EQUITY | EXPLORATION CONSULTANTS LTD.

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-394

Prospect:	Sebesi	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Jerome de Pasquale
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	7/15/2016
UTM Easting	415660.026	Core Size:	HQ3	Azimuth:	233	Date Logging Complete:	8/8/2016
UTM Northing:	6815387.316	Casing Pulled?:	Yes	Dip:	-65	Drill Company:	New Age
UTM Elev. (m):	1562.573	Casing Depth (m):	6	Length (m):	953.31	Drill Rig:	Zinex A5
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	7/13/2016
Local Northing:		Cemented?:	Yes	Core Storage Loc.:	KZK Camp	Drill Completed:	8/8/2016
Local Elev. (m):				Hole Completed?:	Abandoned	Purpose:	Exploration
						Parent Hole:	

Comments:

Northeastern-most of three Sebesi exploration holes designed to test for offset Krakatoa Zone mineralization in between the Sunda and Fault Creek Faults.
The top of the hole consists of calcareous and siliceous mudstone interbedded with mafic tuff units belonging to the Wind Lake Formation. The KZK Formation was intercepted at 293.06 m. A conformal interfingered contact is observed, followed by reworked material -detrital/volcaniclastic-mixed with pelite and muddy ash.
Lapilli and crystal fragments within a fine matrix are observed from 495.05m to 517.50 m, followed by a fault zone from 517.50 m to 562.06 m. Siliceous units are encountered from 615.20 m to 639.70 m, consisting in feldspar porphyry and quartz eyes in aphanitic groundmass.
A second major fault zone occurs from 684.18 m to 746.79 m.
At 769.15 m, interbedded mudstone and mafic tuff occurs, similar to the Wind Lake Formation. A 0.50 m interval of OF type massive sulfide (PO/SP/PY/CP/GL) occurs from 797.38 - 797.88 m and underlies a rhyolite flow. Sedimentary sequences alternating with felsic volcanics occur from 834.30 - 953.31 m.
Weak to moderate muscovite alteration (other than related to faulting) is noticed from 652.37m to 724.80 m, with a maximum intensity between 684.19 m to 703.15 m. This interval is also marked by increasing amount of disseminated PY.
Hole K16-394 ends at 953.31 m in volcaniclastic rhyolite that displays weak to moderate muscovite alteration. The hole was stopped at 953.31 m when the drill string became stuck. Four cuts were completed in order to retrieve the HQ drill string and complete a DHEM survey from ~860 m that includes the massive sulfide mineralization at 797.38m as well as the main muscovite alteration zone.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-65	231.6	1.4	233	TN14	Oscar Nielsen	7/13/2016		☑	
13	-65.4	207.8	22.1	229.9	ReflexEZS	New Age	7/13/2016	5843	☑	
27	-65.8	208.3	22.1	230.4	ReflexEZS	New Age	7/13/2016	5791	☑	
52	-66.1	209.6	22.1	231.7	ReflexEZS	New Age	7/14/2016	5789	☑	
76	-66.2	206.4	22.1	228.5	ReflexEZS	New Age	7/14/2016	5763	☑	
103	-66	209.8	22.1	231.9	ReflexEZS	New Age	7/14/2016	5792	☑	
128	-65.9	211.5	22.1	233.6	ReflexEZS	New Age	7/15/2016	5805	☑	
158	-66.1	209.5	22.1	231.6	ReflexEZS	New Age	7/15/2016	5761	☑	
183	-66.4	212.4	22.1	234.5	ReflexEZS	New Age	7/16/2016	5878	☑	
208	-66.7	211	22.1	233.1	ReflexEZS	New Age	7/16/2016	5672	☑	
233	-66.9	209.7	22.1	231.8	ReflexEZS	New Age	7/16/2016	5782	☑	
258	-67	209.6	22.1	231.7	ReflexEZS	New Age	7/17/2016	5797	☑	
283	-67.2	210.4	22.1	232.5	ReflexEZS	New Age	7/17/2016	5779	☑	

EQUITY | EXPLORATION CONSULTANTS LTD.

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-394

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
308	-66.3	211.1	22.1	233.2	ReflexEZS	New Age	7/17/2016	5796	☑	
333	-66.2	210.4	22.1	232.5	ReflexEZS	New Age	7/18/2016	5790	☑	
358	-65.7	184.5	22.1	206.6	ReflexEZS	New Age	7/18/2016	3532	☐	Low magnetic field.
383	-65.1	210.7	22.1	232.8	ReflexEZS	New Age	7/19/2016	5779	☑	
408	-65.3	211.1	22.1	233.2	ReflexEZS	New Age	7/19/2016	5785	☑	
433	-64.9	212	22.1	234.1	ReflexEZS	New Age	7/19/2016	5763	☑	
458	-64.2	210.5	22.1	232.6	ReflexEZS	New Age	7/20/2016	5785	☑	
483	-64.4	210.7	22.1	232.8	ReflexEZS	New Age	7/20/2016	5782	☑	
508	-64.1	210	22.1	232.1	ReflexEZS	New Age	7/20/2016	5775	☑	
533	-64.3	209.8	22.1	231.9	ReflexEZS	New Age	7/21/2016	5791	☑	
560	-63.4	209.8	22.1	231.9	ReflexEZS	New Age	7/21/2016	5730	☑	
585	-63.2	209.6	22.1	231.7	ReflexEZS	New Age	7/22/2016	5761	☑	
610	-62.3	211	22.1	233.1	ReflexEZS	New Age	7/22/2016	5781	☑	
635	-62.2	210.9	22.1	233	ReflexEZS	New Age	7/22/2016	5787	☑	
660	-60.7	211.2	22.1	233.3	ReflexEZS	New Age	7/23/2016	5774	☑	
685	-60.2	211.2	22.1	233.3	ReflexEZS	New Age	7/23/2016	5756	☑	
710	-60.1	211.3	22.1	233.4	ReflexEZS	New Age	7/24/2016	5784	☑	
735	-58.4	211	22.1	233.1	ReflexEZS	New Age	7/24/2016	5771	☑	
760	-58.2	210.9	22.1	233	ReflexEZS	New Age	7/26/2016	5751	☑	
785	-57.6	206.5	22.1	228.6	ReflexEZS	New Age	7/27/2016	5757	☑	
810	-52.4	206	22.1	228.1	ReflexEZS	New Age	7/28/2016	5755	☑	
835	-56.9	203.2	22.1	225.3	ReflexEZS	New Age	7/29/2016	5766	☑	
860	-56.3	187.5	22.1	209.6	ReflexEZS	New Age	7/30/2016	5781	☐	Magnetic field corrected on paper-Not accepted
885	-61	336.7	22.1	358.8	ReflexEZS	New Age	7/30/2016	1381	☐	Low magnetic field.
910	-56.1	198.2	22.1	220.3	ReflexEZS	New Age	7/31/2016	5761	☑	
935	-55.7	192.4	22.1	214.5	ReflexEZS	New Age	8/2/2016	5710	☑	

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
0.00	**4.00**	**OVBN** **Overburden**									
4.00	**8.02**	**MDS** **Carbonaceous Mudstone & Tuffaceous Mudstone**									
4 - 8.02: Fine grain, CA veinlets, irregular foliation, weakly carbonaceous.											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Min: 4 - 41 0.5% Min: Pyrite>>

<<Min: 4 - 41 1% Min: Pyrrhotite>>

<<Alt: 4 - 19.07 Weak-Moderate Calcite>>

8.02 12.34 MAFt Mafic Volcaniclastics

8.02 - 12.34: Light grey/green, containing wavy CA crenulated veinlets (clots/pseudo fragmental texture). Intermediate composition. PO/PY disseminated.

12.34 14.67 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

12.34 - 14.67: CA veined mudstone, weakly graphitic, thinly foliated.

14.67 16.10 RHY undifferentiated rhyolite

14.67 - 16.1: Episclastic intermediate, Silicic bands at contacts, clasts.

16.10 19.07 MAFt Mafic Volcaniclastics

16.1 - 19.07: Oxidized mafic tuff. Locally rounded clasts, possibly reworked sediments.

<<Struc: 16.3 - 16.7 Weak-Moderate Fault>>

<<Struc: 18.4 - 19 Weak Fault>>

19.07 24.70 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

19.07 - 24.7: "Cherty" mudstone. Crenulated, irregular SI bands.

<<Alt: 19.07 - 24.7 Trace Calcite>>

24.70 48.83 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

24.7 - 48.83: Interbedded with mafic tuff. Calcite veining. Locally silica bands. From 41.00m to 43.00m, few mineralization (CP/SP/PY/PO). Bulk QZ veins and CA veins up to 15cm wide.

<<Min: 41 - 43 0.5% Min: Sphalerite>>

<<Min: 41 - 43 0.5% Min: Pyrite>>

<<Min: 41 - 43 2% Min: Pyrrhotite>>

<<Min: 41 - 43 0.5% Min: Chalcopyrite>>

<<Min: 43 - 120.6 0.5% Min: Pyrite>> and wispy fine grain PY.

<<Min: 43 - 120.6 2% Min: Pyrrhotite>> Mostly in mafic tuff unit.

<<Alt: 24.7 - 48.3 Moderate-Strong Calcite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Alt: 48.3 - 85.28 Moderate Calcite>>

<<Vein: 38.8 - 38.9 Calcite>> CA, minor QZ.

<<Vein: 46.1 - 48.37 Quartz-Carbonate>> Massive QZ veins containing fragment of schist and semi massive QZ/CA vein.

<<Struc: 37 - 38 Weak-Moderate Fault>> Fault gouge, folded mudstone.

48.83 50.64 MAFt Mafic Volcaniclastics

48.83 - 50.64: CA veining. Aggregated ferro-carbonate ("pseudo-leucoxene"), PY in fracture.

50.64 73.33 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

50.64 - 73.33: Fractured, locally faulted weakly graphitic mudstone and mafic tuff interbedded containing brown mica in foliation and elongated PO and clots/fine grain PY veinlets. CA veining. Bulk CA/glassy QZ veins up to 60cn wide. Foliation crenulated, Si veining and patch.

<<Vein: 58.92 - 61.15 Quartz-Carbonate>> CA/QZ veins representing 40% of the interval.

<<Vein: 69.49 - 70.14 Quartz-Carbonate>> CA/QZ massive vein containing fragments of mafic tuff.

73.33 85.28 MAFta Coarse grained to ash tuff

73.33 - 85.28: Interbedded with CA veined mudstone. Locally faulted. Patch of brown mica in foliation. Speck of elongated PO. Massive QZ/CA/TML vein.

<<Vein: 82.96 - 84.25 Quartz-Tourmaline>> QZ/TML veins containing fragments of schist.

<<Struc: 79.12 - 80.2 Weak Fault>> Highly fractured.

85.28 91.35 MAFt Mafic Volcaniclastics

85.28 - 91.35: Interbedded with mudstone. Faulted/sheared, locally oxidized. Sharp upper contact.

<<Alt: 85.28 - 120.6 Weak Calcite>>

<<Struc: 85.28 - 88 Moderate Fault>> Core washed. Gouge.

<<Struc: 89 - 100 Moderate-Strong Fault>> Fault gouge, weak shearing.

91.35 97.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

91.35 - 97: Graphitic mudstone disaggregated, gougy. Core washed over 2 m.

97.00 106.50 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

97 - 106.5: Highly fractured graphitic mudstone, siliceous.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

106.50 109.00 MAFt Mafic Volcaniclastics

106.5 - 109: Fractured/gougy mafic tuff, CA veining.

<<Struc: 107 - 111 Moderate Fault>> Fault gouge, weak shearing.

109.00 116.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

109 - 116: Graphitic gougy/disaggregated mudstone. Locally oxidized (probably mafic tuff interbedded). Siliceous.

<<Alt: 113 - 120.6 Moderate-Strong Silicification>> Silicified mudstone.

<<Struc: 111 - 120.6 Weak-Moderate Fault>> Fault gouge, moderate shearing.

116.00 117.50 MAFta Coarse grained to ash tuff

116 - 117.5: Sheared at lower contact.

117.50 120.60 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

117.5 - 120.6: Weakly sheared mudstone, lack of CA veining. Sharp upper and lower contacts.

120.60 145.71 MAFt Mafic Volcaniclastics

120.6 - 145.71: CL/CA/BI schist. Strongly CA veined mafic tuff, folded at upper contact. Locally granular texture and possible clasts up to 0.5cm. Partially oxidized from 128.00m to 130.75m. CA alteration obscuring the texture from 140.75m to 143.30m, CA veins and possibly clasts at 142.50m of ablitized mafic tuff or felsic dike fragment.

<<Min: 120.6 - 145 0.1% Min: Pyrite>>

<<Min: 120.6 - 145 0.5% Min: Pyrrhotite>>

<<Min: 145 - 154.75 2% Min: Pyrite>>

<<Min: 145 - 154.75 3% Min: Pyrrhotite>>

<<Alt: 120.6 - 145 Strong Calcite>> Locally intense.

<<Alt: 130.75 - 184.22 Moderate Biotite>>

<<Alt: 145 - 154.75 Weak Chlorite>> Could be original.

<<Alt: 145 - 284.89 Moderate-Strong Calcite>>

<<Vein: 140.65 - 143.3 Calcite>> Intense CA alteration marked by CA veins.

<<Struc: 127.9 - 129.9 Weak-Moderate Shear>> Folded and oxidized sandy gouge.

145.71 154.75 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

145.71 - 154.75: Patchy CL altered , CA veined poorly graphitic mudstone. PO clots and fine grain PY. Fine grain BI bands.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

154.75 169.60 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

154.75 - 169.6: Banded and disseminated BI porphyroblasts. CA veining. Mudstone interbedded.

<<Min: 154.75 - 188.03 1% Min: Pyrite>>

<<Min: 154.75 - 188.03 1% Min: Pyrrhotite>>

169.60 170.35 MAFt Mafic Volcaniclastics

169.6 - 170.35: BI porphyroblasts overprinted. Narrow interval showing silicification or albitization. Sharp upper contact, folding at lower contact. This unit could be interpreted as a felsic intrusion (dike) suggesting proximity of pluton.

<<Alt: 169.6 - 170.35 Strong Albite>>

170.35 184.22 MAFt Mafic Volcaniclastics

170.35 - 184.22: Vein interval from 176.72m to 178.65m (QZ/TML/brown BI and mafic tuff fragments, brecciated at lower contact. Possibly albite altered fragment, similar texture than encountered from 169.90m to 170.35m.

<<Vein: 176.72 - 178.65 Quartz-Tourmaline>> QZ/CA/brown biotite/TML/mafic tuff fragments.

<<Vein: 181.98 - 182.25 Quartz-Chlorite>> QZ/CA/CL/brown biotite vein.

<<Struc: 181.7 - 182 Weak-Moderate Shear>> Folded.193.80

184.22 188.03 MAFta Coarse grained to ash tuff

184.22 - 188.03: Unfoliated, fine grain, rare wavy CA veining, strong CA in matrix.

188.03 190.70 MAFt Mafic Volcaniclastics

188.03	189.00	0.97	D00005601	-0.005	1.3	0.03	0.01	0.1

188.03 - 190.7: BI banded. Possibly clasts up to 5cm wide showing primary wavy lamination "pillow style". Weak CL alteration (original?). PY/PO/CP associated in disseminated patch.

<<Min: 188.03 - 190.7 5% Min: Pyrite>>

189.00	190.00	1.00	D00005602	-0.005	2.3	0.05	0.02	0.22

<<Min: 188.03 - 190.7 3% Min: Pyrrhotite>>

190.00	190.70	0.70	D00005603	-0.005	1.5	0.03	-0.01	0.07

<<Min: 188.03 - 190.7 1% Min: Chalcopyrite>>

<<Alt: 188.03 - 190.7 Moderate Chlorite>> Could be original.

190.70 199.04 MAFta Coarse grained to ash tuff

190.7 - 199.04: Low CA content upper part. Heterogeneous texture and faulted (marked by 5cm QZ vein) at lower contact. Locally folded, QZ pods. Large QZ/CA irregular vein from 192.32m to 193.00m.

<<Min: 190.7 - 199.66 2% Min: Pyrite>> and locally wispy.

<<Min: 190.7 - 199.66 0.5% Min: Pyrrhotite>>

<<Struc: 193.8 - 194.55 Moderate Fault>> Multiple fold noses-shearing?

<<Struc: 197 - 199.04 Weak Fault>> 3 narrow fault gouge zones (10 to 20 cm wide within the interval and folding.

From (m)	To (m)	Rocktype & Description
199.04	**202.50**	**MDS** **Carbonaceous Mudstone & Tuffaceous Mudstone**

199.04 - 202.5: Chaotic/crenulated CA veining at upper part. Consistent foliation at lower part, CA veining. 12 cm wide semi massive PY/PO/CP mineralization vein and fine grain PY stringers, possibly CL alteration associated.

<<Min: 199.66 - 201.34 5% Min: Pyrite>> 12 cm of semi-massive sulfide and stringers within the interval.

<<Min: 199.66 - 201.34 5% Min: Pyrrhotite>> 12 cm of semi-massive sulfide and stringers within the interval.

<<Min: 199.66 - 201.34 1% Min: Chalcopyrite>> 12 cm of semi-massive sulfide and stringers within the interval.

<<Min: 201.34 - 293.26 0.5% Min: Pyrite>>

<<Min: 201.34 - 297.7 2% Min: Pyrrhotite>>

From (m)	To (m)	Rocktype & Description
202.50	**205.23**	**MAFt** **Mafic Volcaniclastics**

202.5 - 205.23: Strong CA veining, regular foliation.

From (m)	To (m)	Rocktype & Description
205.23	**209.07**	**MDS** **Carbonaceous Mudstone & Tuffaceous Mudstone**

205.23 - 209.07: Chaotic foliation/CA veining (crenulated). 30cm mafic tuff intercaled.

From (m)	To (m)	Rocktype & Description
209.07	**210.75**	**MAFt** **Mafic Volcaniclastics**

209.07 - 210.75: Sharp transition between wavy CA veining and regular foliation within the interval. PO clots and rare PY in fracture.

From (m)	To (m)	Rocktype & Description
210.75	**250.12**	**MDS** **Carbonaceous Mudstone & Tuffaceous Mudstone**

210.75 - 250.12: Chaotic CA veining, probably lithic fragments.

<<Struc: 228.7 - 230.65 Moderate Fault>> Fault gouge, folded at upper contact.

<<Struc: 244.8 - 245.6 Weak Fault>> Minor fault gouge.

From (m)	To (m)	Rocktype & Description
250.12	**259.00**	**MAFta** **Coarse grained to ash tuff**

250.12 - 259: Light green, fine grain mafic tuff. Containing rare mudstone beds up to 5 cm wide. CA veining locally folded. Gradual contacts.

<<Vein: 254.07 - 254.47 Quartz>> Massive QZ vein.

<<Struc: 253.25 - 253.26 Vein>> Main CA vein set. In Wind Lake formation,

<<Struc: 256.7 - 259 Fault>> Minor fault gouge.

From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
199.66	200.44	0.78	D00005604	-0.005	3.3	0.06	0.06	0.39
200.44	201.34	0.90	D00005605	0.015	2.7	0.08	0.02	0.42

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

259.00 267.65 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

259 - 267.65: Blue/grey, fine grain, containing rare mafic tuff beds and PO clots.

<<Vein: 260.32 - 260.74 Quartz-Carbonate>> QZ/CA massive vein.

<<Vein: 266 - 266.34 Quartz-Carbonate>> QZ/CA massive vein.

<<Struc: 262.86 - 262.87 dominant foliation>> CA veining, foliation. In Wind Lake formation,

267.65 271.00 MAFta Coarse grained to ash tuff

267.65 - 271: Light green, fine grain, weakly foliated. CA veining/xtl. Sharp upper contact. Massive QZ/CA vein containing mudstone fragment at lower contact.

<<Struc: 270.45 - 270.46 dominant foliation>> CA veining, foliation. In Wind Lake formation,

271.00 277.82 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

271 - 277.82: Blue/grey, fine grain, CA veining crenulated/folded. Rare mafic tuff narrow beds.

277.82 279.88 MAFt Mafic Volcaniclastics

277.82 - 279.88: Light green, CA veining.

279.88 281.08 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

279.88 - 281.08: Blue/grey, fine grain, CA veining.

281.08 283.27 MAFt Mafic Volcaniclastics

281.08 - 283.27: Light green, CA veining.

283.27 291.93 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

283.27 - 291.93: Blue/grey, siliceous mudstone, containing rare mafic tuff beds.

<<Alt: 284.89 - 291.93 Moderate-Strong Silicification>>

<<Alt: 284.89 - 291.93 Weak Calcite>>

<<Vein: 290.06 - 290.91 Quartz>> Massive QZ vein. Containing trace PO/PY/CP in fracture

291.93 293.06 MAFt Mafic Volcaniclastics

291.93 - 293.06: Light green, CA veining. Sharp upper contact, gradual conformable lower contact with KZK formation.

<<Alt: 291.93 - 293.06 Weak-Moderate Calcite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

293.06 296.26 RHYvx Quartz and/or feldspar crystal tuff

293.06 - 296.26: Gradual upper contact. Some mafic interval interbedded. From 295.22 m to 295.83 m, mafic tuff containing 10 cm interval of cherty mudstone-Wind Lake.

<<Min: 293.26 - 363.24 0.1% Min: Pyrite>> and rare fractures.

<<Alt: 293.06 - 302.2 Weak Calcite>>

296.26 297.77 MAFt Mafic Volcaniclastics

296.26 - 297.77: Light green, containing possibly AK crystal. Sharp contacts. Interpreted as Wind Lake unit interfingered.

<<Min: 297.7 - 299.4 5% Min: Pyrrhotite>>

297.77 300.90 RHYvx Quartz and/or feldspar crystal tuff

297.77 - 300.9: Some 3 to 10 cm wide light grey/fine grain (ash).

<<Min: 299.4 - 363.24 1% Min: Pyrrhotite>>

<<Struc: 300.05 - 300.06 dominant foliation>> In KZK formation.

<<Struc: 300.55 - 300.56 dominant foliation>> In KZK formation.

300.90 302.20 MDSc Carbonaceous dominant mudstone

300.9 - 302.2: Strongly graphitic mudstone, could be associated with Wind Lake Formation. Disaggregated/faulted/gougy.

<<Struc: 301.15 - 302.2 Weak-Moderate Fault>> Gougy and highly fractured graphitic mudstone.

302.20 305.30 MDSt Rhyolite tuff dominant mudstone

302.2 - 305.3: Possibly carbonaceous content or BI giving dark blue color. Gradual lower contact, coarser grain at upper contact, possibly lithic fragments. Foliated. Rare QE at upper contact.

<<Alt: 302.2 - 313.54 Moderate Calcite>>

305.30 312.57 SED undifferentiated Sediment

305.3 - 312.57: "Dirty rhyolite" (?) containing calcareous pelitic interval from 306.36 m to 306.64 m as well as thin brownish beds. Elongated clasts possibly lapilli. Granular/gritty texture suggesting meta sandstone. Banded chlorite or green sericite locally, discordant QZ/TML veins.

<<Alt: 308.66 - 309.5 Moderate Chlorite>> Or green sericite-Halo associated with QZ/TML veins.

<<Vein: 306.64 - 310 Quartz-Tourmaline 20 deg. >> 3 large QZ/TML or TML deformed veins, shallow angle, alteration halo penetrating foliation.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

312.57 318.96 RHYvl Lapilli tuff

312.57 - 318.96: Light grey, well sorted lapilli tuff. Few BI porphyroblasts.

<<Alt: 313.54 - 314.27 Strong Calcite>>

<<Alt: 314.27 - 318.96 Moderate Calcite>>

<<Struc: 315.9 - 315.91 dominant foliation>>

<<Struc: 318 - 318.94 Weak-Moderate Fault>> Fault gouge, washed during drilling. Possibly moderate intensity.

318.96 319.95 MAFt Mafic Volcaniclastics

318.96 - 319.95: Light green, fine grain, faulted at upper contact. Probably pelite input.

<<Alt: 318.96 - 319.95 Strong Calcite>>

319.95 322.30 RHYva Coarse grained to ash tuff

319.95 - 322.3: Fine grain, dark grey, containing BI porphyroblasts.

<<Alt: 319.95 - 323.58 Weak-Moderate Calcite>>

322.30 326.77 MAFt Mafic Volcaniclastics

322.3 - 326.77: Fine grain, light green, CL/CA banded and CA in matrix. Including two narrow RHYvl intervals, 10 cm wide, sharp contacts.

<<Alt: 323.58 - 326.77 Moderate-Strong Calcite>>

326.77 328.09 RHYvl Lapilli tuff

326.77 - 328.09: Light grey, well sorted. Including 10cm wide MAFt interval (light green).

<<Alt: 326.77 - 328.09 Weak-Moderate Calcite>>

<<Struc: 326.8 - 326.81 dominant foliation>>

328.09 329.80 MAFt Mafic Volcaniclastics

328.09 - 329.8: Fine grain, CA banded, CL in matrix, locally fine biotite bands. Diamond shape white porphyroblasts (ankerite?). Sharp contacts.

<<Alt: 328.09 - 329.8 Strong Calcite>>

329.80 337.18 RHYvl Lapilli tuff

329.8 - 337.18: Light grey, well sorted lapilli tuff.

<<Alt: 329.8 - 349.39 Moderate Calcite>>

<<Struc: 333.75 - 333.76 dominant foliation>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

337.18 338.30 RHYva Coarse grained to ash tuff

337.18 - 338.3: Biotite porphyroblasts disseminated suggesting pelitic input. Fine grain, light grey. Lapilli content increases at lower contact. Rare white, mm size possibly crystals.

338.30 339.39 PEL Equigranular biotite + calcite +/- quartz rock

338.3 - 339.39: Light brown, banded (grading?). Sharp upper contact marked by 0.5 cm wide CL band. Gradual lower contact, biotite porphyroblasts in the unit bellow.

339.39 341.88 RHYvl Lapilli tuff

339.39 - 341.88: Blue-green, ash supported. Rare crystals. CL altered blebs interpreted as lapilli.

<<Alt: 339.39 - 341.88 Weak-Moderate Chlorite>> Altered lapilli.

341.88 351.07 RHYv Rhyolite volcaniclastic

341.88 - 351.07: Well sorted volcaniclastic ash/lapilli sequences. Few biotite patches. Possibly weak CL alteration (or biotite calcite quartz altered lapilli) from 349.39 m to 350.62 m.

<<Alt: 349.39 - 355.3 Weak-Moderate Chlorite>> Altered lapilli.

<<Alt: 349.39 - 358.02 Weak-Moderate Calcite>>

<<Struc: 346.8 - 346.81 dominant foliation>>

351.07 354.34 RHYvl Lapilli tuff

351.07 - 354.34: Blue-green. Rare crystals.

354.34 358.02 RHYvl Lapilli tuff

354.34 - 358.02: Grey, fine grain matrix. Large discordant QZ/TML vein at lower contact.

<<Struc: 356 - 363.5 Weak-Moderate Fault>> Highly fractured zone accentuated by texture, QZ/TML veins and multiple narrow faults.

358.02 363.24 RHYvx Quartz and/or feldspar crystal tuff

358.02 - 363.24: Light grey, heterogeneous, poorly sorted, fragmental. Could be crystals and/or lapilli fragments, possibly reworked material. Unit fractured/highly broken on its top.

<<Alt: 358.02 - 378.25 Weak Calcite>>

<<Vein: 358.1 - 358.77 Quartz-Tourmaline 10 deg. >> Large QZ/TML in fracture, shallow angle vein.

<<Vein: 359.3 - 360 Tourmaline 28 deg. >> TML vein set associated with QZ in fracture zone.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

363.24 370.45 RHYvx Quartz and/or feldspar crystal tuff

363.24 - 370.45: Light grey, poorly sorted, containing crystal and/or lapilli fragments.

<<Min: 363.24 - 370.45 3% Min: Pyrrhotite>>

<<Min: 363.26 - 370.45 2% Min: Pyrite>>

<<Struc: 366.8 - 366.81 dominant foliation>>

370.45 374.40 RHY undifferentiated rhyolite

370.45 - 374.4: Silicic bands and locally wavy (curdy like texture). Possibly RHYcw. Gradual contacts.

<<Min: 370.45 - 378.25 0.1% Min: Pyrite>>

<<Min: 370.45 - 386.49 1% Min: Pyrrhotite>>

<<Alt: 370.45 - 375.08 Weak Muscovite>>

374.40 377.05 RHY undifferentiated rhyolite

374.4 - 377.05: Texture obscured. MU altered, folded. QZ veins. Narrow pelitic interval from 374.84 m to 375.08 m.

<<Alt: 375.08 - 377.05 Moderate Muscovite>>

<<Vein: 375.22 - 375.78 Quartz>> QZ vein surrounded by muscovite altered zone.

<<Struc: 375.6 - 377 Weak-Moderate Shear>> Folded, broken zone marked by QZ veins.

377.05 380.24 PEL Equigranular biotite + calcite +/- quartz rock

377.05 - 380.24: Very fine grain BI, dark grey to black, foliated on the edge. Rhyolite fragments or beds altered MU as evidence of sedimentary sequence but rounded white specks (amygdule like) observed on the upper part suggesting mafic dike.

<<Min: 378.25 - 379 3% Min: Pyrite>> Narrow interval containing PO and PY.

<<Min: 379 - 438.12 0.1% Min: Pyrite>>

<<Alt: 378.25 - 380.24 Moderate-Strong Calcite>>

380.24 383.46 RHYva Coarse grained to ash tuff

380.24 - 383.46: Light grey-green, fine grain, moderately altered MU.

<<Alt: 380.24 - 382.65 Moderate Muscovite>>

<<Alt: 380.24 - 383.95 Weak Calcite>>

<<Alt: 382.65 - 386.49 Weak-Moderate Muscovite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

383.46 386.49 RHYv Rhyolite volcaniclastic

383.46 - 386.49: Grey-blue, BI porphyroblasts heavily disseminated. Weakly MU altered.

<<Alt: 383.95 - 390.39 Strong Calcite>>

386.49 390.39 PEL Equigranular biotite + calcite +/- quartz rock

386.49 - 390.39: Dark brown to black, fine grain Patchy locally strong CA content. CA veining. BI from porphyroblastic to thinly banded along the foliation. Beige specks (ferro carbonate).

<<Min: 386.49 - 390.39 2% Min: Pyrrhotite>>

<<Alt: 386.49 - 404.71 Weak Muscovite>>

<<Struc: 387.95 - 387.96 Foliation>>

390.39 402.97 RHYva Coarse grained to ash tuff

390.39 - 402.97: Patchy BI enrichment. Few lapilli. Weak patchy MU alteration, halo along fracture.

<<Min: 390.39 - 402.97 1% Min: Pyrrhotite>>

<<Alt: 390.39 - 402.97 Weak Calcite>>

<<Struc: 390.92 - 390.93 dominant foliation>>

<<Struc: 396.3 - 396.31 dominant foliation>>

<<Struc: 399.7 - 399.71 dominant foliation>>

402.97 404.71 PEL Equigranular biotite + calcite +/- quartz rock

402.97 - 404.71: Dark brown-black, fine grain biotite rich. Grading on the lower part, showing locally MU bands (ash beds?). White specks on the upper part (amygdule like)-possibly mafic dike.

<<Min: 402.97 - 404.71 2% Min: Pyrrhotite>>

<<Alt: 402.97 - 404.71 Strong Calcite>>

404.71 415.71 RHYv Rhyolite volcaniclastic

404.71 - 415.71: Lapilli from 412.50 m to 413.25 m. Weakly altered MU, halo in fracture and joints.

<<Min: 404.71 - 423.85 1% Min: Pyrrhotite>>

<<Alt: 404.71 - 409.21 Weak-Moderate Muscovite>>

<<Alt: 404.71 - 415.38 Weak Calcite>>

<<Alt: 409.21 - 413.34 Moderate Muscovite>>

<<Alt: 413.34 - 415.38 Weak-Moderate Muscovite>>

<<Alt: 415.38 - 426.13 Strong Calcite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Struc: 405.92 - 405.93 dominant foliation>>

415.71 423.85 MAFw mafic volcanic flows

415.71 - 423.85: CL/BI/CA. Fine to medium grain. Homogeneous texture. Possibly andesite/propylitic alteration.

<<Alt: 416.22 - 423.85 Moderate Chlorite>> Altered andesite.

<<Alt: 423.7 - 438.12 Weak-Moderate Muscovite>>

<<Struc: 418.3 - 418.35 Weak Shear>> Light shearing, fold.

<<Struc: 423.7 - 423.8 Weak Shear>> Narrow sheared interval, brecciated and altered MU.

423.85 427.30 PEL Equigranular biotite + calcite +/- quartz rock

423.85 - 427.3: Fine grain, BI rich, containing ash beds altered MU (locally intense alteration). Possiby mafic and felsic material interfingered.

<<Min: 423.85 - 438.12 2% Min: Pyrrhotite>> and aggregated along the foliation.

<<Alt: 423.85 - 495.05 Weak-Moderate Chlorite>> Altered lapilli.

<<Alt: 426.13 - 438.12 Weak Calcite>>

427.30 430.05 RHYvx Quartz and/or feldspar crystal tuff

427.3 - 430.05: Light grey, containing xtl and/or lapilli fragments.

430.05 434.72 RHYvl Lapilli tuff

430.05 - 434.72: Light grey, few crystals. Possible calcareous sediment from 333.72 m to 333.93 m. Very rare quartz eyes. Few BI porphyroblasts.

<<Struc: 431.65 - 431.66 dominant foliation>>

<<Struc: 431.8 - 432.15 Weak Shear>> Light shearing, fold.

434.72 436.39 SEDc calcareous Sediment

434.72 - 436.39: Blue-grey, fine grain, calcareous, foliated, locally CA banded. Sharp contacts.

436.39 438.12 RHYvx Quartz and/or feldspar crystal tuff

436.39 - 438.12: Fragmental, clasts/crystals heterogeneous size. Ash at upper (sharp) contact.

438.12 441.96 RHYi Aphanitic Rhyolite (intrusion)

438.12 - 441.96: Grey-yellow, aphanitic, MU altered, siliceous, strongly fractured at upper contact, PY/PO/muscovite in fracture. Gradual contacts. Possibly rhyolitic dome.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Min: 438.12 - 441.96 1% Min: Pyrite>> In RHYi.

<<Alt: 438.12 - 441.96 Strong Silicification>> RHYi could strong silicification.

<<Alt: 438.12 - 441.96 Moderate Muscovite>> In RHYi-Yellow color, overprinted by silicification.

<<Alt: 438.12 - 441.96 Trace Calcite>> In fracture.

441.96 444.35 RHYvl Lapilli tuff

441.96 - 444.35: Light grey, fine to very fine grain at upper contact (ash) as well as narrow calcareous interval (SEDc). Foliated. Rare small crystals, weak MU alteration.

<<Min: 441.96 - 452.51 0.1% Min: Pyrite>>

<<Min: 441.96 - 452.51 2% Min: Pyrrhotite>>

<<Alt: 441.96 - 444.35 Weak Calcite>>

444.35 446.52 RHYvl Lapilli tuff

444.35 - 446.52: Dark grey-purple. Sharp upper contact. Possibly meta sediment or intermediate composition. Silicified, calcareous.

<<Alt: 444.35 - 446.52 Weak-Moderate Calcite>>

<<Struc: 444.9 - 444.91 Foliation>>

446.52 452.51 RHYv Rhyolite volcaniclastic

446.52 - 452.51: Heterogeneous unit, fractured. Locally clasts up to 2 cm wide. Weakly MU altered.

<<Alt: 446.52 - 452.51 Weak Calcite>>

<<Vein: 448.9 - 451.4 Quartz>> QZ veins and pods in fractured zone, representing 15% of the interval.

<<Struc: 447 - 449.9 Weak Fault>> Broken zone marked by QZ veins and narrow clay gouge intervals.

452.51 463.86 RHYvl Lapilli tuff

452.51 - 463.86: Dark grey-purple. Sharp upper contact. Possibly meta sediment or intermediate composition. Siliceous/calcareous.

<<Min: 452.51 - 478.05 2% Min: Pyrrhotite>> And veinlets.

<<Min: 452.51 - 503.42 0.5% Min: Pyrite>> QZ?PY patch

<<Alt: 452.51 - 463.86 Moderate Silicification>> Or meta sandstone, SI rich protolith.

<<Alt: 452.51 - 463.86 Weak-Moderate Calcite>>

<<Struc: 454.25 - 454.5 Weak Fault>> Light shearing, MU (halo) alteration in fracture.

463.86 467.36 RHYvl Lapilli tuff

463.86 - 467.36: Light grey, containing white elongated fragment, possibly lapilli.

<<Alt: 463.86 - 478.05 Trace Calcite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

467.36 470.03 RHYv Rhyolite volcaniclastic

467.36 - 470.03: Light blue, fine grain, homogeneous, weakly banded. Fine grain BI. Could be sedimentary/epiclastic.

470.03 478.05 SED undifferentiated Sediment

470.03 - 478.05: Bluish/purple, heterogeneous texture, granular band or patch (QZ blebs 2 to 5 mm) aggregated) possibly sorted. beds. Sedimentary unit mixed with intermediate composition volcaniclastic ash material. Weakly calcareous. Chlorite fine wavy bands and blebs disseminated, BI, MU. Rare TML veinlet. PO and PY disseminated.

<<Struc: 474.15 - 474.15 Foliation>>

478.05 478.65 SEDc calcareous Sediment

478.05 - 478.65: Dark grey to black, strongly calcareous. Medium to fine grain, sorted.

<<Min: 478.05 - 478.65 5% Min: Pyrrhotite>>

<<Min: 478.05 - 503.42 1% Min: Pyrrhotite>>

<<Alt: 478.05 - 478.65 Moderate-Strong Calcite>>

478.65 485.42 RHYv Rhyolite volcaniclastic

478.65 - 485.42: Sedimentary sequence lapilli to ash, light grey volcaniclastic, containing few QE mainly concentrated in lapilli aggregated bands. Interval showing conglomeritic texture, poorly sorted as well as chlorite blebs (altered lapilli?). Ash on top of the unit.

<<Alt: 478.65 - 485.42 Trace Calcite>>

<<Vein: 484.83 - 484.84 Tourmaline>> TML veinlet.

<<Struc: 480.8 - 480.81 dominant foliation>>

<<Struc: 483.4 - 483.41 Foliation>>

485.42 495.05 SED undifferentiated Sediment

485.42 - 495.05: Bluish/purple, heterogeneous texture, granular band or patch (QZ blebs 2 to 5 mm) aggregated) possibly sorted. Beds. Sedimentary unit mixed with intermediate composition volcaniclastic ash material. Weakly calcareous. Chlorite fine wavy bands and blebs disseminated, BI, MU. Rare TML veinlet. PO and PY disseminated. Could be RHYva/BCQlpl.

<<Alt: 485.42 - 503.42 Weak Calcite>>

<<Vein: 491.57 - 492.6 Quartz>> QZ veins and pods representing 60 % of the interval.

<<Struc: 489.9 - 490.91 dominant foliation>>

<<Struc: 494.05 - 494.06 dominant foliation>>

495.05 502.15 RHYvl Lapilli tuff

495.05 - 502.15: Light grey, poorly sorted, fragmental (lapilli/crystal).

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

502.15 503.42 RHYva Coarse grained to ash tuff

502.15 - 503.42: Light blue, fine/medium grain, siliceous, containing rare granular interval.

503.42 517.50 RHYvl Lapilli tuff

503.42 - 517.5: Light grey, poorly sorted, fragmental (lapilli/crystals angular to sub rounded) probably reworked material (sliding) Sheared at lower contact.

<<Min: 503.42 - 516.4 2% Min: Pyrite>>

<<Min: 503.42 - 532 0.5% Min: Pyrrhotite>>

<<Min: 516.4 - 520.38 5% Min: Pyrite>> Clasts and QZ/PY relic veins in fault zone.

<<Alt: 503.42 - 512.8 Weak-Moderate Calcite>> Fragment replacement and bands.

<<Alt: 505 - 516.4 Weak Muscovite>>

<<Alt: 512.8 - 578 Weak Calcite>>

<<Alt: 516.4 - 556.6 Moderate-Strong Muscovite>> In fault zone.

<<Struc: 514.65 - 517.5 Weak-Moderate Shear>>

517.50 520.38 FLZ Fault Zone

517.5 - 520.38: Sheared and brecciated rhyolite. Some QZ/PY clasts and vein relics. Moderate to strong muscovite alteration.

<<Struc: 517.5 - 520.38 Strong Fault>>

520.38 528.45 RHY undifferentiated rhyolite

520.38 - 528.45: Sheared and disaggregated rhyolite. Competent interval showing fragmental texture.

<<Min: 520.38 - 570 1% Min: Pyrite>> associated with dark grey QZ.

<<Vein: 526.7 - 631.25 Quartz-Carbonate-Sulphide>> QZ/PY/CA/PO vein set. 5% of the interval.

<<Struc: 520.38 - 528.45 Moderate-Strong Shear>>

528.45 531.53 FLZ Fault Zone

528.45 - 531.53: Brecciated, disaggregated unit, QZ and rhyolite clasts. Weakly gougy. QE observed in clasts.

<<Struc: 528.45 - 531.53 Strong Fault>> And shearing.

531.53 532.40 RHY undifferentiated rhyolite

531.53 - 532.4: Brittled rhyolite. QZ/PO patch.

<<Min: 532 - 561 1% Min: Pyrrhotite>>

<<Struc: 531.53 - 536.45 Weak-Moderate Shear>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

532.40 535.00 No Core No Core

532.4 - 535: Poor recovery explained by washed core after reaming rods from 516m to 531m.

535.00 555.40 RHY undifferentiated rhyolite

535 - 555.4: MU altered rhyolite, sheared at lower contact, QZ/PY/PO patch (stringers?). Siliceous. One QE observed.

<<Struc: 536.45 - 537.38 Strong Fault>>

<<Struc: 537.38 - 551.3 Weak-Moderate Shear>>

<<Struc: 551.3 - 555.4 Moderate-Strong Shear>>

<<Struc: 554.4 - 555.85 Moderate-Strong Fault>>

555.40 555.84 FLZ Fault Zone

555.4 - 555.84: Gougy, brecciated. QZ and QZ/PO clasts.

555.84 557.60 RHY undifferentiated rhyolite

555.84 - 557.6: Weakly sheared RHY altered MU.QZ/PO pods.

<<Alt: 556.6 - 566 Weak-Moderate Muscovite>> Related to faulting.

<<Struc: 555.85 - 558.28 Weak-Moderate Shear>>

557.60 559.30 MDSt Rhyolite tuff dominant mudstone

557.6 - 559.3: Sheared, wavy mudstone containing PO mixed with rhyolite altered MU.

<<Struc: 558.28 - 562.06 Moderate-Strong Shear>>

559.30 564.55 RHY undifferentiated rhyolite

559.3 - 564.55: Sheared rhyolite altered MU, one QE observed. PO ad QZ/PO bands.

<<Min: 561 - 570 3% Min: Pyrrhotite>> and patch.

564.55 566.60 MDSt Rhyolite tuff dominant mudstone

564.55 - 566.6: Weakly carbonaceous, siliceous blue mudstone containing about 5% of PO. Mixed with rhyolite.

566.60 571.00 RHYvl Lapilli tuff

566.6 - 571: Siliceous tuffaceous rhyolite containing PO, possibly carbonaceous content and/or fine grain BI (bluish band, heterogeneous composition). Whitish elongated clasts "lapilli like". Tourmaline specks patch.

<<Min: 570 - 598 0.1% Min: Pyrite>>

<<Min: 570 - 615.2 1% Min: Pyrrhotite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Alt: 568.53 - 571.13 Weak Tourmaline>>

571.00 572.50 SED undifferentiated Sediment

571 - 572.5: Fine grain, banded grey/black. Faulted at lower contact. Crosscut by QZ/TML veinlets as well as TML speck aggregated. Heterogeneous texture. White clasts/crystal, rounded.

572.50 588.04 RHYv Rhyolite volcaniclastic

572.5 - 588.04: Grey to bluish. Dirty unit, containing BI and muscovite in fractures. Siliceous bands.

<<Alt: 574 - 581 Weak-Moderate Muscovite>>

<<Alt: 578 - 583 Weak-Moderate Calcite>>

<<Alt: 581 - 598 Weak Muscovite>> Related to faulting.

<<Alt: 583 - 598 Weak Calcite>>

<<Struc: 572.5 - 573 Weak-Moderate Fault>> Fault gouge, and shearing. PY clasts.

<<Struc: 582.95 - 582.96 Foliation>>

<<Struc: 585.68 - 585.69 Foliation>>

<<Struc: 587.97 - 587.98 Foliation>>

588.04 593.80 RHYva Coarse grained to ash tuff

588.04 - 593.8: Light grey, fine grin, weakly MU altered.

<<Struc: 593 - 593.8 Weak Fault>> Broken zone, sandy gouge.

593.80 598.00 RHYva Coarse grained to ash tuff

593.8 - 598: Fine grain, light grey, siliceous, weakly MU altered.

<<Vein: 595 - 595.28 Quartz>> QZ vein, fractured.

<<Struc: 596.4 - 597.8 Weak Fault>> Narrow gouge zone.

598.00 601.70 RHYva Coarse grained to ash tuff

598 - 601.7: Homogeneous groundmass, light blue (BI?), fine grain. PO disseminated and locally banded. Siltstone texture. White clasts, possibly crystals.

<<Min: 598 - 615.2 0.5% Min: Pyrite>>

<<Alt: 598 - 608.18 Weak-Moderate Garnet>> Locally moderate.

<<Alt: 598 - 622.15 Moderate Silicification>> Or SI in lithology.

601.70 608.18 RHYva Coarse grained to ash tuff

601.7 - 608.18: Fine grain, light blue, siltstone texture (siliceous groundmass). Strong muscovite (regional metamorphic-overprint) from 605.60m.

<<Struc: 602.08 - 602.09 dominant foliation>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Struc: 604.6 - 604.61 dominant foliation>>

608.18 613.35 RHYva Coarse grained to ash tuff

608.18 - 613.35: Fine grain, light grey-green, white "clasts" (1 to 3mm), replaced CA, poorly sorted (probably crystals). Muscovite rich (metamorphic-overprint).

<<Alt: 608.18 - 622.15 Weak-Moderate Calcite>> Replacing feldspar porphyroblasts.

<<Struc: 609.95 - 609.95 dominant foliation>>

613.35 615.20 RHYva Coarse grained to ash tuff

613.35 - 615.2: Blue/black, containing BI porphyroblasts. Intermediate composition or pelitic input. Sharp contacts-could be dike. CA crystals.

615.20 622.16 RHYcf Feldspar & feldspar quartz porphyry

615.2 - 622.16: Porphyritic texture (1 to 3 cm wide crystal), probably feldspar CA replaced, randomly oriented, siliceous groundmass supported, low to mid strain.MU altered.

<<Min: 615.2 - 622.15 0.1% Min: Pyrrhotite>>

<<Min: 615.2 - 622.16 1% Min: Pyrite>> and disseminated.

<<Min: 622.15 - 632.5 3% Min: Pyrrhotite>> QZ/CA/PO/PY veins in RHYcf/RHYif.

<<Alt: 615.2 - 622.15 Trace Muscovite>>

<<Alt: 622.15 - 639.23 Weak Muscovite>>

<<Alt: 622.15 - 639.9 Strong Silicification>> Strongly siliceous unit, glassy RHYcf.

<<Alt: 622.15 - 639.9 Weak Calcite>> and CA veins associated with PY/PO/QZ.

622.16 626.70 RHYif feldspar and quartz porphyry intrusions

622.16 - 626.7: Siliceous, containing 0.5 to 2cm wide crystals, randomly oriented. Gradual upper contact. Same unit than above but SI saturated (QE/glassy groundmass). MU altered. Heterogranular QE/high density, Possibly weakly MU altered (yellow/original?).

<<Min: 622.16 - 639.9 3% Min: Pyrite>> Aggregated/banded.

<<Struc: 626.31 - 626.32 dominant foliation>>

626.70 632.48 RHYcf Feldspar & feldspar quartz porphyry

626.7 - 632.48: QZ/PY and QZ/PO/CA veining, Altered MU. Texture obscured, glassy texture fading out locally but same unit than above and bellow.

<<Struc: 629.1 - 629.11 dominant foliation>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

632.48 639.70 RHYif feldspar and quartz porphyry intrusions

632.48 - 639.7: Aphanitic groundmass. QZ/PY veining, feldspar phenocrysts altered CA and QE eyes.

<<Min: 632.5 - 674 0.5% Min: Pyrrhotite>>

<<Alt: 639.23 - 652.37 Moderate Muscovite>>

<<Struc: 634.13 - 634.14 dominant foliation>>

<<Struc: 638.73 - 639.28 Weak Shear>> and faulted.

639.70 652.84 RHYvl Lapilli tuff

639.7 - 652.84: Bleached texture, PY/QZ banded, MU altered. Lapilli replaced CA,. Heterogeneous texture. Rare QE. Locally folded to weakly sheared.

<<Min: 639.9 - 652.84 3% Min: Pyrite>>

<<Alt: 639.9 - 652.37 Weak-Moderate Calcite>> Lapilli replacement.

<<Alt: 652.37 - 664 Weak-Moderate Muscovite>>

<<Alt: 652.37 - 690 Trace Calcite>>

<<Vein: 649.8 - 649.9 Quartz-Albite>> QZ vein containing few PY/PO, strong MU alteration surrounding, CA patch, green mineral (CL?).

<<Struc: 639.95 - 639.96 dominant foliation>>

<<Struc: 643 - 643.92 Weak Shear>>

<<Struc: 644.95 - 644.96 dominant foliation>>

<<Struc: 645.75 - 646.2 Weak-Moderate Shear>> Folded from 645.30m to 645.75m.

652.84 685.30 RHYv Rhyolite volcaniclastic

652.84 - 685.3: Patchy granular texture, Strongly PY/QZ/MU banded to ribboned (up to 15% PY). Some very fine grain beds, grey (mud or ash?). Rare PO associated with PY/QZ veins. Possibly reworked volcaniclastic material .

<<Min: 652.84 - 681 10% Min: Pyrite>> Ribboned QZ/PY veins

<<Min: 674 - 685 1% Min: Pyrrhotite>>

<<Min: 681 - 691.35 5% Min: Pyrite>>

<<Alt: 664 - 684.19 Weak Muscovite>>

<<Alt: 684.19 - 703.15 Moderate Muscovite>> Fault zone.

<<Struc: 666.1 - 666.11 dominant foliation>>

<<Struc: 684.18 - 685.5 Weak-Moderate Fault>> and sheared. Gouge containing QZ/PY clasts and/or vein relics.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

685.30 691.93 RHYcf Feldspar & feldspar quartz porphyry

685.3 - 691.93: Granular texture, phenocrysts aggregated (possiby clasts), micro fractured, MU altered.

<<Min: 691.35 - 703.15 0.1% Min: Pyrite>>

<<Alt: 690 - 693.71 Moderate Calcite>>

<<Struc: 687.22 - 691.93 Moderate-Strong Fault>> Micro fractured, brecciaed texture, indured fault zone.

691.93 694.43 FLZ Fault Zone

691.93 - 694.43: Fault breccia, black/grey layers intercaled, gougy (mudstone?). Rounded clasts. CA in matrix and clasts-mylonitic texture.

<<Alt: 693.71 - 721.63 Weak Calcite>>

<<Struc: 691.93 - 694.43 Intense Fault>> Fault breccia, rounded clasts, dark matrix, indured.

694.43 703.15 FLZ Fault Zone

694.43 - 703.15: Dominantly rhyolite (RHYcf) clasts, crackobrecciated, cataclastic. Healed fault, indured.

<<Struc: 694.43 - 703.15 Strong Fault>> Brecciated, fracture and microfracture, indured fault, healed.

703.15 719.86 RHYcf Feldspar & feldspar quartz porphyry

703.15 - 719.86: Shattered, strongly siliceous. Feldspar phenos relics. Rare QE.

<<Min: 703.15 - 705 3% Min: Pyrite>> Fracture in siliceous feldspar porphyry.

<<Min: 705 - 718 0.5% Min: Pyrite>>

<<Min: 718 - 723.64 3% Min: Pyrite>> and finely disseminated.

<<Alt: 703.15 - 716.86 Strong Silicification>> Silicified RHYcf.

<<Alt: 703.15 - 721 Weak-Moderate Muscovite>>

<<Struc: 703.15 - 716.86 Moderate Fault>> Solid rock intervals and shattered rhyolite (feldspar porphyry), brecciated in some intervals. Large block within healed fault. Possibly under estimated intensity.

<<Struc: 716.86 - 719.86 Moderate-Strong Fault>> Solid rock/micro fractured and sandy gouge.

719.86 723.64 RHYvx Quartz and/or feldspar crystal tuff

719.86 - 723.64: Light blue, medium grain, siliceous. QE highly concentrated. Microfracture containing clay. Possibly preserved unit in larger fracture zone

<<Alt: 721 - 724.8 Weak Muscovite>>

<<Alt: 721.63 - 723.64 Moderate Calcite>>

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Struc: 719.86 - 729.4 Weak-Moderate Fault>> Micro fracture, brittle and friable intervals/solid rock intercaled. Probably preserved block within fault zone.

723.64 724.80 MDSc Carbonaceous dominant mudstone

723.64 - 724.8: Possibly preserved unit in larger fault zone. Fine grain, black, siliceous (or silicified). Sharpe, faulted lower contact.

<<Min: 723.64 - 727.3 1% Min: Pyrite>> Elongated, in ash (?) beds.

<<Alt: 723.64 - 729.4 Weak-Moderate Calcite>>

724.80 727.30 RHYv Rhyolite volcaniclastic

724.8 - 727.3: Microfractured/shattered. Mid strain CA altered possibly lapilli and interval showing finer grain (ash?) containing elongated PY disseminated.

<<Alt: 724.8 - 729.4 Moderate-Strong Muscovite>>

727.30 729.40 RHYcw Curdy textured-flow banded (flows, subvolcanics)

727.3 - 729.4: Flow banded, microfractured, locally breccia texture.

<<Min: 727.37 - 745 0.5% Min: Pyrite>> Rare veins.

729.40 733.02 FLZ Fault Zone

729.4 - 733.02: Fault breccia, black, grey bands (rhyolitic) intercaled. Rounded clasts dominantly Qz/CA. Mylonitic texture.

<<Alt: 729.4 - 732.63 Moderate Calcite>>

<<Alt: 729.4 - 733.5 Weak Muscovite>> In rhyolite interval.

<<Alt: 732.63 - 741.02 Weak Calcite>>

<<Struc: 729.4 - 733 Strong Fault>> Fault breccia, polymictique, gougy. Dominant black matrix (mudstone).

733.02 733.50 RHY undifferentiated rhyolite

733.02 - 733.5: Narrow rhyolitic interval, grey, poorly aggregated/friable.

733.50 734.81 CHT Chert

733.5 - 734.81: 1 to 3mm translucent QZ bands in siliceous mudstone unit.

<<Alt: 733.5 - 757.7 Moderate Muscovite>> Proximity of fault. But could be original.

734.81 735.70 RHY undifferentiated rhyolite

734.81 - 735.7: Texture bleached, grey, friable, containing mudstone intercaled. 5cm QZ vein.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

735.70 741.02 FLZ Fault Zone

735.7 - 741.02: Fine grain, black, graphitic mudstone dominant in fault zone, gougy in some interval. White bands (CA and possibly feldspar. Sheared/friable. Containing possibly beached mafic unit, BI porphyroblasts rich.

<<Struc: 735.7 - 742 Moderate-Strong Fault>>

741.02 746.79 RHY undifferentiated rhyolite

741.02 - 746.79: Beige, bleached rhyolite, possibly flow banded, gougy over 50 cm, microfractured to sheared. QZ/PY vein relics.

<<Min: 745 - 753.26 1% Min: Pyrite>> Associated with QZ and PO.

<<Alt: 741.02 - 758 Weak-Moderate Calcite>>

<<Struc: 742 - 746.79 Moderate Fault>> Friable rhyolite, fault gouge intervals over 50cm.

746.79 753.26 RHY undifferentiated rhyolite

746.79 - 753.26: Mu altered rhyolite, QZ/PY veins and blebs, partly silicified.

<<Alt: 750.86 - 751.8 Weak-Moderate Silicification>>

753.26 754.02 SED undifferentiated Sediment

753.26 - 754.02: Brownish, PY/PO rich, QE concentrated at lower contact. Possibly "dirty" rhyolite.

<<Min: 753.26 - 754 5% Min: Pyrite>> In possibly sediment.

<<Min: 754 - 758.5 0.5% Min: Pyrite>>

<<Alt: 754 - 755.1 Moderate Silicification>>

754.02 755.76 RHYvl Lapilli tuff

754.02 - 755.76: Locally "dirty" (brown BI bands). PO rich. Silicified at upper contact.

<<Struc: 754.55 - 754.56 Foliation>>

755.76 756.70 SED undifferentiated Sediment

755.76 - 756.7: BI bands, calcareous.

<<Struc: 756.58 - 756.59 Foliation>>

756.70 758.00 RHYv Rhyolite volcaniclastic

756.7 - 758: Locally "dirty bands" (brown BI rich). Granular texture observed in some narrow interval showing medium to coarse grain,

From (m)	To (m)	Rocktype & Description
758.00	**762.00**	**RHY** **undifferentiated rhyolite**
758 - 762: QZ/BI/CL. Mineralized unit containing PO stringers associated with CP, PY disseminated, SP/GL wispy. Specks of with mineral-possibly fine cordierite. Weak CL alteration.		
<<Min: 758.5 - 762 0.5% Min: Sphalerite>>		
<<Min: 758.5 - 762 2% Min: Pyrite>>		
<<Min: 758.5 - 762 10% Min: Pyrrhotite>>		
<<Min: 758.5 - 762 0.1% Min: Galena>> Associated with SP.		
<<Min: 758.5 - 762 0.5% Min: Chalcopyrite>>		
<<Alt: 758 - 762.5 Moderate Silicification>>		
<<Alt: 758 - 765.2 Weak Calcite>>		
<<Alt: 758.5 - 762 Weak Chlorite>> Associated with PO stringers.		
762.00	**764.68**	**RHY** **undifferentiated rhyolite**
762 - 764.68: Silicified rhyolite partially muscovite altered. Some brown BI/CA rich bands.		
<<Min: 762 - 783.82 1% Min: Pyrrhotite>>		
<<Min: 762 - 797.38 0.5% Min: Pyrite>>		
<<Alt: 762 - 772.85 Weak-Moderate Muscovite>>		
<<Struc: 762.95 - 762.96 Foliation>>		
764.68	**766.58**	**MDS** **Carbonaceous Mudstone & Tuffaceous Mudstone**
764.68 - 766.58: Fine grain, blue, CA banded, patchy Biotite porphyroblasts.		
<<Alt: 765.2 - 770.66 Moderate Calcite>>		
766.58	**768.02**	**RHYv** **Rhyolite volcaniclastic**
766.58 - 768.02: Bleached, sharp contacts. BI porphyroblasts rich interval over 20 cm at lower contact.		
768.02	**769.15**	**RHYva** **Coarse grained to ash tuff**
768.02 - 769.15: Fine grain, homogeneous texture, few BI porphyroblasts. Chloritic interval from 768.94m to 769.13m (mafic?). Possibly siltstone.		
<<Alt: 768.02 - 768.94 Trace Chlorite>>		
<<Alt: 768.94 - 769.14 Moderate-Strong Chlorite>>		

From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
758.50	759.53	1.03	D00005606	-0.005	1.3	0.12	-0.01	0.04
759.53	760.42	0.89	D00005607	-0.005	5.7	0.21	0.1	0.36
760.42	761.26	0.84	D00005608	-0.005	3.6	0.09	0.04	0.24
761.26	762.00	0.74	D00005609	-0.005	6.2	0.11	0.05	0.61

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

769.15 770.16 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

769.15 - 770.16: Blue, fine grain, siliceous. CA bands/blebs.

770.16 772.85 RHYvl Lapilli tuff

770.16 - 772.85: Silicified rhyolite containing brown biotite beds intercaled (sediment?). Locally lapillitic.

<<Alt: 770.66 - 772.85 Weak Calcite>>

<<Alt: 771.7 - 772.85 Moderate-Strong Silicification>>

772.85 775.85 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

772.85 - 775.85: Fine grain, blue, CA banded, foliated/crenulated. Narrow mafic tuff interval intercaled.

<<Alt: 772.85 - 775.83 Moderate-Strong Calcite>>

<<Alt: 775.83 - 777.85 Moderate-Strong Silicification>> Or part of the lithology.

<<Alt: 775.83 - 779.14 Trace Calcite>>

775.85 779.14 MAFt Mafic Volcaniclastics

775.85 - 779.14: Partly silicified, green, fine to medium grain. Some mudstone bands intercaled.

<<Struc: 777.27 - 777.28 Foliation>>

<<Struc: 778.12 - 778.13 Foliation>>

<<Struc: 779.1 - 779.11 Foliation>>

779.14 780.39 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

779.14 - 780.39: Fine grain, blue, calcareous, CA banded.

<<Alt: 779.14 - 793.82 Strong Calcite>> and in matrix.

780.39 781.93 MAFt Mafic Volcaniclastics

780.39 - 781.93: Possibly intermediate composition or pelite input., green to blue. Sharp contact.

781.93 783.82 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

781.93 - 783.82: Fine grain, blue to light blue, foliated, calcareous. PO disseminated. CA bands and in matrix, light blue bands strongly CA rich.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
783.82	**797.38**	**MDS Carbonaceous Mudstone & Tuffaceous Mudstone**	796.00	797.38	1.38	D00005611	0.013	7.9	0.2	0.15	1.81
783.82 - 797.38: Possibly RHYva with intermediate composition. Blue, homogeneous, fine grain, siliceous, weak CL, non calcareous.											
<<Min: 783.82 - 797.38 3% Min: Pyrrhotite>>											
<<Min: 793.82 - 797.38 0.1% Min: Chalcopyrite>>											
<<Alt: 793.82 - 800.5 Moderate Muscovite>>											
<<Alt: 793.82 - 828.08 Trace Calcite>>											
<<Struc: 783.95 - 783.96 Foliation>>											
<<Struc: 785.8 - 790 Weak Fault>> Multiple narrow fault gouge intervals.											
<<Struc: 793.45 - 793.46 dominant foliation>>											
797.38	**797.88**	**OF Pyrrhotite rich sulphides**	797.38	797.88	0.50	D00005612	0.024	8.1	0.49	0.15	9.27
797.38 - 797.88: PO dominant, PY/SP/CP/GL, CA in groundmass, clots of CL											
<<Min: 797.38 - 797.78 10% Min: Sphalerite>>											
<<Min: 797.38 - 797.78 15% Min: Pyrite>>											
<<Min: 797.38 - 797.78 40% Min: Pyrrhotite>>											
<<Min: 797.38 - 797.78 5% Min: Galena>>											
<<Min: 797.38 - 797.78 3% Min: Chalcopyrite>>											
<<Min: 797.78 - 806.4 0.5% Min: Tetrahedrite>>											
<<Min: 797.78 - 806.4 2% Min: Sphalerite>>											
<<Min: 797.78 - 806.4 0.5% Min: Pyrite>>											
<<Min: 797.78 - 806.4 2% Min: Pyrrhotite>>											
<<Min: 797.78 - 806.4 0.1% Min: Chalcopyrite>>											
797.88	**800.50**	**MDS Carbonaceous Mudstone & Tuffaceous Mudstone**	797.88	799.00	1.12	D00005613	-0.005	2.2	0.03	0.01	0.6
797.88 - 800.5: Fine grain, dark blue, silicified. Containing QZ veins, gradual contacts.											
<<Vein: 797.88 - 797.96 Quartz>> Massive QZ vein at lower contact with mineralized interval (OF).			799.00	800.50	1.50	D00005614	-0.005	-0.3	-0.01	-0.01	0.02
800.50	**806.40**	**RHYc Rhyolite coherant volcanics**	800.50	802.00	1.50	D00005615	-0.005	0.4	0.01	-0.01	0.04
800.5 - 806.4: Silica bands, brown biotite intercaled,. CP/SP/PO/PY-possibly TT in veinlets. Massive flow (?).											
<<Alt: 800.5 - 822.32 Strong Muscovite>> Strong muscovite in between silicic bands-Could be original.			802.00	803.50	1.50	D00005616	-0.005	2.3	0.03	0.02	0.52
<<Struc: 804.82 - 804.83 dominant foliation>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

806.40 818.69 RHYc Rhyolite coherant volcanics

806.4 - 818.69: Lack of brown biotite, replaced by strong muscovite alteration in between silica bands. Sulfide disseminated. Locally greenish (CL?).

<<Min: 806.4 - 858.7 0.5% Min: Pyrite>>

<<Min: 806.4 - 858.7 1% Min: Pyrrhotite>>

<<Struc: 814.25 - 814.26 dominant foliation>>

818.69 822.32 RHYcw Curdy textured-flow banded (flows, subvolcanics)

818.69 - 822.32: Flow banded (1 cm wide silica bands). PO/SP-CP trace. @) cm QZ vein at lower contact, sharp.

<<Vein: 822 - 822.3 Quartz>> Massive QZ vein at contact between flow and mudstone/sed.

822.32 827.11 MDSt Rhyolite tuff dominant mudstone

822.32 - 827.11: Heterogeneous texture (foliated to massive/siliceous), fine grain, dark blue, non calcareous.

827.11 828.08 RHYc Rhyolite coherant volcanics

827.11 - 828.08: Silica banded, sharp contacts. Probably mixed with pelitic material.

828.08 828.50 PEL Equigranular biotite + calcite +/- quartz rock

828.08 - 828.5: Siliceous and calcareous. Biotite porphyroblasts. Gradual lower contact. Several sequences of flow/ash-pelite are observed from 826.47m to 834.30m.

<<Alt: 828.08 - 828.5 Weak-Moderate Calcite>>

828.50 832.03 RHYcw Curdy textured-flow banded (flows, subvolcanics)

828.5 - 832.03: Heterogeneous. Ash at lower contact. Locally PO/PY-CP trace in between silica bands.

<<Alt: 828.5 - 846.09 Strong Silicification>> Or silica part of the lithology.

<<Struc: 830.8 - 830.81 dominant foliation>>

832.03 834.30 RHYcw Curdy textured-flow banded (flows, subvolcanics)

832.03 - 834.3: Flow banded and pelite intercaled (biotite porphyroblasts-calcareous). Possibly interfingered contact or peperite.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

834.30 838.54 MDSw Coherent rhyolite flow with carbonaceous content

834.3 - 838.54: Flow banded, containing blebs or lithic fragments of mudstone. Almost cherty texture.

<<Struc: 836.4 - 836.41 dominant foliation>>

838.54 840.68 PEL Equigranular biotite + calcite +/- quartz rock

838.54 - 840.68: Fine grain, black, calcareous, thin CA bands. Gradual contacts.

<<Struc: 839.49 - 839.49 dominant foliation>>

840.68 842.51 RHY undifferentiated rhyolite

840.68 - 842.51: Silicic bands. QZ/CA pods. Heterogeneous texture. Muscovite rich.

842.51 844.82 CHT Chert

842.51 - 844.82: Fine silica bands (1 to 4mm wide) and carbonaceous mudstone intercaled Could be interpreted as MDSw.

<<Struc: 843.45 - 843.46 dominant foliation>>

844.82 846.09 RHYva Coarse grained to ash tuff

844.82 - 846.09: Fine grain, light grey, muscovite rich,

846.09 873.94 SED undifferentiated Sediment black

846.09 - 873.94: Bluish, dark color dominant. Heterogeneous unit, CA/QZ banded, dominantly fine grain (mudstone), mafic tuffaceous material (possibly reworked), and coarse grain beds. Wispy PO/CP/PY-possibly AS, QZ/CA veins. Brown biotite in foliation and locally disseminated. Weak chlorite content.

<<Min: 854.6 - 858.7 0.5% Min: Pyrite>>

<<Min: 854.6 - 858.7 0.1% Min: Chalcopyrite>>

<<Min: 854.6 - 858.7 0.1% Min: Arsenopyrite>>

<<Min: 858.7 - 873.94 3% Min: Pyrrhotite>>

<<Min: 858.7 - 873.94 0.5% Min: Chalcopyrite>>

<<Min: 858.7 - 900.93 0.5% Min: Pyrite>>

<<Alt: 846.09 - 873.94 Trace Chlorite>> Could be original.

<<Alt: 846.09 - 875.35 Moderate Calcite>>

<<Vein: 854.2 - 854.5 Quartz-Carbonate>> QZ/CA massive vein.

<<Vein: 855 - 858 Quartz-Carbonate>> Multiple QZ/CA veins and pods, 10 cm wide, representing 10% of the interval.

<<Struc: 850 - 850.7 Weak-Moderate Fault>> Washed material.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Struc: 853.55 - 853.9 Moderate Shear>> Partially brecciated.

<<Struc: 855.85 - 855.86 dominant foliation>>

<<Struc: 860.85 - 860.86 dominant foliation>>

<<Struc: 861 - 861.01 dominant foliation>>

<<Struc: 864.35 - 864.36 dominant foliation>>

<<Struc: 865.1 - 865.25 Weak Shear>> Brecciated, healed shearing.

<<Struc: 867.95 - 867.96 dominant foliation>>

<<Struc: 868.9 - 868.91 dominant foliation>>

<<Struc: 872.31 - 872.32 dominant foliation>>

873.94 880.94 SED undifferentiated Sediment dark grey

873.94 - 880.94: Greenish/light blue color dominant (sericite/possibly chlorite). CA/QZ banded interlayered with fine grain carbonaceous and fine grain green (mafic?) material containing BI porphyroblasts disseminated. Locally 10cm fine grain (ash/pelite) green homogeneous bands.

<<Min: 873.94 - 898.5 1% Min: Pyrrhotite>>

<<Alt: 873.94 - 892.05 Weak Chlorite>> Could be original.

<<Alt: 875.35 - 882.19 Weak Calcite>>

<<Vein: 874.2 - 874.35 Quartz-Pyrite>> QZ/fine grain PY, brecciated contact with host rock.

<<Struc: 876 - 879 Weak Shear>> weak shearing and deformed foliation.

<<Struc: 879.95 - 879.96 dominant foliation>>

880.94 882.19 RHYv Rhyolite volcaniclastic

880.94 - 882.19: Felsic domain, large CA/QZ bands. Fine grain at (chill) margin.

882.19 892.05 PEL Equigranular biotite + calcite +/- quartz rock

882.19 - 892.05: Greenish color dominant. Heterogeneous. Few CA/QZ bands. Fine grain, green bands, 10cm wide, BI porphyroblasts disseminated, brown biotite in foliation. PO/PY disseminated, CP-SP trace, associated with carbonate. Probably chloritic layers.

<<Min: 882.19 - 895.41 0.1% Min: Sphalerite>>

<<Min: 882.19 - 898.5 0.1% Min: Chalcopyrite>>

<<Alt: 882.19 - 891.62 Weak-Moderate Calcite>>

<<Alt: 891.62 - 899.03 Trace Calcite>>

892.05 893.43 RHYva Coarse grained to ash tuff

892.05 - 893.43: Narrow interval, grey, fine grain, containing QZ/MS/MU-maybe CL. Biotite replacing white/orange mineral aggregated specks (maybe Kspar). Sharp lower contact.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Vein: 893.2 - 893.35 Quartz-Pyrite>> QZ/fine grain PY, weakly sheared zone.

<<Struc: 893 - 893.35 Weak-Moderate Fault>> QZ/PY veins at lower contact.-Moderate shearing

893.43 899.03 RHYcw Curdy textured-flow banded (flows, subvolcanics)

893.43 - 899.03: Flow banded, large silicic bands. MU/MS intercaled. QZ veins containing CP/SP/PY-GL trace. Ash interlayered containing QE.

<<Min: 895.41 - 895.66 2% Min: Sphalerite>> QZ vein/bands.

<<Min: 895.41 - 895.66 2% Min: Pyrrhotite>> QZ vein/bands.

<<Min: 895.41 - 895.66 0.1% Min: Galena>> QZ vein/bands.

<<Min: 895.41 - 895.66 0.5% Min: Chalcopyrite>> QZ vein/bands.

<<Min: 895.41 - 898.66 1% Min: Pyrite>> QZ vein/bands.

<<Min: 895.66 - 898.5 0.1% Min: Chalcopyrite>>

<<Min: 898.95 - 902.29 0.1% Min: Galena>> and patchy.

<<Min: 898.95 - 902.29 0.5% Min: Chalcopyrite>> and patchy.

<<Min: 898.95 - 902.29 0.1% Min: Arsenopyrite>> Associated with other sulfides.

<<Min: 898.95 - 907.35 1% Min: Pyrite>> and patchy.

<<Min: 898.95 - 907.35 3% Min: Pyrrhotite>> and patchy.

<<Vein: 895.41 - 895.66 Quartz-Sulphide>> QZ band containing sulfides PO/CP/SP/PY-GL trace.

899.03 906.32 SED undifferentiated Sediment

899.03	900.00	0.97	B00291972	0.024	4.4	0.06	0.03	0.38

899.03 - 906.32: Heterogeneous, CA bands, CL bands containing bi porphyroblasts, Best mineralized interval from 898.95m to 902.29m-CP/PO/PY patch and veinlets (wispy). Rhyolite (QE) interval intercaled from 900.93m to 901.32m.

<<Min: 902.29 - 907 0.1% Min: Chalcopyrite>>

900.00	900.93	0.93	B00291973	0.058	4.7	0.04	0.15	0.29

<<Alt: 899.03 - 907.35 Weak-Moderate Calcite>>

<<Alt: 901.32 - 906.32 Weak Chlorite>> Probably related to mineral composition.

906.32 907.35 RHYva Coarse grained to ash tuff

906.32 - 907.35: Light grey, CA bands at upper contact.

907.35 909.41 RHY undifferentiated rhyolite

907.35 - 909.41: Bleached/altered interval containing crystal aggregated and numerous specks of beige/orange rounded mineral garnet (?) shape), granular texture (sandy?). Could be fine grain margin of porphyry.

<<Min: 907.35 - 911 0.5% Min: Pyrite>>

<<Min: 907.35 - 914.33 1% Min: Pyrrhotite>>

<<Alt: 907.35 - 921.53 Weak Calcite>> and banded.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Alt: 908.54 - 911 Moderate Muscovite>> Could be original.

909.41 910.92 RHYvl Lapilli tuff

909.41 - 910.92: Poorly sorted, possibly Fspar fragments. Large clasts. Mid to high strain. Matrix altered MU.

910.92 916.17 PEL Equigranular biotite + calcite +/- quartz rock

910.92 - 916.17: Green/grey, heterogeneous. Biotite porphyroblasts path. Probably ash interlayered (QE observed). CP/PO-maybe AS trace (silvery mineral). Patchy CL alteration from 913.10m to 916.57m. Gradual lower contact.

<<Min: 910.92 - 914.33 0.5% Min: Chalcopyrite>> Rare stringers and rare disseminated.

<<Min: 910.92 - 914.33 0.1% Min: Arsenopyrite>> Observed silvery mineral specks, possibly AS.

<<Min: 911 - 921.53 0.1% Min: Pyrite>>

<<Min: 914.33 - 918.99 2% Min: Pyrrhotite>> Associated with CP and CL alteration bands and disseminated.

<<Min: 914.33 - 918.99 2% Min: Chalcopyrite>> Associated with CP and CL alteration bands.

<<Alt: 913.1 - 914.33 Weak-Moderate Chlorite>>

<<Alt: 914.33 - 918.38 Weak Chlorite>> Associated with stringers CP/PO

<<Struc: 913.15 - 913.16 dominant foliation>>

916.17 921.53 RHYvl Lapilli tuff

916.17 - 921.53: Dark grey, large lapilli, medium strain. CP/PO stringers altered CL. Biotite porphyroblasts overprinted and biotite in foliation. From 919.98m to 920.60, rare QE, green/grey, fragmental, poorly sorted, large clasts. Gradual ashy lower contact.

<<Min: 918.99 - 921.53 1% Min: Pyrrhotite>> and disseminated.

<<Min: 918.99 - 921.53 0.5% Min: Chalcopyrite>>

<<Struc: 918.1 - 918.11 Vein>> CP/PO stringers-Beta angle averaging 200 degrees.

<<Struc: 918.63 - 918.64 dominant foliation>>

<<Struc: 918.9 - 918.91 dominant foliation>>

921.53 923.50 PEL Equigranular biotite + calcite +/- quartz rock

921.53 - 923.5: Dark green. BI/CL/CA, QZ vein. Rare CP stringers. Locally assemblage similar as GP4F pelite unite (CL/BI/CA/TML/Sulfides). Fine grain BI patches.

<<Min: 921.53 - 932.66 1% Min: Pyrite>>

<<Min: 921.53 - 932.66 3% Min: Pyrrhotite>>

<<Min: 921.53 - 932.66 0.1% Min: Galena>> Associated with other sulfides.

<<Min: 921.53 - 932.66 1% Min: Chalcopyrite>> Stringers and remobilized.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %

<<Min: 921.53 - 932.66 0.1% Min: Arsenopyrite>> Associated with other sulfides.

<<Alt: 921.53 - 932.66 Weak-Moderate Chlorite>> Probably related to mineral composition.

<<Alt: 921.53 - 932.66 Weak-Moderate Calcite>>

<<Vein: 923.15 - 923.33 Quarzt-Chlorite-Tourmaline>> QZ/CA/CL/BI/TML assemblage similar to GP4F.

<<Struc: 921.58 - 921.69 dominant foliation>>

923.50 932.66 SED undifferentiated Sediment

923.5 - 932.66: Dark blue/dark green. CL/BI/fine grain bands. Clasts and blebs, interpreted as lithic fragments (1 to 5cm wide). Heterogeneous/chaotic texture. CP/PO/PY/SP-maybe as well as CP remobilized in thin fractures. Conglomerate texture from 931.69m to 932.31m.

<<Vein: 926.58 - 928.42 Quartz-Carbonate>> Multiple QZ/CA veins representing 30% of the interval.

932.66 949.00 RHYv Rhyolite volcaniclastic

932.66 - 949: Rare QE/rare biotite porphyroblasts. Light grey, texture obscured. PO patch and disseminated representing up to 5%. Rare PY disseminated. QZ vein associated with possibly sediment interval.

<<Min: 932.66 - 949 5% Min: Pyrrhotite>> and disseminated.

<<Min: 932.66 - 953.31 0.1% Min: Pyrite>>

<<Alt: 932.66 - 953.31 Weak Calcite>>

<<Struc: 933.95 - 933.96 dominant foliation>>

<<Struc: 939.95 - 939.96 dominant foliation>>

<<Struc: 945.52 - 945.53 dominant foliation>>

949.00 953.31 RHYvl Lapilli tuff

949 - 953.31: Showing MU weak to moderate banded alteration. PO disseminated and oriented along the foliation. Rare PY. Silica clasts (1 to 3cm wide) , low strain, probably lapilli.

<<Min: 949 - 953.31 3% Min: Pyrrhotite>>

<<Alt: 949 - 953.31 Weak-Moderate Muscovite>> EOH

<<Struc: 952.82 - 952.82 dominant foliation>>

End of Hole @ 953.31