EQUITY | EXPLORATION CONSULTANTS LTD.

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K95-170

Prospect:		Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Jerome de Pasquale
Grid:	NAD83_Z9	Hole Diameter:		Survey By:	Challenger_Survey	Date Logging Start:	4/25/2016
UTM Easting	417104.97	Core Size:	HQ/NQ	Azimuth:	150	Date Logging Complete:	4/28/2016
UTM Northing:	6815120.294	Casing Pulled?:		Dip:	-90	Drill Company:	
UTM Elev. (m):	1618.8	Casing Depth (m):	9	Length (m):	442	Drill Rig:	
Local Easting:	7150	Stored?:	Yes	Claims Title		Drill Started:	
Local Northing:	5100	Cemented?:		Core Storage Loc.:	KZK Camp	Drill Completed:	
Local Elev. (m):	1619			Hole Completed?:		Purpose:	Exploration
						Parent Hole:	

Comments:

Wind Lake/KZK formation contact at 197.52. Lots of biotite in the lowest units suggesting an intermediate composition of the rocks. Possibly some evidences of pelitic layers presence.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-90	150		150	SS				☑	
30	-89	149		149	SS				☑	
61	-87	118		118	SS				☑	
91	-86	131		131	SS				☑	
122	-85	156		156	SS				☑	
152	-83	154		154	SS				☑	
192	-80	138		138	SS				☑	
250	-78	151		151	SS				☑	
259	-78	151		151	SS				☑	
350	-74	168		168	SS				☑	
442	-73	168		168	SS				☑	

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
0.00	**8.80**	**OVBN Overburden**									
8.80	**9.07**	**MAFt Mafic Volcaniclastics**									

8.8 - 9.07: Rusty, calcareous.

<<Min: 8.8 - 20 0.1% Min: Sphalerite>>

<<Min: 8.8 - 442 0.1% Min: Pyrite>>

<<Min: 8.8 - 442 0.1% Min: Pyrrhotite>> Mostly in mafic tuff units.

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

<<Alt: 8.8 - 36 Moderate-Strong Calcite>> 15 per cent CA.

9.07 19.12 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

9.07 - 19.12: Thin foliation, locally vuggu. CA veining. Rare PY/SP veinlets. Fault from 12.50 to 12.80. Strongly oxidized from 14.70 to 14.85, probably due to groundwater.

<<Struc: 11.5 - 13.5 Moderate Fault>> Sandy-silty gouge. Broken zone.

19.12 22.55 MAFt Mafic Volcaniclastics

19.12 - 22.55: CA in veinlets and matrix.

22.55 23.66 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

22.55 - 23.66: CA veining. Few MAFt interbedded.

23.66 29.80 MAFt Mafic Volcaniclastics

23.66 - 29.8: Few lapilli. Fine grain from 27.55 to 28.62. Locally mixed with MDS. Few silica bands, possibly chert.

29.80 32.84 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

29.8 - 32.84: Mixed with mafic tuff. Some silica bands, possibly chert.

32.84 33.48 MAFta Coarse grained to ash tuff

32.84 - 33.48: Fine grain mafic tuff.

33.48 35.78 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

33.48 - 35.78: Faulted. CA veining. Mixed with mafic tuff.

<<Struc: 34.5 - 36.1 Moderate-Strong Fault>> Sandy-clay gouge over 30 and 40 cm.

35.78 43.71 MAFw mafic volcanic flows

35.78 - 43.71: Fractured, altered to clay. Texture e obscured.

<<Alt: 36 - 49 Weak-Moderate Calcite>>

<<Struc: 40.8 - 43.1 Moderate-Strong Fault>> Highly broken zone, sheared.

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

43.71 46.56 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

43.71 - 46.56: CA veining. Mixed with mafic tuff.

46.56 49.20 MAFt Mafic Volcaniclastics

46.56 - 49.2: Medium grain lapilli.

<<Alt: 49 - 65.62 Moderate-Strong Calcite>> In foliation, veinlets and matrix.

<<Alt: 49 - 66.1 Moderate-Strong Silicification>> Some patch highly silicified. Could also be felsic dike.

49.20 52.80 RHY undifferentiated rhyolite

49.2 - 52.8: QZ "eyes". Texture obscured. Strongly silicified. Possible dacitic flow e or quartzite.

<<Alt: 50 - 65 Strong Biotite>>

<<Vein: 50.3 - 50.4 Quartz>> QZ vein.

52.80 57.78 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

52.8 - 57.78: Massive intrusion. Silicified. BI/CL or hornblende, few CA.

<<Vein: 56.28 - 58.37 Quartz-Carbonate 35 deg. >> QZ/CA vein.

57.78 58.20 RHY undifferentiated rhyolite

57.78 - 58.2: Felsic unit, or MAFt highly silicified.

58.20 58.87 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

58.2 - 58.87: Silicified. Texture obscured.

58.87 59.12 RHY undifferentiated rhyolite

58.87 - 59.12: Possibly silicified chill margin. Foliated.

59.12 65.62 MAFt Mafic Volcaniclastics

59.12 - 65.62: Possibly MAFw. Highly silicified. Texture obscured.

65.62 68.46 MAFta Coarse grained to ash tuff

65.62 - 68.46: CA and BI bands. Fine grain.

<<Alt: 66.06 - 74.8 Moderate-Strong Calcite>> And pervasive.

<<Struc: 66.1 - 66.32 Moderate Fault>> Fault gouge. Clay.

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

68.46 69.31 MAFt Mafic Volcaniclastics

68.46 - 69.31: Large CA vein associated with QZ/BI/CL, maybe talc.

<<Vein: 68.46 - 69.31 Quartz-Carbonate>> Large CA/QZ vein associated with CL/BI maybe talc. Hydrothermal fluids

69.31 74.60 MAFta Coarse grained to ash tuff

69.31 - 74.6: Or MAFw. Possibly mafic dike from 73.40 to 74.27.

74.60 75.41 MAFw mafic volcanic flows

74.6 - 75.41: BI porphyroblasts.

<<Alt: 74.8 - 84 Moderate Calcite>>

75.41 79.75 MAFw mafic volcanic flows

75.41 - 79.75: Intermediate composition. Light green, foliated, locally flow banded.

79.75 87.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

79.75 - 87: CA veining. AK bands.

<<Alt: 84 - 94.4 Moderate Ankerite>> Or dolomite.

<<Alt: 84 - 258.5 Weak-Moderate Calcite>> 5 percent.

87.00 88.50 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

87 - 88.5: Sheared. Broken zone.

<<Struc: 87 - 88.5 Moderate-Strong Fault>> In graphitic mudstone. Shreared/creulation.

88.50 94.80 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

88.5 - 94.8: CA veining. Thin foliation. Mixed with sediment and/or mafic material tightly interbedded.

<<Alt: 94.64 - 99.8 Strong Silicification>>

<<Vein: 90.05 - 90.15 Quartz>> QZ vein

<<Vein: 94.4 - 94.64 Quartz-Carbonate>> QZ/CA vein.

94.80 99.80 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

94.8 - 99.8: Strongly silicified mudstone. Weakly carbonaceous, weakly calcareous. White veining (possibly feldspar) locally crenulated.

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

99.80 104.02 MAFt Mafic Volcaniclastics

99.8 - 104.02: CA veining. Mafic tuff crosscut but 10 cm wide CA/QZ veins associated with CL patch. Gradual lower contact with mudstone. Few lapilli. Foliation well marker downhole.

<<Vein: 99.89 - 102.17 Quarzt-Chlorite-Carbonate>> QZ/CA/CL.

104.02 105.83 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

104.02 - 105.83: CA veining. Poorly carbonaceous.

105.83 106.11 MAFt Mafic Volcaniclastics

105.83 - 106.11: CA veining. Sharp upper and lower contact.

<<Struc: 105.83 - 107.98 Moderate Shear>> In highly graphitic mudstone, broken zone.

106.11 107.98 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

106.11 - 107.98: Graphitic mudstone, sheared, almost brecciated. CA veining. Gradual lower contact.

107.98 128.64 MAFt Mafic Volcaniclastics

107.98 - 128.64: Could be partly MAFw. Lapilli/ashes interbedded suggesting normal grading. BI patchy.

<<Vein: 115 - 115.68 Quarzt-Chlorite-Carbonate>> QZ/CA/CL.

128.64 129.50 MDSt Rhyolite tuff dominant mudstone

128.64 - 129.5: Granular patch, possibly Xtl. QZ eyes aggregated suggesting felsic content. Probably QE in mudstone interbedded with mafic tuff and grading normal sequence.

129.50 135.02 MAFt Mafic Volcaniclastics

129.5 - 135.02: Dominantly mafic material mixed with mudstone. Some argilitic thin bands in larger mafic bands, Secondary schistosity observed.

135.02 137.75 MAFw mafic volcanic flows

135.02 - 137.75: Mix of mafic (silicic bands and QZ) and felsic material interbedded. Medium grain to fine grain at upper contact.

137.75 143.60 MAFw mafic volcanic flows

137.75 - 143.6: CA veining.

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

143.60 145.05 MAFt Mafic Volcaniclastics

143.6 - 145.05: Lapilli to ash from bottom to top.

145.05 162.02 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

145.05 - 162.02: Gradual upper contact from 149.90. CA veining. Wavy beds disrupted locally. Narrow shear zone. Gradual lower contact.

<<Struc: 158.3 - 158.8 Moderate Shear>>

<<Struc: 159.5 - 162.5 Weak Fault>> Multiple narrow fault, minor.

162.02 165.03 MAFt Mafic Volcaniclastics

162.02 - 165.03: Massive QZ vein at lower contact. CA veining.

165.03 168.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

165.03 - 168: Folded, secondary schistosity observed. CA veining.

<<Vein: 165.03 - 165.2 Quartz-Carbonate>> QZ/CA vein.

168.00 169.91 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

168 - 169.91: Bleached mudstone in fault zone. QZ vein at lower contact. Late QZ/PY discordant vein (up to 1 cm wide).

<<Struc: 168 - 171.2 Moderate-Strong Fault>> Fault gouge over 20 cm, expended broken zone, bleached mudstone suggesting fluid circulation.

169.91 172.79 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

169.91 - 172.79: Graphitic mudstone. Broken zone. Large bull QZ vein from 171.20 to 172.50.

<<Vein: 171.2 - 175.4 Quartz>> QZ containing schist. Vuggy.

172.79 176.60 MAFt Mafic Volcaniclastics

172.79 - 176.6: Crosscut by vuggy QZ veins. Faulted (gouge).

<<Struc: 172.79 - 174.4 Moderate-Strong Fault>>

176.60 189.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

176.6 - 189: Gradual lower contact. CA veining, crenulated and folded.

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

<<Vein: 178.7 - 181 Quartz-Carbonate>> Multiple QZ/CA veins up to 30 cm wide.

189.00 191.92 MAFt Mafic Volcaniclastics

189 - 191.92: CA/QZ vein.

<<Struc: 190 - 191.75 Moderate-Strong Fault>> Few gouge.

191.92 197.52 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

191.92 - 197.52: Containing bull QZ vein over 1.20 m. Some MAFt in the QZ vein.

<<Vein: 197.3 - 197.42 Quartz-Carbonate>> QZ/CA vein.

197.52 199.95 RHYva Coarse grained to ash tuff

197.52 - 199.95: Few lapilli. Thin foliation

<<Alt: 197.52 - 337.4 Moderate Ankerite>> In lapilli.

199.95 213.00 RHYvl Lapilli tuff

199.95 - 213: Locally few fine grain bands (Bl rich-dark blue). Ash at lower contact.

<<Alt: 203.11 - 206.8 Strong Silicification>>

213.00 214.96 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

213 - 214.96: Bl/CA. Sharp contacts.

214.96 216.70 RHYvx Quartz and/or feldspar crystal tuff

214.96 - 216.7: Almost curdy texture. High density of lapilli and/or porphyroblasts.

216.70 221.43 RHYvl Lapilli tuff

216.7 - 221.43: Ash locally. Biotite rich.

221.43 223.70 RHYva Coarse grained to ash tuff

221.43 - 223.7: Bluish. Fine to very fine grain at lower contact.

<<Alt: 221.43 - 223.7 Strong Silicification>>

223.70 223.94 MDSt Rhyolite tuff dominant mudstone

223.7 - 223.94: Banded. Very fine grain and carbonaceous.

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

223.94 224.60 RHYvl Lapilli tuff

224.60 225.53 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

224.6 - 225.53: CA in matrix/BI.

225.53 231.80 RHYvx Quartz and/or feldspar crystal tuff

225.53 - 231.8: Locally sheared (from 228.6 to 230)

<<Struc: 228.4 - 230 Moderate-Strong Shear>>

<<Struc: 231 - 231.6 Moderate Shear>>

231.80 232.00 RHYva Coarse grained to ash tuff

231.8 - 232: BI porphyroblasts. Locally folded.

232.00 234.54 RHYvx Quartz and/or feldspar crystal tuff

232 - 234.54: Strongly Lapillitic and heterogeneous.

234.54 235.09 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

234.54 - 235.09: CA in matrix/BI.

235.09 242.04 RHYvx Quartz and/or feldspar crystal tuff

235.09 - 242.04: Low strained.

242.04 245.86 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

242.04 - 245.86: CA in matrix/BI. Locally banded, sharp contacts. Could be pelitic.

<<Struc: 245 - 245.2 Weak-Moderate Shear>> In mafic dike (or pelite).

245.86 248.61 RHYva Coarse grained to ash tuff

245.86 - 248.61: Ash dominant. BI rich, silicified from 247.84 to lower contact.

<<Alt: 247.84 - 251.42 Strong Silicification>>

<<Vein: 247.5 - 247.84 Quartz-Carbonate>> QZ/CA vein.

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

248.61 252.96 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

248.61 - 252.96: CA in matrix/BI. CA veinlets.

252.96 253.60 RHYv Rhyolite volcaniclastic

252.96 - 253.6: Maybe sedimentary. Thin foliation. Probably RHYv mixed with mafic or pelitic material. Few CA, possibly QZ. Proximity of massive QZ vein and mafic dyke.

253.60 259.00 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

253.6 - 259: BI rich. Large peperitic contact (upper and lower). Very fine grain BI. Bull QZ vein at upper contact.

<<Alt: 258.5 - 442 Moderate Calcite>> 10 percent and lapilli. More intense in mafic material

<<Vein: 254.26 - 256.66 Quartz>> Bull QZ vein associated with large peperitic texture.

<<Vein: 258.67 - 258.82 Quartz>> QZ vein at upper contact of mafic dike showing peperitic texture.

259.00 261.40 RHYvx Quartz and/or feldspar crystal tuff

259 - 261.4: BI rich, extension of the peperitic texture. BI porphyroblasts. Large crystals.

261.40 264.96 RHYvl Lapilli tuff

261.4 - 264.96: Almost curdy texture and intense silicification locally.

264.96 269.60 RHYvx Quartz and/or feldspar crystal tuff

264.96 - 269.6: Or low strained lapilli, high density. QZ veins crosscutting (up to 2 cm wide).

269.60 274.55 RHYvx Quartz and/or feldspar crystal tuff

274.55 276.34 RHYvl Lapilli tuff

274.55 - 276.34: BI rich.

276.34 281.34 RHYvl Lapilli tuff

276.34 - 281.34: BI rich (bluish). High stained lapilli.

281.34 282.90 RHYva Coarse grained to ash tuff

281.34 - 282.9: Medium grain lapilli.

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

282.90 283.73 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

282.9 - 283.73: CA in matrix/brown biotite.

283.73 286.34 RHYva Coarse grained to ash tuff

283.73 - 286.34: BI rich.

286.34 295.68 RHYvl Lapilli tuff

286.34 - 295.68: Locally brown ash with Bippo and fine grain bands (pelite?)

295.68 296.67 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

295.68 - 296.67: CA in matrix/BI.

296.67 303.82 RHYvl Lapilli tuff

296.67 - 303.82: BI rich. Faulted at lower contact.

<<Struc: 300.22 - 300.36 Weak-Moderate Fault>> 20 cm of gouge.

<<Struc: 303.5 - 304.55 Moderate-Strong Shear>>

303.82 306.14 RHYva Coarse grained to ash tuff

303.82 - 306.14: Sheared at upper contact.

306.14 306.86 RHYvl Lapilli tuff

306.14 - 306.86: Heterogeneous, high density of lapilli.

306.86 309.72 RHYva Coarse grained to ash tuff

306.86 - 309.72: Fine grain, weakly foliated.

309.72 312.40 RHYvl Lapilli tuff

309.72 - 312.4: Ash at lower contact.

312.40 313.18 RHYva Coarse grained to ash tuff

312.4 - 313.18: Crosscut by a narrow dike showing chill margin and amygdules.

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

313.18 317.17 RHYvx Quartz and/or feldspar crystal tuff

313.18 - 317.17: QZ veinlets.

317.17 320.03 RHYva Coarse grained to ash tuff

317.17 - 320.03: Faulted and sheared from 3.17.20 to 320.84.

<<Struc: 317.17 - 320.85 Moderate-Strong Fault>> And broken zone. 2 fault gouge (50 cm wide each).

320.03 324.30 RHYvl Lapilli tuff

320.03 - 324.3: Fault gouge.

324.30 325.61 PEL Equigranular biotite + calcite +/- quartz rock

324.3 - 325.61: CA/BI, ash interbed. Sharp upper contact, gradual lower contact.

325.61 334.15 RHYvl Lapilli tuff

325.61 - 334.15: Lapilli and ash interbedded.

<<Struc: 327 - 327.6 Weak-Moderate Fault>> Minor fault and shearing.

334.15 334.85 RHYcw Curdy textured-flow banded (flows, subvolcanics)

334.15 - 334.85: Base of sequence flow/lapilli/ash.

334.85 337.40 RHYvl Lapilli tuff

334.85 - 337.4: From 335.36 to 335.64, fine grain CA rich, weakly sheared.

<<Struc: 335.36 - 335.65 Weak-Moderate Shear>> In CA rick layer logged as ash.

337.40 343.72 RHYvl Lapilli tuff

<<Alt: 337.4 - 442 Trace Ankerite>>

343.72 344.42 PEL Equigranular biotite + calcite +/- quartz rock

343.72 - 344.42: Interbedded with RHY. B/QZ/CA.

344.42 347.53 RHYvl Lapilli tuff

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

347.53 356.20 RHYva Coarse grained to ash tuff

347.53 - 356.2: Maybe xtl.

<<Alt: 347.53 - 428.7 Moderate Biotite>> Locally strong.

356.20 356.94 PEL Equigranular biotite + calcite +/- quartz rock

356.2 - 356.94: Could be MAFi. Mixed with RHY.

356.94 359.59 RHYvx Quartz and/or feldspar crystal tuff

359.59 377.74 RHYva Coarse grained to ash tuff

359.59 - 377.74: BI rich. Dominantly ash. Few beds CA rich.

377.74 382.68 RHYva Coarse grained to ash tuff

377.74 - 382.68: Flow banded at lower contact over 20 cm.

<<Vein: 381.64 - 381.95 Quartz>> QZ veins, ribboned.

382.68 391.73 MAFt Mafic Volcaniclastics

382.68 - 391.73: Or flow. Silicified CL/BI/CA. Chlorite alteration locally strong. Ribboned QZ vein from 381.62 to 381.84, could be flow. CA veining. BI goes from very fine grain to coarse grain. Possibly relic of amygdules.

<<Alt: 382.95 - 384.5 Moderate-Strong Chlorite>>

<<Alt: 383.62 - 393.5 Strong Silicification>>

<<Alt: 384.5 - 389.14 Strong Chlorite>>

<<Alt: 389.14 - 390.4 Moderate Chlorite>>

391.73 392.40 RHY undifferentiated rhyolite

391.73 - 392.4: Silicified.

392.40 392.93 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

392.93 393.40 RHY undifferentiated rhyolite

392.93 - 393.4: BI rich.

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

393.40 394.54 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

393.4 - 394.54: CA at upper contact. Maybe ash layer.

394.54 397.24 RHYva Coarse grained to ash tuff

397.24 397.65 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

397.24 - 397.65: CA. Foliated.

397.65 403.33 RHYva Coarse grained to ash tuff

397.65 - 403.33: BI rich.

<<Vein: 399 - 402.6 Quartz>> Several QZ vein from 1 cm to 25 cm wide, 3/metre.

403.33 403.75 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

403.33 - 403.75: CA in matrix/BI. Gradual lower contact.

403.75 408.61 RHYva Coarse grained to ash tuff

408.61 409.27 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

408.61 - 409.27: CA in matrix/BI. Few CL.

409.27 413.78 RHYva Coarse grained to ash tuff

409.27 - 413.78: Biotite rich. Some BI/MU bands. Speck of AK.

<<Vein: 411.44 - 411.64 Quartz-Carbonate>> QZ/CA.

413.78 414.83 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

413.78 - 414.83: Banded BI/CL/CA/SI.Speck of AK. Strong foliation.

<<Alt: 413.78 - 414.83 Moderate-Strong Chlorite>>

<<Struc: 413.78 - 417.2 Weak Fault>> Multiple minor fault with gouge up to 3 cm wide.

414.83 417.63 RHY undifferentiated rhyolite

414.83 - 417.63: Speck of AK. Locally flow banded. CA/QZ vein.

<<Vein: 415.1 - 415.33 Quartz-Carbonate>> QZ/CA, ribonned.

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

417.63 418.60 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

417.63 - 418.6: CA in matrix/BI.

418.60 421.80 RHYvl Lapilli tuff

421.80 422.40 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

421.8 - 422.4: CA in matrix ad veining/BI.

422.40 428.70 RHYvx Quartz and/or feldspar crystal tuff

428.70 432.17 MAFt Mafic Volcaniclastics

428.7 - 432.17: And Bi porphyroblasts. Possibly mafic flow. Silicified. Few RHY interbedded at upper contact.

<<Alt: 428.7 - 432.17 Moderate-Strong Chlorite>>

<<Alt: 428.7 - 439.3 Strong Biotite>>

<<Alt: 430 - 439.2 Strong Silicification>>

432.17 434.59 RHYvx Quartz and/or feldspar crystal tuff

434.59 438.24 RHY undifferentiated rhyolite

434.59 - 438.24: And BI porphyroblasts. Silicified.

438.24 442.00 RHYvl Lapilli tuff

438.24 - 442: E.O.H.

<<Alt: 439.3 - 442 Moderate Biotite>>

End of Hole @ 442