

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-408

Prospect:	Sebesi	Hole Type:	DD	Survey Type:	PLND-LiDAR	Logged By:	Dillon Hume
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Dillon Hume	Date Logging Start:	8/4/2016
UTM Easting	415424	Core Size:	HQ3	Azimuth:	228	Date Logging Complete:	8/17/2016
UTM Northing:	6815263	Casing Pulled?:	No	Dip:	-67	Drill Company:	New Age
UTM Elev. (m):	1548	Casing Depth (m):	7.5	Length (m):	491	Drill Rig:	Zinex A5
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	8/2/2016
Local Northing:		Cemented?:	Yes	Core Storage Loc.:	KZK Camp	Drill Completed:	8/17/2016
Local Elev. (m):				Hole Completed?:	Abandoned	Purpose:	Exploration
Comments:						Parent Hole:	

K16-408 was drilled as an exploration hole to test the Sebesi target on the East side (footwall) of the Fault Creek/Sunda Fault. The downhole EM survey was not completed due to rods becoming stuck in the Fault Creek Fault. The HQ3 rods became stuck at 365 m, at which point the hole was reduced to NQ3. The NQ3 string became stuck at 491 m. K16-408 intersected intercalated mafic tuffs and carbonaceous mudstones of the Wind Lake Formation from 7.2-182.2 m. The Kudz Ze Kayah formation has a conformable interfingering contact with the overlying Wind Lake Formation. Intercalated felsic volcanic and pelitic sedimentary rocks of the Kudz Ze Kayah formation occur from 182.2-333.85 m. A strongly faulted zone (Fault Creek Fault?) occurs from 333.85-397.68 m which includes a predominantly gouge supported fault breccia and some large coherent blocks consisting of MAFi, and altered RHY. Below the fault zone, from 397.68-491 m (EOH), the hole intersected strongly muscovite altered rhyolite.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-67	226.6	1.4	228	TN14	Dillon Hume	8/2/2016		<input checked="" type="checkbox"/>	
20	-68.4	207.3	22.1	229.4	ReflexEZS	New Age	8/3/2016	5774	<input checked="" type="checkbox"/>	
44	-68.9	209.3	22.1	231.4	ReflexEZS	New Age	8/3/2016	5771	<input checked="" type="checkbox"/>	
71	-69.1	206.1	22.1	228.2	ReflexEZS	New Age	8/4/2016	5763	<input checked="" type="checkbox"/>	
95	-69.2	207.4	22.1	229.5	ReflexEZS	New Age	8/4/2016	5747	<input checked="" type="checkbox"/>	
122	-69.7	206.2	22.1	228.3	ReflexEZS	New Age	8/4/2016	5747	<input checked="" type="checkbox"/>	
149	-69.8	205.1	22.1	227.2	ReflexEZS	New Age	8/5/2016	5741	<input checked="" type="checkbox"/>	
176	-69.9	204	22.1	226.1	ReflexEZS	New Age	8/5/2016	5747	<input checked="" type="checkbox"/>	
203	-70.4	202.1	22.1	224.2	ReflexEZS	New Age	8/5/2016	5756	<input checked="" type="checkbox"/>	
230	-70	200.8	22.1	222.9	ReflexEZS	New Age	8/6/2016	5744	<input checked="" type="checkbox"/>	
257	-70	203	22.1	225.1	ReflexEZS	New Age	8/6/2016	5752	<input checked="" type="checkbox"/>	
284	-70	196.9	22.1	219	ReflexEZS	New Age	8/6/2016	5827	<input checked="" type="checkbox"/>	
311	-70.3	204.2	22.1	226.3	ReflexEZS	New Age	8/6/2016	5741	<input checked="" type="checkbox"/>	
338	-70.4	205.4	22.1	227.5	ReflexEZS	New Age	8/7/2016	5766	<input checked="" type="checkbox"/>	
437	-68.5	202.1	22.1	224.2	ReflexEZS	New Age	8/11/2016	6421	<input checked="" type="checkbox"/>	No surveys between 338-437 m or below 437 m due to very faulted ground and possibility of rods becoming stuck.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
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<p>0.00 7.20 OVBN Overburden 7.20 9.24 RHY undifferentiated rhyolite 7.2 - 9.24: Light grey, massive siliceous unit, with large massive quartz vein.</p> <p><<Min: 7.2 - 55.45 0.01% Min: Pyrite>> <<Alt: 7.2 - 9.24 Trace Calcite>> <<Vein: 7.3 - 9.24 60% Quartz>> Zone with massive QZ-veins and silicification</p> <p>9.24 11.53 MDS Carbonaceous Mudstone & Tuffaceous Mudstone 9.24 - 11.53: Carbonaceous mudstone</p> <p><<Alt: 9.24 - 11.53 Weak-Moderate Calcite>></p> <p>11.53 18.35 MAft Mafic Volcaniclastics 11.53 - 18.35: Medium green and white, calcareous banded mafic with chloritic groundmass and disseminated BI porphyroblasts. Calcareous bands are patchy and not always through going.</p> <p><<Alt: 11.53 - 18.35 Moderate-Strong Calcite>></p> <p>18.35 21.98 MAfta Coarse grained to ash tuff 18.35 - 21.98: Fine grained, mixed chloritic and carbonaceous mudstone/mafic tuff.</p> <p><<Alt: 18.35 - 26.3 Trace Calcite>> <<Struc: 21.32 - 21.4 Weak-Moderate Fault>></p> <p>21.98 26.30 MDS Carbonaceous Mudstone & Tuffaceous Mudstone 21.98 - 26.3: Fine grained, mixed carbonaceous and chloritic mudstone/mafic tuff.</p> <p>26.30 27.55 MAfta Coarse grained to ash tuff 26.3 - 27.55: BI porphyroblasts in fine grained chloritic groundmass.</p> <p><<Alt: 26.3 - 27.55 Moderate Calcite>></p> <p>27.55 28.44 MDS Carbonaceous Mudstone & Tuffaceous Mudstone 27.55 - 28.44: Fine grained, mixed carbonaceous and chloritic mudstone/mafic tuff.</p> <p><<Alt: 27.55 - 28.44 Trace Calcite>></p>									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
28.44	31.34	MAFt Mafic Volcaniclastics 28.44 - 31.34: Medium green and white, calcareous banded mafic with chloritic groundmass and disseminated BI porphyroblasts. Calcareous bands are patchy and not always through going. <<Alt: 28.44 - 31.34 Moderate-Strong Calcite>> <<Struc: 30.1 - 30.9 Weak Fault>>									
31.34	34.86	MAFt Mafic Volcaniclastics 31.34 - 34.86: Medium green and white, mafic with chloritic groundmass and ~20% disseminated BI porphyroblasts. <<Alt: 31.34 - 34.86 Moderate Calcite>>									
34.86	40.93	MAFt Mafic Volcaniclastics 34.86 - 40.93: Medium green and white, calcareous banded mafic with chloritic groundmass and disseminated BI porphyroblasts. Calcareous bands are patchy and not always through going. <<Alt: 34.86 - 40.93 Moderate-Strong Calcite>>									
40.93	45.26	MAFta Coarse grained to ash tuff 40.93 - 45.26: Fine grained, mixed chloritic and carbonaceous mudstone/mafic tuff. <<Alt: 40.93 - 54.57 Weak-Moderate Calcite>> <<Struc: 44.7 - 45 Trace Fault>>									
45.26	54.57	MAFt Mafic Volcaniclastics 45.26 - 54.57: Medium green and white, mafic with chloritic groundmass and ~20% disseminated BI porphyroblasts. <<Vein: 45.38 - 48.25 3% Quartz-Carbonate>> Minor QZ-carbonate veins, locally ptigmatic									
54.57	59.37	MAFt Mafic Volcaniclastics 54.57 - 59.37: Medium green and white, calcareous banded mafic with chloritic groundmass and disseminated BI porphyroblasts. Calcareous bands are patchy and not always through going. Local zones of strong albite (?) alteration associated with qz-veining and pyritic stringers. <<Min: 55.45 - 56.65 3% Min: Pyrite>> <<Min: 56.65 - 57.92 0.01% Min: Pyrite>> <<Min: 57.92 - 58.85 3% Min: Pyrite>> <<Min: 58.85 - 74.9 0.1% Min: Pyrrhotite>> <<Alt: 54.57 - 55.45 Moderate Calcite>> <<Alt: 55.45 - 56.65 Weak Calcite>> <<Alt: 55.45 - 56.65 Strong Albite>> Pervasive albite (?) alteration with disseminated BI +/-PY, QZ-carbonate veins and pyritic stringers.									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<p><<Alt: 56.65 - 57.92 Moderate Calcite>> <<Alt: 57.92 - 58.85 Weak Calcite>> <<Alt: 57.92 - 58.85 Strong Albite>> Pervasive albite (?) alteration with disseminated BI +/-PY, QZ-carbonate veins and pyritic stringers. <<Alt: 58.85 - 59.37 Moderate Calcite>> <<Vein: 55.45 - 55.65 10% Quartz-Carbonate 20 deg. >> Zone with QZ-carbonate veining, pyritic stringers, and pervasive albite alteration. <<Vein: 55.45 - 56.65 3% Pyrite>> Zone with QZ-carbonate veining, pyritic stringers, and pervasive albite alteration. <<Vein: 57.92 - 58.85 3% Quartz-Carbonate 40 deg. >> Zone with QZ-carbonate veining, pyritic stringers, and pervasive albite alteration. <<Vein: 57.92 - 58.85 3% Pyrite>> Zone with QZ-carbonate veining, pyritic stringers, and pervasive albite alteration.</p> <p>59.37 73.88 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p>59.37 - 73.88: Mixed mafic tuff and mudstone. Local conglomerate (?) texture at 65 m, which appears as elongated calcereous blebs in a chloritic groundmass.</p> <p><<Alt: 59.37 - 73.88 Weak-Moderate Calcite>> <<Struc: 70.5 - 72 Moderate Fault>></p> <p>73.88 74.90 FLZ Fault Zone</p> <p>73.88 - 74.9: Gouge supported fault breccia with MDS and QZ-carbonate clasts.</p> <p><<Alt: 73.88 - 74.9 Weak-Moderate Calcite>> <<Struc: 73.88 - 74.9 Strong Fault>></p> <p>74.90 82.10 MAFt Mafic Volcaniclastics</p> <p>74.9 - 82.1: Medium grey-green, CL-BI-CA schist. Dominated by massive CL with disseminated BI porphyroblasts and local patchy to banded CA.</p> <p><<Min: 74.9 - 85.3 0.5% Min: Pyrite>> <<Alt: 74.9 - 130.22 Moderate Calcite>> <<Vein: 75.25 - 78.35 3% Quartz-Carbonate>> Minor blebby QZ-carbonate veins</p> <p>82.10 85.30 RHYvl Lapilli tuff</p> <p>82.1 - 85.3: Calcareous lpl in fine grained felsic groundmass. Local ~RHYc textures exist.</p> <p>85.30 102.05 MAFt Mafic Volcaniclastics</p> <p>85.3 - 102.05: Medium grey-green, CL-BI-CA schist. Dominated by massive CL with disseminated BI porphyroblasts and local patchy to banded CA.</p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<p><<Min: 85.3 - 102.05 0.5% Min: Pyrrhotite>> <<Struc: 101.9 - 102 Weak Fault>></p> <p>102.05 130.22 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p>102.05 - 130.22: Carbonaceous mudstone with well developed crenulation cleavage. Local breccia zones/faults.</p> <p><<Min: 102.05 - 130.22 0.1% Min: Pyrite>> <<Min: 104.8 - 105 0.5% Min: Galena>> <<Struc: 112.3 - 112.5 Weak Fault>> <<Struc: 114.8 - 117.6 Moderate Fault>> Rubble zone with two ~50 cm wide intervals of partially healed clast-supported gouge breccia <<Struc: 120.8 - 121.35 Weak-Moderate Fault>> <<Struc: 125.09 - 125.1 Weak-Moderate dominant foliation>> <<Struc: 125.9 - 126.3 Moderate Fault>> Partially healed clast-supported breccia</p> <p>130.22 139.53 MAfT Mafic Volcaniclastics</p> <p>130.22 - 139.53: Light green, massive CL-CA mafic with blebby CA+/-SI+/-AK.</p> <p><<Min: 130.22 - 171.68 0.5% Min: Pyrrhotite>> <<Alt: 130.22 - 171.68 Moderate Calcite>> <<Struc: 133.1 - 133.2 Weak Fault>> <<Struc: 139.4 - 139.5 Weak Fault>></p> <p>139.53 154.80 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p>139.53 - 154.8: Carbonaceous mudstone with minor intercalated mafic tuff. Sharp lower contact.</p> <p><<Vein: 146.46 - 146.7 80% Quartz-Carbonate>> Patchy mottled QZ-carbonate vein <<Struc: 146.6 - 146.75 Moderate Fault>></p> <p>154.80 163.00 MAfT Mafic Volcaniclastics</p> <p>154.8 - 163: Light green, massive CL-CA mafic with blebby to wavy CA.</p> <p><<Vein: 162.55 - 163.1 100% Quartz-Carbonate>> Massive QZ+/-carbonate vein <<Struc: 157 - 157.01 Weak dominant foliation>> <<Struc: 158 - 158.6 Weak Fault>> <<Struc: 160.75 - 160.76 Weak dominant foliation>></p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
163.00	170.00	MDS Carbonaceous Mudstone & Tuffaceous Mudstone 163 - 170: Carbonaceous mudstone with minor intercalated mafic tuff. <<Vein: 167.4 - 167.55 100% Quartz-Carbonate>> Massive QZ-carbonate vein <<Struc: 167.35 - 168.7 Moderate Fault>> <<Struc: 168.7 - 169.5 Weak Fault>>									
170.00	171.68	MAFt Mafic Volcaniclastics 170 - 171.68: Light green, massive CL-CA mafic with blebby to wavy CA.									
171.68	175.40	MDS Carbonaceous Mudstone & Tuffaceous Mudstone 171.68 - 175.4: Carbonaceous mudstone with minor intercalated chert. <<Min: 171.68 - 217.05 0.5% Min: Pyrite>> <<Alt: 171.68 - 175.4 Trace Calcite>> <<Vein: 172.1 - 172.5 95% Quartz-Carbonate>> Massive QZ-carbonate vein with minor wallrock fragments.									
175.40	179.57	MAFt Mafic Volcaniclastics 175.4 - 179.57: Light green-grey, massive CL-MU-CA intermediate tuff with blebby to wavy CA. <<Alt: 175.4 - 182.2 Weak-Moderate Calcite>>									
179.57	182.20	MDS Carbonaceous Mudstone & Tuffaceous Mudstone 179.57 - 182.2: Intercalated MU-CL schist (MAFt) and carbonaceous mudstone. At contact with KZK Group. <<Struc: 181.2 - 182.15 Weak-Moderate Fault>>									
182.20	185.00	MDSt Rhyolite tuff dominant mudstone 182.2 - 185: QZ-eyes and felsic lpl with a carbonaceous and ashy matrix. Similar to unit seen at Wind Lake-KZK contact elsewhere. <<Alt: 182.2 - 200.68 Weak Calcite>> <<Vein: 182.5 - 182.75 100% Quartz-Carbonate>> Massive QZ-carbonate vein									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
185.00	187.17	MDSc Carbonaceous dominant mudstone 185 - 187.17: Carbonaceous mudstone with minor felsic volcanoclastic material and QZ-eyes. <<Struc: 185.9 - 187 Moderate Fault>>									
187.17	188.00	RHYvx Quartz and/or feldspar crystal tuff 187.17 - 188: QZ-eyes and felsic lpl with a carbonaceous and ashy matrix. Similar to unit seen at Wind Lake-KZK contact elsewhere.									
188.00	197.00	RHYv Rhyolite volcanoclastic 188 - 197: Fine grained QZ-MU schist with local BCQlpl and weak MU-alteration <<Alt: 193.2 - 197 Weak Muscovite>> Weak yellowish sericite/muscovite alteration. <<Vein: 188 - 216.65 15% Quartz-Tourmaline>> Large zone with massive to veinlets of QZ-TML-carbonate. Mostly at a high angle to foliation (cross-cutting). As well there are 5-10 cm wide creamy veins of QZ-carbonate.									
197.00	200.68	RHYvl Lapilli tuff 197 - 200.68: Cream-coloured felsic lpl in a light grey ashy matrix. <<Struc: 197.31 - 197.32 Moderate dominant foliation>> <<Struc: 198.75 - 198.85 Weak Fault>>									
200.68	201.52	PEL Equigranular biotite + calcite +/- quartz rock 200.68 - 201.52: Light brown, mixed ash and pelitic sediment with calcareous veining. <<Alt: 200.68 - 201.52 Moderate Calcite>>									
201.52	213.47	RHYvl Lapilli tuff 201.52 - 213.47: Cream-coloured felsic lpl in a light grey ashy matrix. Large zone of massive QZ-cabonate-TML vein from ~205-208.5 m. <<Alt: 201.52 - 216.65 Weak-Moderate Calcite>> <<Struc: 204.25 - 209.65 Weak Fault>> <<Struc: 212.1 - 212.65 Weak Fault>>									
213.47	216.65	RHYvl Lapilli tuff 213.47 - 216.65: Dark cm sized CL-BI-CA lpl in fine grained grey ash tuff.									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
216.65	217.05	PEL Equigranular biotite + calcite +/- quartz rock 216.65 - 217.05: Brown, laminated/banded BI-CA-QZ schist. <<Alt: 216.65 - 217.05 Moderate-Strong Calcite>>									
217.05	226.75	RHYva Coarse grained to ash tuff 217.05 - 226.75: Light grey, ash dominated felsic tuff with local darker coloured blebs/patches (lpl?) consisting of CL-BI-CA-QZ. <<Min: 217.05 - 243.45 0.5% Min: Pyrrhotite>> <<Alt: 217.05 - 225.75 Moderate Calcite>> <<Alt: 225.75 - 243.45 Weak-Moderate Calcite>>									
226.75	237.56	RHYvl Lapilli tuff 226.75 - 237.56: White cm-sized calcareous lpl (~20%) in light grey ash matrix, with ~10% disseminated fgr BI. <<Struc: 229.74 - 229.75 Weak-Moderate dominant foliation>>									
237.56	243.45	RHYvf Lapilli tuff 237.56 - 243.45: White cm-sized calcareous lpl (~20%) in light grey ash matrix, with ~5-10% disseminated fgr creamy crystals (sericite-after-feldspar?).									
243.45	246.20	RHYc Rhyolite coherent volcanics 243.45 - 246.2: Siliceous banded to massive coherent rhyolite. <<Min: 243.45 - 246.2 1% Min: Pyrrhotite>> <<Alt: 243.45 - 246.2 Weak Calcite>> <<Struc: 245.59 - 245.6 Moderate dominant foliation>>									
246.20	246.63	PEL Equigranular biotite + calcite +/- quartz rock 246.2 - 246.63: Laminated BI-CA schist. <<Min: 246.2 - 252.95 0.1% Min: Pyrite>> <<Alt: 246.2 - 246.63 Moderate-Strong Calcite>>									
246.63	248.40	RHYvl Lapilli tuff 246.63 - 248.4: Felic lpl tuff to silicic banded rhyolite. <<Alt: 246.63 - 250.07 Weak-Moderate Calcite>> <<Vein: 247.5 - 247.75 100% Quartz-Carbonate>> Massive QZ-carbonate vein									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
248.40	248.50	PEL Equigranular biotite + calcite +/- quartz rock 248.4 - 248.5: BI-CA schist.									
248.50	249.00	RHYc Rhyolite coherant volcanics 248.5 - 249: Silicic banded rhyolite.									
249.00	249.15	PEL Equigranular biotite + calcite +/- quartz rock									
249.15	250.07	RHYvi Lapilli tuff 249.15 - 250.07: White calcareous lpl in fine grained gey ash matrix.									
250.07	252.95	PEL Equigranular biotite + calcite +/- quartz rock 250.07 - 252.95: Black, massive BI with banded to disseminated CA. <<Alt: 250.07 - 252.95 Moderate-Strong Calcite>> <<Struc: 251.44 - 251.45 Moderate dominant foliation>>									
252.95	253.40	RHYva Coarse grained to ash tuff 252.95 - 253.4: Grey, fine grained ash tuff. <<Min: 252.95 - 259.8 1% Min: Pyrite>> <<Min: 252.95 - 259.8 0.1% Min: Pyrrhotite>> <<Alt: 252.95 - 259.8 Weak Calcite>>									
253.40	255.30	RHYc Rhyolite coherant volcanics 253.4 - 255.3: Silicic banded rhyolite.									
255.30	257.56	RHYi Aphanitic Rhyolite (intrusion) 255.3 - 257.56: Light grey, aphanitic, glassy rhyolite with randomy oriented brittle fractures.									
257.56	259.80	RHYc Rhyolite coherant volcanics 257.56 - 259.8: Silicic banded rhyolite. <<Vein: 258.4 - 258.95 40% Quartz-Carbonate>> Patchy to massive QZ-carbonate veining with minor sericitic vein selvage									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
259.80	263.42	RHYva Coarse grained to ash tuff 259.8 - 263.42: Grey, ash dominated tuff with minor calcareous lpl. <<Min: 259.8 - 263.42 2% Min: Pyrrhotite>> <<Alt: 259.8 - 278.4 Weak-Moderate Calcite>> <<Struc: 259.95 - 260 Weak Fault>>									
263.42	268.90	RHYvi Lapilli tuff 263.42 - 268.9: White cm-sized calcareous lpl (~20%) in light grey ash matrix, with ~10% disseminated fgr BI. <<Min: 263.42 - 336.5 0.1% Min: Pyrrhotite>>									
268.90	278.40	RHYvx Quartz and/or feldspar crystal tuff 268.9 - 278.4: Fine grained ash tuff with disseminated (10-25%) fine grained subhedral to euhedral sericite-after-feldspar. Moderate faulting/brecciation from 269.7-271.8 m. <<Struc: 269.55 - 270.6 Weak Fault>> <<Struc: 270.6 - 271.75 Moderate Fault>> <<Struc: 278.15 - 278.2 Weak-Moderate Fault>>									
278.40	285.20	SED undifferentiated Sediment 278.4 - 285.2: Brown, mixed ash and pelitic sediment with local cgr sand clasts. Disseminated BI throughout with vfgr matrix. Blebs to bands of CA. <<Alt: 278.4 - 285.2 Moderate Calcite>>									
285.20	287.75	RHYv Rhyolite volcanoclastic 285.2 - 287.75: Light green-grey, fine grained tuff (?) with blebby CA and disseminated BI. <<Alt: 285.2 - 287.75 Weak-Moderate Calcite>>									
287.75	288.43	PEL Equigranular biotite + calcite +/- quartz rock 287.75 - 288.43: Medium green-brown, fine grained pelitic sediment (?) with disseminated BI and wavy bands of CA. <<Alt: 287.75 - 295.05 Moderate-Strong Calcite>>									
288.43	289.90	RHYv Rhyolite volcanoclastic 288.43 - 289.9: Light green-grey, fine grained ash (?) with wavy bands of CA+/-QZ. Local texturally resembles RHYc.									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
289.90	295.05	SED undifferentiated Sediment 289.9 - 295.05: Medium green-brown, fine grained pelitic sediment (?) with disseminated BI and wavy bands and blebs of CA.									
295.05	297.40	RHYva Coarse grained to ash tuff 295.05 - 297.4: Grey, fine grained ash tuff with disseminated BI and minor calcareous lpl. <<Alt: 295.05 - 297.4 Weak Calcite>>									
297.40	297.60	PEL Equigranular biotite + calcite +/- quartz rock 297.4 - 297.6: Brown, very fine grained pelitic sediment with disseminated fgr and minor CA blebs. <<Alt: 297.4 - 302.4 Weak-Moderate Calcite>>									
297.60	302.40	RHYvl Lapilli tuff 297.6 - 302.4: White cm-sized calcareous lpl (~20%) in light grey ash matrix, with ~10% disseminated fgr BI. <<Vein: 298.5 - 298.9 30% Quartz-Carbonate 70 deg. >> QZ-carbonate veins									
302.40	304.50	PEL Equigranular biotite + calcite +/- quartz rock 302.4 - 304.5: Brown-black, fine grained BI with disseminated to banded CA+/-AK. <<Alt: 302.4 - 304.5 Moderate-Strong Calcite>>									
304.50	313.75	RHYvl Lapilli tuff 304.5 - 313.75: White cm-sized calcareous lpl (~20%) in light grey ash matrix, with ~10% disseminated fgr BI. <<Alt: 304.5 - 333.85 Weak-Moderate Calcite>> <<Struc: 309.15 - 309.3 Weak Fault>>									
313.75	323.15	RHYvl Lapilli tuff 313.75 - 323.15: Calcareous and felsic lpl within fine grained ash tuff. Lpl content appears to increase toward the lower contact (Fining upward?). <<Struc: 318.84 - 318.85 Weak dominant foliation>>									
323.15	328.20	RHYv Rhyolite volcanoclastic 323.15 - 328.2: Light green-grey, clast-supported breccia. Clasts range from ~0.5 to 2 cm and are felsic rhyolitic composition. Matrix is predominantly fine grained medium grey-green ash? Potentially a healed fault breccia? <<Vein: 324.1 - 324.55 100% Quartz-Carbonate>> Massive QZ-carbonate vein									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
328.20	332.45	RHYv Rhyolite volcanoclastic 328.2 - 332.45: Light grey mixed lpl and ash tuff. <<Vein: 328.45 - 336.5 5% Quartz-Carbonate 80 deg. >> Zone with 2-3 ~1 cm wide QZ-carbonate veins per metre and minor ~20 cm massive QZ-carbonate veins.									
332.45	333.85	RHYc Rhyolite coherent volcanics 332.45 - 333.85: Silicic banded rhyolite with minor horizons of RHYv.									
333.85	337.60	FLZ Fault Zone 333.85 - 337.6: Strongly faulted zone with core of fault gouge-supported polyolithic breccia. Clasts include QZ, CA, SED, RHY, and PY. <<Min: 336.5 - 337.6 2% Min: Pyrite>> Minor pyritic clasts <<Alt: 333.85 - 337.6 Moderate Calcite>> <<Struc: 333.85 - 336.5 Weak-Moderate Fault>> <<Struc: 336.5 - 337.6 Intense Fault>>									
337.60	342.70	SED undifferentiated Sediment 337.6 - 342.7: Light brown BI-MU-CA+/-SI schistwith AK-porphyroblasts. Large block within fault zone? <<Min: 337.6 - 342.7 0.1% Min: Pyrite>> <<Alt: 337.6 - 342.7 Moderate Calcite>> <<Struc: 337.6 - 338 Weak-Moderate Fault>>									
342.70	356.00	FLZ Fault Zone 342.7 - 356: Fault gouge-supported fault breccia. Intense faulting of rhyolite (?) from 342.7-348.5 m and 353.6-356 m. From 348.5-353.6 m, faulted and sheared MAFi occurs. The MAFi appears to have deformed more ductilely than the rhyolitic unit ?? Minor clasts of massive pyrite at ~354.7 m. <<Min: 342.7 - 348.5 2% Min: Pyrite>> Minor pyritic clasts <<Min: 348.5 - 353.6 0.1% Min: Pyrrhotite>> <<Min: 353.6 - 356 2% Min: Pyrite>> Minor pyritic clasts <<Alt: 342.7 - 348.5 Weak-Moderate Calcite>> <<Alt: 348.5 - 353.6 Moderate-Strong Calcite>> <<Alt: 353.6 - 356 Moderate Calcite>> <<Struc: 342.7 - 348.5 Intense Fault>> <<Struc: 348.5 - 353.6 Moderate Shear>> Sheared ductile deformation of MAFi. Also, brittle faulting. <<Struc: 348.5 - 353.6 Strong Fault>> Sheared ductile deformation of MAFi. Also, brittle faulting. <<Struc: 353.6 - 356 Intense Fault>>									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
356.00	358.85	MAFi Mafic Intrusions (primarily footwall mafic intrusion)									
<p>356 - 358.85: Cl-CA banded schist with disseminated BI. Maybe a coherent block within a larger fault zone?</p> <p><<Min: 356 - 358.85 0.1% Min: Pyrrhotite>> <<Alt: 356 - 358.85 Moderate-Strong Calcite>> <<Vein: 356.75 - 358.8 5% Calcite>> ~3 1 cm wide CA-QZ veins per metre. Veins are parallel to foliation <<Struc: 356 - 358.85 Weak-Moderate Fault>></p>											
358.85	379.00	FLZ Fault Zone									
<p>358.85 - 379: Gouge-supported fault breccia with clasts of RHY, MDS, MAFi, and minor semi-massive PY.</p> <p><<Min: 358.85 - 378.5 2% Min: Pyrite>> Minor pyritic clasts <<Min: 378.5 - 385.1 3% Min: Pyrite>> Disseminated PY in MU-altered RHY block within fault zone. <<Alt: 358.85 - 401.8 Weak-Moderate Calcite>> <<Alt: 378.5 - 386 Moderate Muscovite>> Yellow coloured MU, noted in coherent block within the fault zone. Potentially an altered block that was then faulted into the zone. <<Struc: 358.85 - 378.5 Intense Fault>> <<Struc: 378.5 - 380.4 Moderate Fault>></p>											
379.00	383.20	RHY undifferentiated rhyolite									
<p>379 - 383.2: Weak-moderate MU-altered, weak-moderately faulted, rhyolite with a spaced MU-cleavage and siliceous domains.</p> <p><<Vein: 383 - 384.1 20% Quartz-Carbonate>> Two massive QZ-carbonate veins within moderately faulted and MU-altered RHY. A block within the larger fault zone that displays MU-alteration with QZ-veining assemblage? <<Struc: 380.4 - 383.2 Weak Fault>></p>											
383.20	397.68	FLZ Fault Zone									
<p>383.2 - 397.68: Moderate-strongly faulted RHY. Locally gouge-supported breccia with clasts of RHY and MDS. From 390-397.68 m, the fault consists of strongly faulted rhyolite with strong MU-alteration.</p> <p><<Min: 385.1 - 390 2% Min: Pyrite>> Minor pyritic clasts <<Min: 390 - 401.8 3% Min: Pyrite>> Disseminated PY in MU-altered RHY block within fault zone. <<Alt: 390 - 401.8 Strong Muscovite>> <<Struc: 383.2 - 385.1 Moderate-Strong Fault>> <<Struc: 385.1 - 390 Intense Fault>> <<Struc: 390 - 397.68 Strong Fault>></p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
397.68	401.80	RHY undifferentiated rhyolite 397.68 - 401.8: Yellow-grey, moderately faulted, strongly MU-altered rhyolite. RHYv? <<Struc: 397.68 - 399.9 Weak Fault>> <<Struc: 399.9 - 401.8 Moderate Fault>>									
401.80	402.60	MDSc Carbonaceous dominant mudstone 401.8 - 402.6: Black, carbonaceous mudstone. Quite hard, potentially due to silicification. Blebby PY. <<Min: 401.8 - 402.6 5% Min: Pyrite>> <<Alt: 401.8 - 405.05 Weak Muscovite>> Silver coloured MU in MDS unit. <<Alt: 401.8 - 405.05 Trace Calcite>>									
402.60	405.05	MDSt Rhyolite tuff dominant mudstone 402.6 - 405.05: Black and grey, carbonaceous bands in rhyolite tuff. <<Min: 402.6 - 405.05 3% Min: Pyrite>>									
405.05	462.70	RHY undifferentiated rhyolite 405.05 - 462.7: Strongly Mu-altered forming pervasive sericitic cleavages. Yellowish-grey, QZ-sericite schist with disseminated PY and minor CA bands. Locally texture ~resembles silicic banding and elsewhere RHYv textures? Strong alteration and moderate faulting makes differentiating RHYv from RHYc very difficult. <<Min: 405.05 - 462.7 2% Min: Pyrite>> <<Min: 405.05 - 462.7 2% Min: Pyrrhotite>> <<Alt: 405.05 - 464.12 Strong Muscovite>> Yellow coloured sericitic cleavages <<Alt: 405.05 - 464.12 Weak Calcite>> <<Struc: 411 - 448.6 Weak Fault>> Highly broke core (Rubble zone) with local gougey material. Coincides with strong sericite alteration. <<Struc: 459.5 - 459.6 Weak Fault>> <<Struc: 462.4 - 462.7 Weak-Moderate Fault>>									
462.70	464.12	OI Heavily disseminated sulphides in host schist 462.7 - 464.12: ~15% patchy to disseminated PY in strongly MU-altered RHY. <<Min: 462.7 - 464.12 15% Min: Pyrite>>									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
464.12	491.00	RHYv Rhyolite volcanoclastic									
<p>464.12 - 491: Strongly Mu-altered rhyolite, with some clastic textures including minor fine grained ashy bands and local lpl.</p> <p><<Min: 464.12 - 491 3% Min: Pyrite>></p> <p><<Alt: 464.12 - 491 Moderate-Strong Muscovite>> Yellow coloured sericitic cleavages</p> <p><<Alt: 464.12 - 491 Weak-Moderate Calcite>></p> <p><<Vein: 471 - 480.8 5% Quartz-Carbonate>> Zone with minor ~5-15 cm wide massive QZ +/- patchy carbonate veins</p> <p><<Struc: 464.15 - 464.5 Weak-Moderate Fault>></p> <p><<Struc: 479.15 - 479.6 Weak-Moderate Fault>></p> <p>End of Hole @ 491</p>											