○ ○ ○																	
155	○ ○ ○ ○																	
160	○ ○ ○ ○																	
165	○ ○ ○ ○																	
170	■		Pelitic Schist	167.0m, Pelitic schist (Paleozoic).														
175	■			175.10m, Pyrite — Sphalerite — carbonate veinlets along schistsity (45°). width: 3mm.														
175	■	175.40m, Glens — Sphalerite — Pyrite — carbonate irregular veinlet. width: <4mm		Py, Sp, Gn			1	175.45	175.6	15	0.003	0.5	0.033	0.029	0.694	36.1	2.31	
180	■	176.20m, Pyrite veinlet along schistsity (35°) with carbonate veinlets. Pelitic schist. schistsity 40-45°. With Pyrite disseminated and carbonate veinlet.																
185	■	Black-d-gray pelitic schist																
190	■	191.45m, 193.90m, pyrite vein 2cm ∠ 45°, non-magnetic.																
190	■	195.4m, Fracture (40° width: 6cm) filled by Pyrite and clay.		Py														
195	■	With fracture zone, Pyrite- disseminated. Graphite dominant.																
195	■	197.0m-198.2m, Psamitic schist. bedded (45°). Pyrite disseminated. Graphite dominant.		Py														
200	■	198.2m, Pelitic schist. bedded (45°). Graphite dominant. Pyrite disseminated along schistsity. 199.95m. Partly carbonate network.																

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS						
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)
205		Pelitic Schist	Pelitic schist. bedded(45°).Graphite dominant. Pyrite disseminated along schistsity.													
210																
215			211m, psamitic lamination. With silty psamitic lamina.45°-50°. Black- d gray Pelitic schist ∠45° lamina (partly psamitic) pyrite disseminated. Graphite dominant.													
220			213.50m,pyrite disseminated lens, width<20mm. 217.1m-221.5m, partly sandy-silty lamina ∠45-50°. graphite													
225			221.5-, graphite dominant. Fragile.													
230																
235																
240																
245																
250																
255			254.60m, quartz vein porous, 70°, width>20mm. Black pelitic schist. Partly Quartz-dolomite? Network and pyrite disseminated along scistsity.													
260			259.90m-, very fragile. graphite dominant. Schistsity 40°->30°. Black Pelitic schist, graphite.													
265																
270			269.40-270.00m, 40°, Fault? brecciated. Fractured in the upper zone. 270.25m,quartz vein 25° width:70mm. 270.30m-, 25°, psamitic schist. With ∠ 20 - 30° laminated. With quartz network.													
275			274.5m-, Pelitic schist. 275m, silty - pelitic schist with graphite. Partly lamina ∠ 40°, pyrite disseminated. Hard and fragile. With graphite, sheared, pyrite-disseminated, carbonate dominant.													
280																
285			285m, psamitic - silty - pelitic - schist. With graphite, fragile.													
290																
295																
300																

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS								
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
		Psamitic schist																
		Pelitic Schist	301.20m-Pelitic schist., Graphite dominant 302.15m, $\angle 40^\circ$ quartz vein 3cm. chlorite imp. With quartz network. 302.25m-, $\angle 45^\circ$ , psamitic schist, Chlorite, silicified, pyrite (very fine). Partly pelitic schist thin layers. 305.1m-, pelitic schist-psamitic schist alternation. Graphite. $\angle 45^\circ$ . Silicified. Fine pyrite and marcasite disseminated. Calcareous fossils. Partly silty. Partly quartz-carbonate veinlets.	Py	Chlorite													
305																		
310																		
315																		
320																		
325																		
330																		
335																		
340																		
345																		
350			344.1m-344.7m, pyrite disseminated layer. 1cm-2cm thick. $\angle 45^\circ$	Sp, Cp														
355																		
360			356.60m, quartz-sphalerite-pyrite veinlet. 358.85m, sphalerite-chalcopryrite-pyrite disseminated.	Sp, Cp														
365																		
370																		
375																		
380			375.90m-377.20m, shered. Carbonate network.															
385		Sand stone - Psamitic schist	384.10-, Sand stone (Psamitic schist). Silicified. carbonate-quartz network with sphalerite. Graphite. Fractured. Pyrite disseminated.	Sili Chlorite		2	385.10	385.20	10	0.001	0.65	0.037	0.052	7.630	23.200	5.780		
390			384.85m-385.10m, quartz-carbonate-sphalerite-pyrite network. 386.70m-386.85m, sphalerite-pyrite disseminated. 387.00m-389.85m, sphalerite-pyrite network. Silicified.			3	386.15	386.45	30	0.001	0.75	0.131	0.363	1.060	23.900	7.270		
395			390.40m, 390.45m, 392.00m, sphalerite-quartz veinlets $\angle 45^\circ$ 392.00m-393.00m, sphalerite-quartz 6			4	386.6	386.8	20	0.001	1.45	0.075	2.18	7.81	44.4	9.06		
400						5	387.5	387.75	25	0.001	< 0.01	0.003	0.004	0.62	34.1	1.14		
						6	387.75	387.95	20	0.002	0.01	0.01	0.038	0.32	12.9	1.75		
						7	392.05	392.2	15	0.001	0.04	0.018	0.125	6.67	20.5	3.27		
						8	392.75	392.85	10	0.004	0.01	0.018	0.004	6.52	8.91	3.1		
						9	395.7	395.9	20	< 1	0.04	0.014	0.282	7.43	11.4	5.58		
						10	396.8	397.1	30	0.001	0.03	0.017	0.004	6.08	18.5	3.59		
						11	397.1	397.35	25	< 1	1.25	0.05	1.28	43.3	26.8	23.2		

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS							
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)	
405		Sand stone	Fine Sand stone (-Psamitic schist) Silicified. Chlorite. Pyrite disseminated. Graphite. 404.10m-404.70m, Sphalerite-quartz network. 408.55m-408.75m, medium-coarse sandstone. $\angle 70^\circ$ ? 410.90m-412.00m, laminated. $\angle 75^\circ$ . 412.90m, Quartz(-Galena-Pyrite) vein intrudes Chlorite vein. 413.80m-415.10m, Sheared.	Py Sp	Sili Ch												
410				Sp													
415			415.1m, Sphalerite-quartz veinlet $\angle 70^\circ$ , Reverse Fault like.	Sp		12	412.9	413.15	25	< 1	< 0.01	0.011	0.023	0.128	19.2	0.295	
420																	
425			426.40-, partly sphalerite-quartz veinlets. 427m, lamina (by graphite) $\angle 65^\circ$ . Quartz-K.feldspar network. 431.9m, lamina (by graphite) $\angle 65^\circ$ .			13	415.5	415.8	30	< 1	1.65	0.053	0.655	21.2	21.9	10.3	
430																	
435																	
440																	
445			440.0m-440.3m, lamina (by graphite) $\angle 65^\circ$ . 446.45m, lamina (by graphite) $\angle 60^\circ$ .			14	426.4	426.65	25	0.004	1.95	0.037	1.47	5.09	30.4	4.01	
450			↓ Graphite decreases. Silicified stronger.			15	443.9	444.1	20	< 1	0.3	0.008	0.005	0.679	15.4	0.52	
455				Ba													
460			455.00m, Hematite?-Barite veinlet, $\angle 20^\circ$ .														
465				Sp	Ch												
470			463.40m, Quartz-chlorite-Sphalerite veinlet. $\angle 65^\circ$ . 465.70m, Quartz network with sphalerite in chlorite zone.			16	465.65	465.8	15	0.003	0.1	0.01	0.171	0.033	14.3	0.973	
475				Ba													
480			475.7m-, Quartz-Barite veinlet. width<3cm. -477.2m, Quartz network, with sp. and py. 479.0m-480.1m, Quartz-network with sphalerite and pyrite. Chloritesated strongly. partly Py-Sp-Q veinlets (-481.7m)	Sp													
485				Sp													
490			482.0m, Sp-Q network 485.2m-485.5m, Quartz-Chlorite networ 489.6m, Quartz(-sphalerite) network. ch		Sili Ch	17	492.75	492.9	15	0.001	0.2	0.004	0.014	0.058	15.4	2.06	
495																	
500			492.3m-493.2m, Fractured and hydrother porous. quartz cristals.														

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS								
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)		
505		Sand stone	Fine sand stone. Graphite (rare). Silicified, Chlorite. Pyrite. 501.7m-502.8m, Quartz(-carbonate) network. 503.0m-503.45m, Coarse Sand stone, $\angle 55^\circ$	Py	Sili Ch													
510			515.20m, lamina by graphite $\angle 65^\circ$ Fine alkose sand stone. Fine, partly medium - coarse.															
515			520.3m, Calcareous sandstone layer. $\angle 55^\circ$ . Small sulfide grains. weakly magnetic. 520.9m, coarse gentle sand dyke. Weakly magnetic.															
520			522.5m, Barite-Quartz network. Width < 9mm. 525.0m, Sphalerite-pyrite-quartz veinlet. $\angle 75^\circ$ .	Ba														
525			529.3m-529.5m, Barite(-Carbonate) veinlets, with Galena. $\angle 60^\circ$ . 533.8m-534.0m, Shered.	Sp, Py														
530			535.9m, Carbonate (Chlorite) network. 536.1m, Sphalerite-pyrite-quartz(-carbonate) veinlets, $\angle 30^\circ$ . 536.85m, Graphite $\angle 65^\circ$ . 537.35m, Sphalerite-Barite-Quartz veinlet, $\angle 50^\circ$ .	Ba, Sp														
535			537.65m, Sphalerite(-Galena)-Barite-Quartz veinlet, $\angle 65^\circ$ , W=3mm. 537.8m, Sphalerite-Quartz-Barite veinlet, $\angle 50^\circ$ .	Sp, Py														
540			538.04m, 538.1m, 538.23m, 538.39m, (Py-Sphalerite-Galena-Barite-) Quartz veinlets. 539.10m-541.6m, Strongly silicified and fractured.	Sp, Ba Sp, Gn, Ba	Sili Ch	18	537.35	537.45	10	< 1	0.85	0.009	0.088	2.26	14.4	1.55		
545			540.4m, Sphalerite Barite-Quartz veinlets-network. 540.7m, Sheared and argillized.	Sp, Gn, Ba Sp, Gn, Ba		19	540	540.2	20	< 1	1.55	0.014	0.162	3.9	5.94	2.38		
550			541.1m-541.2m, Barite-Quartz(-Galena) 541.8m-, Several Quartz-Barite(-Galena) 546.1m-546.3m, Barite vein. w:3cm, $\angle 6^\circ$ 548.1-2m, 548.3-6m, Graphite schist layer 550.1m-550.9m, Barite network. 551.8m-552.1m, Graphite dominant. 552.1m-552.55m, Shered.	Ba		20	546.35	546.6	25	0.003	6.3	0.068	4.42	18.1	32.6	13.8		
555			552.8m, Barite vein, Sphalerite in edges. with Barite-Chlorite(-Sphalerite) network	Ba, Sp														
560			554.1m-, Pelitic schist. graphite rich. 558.4m, Barite(-Carbonate-Quartz) netw	Ba, Sp														
565			561.1m, Pyrrhotite dissemination. 561.3m-561.4m, Barite-Carbonate netw	Ba, Po														
570			Pelitic schist, with graphite. 566.0m, barite-carbonate vein. width 2cm, with barite-quartz network. sphale	Ba		21	566.15	566.35	20	0.001	1.1	0.083	0.278	0.019	102	27.5		
575			566.2m, pyrrhotite and pyrite disseminat $\angle 50^\circ$ concordant?. 568.6m, barite veinlet. With calcopyrite. 568.75, (sphalerite-galena-barite?) quart in pelitic schist. Massive, with graphite.	Ba, Sp, Gn														
580			584.35m, barite vein. Width: 8mm. $\angle 60^\circ$ . 587.05m, 587.10m, pyrrhotite, lense. 13mm. 587.30m, barite network. width: 7mm. $45^\circ$ 589.20m, pyrite lens, intruded by barite-s 589.25m, barite network.															
585			589.6m-589.8m, sphalerite-galena-barite- 590.80m-, lamina ( $45^\circ$ ). pyrrhotite lens 40 Lamina. $\angle 40^\circ - \angle 65^\circ$ . 592.70m, stopped to drill (Jan.28).	Ba														
590				Po														
595			Ba, Sp, Gn Po															
600																		

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS										
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)				
5	○ ○ ○ ○	Cenozoic sediment.	Cenozoic sediment.  Conglomerate		Lim.															
10	○ ○ ○ ○																			
15	○ ○ ○ ○																			
20	○ ○ ○ ○																			
25	○ ○ ○ ○																			
30	○ ○ ○ ○																			
35	○ ○ ○ ○																			
40	○ ○ ○ ○																			
45	○ ○ ○ ○																			
50	○ ○ ○ ○																			
55	○ ○ ○ ○																			
60	○ ○ ○ ○																			
65	○ ○ ○ ○																			
70	○ ○ ○ ○																			
75	○ ○ ○ ○																			
80	○ ○ ○ ○																			
85	# #			Gabbro	83.0m, Gabbro. Black - dark gray. Massive. Partly magnetic. Carbonate veinlets-network, partly with chlorite.	Pyrite	Chlorite													
90	# #				86.6m, fracture with pyrite $\angle 30^\circ$ . Carbonate veinlets.															
95	# #				96.20m, Carbonate veinlets - network															
100	# #																			

Geological columnar figures



DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS										
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)				
105	# #	Gabbro	Gabbro, dark gray, massive, magnetic. Plagio:2mm. Pyroxene->Chlorite. Massive, homogeneous, magnetic. Carbonate veinlets - network dominant.	Pyrite	Chlorite															
110	# #		104.60-85m fractured zone with carbonate network.																	
115	# #		116.85m / 15° carbonate veinlet.																	
120	# #		121.65-122.10m, Fractured with carbonate. 124.00-124.80m, / 70° carbonate veinlet.																	
125	# #		125.20m, / 65° carbonate-chlorite vein, 3mm width.																	
130	# #		133.45m, / 75° carbonate-chlorite-limonite veinlet, 7mm width. Carbonate veinlets dominant.																	
135	# #		137.5-137.9m Carbonate-chlorite network. partly sheared.																	
140	# #		141.20m, carbonate-chlorite network.																	
145	# #		145.00m, 145.08m, carbonate-chlorite veinlets, 3mm width.																	
150	# #		150.90m, / 30° carbonate-chlorite vein 3mm.																	
155	# #		162.80m, / 35° carbonate vein 4mm																	
160	# #		169.30m, 170.95 carbonate veins 1mm width																	
165	# #																			
170	# #		183.7m, 183.8m carbonate-chlorite veinlets																	
175	# #		186.1m / 70° carbonate veinlet 6mm width																	
180	# #																			
185	# #		191.80m, / 70° carbonate-chlorite vein 1mm																	
190	# #		196.2m, Chlorite network																	
195	# #																			
200	# #																			

Geological columnar figures

DEPTH (m)	COLUMN	ROCK NAME	DESCRIPTION	MINER.	ALTER.	SAMPLE				CHEMICAL ANALYSIS									
						No.	FROM (m)	TO (m)	WIDTH (cm)	Au (ppm)	Ag (ppm)	Cu (%)	Pb (%)	Zn (%)	Fe (%)	S (%)			
205	# #	Gabbro	Gabbro. Grey-d-grey, massive, homogeneous, magnetic.	Pyrite	Chlorite														
	# #		Partly carbonate network, pyrite dissemination.																
	# #		201.0m-202.3m, fractured. Carbonate-limonite network.																
	# #		203.35m,206.60m, chlorite-carbonate veinlets.																
210	# #																		
	# #																		
215	# #																		
	# #		215.25m,217.90m,221.95m, carbonate veinlets.																
220	# #		Micro-Gabbro					Silicified											
	# #					219.2m, Micro-gabbro. crystal size finer. Non-magnetic. Silicified													
	# #		220.85m-221.05m, fractured.																
225	# #		222.90m, carbonate veinlet.																
	# #																		
230	# #		227.70m-232.00m, Brecciated, partly flow structure.	Pyrrhotite															
	# #		229.40m, Pyrrhotite+Chalcopyrite film.																
	# #		230.60m-240.00m,flow structure $\angle 30^\circ - 50^\circ$ . silicified.																
235	# #		233.50m-235.00m, Fractured, carbonate network. Partly flow st.																
	# #																		
240	# #		236.30m-239.00m, Brecciated.																
	# #																		
245	# #		242.10m, Brecciated, $\phi=21$ cm																
	# #																		
250	# #		248.49m-250.10m, Fractured.																
	# #		251.70m. $\angle 40^\circ$ , Carbonate vein 2mm wid.																
	# #		253.20m, stopped to drill.																
255																			
260																			
265																			
270																			
275																			
280																			
285																			
290																			
295																			
300																			

Geological columnar figures