EQUITY | EXPLORATION CONSULTANTS LTD.

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-416

Prospect:	Sebesi	Hole Type:	DD	Survey Type:	PLND-LiDAR	Logged By:	Roger Hulstein
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Roger Hulstein	Date Logging Start:	8/26/2016
UTM Easting	415440	Core Size:	HQ3	Azimuth:	183	Date Logging Complete:	9/18/2016
UTM Northing:	6815276	Casing Pulled?:	Yes	Dip:	-68	Drill Company:	New Age
UTM Elev. (m):	1550	Casing Depth (m):	6	Length (m):	834	Drill Rig:	Zinex A5
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	8/24/2016
Local Northing:		Cemented?:	Yes	Core Storage Loc.:	KZK Camp	Drill Completed:	9/17/2016
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Exploration
Comments:						Parent Hole:	

The purpose of K16-416 was to test for possible offset Krakatoa Zone mineralisation at the Sebesi exploration target and follow up on the PO-rich sulphide horizon intersected in K16-394, which is expected at approximately 700m depth.
Bedrock was encountered at 6m; followed by the Wind Lake Formation to a depth of 190.58m. KZK Formation rocks occur from 190.58 m to EOH and consist of alternating felsic volcanic ash and lapilli tuffs, intercalated with minor pelitic-beds, mudstone, mafic tuffs, and feldspar + quartz phyric, glassy, RHYif intrusive's (531.2-601.3m). Strong muscovite-silica alteration was encountered between 614.5 - 618.0 m associated with minor disseminated PO+SP+PY+/-GL. Patchy-disseminated CP+PO+/-GL occurs within quartz veins from 696.8 - 696.95 m, and 726.91 - 727.09 m correlating with the expected depth of mineralisation from K16-394. A DHEM survey was completed by Aurora Geosciences on September 17th, 2016.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-68	181.6	1.4	183	TN14	Roger Hulstein	8/24/2016		☑	aligned at 830pm Aug 24, 2016
0.01	-68.1131	181.6	1.4	183	Gyro	Oscar Nielsen	9/17/2016		☑	100
10	-67.9228	181.3914	1.4	182.7914	Gyro	Oscar Nielsen	9/17/2016		☑	98.607
12	-67.7	159.7	22.1	181.8	EZ-MARK	New Age	8/25/2016	5828	☐	
20	-68.1833	181.6957	1.4	183.0957	Gyro	Oscar Nielsen	9/17/2016		☑	99.1366
30	-68.2488	182.0277	1.4	183.4277	Gyro	Oscar Nielsen	9/17/2016		☑	99.0631
39	-68.5	160.3	22.1	182.4	EZ-MARK	New Age	8/25/2016	58378	☐	
40	-68.43	182.5046	1.4	183.9046	Gyro	Oscar Nielsen	9/17/2016		☑	98.9532
50	-68.3941	182.5514	1.4	183.9514	Gyro	Oscar Nielsen	9/17/2016		☑	99.0725
60	-68.3399	182.7682	1.4	184.1682	Gyro	Oscar Nielsen	9/17/2016		☑	99.3729
63	-68.5	161.1	22.1	183.2	EZ-MARK	New Age	8/25/2016	58492	☐	
70	-68.3352	183.1303	1.4	184.5303	Gyro	Oscar Nielsen	9/17/2016		☑	99.1618
80	-68.3423	183.2458	1.4	184.6458	Gyro	Oscar Nielsen	9/17/2016		☑	98.7148
87	-68.4	161.5	22.1	183.6	EZ-MARK	New Age	8/26/2016	58098	☐	
90	-68.3806	183.1449	1.4	184.5449	Gyro	Oscar Nielsen	9/17/2016		☑	98.7556
100	-68.4006	182.7379	1.4	184.1379	Gyro	Oscar Nielsen	9/17/2016		☑	98.6712
110	-68.4215	182.6889	1.4	184.0889	Gyro	Oscar Nielsen	9/17/2016		☑	99.108

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Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
114	-68.3	161.4	22.1	183.5	EZ-MARK	New Age	8/26/2016	58266	☐	
120	-68.4655	182.7955	1.4	184.1955	Gyro	Oscar Nielsen	9/17/2016		☑	99.3379
130	-68.4056	183.3621	1.4	184.7621	Gyro	Oscar Nielsen	9/17/2016		☑	99.2539
138	-68.6	162.5	22.1	184.6	EZ-MARK	New Age	8/26/2016	58322	☐	
140	-68.7211	184.2738	1.4	185.6738	Gyro	Oscar Nielsen	9/17/2016		☑	99.3747
150	-68.9173	185.0643	1.4	186.4643	Gyro	Oscar Nielsen	9/17/2016		☑	99.5969
160	-69.0139	185.2755	1.4	186.6755	Gyro	Oscar Nielsen	9/17/2016		☑	100
162	-68.8	163.3	22.1	185.4	EZ-MARK	New Age	8/26/2016	57939	☐	
170	-69.0306	185.6429	1.4	187.0429	Gyro	Oscar Nielsen	9/17/2016		☑	99.8963
180	-69.1452	185.7354	1.4	187.1354	Gyro	Oscar Nielsen	9/17/2016		☑	100
186	-69.1	164.5	22.1	186.6	EZ-MARK	New Age	8/27/2016	58335	☐	
190	-69.2264	185.9898	1.4	187.3898	Gyro	Oscar Nielsen	9/17/2016		☑	100
200	-69.4487	186.1581	1.4	187.5581	Gyro	Oscar Nielsen	9/17/2016		☑	100
210	-69.464	186.5121	1.4	187.9121	Gyro	Oscar Nielsen	9/17/2016		☑	100
210.01	-69.6	166.5	22.1	188.6	EZ-MARK	New Age	8/27/2016	58032	☐	
220	-69.5047	186.3783	1.4	187.7783	Gyro	Oscar Nielsen	9/17/2016		☑	100
230	-69.572	186.4915	1.4	187.8915	Gyro	Oscar Nielsen	9/17/2016		☑	100
234	-69.6	163.8	22.1	185.9	EZ-MARK	New Age	8/28/2016	58019	☐	
240	-69.6133	187.0757	1.4	188.4757	Gyro	Oscar Nielsen	9/17/2016		☑	100
250	-69.6803	187.3545	1.4	188.7545	Gyro	Oscar Nielsen	9/17/2016		☑	100
260	-69.7299	187.8238	1.4	189.2238	Gyro	Oscar Nielsen	9/17/2016		☑	100
261	-69.7	165.6	22.1	187.7	EZ-MARK	New Age	8/28/2016	58084	☐	
270	-69.8543	188.4077	1.4	189.8077	Gyro	Oscar Nielsen	9/17/2016		☑	100
280	-69.7577	188.9729	1.4	190.3729	Gyro	Oscar Nielsen	9/17/2016		☑	100
285	-70.1	169	22.1	191.1	EZ-MARK	New Age	8/28/2016	58084	☐	
290	-69.7259	189.4804	1.4	190.8804	Gyro	Oscar Nielsen	9/17/2016		☑	100
300	-69.6029	189.4849	1.4	190.8849	Gyro	Oscar Nielsen	9/17/2016		☑	100
300.01	-69.8	168.2	22.1	190.3	EZ-MARK	New Age	8/29/2016	57906	☐	
310	-69.6239	189.5707	1.4	190.9707	Gyro	Oscar Nielsen	9/17/2016		☑	100
320	-69.3171	189.9841	1.4	191.3841	Gyro	Oscar Nielsen	9/17/2016		☑	99.8006
324	-69	168.9	22.1	191	EZ-MARK	New Age	8/31/2016	57932	☐	
330	-69.5194	189.9456	1.4	191.3456	Gyro	Oscar Nielsen	9/17/2016		☑	100
340	-69.3903	189.9024	1.4	191.3024	Gyro	Oscar Nielsen	9/17/2016		☑	100
348	-69.7	165.8	22.1	187.9	EZ-MARK	New Age	9/2/2016	58094	☐	

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Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
350	-69.5988	188.8874	1.4	190.2874	Gyro	Oscar Nielsen	9/17/2016		☑	100
360	-69.9638	188.2822	1.4	189.6822	Gyro	Oscar Nielsen	9/17/2016		☑	99.8939
370	-70.1034	187.6167	1.4	189.0167	Gyro	Oscar Nielsen	9/17/2016		☑	100
372	-70	164.9	22.1	187	EZ-MARK	New Age	9/3/2016	58244	☐	
380	-70.1449	187.1052	1.4	188.5052	Gyro	Oscar Nielsen	9/17/2016		☑	100
390	-70.0749	186.8403	1.4	188.2403	Gyro	Oscar Nielsen	9/17/2016		☑	100
396	-70.2	166.3	22.1	188.4	EZ-MARK	New Age	9/3/2016	58062	☐	
400	-69.9817	187.0717	1.4	188.4717	Gyro	Oscar Nielsen	9/17/2016		☑	100
410	-69.7853	187.2253	1.4	188.6253	Gyro	Oscar Nielsen	9/17/2016		☑	100
420	-69.6826	187.303	1.4	188.703	Gyro	Oscar Nielsen	9/17/2016		☑	100
420.01	-86.6	85.9	22.1	108	EZ-MARK	New Age	9/5/2016	22169	☐	
430	-69.6057	186.8032	1.4	188.2032	Gyro	Oscar Nielsen	9/17/2016		☑	100
435	-69.5	164.3	22.1	186.4	EZ-MARK	New Age	9/5/2016	58042	☐	
440	-69.5186	186.5172	1.4	187.9172	Gyro	Oscar Nielsen	9/17/2016		☑	100
450	-69.4602	186.4944	1.4	187.8944	Gyro	Oscar Nielsen	9/17/2016		☑	100
459	-69.4	164.5	22.1	186.6	EZ-MARK	New Age	9/5/2016	58192	☐	
460	-69.4186	186.6192	1.4	188.0192	Gyro	Oscar Nielsen	9/17/2016		☑	100
470	-69.3132	186.5286	1.4	187.9286	Gyro	Oscar Nielsen	9/17/2016		☑	100
480	-69.1437	186.8308	1.4	188.2308	Gyro	Oscar Nielsen	9/17/2016		☑	100
483	-69	164.5	22.1	186.6	EZ-MARK	New Age	9/6/2016	57774	☐	
490	-68.9465	187.3068	1.4	188.7068	Gyro	Oscar Nielsen	9/17/2016		☑	100
500	-68.8437	187.4834	1.4	188.8834	Gyro	Oscar Nielsen	9/17/2016		☑	100
507	-69.1	164.3	22.1	186.4	EZ-MARK	New Age	9/7/2016	57473	☐	
510	-68.7307	187.4828	1.4	188.8828	Gyro	Oscar Nielsen	9/17/2016		☑	100
520	-68.7222	187.6685	1.4	189.0685	Gyro	Oscar Nielsen	9/17/2016		☑	100
530	-68.6562	187.971	1.4	189.371	Gyro	Oscar Nielsen	9/17/2016		☑	100
531	-68.3	164.8	22.1	186.9	EZ-MARK	New Age	9/7/2016	57887	☐	
540	-68.6182	188.1894	1.4	189.5894	Gyro	Oscar Nielsen	9/17/2016		☑	100
550	-68.4506	188.5692	1.4	189.9692	Gyro	Oscar Nielsen	9/17/2016		☑	100
555	-68.2	165.2	22.1	187.3	EZ-MARK	New Age	9/8/2016	58062	☐	
560	-68.1516	188.8094	1.4	190.2094	Gyro	Oscar Nielsen	9/17/2016		☑	100
570	-67.9237	189.1346	1.4	190.5346	Gyro	Oscar Nielsen	9/17/2016		☑	100
580	-67.9097	189.4467	1.4	190.8467	Gyro	Oscar Nielsen	9/17/2016		☑	100
582	-68.4	166.7	22.1	188.8	EZ-MARK	New Age	9/8/2016	57914	☐	

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Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
590	-67.8315	189.8271	1.4	191.2271	Gyro	Oscar Nielsen	9/17/2016		☑	100
600	-67.6064	190.3151	1.4	191.7151	Gyro	Oscar Nielsen	9/17/2016		☑	100
606	-67.7	168.2	22.1	190.3	EZ-MARK	New Age	9/8/2016	57412	☐	
610	-67.3997	190.7698	1.4	192.1698	Gyro	Oscar Nielsen	9/17/2016		☑	100
620	-67.2892	191.0952	1.4	192.4952	Gyro	Oscar Nielsen	9/17/2016		☑	100
630	-67.2437	191.2486	1.4	192.6486	Gyro	Oscar Nielsen	9/17/2016		☑	100
636	-66.6	168.5	22.1	190.6	EZ-MARK	New Age	9/11/2016	56832	☐	
640	-66.8279	190.7464	1.4	192.1464	Gyro	Oscar Nielsen	9/17/2016		☑	100
650	-66.5325	190.3564	1.4	191.7564	Gyro	Oscar Nielsen	9/17/2016		☑	100
660	-66.3749	190.1215	1.4	191.5215	Gyro	Oscar Nielsen	9/17/2016		☑	100
660.01	-66.2	168.7	22.1	190.8	EZ-MARK	New Age	9/11/2016	56877	☐	
670	-66.1888	190.0369	1.4	191.4369	Gyro	Oscar Nielsen	9/17/2016		☑	100
680	-65.7921	189.5188	1.4	190.9188	Gyro	Oscar Nielsen	9/17/2016		☑	100
684	-65.3	169.3	22.1	191.4	EZ-MARK	New Age	9/12/2016	57448	☐	
690	-65.2801	189.3517	1.4	190.7517	Gyro	Oscar Nielsen	9/17/2016		☑	100
700	-65.1717	189.2739	1.4	190.6739	Gyro	Oscar Nielsen	9/17/2016		☑	100
708	-64.9	165.9	22.1	188	EZ-MARK	New Age	9/12/2016	56755	☐	
710	-65.0041	189.1209	1.4	190.5209	Gyro	Oscar Nielsen	9/17/2016		☑	100
720	-64.8461	189.2138	1.4	190.6138	Gyro	Oscar Nielsen	9/17/2016		☑	100
730	-64.3674	188.9469	1.4	190.3469	Gyro	Oscar Nielsen	9/17/2016		☑	100
740	-64.0263	188.7327	1.4	190.1327	Gyro	Oscar Nielsen	9/17/2016		☑	100
750	-63.5888	188.1951	1.4	189.5951	Gyro	Oscar Nielsen	9/17/2016		☑	100
759	-62.5	165.8	22.1	187.9	EZ-MARK	New Age	9/14/2016	57012	☐	
760	-62.7762	188.2294	1.4	189.6294	Gyro	Oscar Nielsen	9/17/2016		☑	100
770	-62.5405	188.0979	1.4	189.4979	Gyro	Oscar Nielsen	9/17/2016		☑	100
780	-62.3129	188.172	1.4	189.572	Gyro	Oscar Nielsen	9/17/2016		☑	100
786	-61.8	165.3	22.1	187.4	EZ-MARK	New Age	9/15/2016	57183	☐	
790	-62.0865	188.2112	1.4	189.6112	Gyro	Oscar Nielsen	9/17/2016		☑	100
800	-61.8589	188.2033	1.4	189.6033	Gyro	Oscar Nielsen	9/17/2016		☑	100
810	-61.5657	188.4503	1.4	189.8503	Gyro	Oscar Nielsen	9/17/2016		☑	100
810.01	-61.2	167	22.1	189.1	EZ-MARK	New Age	9/16/2016	56894	☐	
820	-61.2264	188.6963	1.4	190.0963	Gyro	Oscar Nielsen	9/17/2016		☑	100
830	-60.851	188.9059	1.4	190.3059	Gyro	Oscar Nielsen	9/17/2016		☑	100

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

0.00 6.00 OVBN Overburden

6.00 10.60 SLT Siltstone - fine-grained sedimentary rock

6 - 10.6: massive homogeneous black fine grained silicified siltstone (looks like chert), locally crosscut by minor white qtz veins with associated bleaching

<<Alt: 6 - 10.6 Intense Silicification>> chert like unit

<<Alt: 6 - 12 Trace Calcite>> fracture filling

<<Vein: 6.3 - 7.6 50% Quartz>> poor core recovery. Locally bleached envelope

<<Vein: 10.5 - 10.6 80% Quartz>>

<<Struc: 10.5 - 12 Moderate Fault>> missing and broken core, minor gouge.

10.60 14.45 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

10.6 - 14.45: minor siliceous zones, broken with minor gouge 10.60-12.30

<<Min: 12 - 26 0.1% Min: Pyrite>>

<<Alt: 12 - 14.45 Moderate Calcite>>

<<Vein: 12.05 - 12.12 100% Quartz-Carbonate>>

<<Struc: 10.6 - 16 Moderate dominant foliation>>

14.45 17.64 MAFta Coarse grained to ash tuff

14.45 - 17.64: lower 25cm is qtz vein - silica flooding with minor chlorite - silica and alteration from underlyng unit?

<<Min: 16 - 17 1% Min: Pyrrhotite>>

<<Alt: 14.45 - 17.64 Moderate-Strong Calcite>>

<<Alt: 17.44 - 20.25 Intense Silicification>> chert like unit

<<Vein: 17.4 - 17.64 100% Quarzt-Chlorite-Carbonate>> veining at unit contact

17.64 20.25 SLT Siltstone - fine-grained sedimentary rock

17.64 - 20.25: black fine grained weakly & faintly banded silicified siltstone in upper section of unit while lower section resembles a more massive grey silicified siltstone with interstitial calcite (originally limestone unit?).

<<Alt: 17.64 - 19 Trace Calcite>> fracture filling

<<Alt: 19 - 22 Moderate Calcite>> and diss

<<Vein: 19.1 - 19.6 15% Quartz 10 deg. >>

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

20.25 21.10 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

20.25 - 21.1: dominated by MDS, 20cm band MAFta at upper contact.

21.10 27.19 MAFta Coarse grained to ash tuff

<<Min: 24 - 36 1% Min: Pyrrhotite>>

<<Alt: 22 - 25.7 Moderate-Strong Calcite>>

<<Alt: 25.7 - 27.19 Weak Calcite>>

<<Struc: 22.4 - 24 Moderate-Strong dominant foliation>>

27.19 27.67 MAFt Mafic Volcaniclastics

27.19 - 27.67: coarse lappilli.

<<Alt: 27.19 - 27.67 Strong Calcite>>

27.67 34.68 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

27.67 - 34.68: upper 3 m has high ash content, transitional contact with true MDS in lower section of unit.

<<Alt: 27.67 - 30.9 Weak Calcite>>

<<Alt: 30.9 - 31.6 Moderate Calcite>>

<<Alt: 31.6 - 34.68 Weak-Moderate Calcite>>

<<Struc: 30.3 - 31.2 Weak-Moderate Fault>> scattered thin (<3cm) zones of gouge, minor crushed gouge.

<<Struc: 32.2 - 33 Moderate dominant foliation>>

34.68 45.00 MAFt Mafic Volcaniclastics

34.68 - 45: 35.43-36.42m: minor mudstone component

<<Min: 36 - 50.4 0.5% Min: Pyrite>>

<<Alt: 34.68 - 38.5 Moderate-Strong Calcite>>

<<Alt: 38.5 - 41.2 Weak Calcite>>

<<Alt: 41.2 - 45 Moderate-Strong Calcite>>

<<Vein: 36.67 - 37.95 30% Quartz-Carbonate 80 deg. >>

<<Struc: 41.85 - 52 Moderate dominant foliation>>

<<Struc: 42.5 - 48 Moderate Fault>> broken and crushed core, scattered thin (<3cm) zones of gouge.

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

45.00 50.40 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

45 - 50.4: mix of MAFta and MDS

<<Alt: 45 - 47.15 Weak Calcite>>

<<Alt: 47.15 - 51 Weak Calcite>>

<<Alt: 49.4 - 50.4 Trace Chlorite>> associated with adjacent rhyolite

<<Vein: 47.15 - 47.25 100% Quartz-Carbonate>>

<<Vein: 49.4 - 50.4 50% Quartz-Carbonate>> rubble in fault zone

<<Struc: 49.4 - 50.4 Strong Fault>> broken and crushed core, scattered thin (<3cm) zones of gouge. Missing core.

50.40 55.27 RHY undifferentiated rhyolite light grey FG

50.4 - 55.27: light grey, fine grained rhyolite, possible dyke, flow, ? Upper contact sharp but marked by about a meter of missing core, broken core, gouge, qtz veining and possible remnant chlorite alteration - possible hornfels. Up to 3% rounded 0.2 - .-5 mm feldspar grains & up to 5% 1-2mm chlorite after mafic mineral, both in fine grained (<0.1mm) groundmass of qtz - feldspar +/- calcite groundmass. Lower contact sharp over 1cm and marked by increase in biotite, Bippo, in RHY over 30cm.

<<Min: 50.4 - 53.36 0.5% Min: Pyrite>>

<<Alt: 51 - 53.35 Weak-Moderate Calcite>>

<<Alt: 53.35 - 55.27 Moderate-Strong Calcite>>

<<Struc: 51 - 51.5 Weak Fault>>

<<Struc: 53.56 - 54.2 Weak-Moderate Fault>>

<<Struc: 55.25 - 55.3 Strong Contact>>

55.27 56.69 MAFta Coarse grained to ash tuff

55.27 - 56.69: Slight increase in calcite banding along foliation at contacts.

<<Min: 55.75 - 71.73 3% Min: Pyrite>>

<<Alt: 55.27 - 56.69 Strong Calcite>>

<<Struc: 55.35 - 56.6 Moderate dominant foliation>>

<<Struc: 56.65 - 56.69 Strong Contact>>

56.69 60.40 RHY undifferentiated rhyolite

56.69 - 60.4: as 50.40-55.27m

<<Alt: 56.69 - 60.4 Weak Calcite>>

60.40 61.00 MAFta Coarse grained to ash tuff

60.4 - 61: as 55.27-56.69m.

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

<<Alt: 60.4 - 66.1 Moderate Calcite>>

61.00 71.73 RHY undifferentiated rhyolite

61 - 71.73: as 50.40-55.27m but less siliceous, more chloritic groundmass from 61.00 - 66.00m. At 65.60-70.20m brittle fractures with hairline - 2mm py filling with py selvege. At 70.20-70.30m flow banding(?) with calcite on some bands. Lower contact marked by finer grained size and end of Bippo.

<<Alt: 61 - 66.19 Weak Chlorite>>

<<Alt: 66.1 - 71.1 Weak Calcite>> dis, blebs

<<Alt: 71.1 - 75.8 Weak-Moderate Calcite>> dis, blebs, bands

<<Vein: 64 - 64.2 70% Quartz-Carbonate>>

<<Vein: 67.8 - 67.84 100% Quartz-Carbonate 57 deg. >>

<<Vein: 70.5 - 71 20% Quartz-Carbonate 65 deg. >>

<<Struc: 70 - 70.15 Weak Fault>> broken core

<<Struc: 71.65 - 71.85 Weak Fault>>

71.73 79.10 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

71.73 - 79.1: mixed bands of fine ash and mudstone, some grey calcite rich bands with Bippo. Lithic clasts - lappilli in some bands/sections.

<<Min: 71.73 - 73.2 1% Min: Pyrite>>

<<Min: 73.2 - 76.4 1% Min: Pyrite>>

<<Min: 73.2 - 76.4 1% Min: Pyrrhotite>>

<<Min: 76.4 - 80 0.1% Min: Pyrite>>

<<Alt: 75.8 - 81 Moderate Calcite>> dis, blebs, bands

<<Struc: 72 - 72.7 Moderate dominant foliation>>

<<Struc: 76.4 - 78.4 Moderate Fault>> broken and crushed core, minor gouge

79.10 82.44 MAFta Coarse grained to ash tuff

<<Min: 80 - 82.44 3% Min: Pyrite>>

<<Alt: 81 - 93 Moderate-Strong Calcite>> dis, blebs

82.44 93.00 MAFt Mafic Volcaniclastics

<<Min: 82.44 - 84.9 1% Min: Pyrite>>

<<Min: 84.9 - 87.45 3% Min: Pyrite>>

<<Min: 87.45 - 94 0.1% Min: Pyrite>>

<<Struc: 84 - 84.5 Weak Fault>> broken core

<<Struc: 85.5 - 86.1 Weak-Moderate Fault>> broken and crushed core, minor gouge

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

<<Struc: 87 - 91.5 Moderate-Strong dominant foliation>>

<<Struc: 91 - 93.25 Moderate Fault>> broken and crushed core, minor gouge

93.00 95.21 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

93 - 95.21: crackle brx, qtz vein at upper contact, py blebs and filling, MAFi similar to chloritized section of RHY at 61.00-66.00m.

<<Min: 94 - 95.05 3% Min: Pyrite>>

<<Min: 95.05 - 102 3% Min: Pyrite>>

<<Alt: 93 - 95.4 Weak Calcite>> dis, blebs, bands

<<Alt: 93.8 - 95 Weak Chlorite>>

<<Vein: 93.2 - 93.95 100% Quartz>>

<<Vein: 94.65 - 95.21 30% Quartz>>

<<Struc: 93.9 - 95.25 Moderate Fault>> broken and crushed core, minor gouge

95.21 95.40 MAFt Mafic Volcaniclastics

95.40 99.00 FLZ Fault Zone

<<Alt: 95.4 - 99.1 Trace Calcite>>

<<Struc: 95.4 - 99.1 Moderate-Strong Fault>> broken and crushed core, gouge

99.00 101.73 MAFta Coarse grained to ash tuff

<<Alt: 99.1 - 101 Weak-Moderate Calcite>> dis, blebs

<<Alt: 101 - 108 Moderate-Strong Calcite>>

<<Struc: 99.1 - 102.35 Weak Fault>> broken and crushed core

101.73 113.22 MAFt Mafic Volcaniclastics

<<Min: 111 - 113.7 1% Min: Pyrrhotite>>

<<Min: 111 - 113.7 0.1% Min: Galena>>

<<Min: 111 - 113.7 0.1% Min: Chalcopyrite>>

<<Min: 111 - 115.6 1% Min: Pyrite>>

<<Alt: 108 - 126.3 Weak-Moderate Calcite>> dis, blebs

<<Struc: 107 - 112 Weak Fault>> scattered narrow gouge zones

<<Struc: 113 - 114 Moderate dominant foliation>>

113.22 118.13 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

113.22 - 118.13: gradational upper contact over about 1m, MAFta band at 117.15-117.32m

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

<<Min: 115.6 - 120.6 3% Min: Pyrite>> trace silver sulfides at 116.15

<<Struc: 115.5 - 116 Moderate Fault>> gouge and crushed core

<<Struc: 116.4 - 117.65 Weak Fault>> minor gouge zones on folia

118.13 119.30 MAFta Coarse grained to ash tuff

<<Struc: 118.8 - 119.7 Moderate-Strong Fault>> gouge and crushed core

119.30 120.65 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

<<Min: 120.6 - 126.5 1% Min: Pyrite>>

120.65 124.15 MAFta Coarse grained to ash tuff

<<Struc: 120.8 - 126.35 Moderate Fault>> gouge and crushed core

124.15 162.00 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

124.15 - 162: Good MDS for the most part. Local sections (136.20-138.70m) has tuff - ash component. Abundant calcite and med grey limy bands (limestone) and clasts (ie. 136.2-145.5m, 149.3-154.3m). Entire unit is incompetent,locally contorted and cut by shear - gouge zones.

<<Min: 126.5 - 158.7 0.1% Min: Pyrite>>

<<Min: 143 - 144 0.1% Min: Pyrrhotite>>

<<Min: 158.7 - 161.4 1% Min: Pyrrhotite>>

<<Min: 161.4 - 168 0.1% Min: Pyrite>>

<<Alt: 126.3 - 136.2 Moderate-Strong Calcite>> dis, blebs

<<Alt: 136.2 - 145.5 Strong Calcite>> dis, blebs, bands of limestone

<<Alt: 145.5 - 148.26 Weak-Moderate Calcite>>

<<Alt: 148.26 - 151.9 Strong Calcite>>

<<Alt: 151.9 - 167.45 Moderate Calcite>> dis, blebs, bands, in shear - fault zone.

<<Vein: 125.9 - 126 75% Quartz-Carbonate>>

<<Vein: 129.6 - 133.8 10% Quartz-Carbonate>>

<<Vein: 134.7 - 135.6 90% Quartz-Carbonate>>

<<Vein: 136.9 - 137.1 50% Quartz-Carbonate>>

<<Vein: 139.25 - 139.32 100% Quartz-Carbonate 32 deg. >>

<<Vein: 141.81 - 143.3 10% Quartz-Carbonate 60 deg. >>

<<Vein: 145.5 - 146.3 30% Quartz-Carbonate 30 deg. >>

<<Vein: 147.1 - 147.2 50% Quartz-Carbonate>>

<<Vein: 157.43 - 157.7 70% Quartz-Carbonate>>

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

<<Vein: 157.7 - 167.5 15% Quartz-Carbonate>> vein clasts in fault brx

<<Vein: 160.75 - 261.2 25% Quartz-Carbonate 70 deg. >>

<<Struc: 126.35 - 131.1 Weak Fault>>

<<Struc: 127.5 - 128 Moderate dominant foliation>>

<<Struc: 128.5 - 130.5 Moderate-Strong dominant foliation>>

<<Struc: 131.1 - 133.9 Weak-Moderate Fault>> gouge and crushed core

<<Struc: 133.9 - 143.1 Weak Fault>>

<<Struc: 136.2 - 139 Moderate-Strong dominant foliation>>

<<Struc: 143.1 - 143.35 Moderate Fault>> gouge and crushed core

<<Struc: 143.35 - 149.3 Weak Fault>>

<<Struc: 144.7 - 145.75 Moderate-Strong dominant foliation>>

<<Struc: 147 - 148 Moderate-Strong dominant foliation>> and shearing

<<Struc: 151.8 - 159.3 Moderate Fault>> contorted schist, local gouge and brx zones.

<<Struc: 155 - 155.2 Moderate dominant foliation>>

<<Struc: 157.7 - 158.3 Moderate-Strong dominant foliation>>

<<Struc: 157.8 - 158.4 Moderate-Strong dominant foliation>>

<<Struc: 159.3 - 160 Strong Fault>> gouge and crushed core

<<Struc: 160 - 162 Moderate Fault>> contorted schist, local gouge and brx zones.

<<Struc: 161.7 - 161.85 Moderate-Strong Shear>>

162.00 183.90 FLZ Fault Zone

162 - 183.9: brecciated and sheared, blocks and clasts of MDS, MAFta and qtz-carb veining in gouge and crushed lithology of same. 170.60-173.60m; 50% qtz veining and remainder is muscovite altered and bleached MAFt.

<<Min: 168 - 175 3% Min: Pyrite>>

<<Min: 175 - 190.2 0.1% Min: Pyrite>>

<<Alt: 167.45 - 173.6 Trace Calcite>>

<<Alt: 170.7 - 173.6 Moderate-Strong Muscovite>> in shear - fault zone

<<Alt: 173.6 - 179.25 Weak Calcite>> and diss

<<Alt: 179.25 - 184.8 Weak-Moderate Calcite>> dis, blebs

<<Vein: 170.8 - 173.6 60% Quartz-Carbonate>> crushed qtz vein (minor carbonate) in fault zone with bleached MAFt clasts

<<Struc: 162 - 183.9 Strong Fault>> gouge and crushed core

183.90 184.83 MAFta Coarse grained to ash tuff

183.9 - 184.83: minor bands of MDS

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

<<Alt: 184.8 - 190.58 Trace Calcite>>

<<Struc: 183.9 - 186.2 Weak-Moderate Fault>> zones of gouge and broken core

184.83 190.58 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

184.83 - 190.58: most of unit is medium green grey, cut by grey MDS bands. Medium - green - grey ash tuff is not calcareous, unusual for Wind Lake package, more likely an intermediate ash tuff belonging to KZK.

<<Struc: 189.9 - 190.2 Weak-Moderate Fault>> zones of gouge and broken core

190.58 194.50 RHY undifferentiated rhyolite

190.58 - 194.5: light tan green, fine - medium grained, banded (silic) homogonous - massive unit. Upper contact interbanded with MDS over approx 40cm. Silic bands, cut by foliation, unit could be a RHYc.

<<Min: 194 - 195 0.5% Min: Pyrrhotite>>

<<Alt: 190.58 - 197.3 Trace Calcite>>

<<Struc: 192 - 196.85 Weak Fault>>

194.50 198.22 RHYva Coarse grained to ash tuff

194.5 - 198.22: Similar to unit above but light green grey in color. Upper contact is sharp along fine grained bleached band of ash. Lower contact from 197.30 - 198.22m is bleached, light tan - brown (fine grained phlogopite - biotite), hornfeldsed looking ash unit, terminating at a thin (<1cm) qtz-pyrite-gouge band that cuts the foliation of the underlying brown RHY unit. Unconformable contact at core scale.

<<Min: 195 - 225 0.1% Min: Pyrite>>

<<Alt: 197.3 - 198.7 Moderate Calcite>>

<<Vein: 198.2 - 198.22 50% Quartz-Carbonate-Sulphide 20 deg. >> qtz-pyrite-gouge on contact, bleached envelope with calcite

<<Struc: 196.2 - 198.7 Weak-Moderate Fault>> gouge zones on folia

198.22 198.70 RHYvl Lapilli tuff

198.22 - 198.7: Brown (biotite) fine grained ash with light grey qtz clasts and disrupted bands. Upper contact is unconformable, appears to cut banding at low angle, against a thin (<1cm) qtz-pyrite-gouge band. Lower contact is light grey gouge.

198.70 205.00 RHYvx Quartz and/or feldspar crystal tuff

198.7 - 205: Granular ash unit with blue qtz eyes. Bleaching and weak muscovite alteration increasing towards lower contact over 1 m.

<<Alt: 198.7 - 201.9 Weak-Moderate Calcite>>

<<Alt: 201.9 - 204.9 Trace Calcite>>

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

<<Alt: 204.9 - 207 Weak-Moderate Calcite>>

<<Struc: 202.2 - 202.6 Weak-Moderate dominant foliation>>

205.00 205.98 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

205 - 205.98: Calcite altered feldspar phyric MAFi dyke with fine grained banded contacts. About 30% feldspars, up to 0.5 cm. Could also just be calcite porphyroblasts in a volcaniclastic… Dyke is likely intermediate, has a fine gr groundmass of qtz-feld-musc.

205.98 214.80 RHYvl Lapilli tuff

205.98 - 214.8: Blue qtz eyes, about 5%, 1-4mm size and possibly up to 3% broken white 1-3 mm feldspar crystals.10% white - light grey lapilli. Unit is coarser than 198.70-205.00m. Lower contact in bleached, muscovite - sericite altered, fault-shear zone with qtz vein.

<<Alt: 207 - 213 Weak Calcite>>

<<Alt: 213 - 216 Moderate Muscovite>> musc-sericite-clay associated with shear - fault zones.

<<Alt: 213 - 222 Trace Calcite>>

<<Vein: 206.75 - 207 80% Quartz-Carbonate 52 deg. >> crudely banded with schist

<<Struc: 205.98 - 207 Weak-Moderate Fault>>

<<Struc: 206.5 - 206.7 Weak-Moderate dominant foliation>>

<<Struc: 211.95 - 212 Weak-Moderate dominant foliation>>

<<Struc: 212 - 213 Weak-Moderate Fault>> gouge zones on folia

<<Struc: 213.61 - 216.8 Moderate Fault>> gouge

214.80 219.20 RHYva Coarse grained to ash tuff

214.8 - 219.2: locally finely banded

<<Alt: 216 - 222.15 Weak Muscovite>> musc-sericite-clay associated with shear - fault zones.

<<Struc: 216.8 - 219.2 Weak Fault>> gouge on folia

219.20 220.29 RHYvl Lapilli tuff

<<Struc: 219.2 - 221.6 Weak-Moderate Fault>> gouge cutting foliation

220.29 223.36 RHYva Coarse grained to ash tuff

<<Alt: 222 - 223.36 Moderate Calcite>>

223.36 234.22 RHYvl Lapilli tuff

223.36 - 234.22: more ash rich to 226.5m but textures obscured by faulting. Good RHYvl from 226.50-234.00m. Lower contact in broken core but appears to be a healed breccia

<<Min: 225 - 254.1 0.5% Min: Pyrite>> blebs and diss

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

<<Alt: 223.36 - 228 Trace Calcite>>

<<Alt: 223.36 - 233.5 Weak-Moderate Muscovite>> musc-sericite-clay associated with shear - fault zones.

<<Alt: 228 - 232.7 Weak Calcite>>

<<Alt: 232.7 - 234.22 Trace Calcite>>

<<Vein: 224.6 - 228 5% Quartz-Tourmaline>> several qtz-tourmaline veins, some crushed by more recent faulting - shearing

<<Vein: 232.5 - 233.55 5% Quartz-Carbonate 30 deg. >> several narrow < cm crushed veins

<<Struc: 223.4 - 228 Moderate-Strong Fault>> gouge zones

<<Struc: 229.4 - 237 Weak-Moderate Fault>> gouge and broken core

234.22 237.00 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

234.22 - 237: Very similar to 205.00-205.99m. Green weakly calcite altered feldspar phyric MAFi dyke with fine grained banded contacts. About 10% feldspars, up to 3-4mm. Dyke is likely intermediate, has a fine gr groundmass of qtz-feld-musc-biotite-chlorite..

<<Alt: 234.22 - 235.35 Weak Calcite>>

<<Alt: 235.35 - 244.2 Weak-Moderate Calcite>> and diss

237.00 258.43 RHYvl Lapilli tuff

237 - 258.43: numerous shear - fault zones, minor fine grained, ash rich, sections.

<<Min: 254.1 - 258.43 1% Min: Pyrite>> and diss

<<Alt: 237 - 242 Weak Muscovite>> musc-sericite-clay associated with shear - fault zones.

<<Alt: 244.2 - 258.43 Weak Calcite>> and diss

<<Alt: 244.6 - 258.43 Weak-Moderate Muscovite>> musc-sericite-clay associated with shear - fault zones.

<<Vein: 245.92 - 246 100% Quartz-Carbonate>>

<<Vein: 249.76 - 253.8 5% Quartz-Tourmaline>>

<<Vein: 254.1 - 254.89 80% Quartz-Tourmaline>> includes 20% wallrock clasts

<<Struc: 237 - 242 Moderate-Strong Fault>> gouge and broken core

<<Struc: 244 - 246.25 Moderate Fault>> gouge and broken core

<<Struc: 247.9 - 251 Moderate Fault>> gouge and broken core

<<Struc: 250 - 250.1 Moderate dominant foliation>>

<<Struc: 251 - 254.1 Moderate-Strong Fault>> gouge and broken core

<<Struc: 256 - 257 Moderate dominant foliation>>

<<Struc: 256.4 - 262.7 Moderate Fault>> broken core and minor gouge

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

258.43 261.40 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

258.43 - 261.4: Very similar to 205.00-205.98m & 234.22-237.00m:Fine grained (chilled?) poorly banded contacts with qtz-carb veining, Exact footwall contact lost in rubble.

<<Min: 258.43 - 265.8 0.5% Min: Pyrite>>

<<Alt: 258.43 - 261.4 Weak-Moderate Calcite>> and diss

<<Vein: 258.43 - 258.8 25% Quartz-Carbonate 80 deg. >>

261.40 263.25 RHYv Rhyolite volcaniclastic

261.4 - 263.25: textures obscured by broken core.

<<Alt: 261.4 - 263.25 Weak Calcite>>

<<Struc: 262.65 - 262.7 Moderate-Strong Shear>>

<<Struc: 262.7 - 265.8 Weak Fault>> broken core and minor gouge

<<Struc: 263 - 264 Moderate dominant foliation>>

263.25 266.19 PEL Equigranular biotite + calcite +/- quartz rock

263.25 - 266.19: fine grained biotite and calcite altered PEL with numerous mm to cm size rhyolite ash bands, few section with lpl. Lower 20cm leached, brecciated and qtz veined.

<<Min: 265.8 - 266.7 0.5% Min: Pyrrhotite>>

<<Alt: 263.25 - 265.9 Moderate-Strong Calcite>>

<<Alt: 265.9 - 269.55 Weak Calcite>>

<<Vein: 264 - 265.7 5% Calcite>> carb veining with vugs

<<Vein: 266 - 268 15% Quarzt-Chlorite-Carbonate>> brecciated qtz-carb veining in fault zone

266.19 278.15 RHYvl Lapilli tuff

266.19 - 278.15: Sheared and faulted RHYvl. 266.19-269.55m: sheared-faulted and qtz veining obscure textures, possible block of brecciated RHYc 267.2-267.40.

<<Min: 266.7 - 269.2 0.5% Min: Pyrite>>

<<Min: 266.7 - 269.2 0.1% Min: Pyrrhotite>>

<<Min: 269.2 - 280 0.1% Min: Pyrite>>

<<Alt: 269.5 - 277.2 Weak-Moderate Calcite>>

<<Alt: 277.2 - 283.4 Weak Calcite>>

<<Vein: 266.9 - 267.1 10% Quartz-Tourmaline 13 deg. >> crosscutting QT vein

<<Struc: 267 - 267.1 Moderate Vein>>

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

<<Struc: 269.2 - 269.3 Moderate-Strong Fault>> fault margin contact

<<Struc: 269.3 - 270 Moderate-Strong Fault>>

<<Struc: 270 - 287.4 Weak-Moderate Fault>> numerous narrow gouge zone on folia and crosscutting DFOL. Broken core, missing core, very soft ground.

<<Struc: 276 - 276.9 Moderate-Strong dominant foliation>>

278.15 279.70 MAFi Mafic Intrusions (primarily footwall mafic intrusion)

278.15 - 279.7: Very similar to 205.00-205.98m & 234.22-237.00m:Fine grained (chilled?) poorly banded contacts with minor qtz-carb veining, Unit has better banding, than units above, defined by calcite - ankerite altered feldspar phenocrysts, - now looking more like porphyroblasts. Unit could easily be a MAFTa.

<<Struc: 278.15 - 278.9 Moderate-Strong dominant foliation>>

279.70 290.05 RHYvl Lapilli tuff

279.7 - 290.05: A different looking RHYvl. Has silic bands, brecciated silic bands and brecciated blocks of RHYc. White lpl and lithic clasts of qtz and mixed qtz+/-feld+/-calcite from mm to 2cm size. Lpl - lithic clasts are poorly sorted and matrix (ash) supported. Unit is locally brecciated, fractured and cut/healed with qtz+/-py fracture filling.

<<Min: 280 - 290 3% Min: Pyrite>> py - qtz in healed fractures

<<Min: 290 - 297.5 0.1% Min: Pyrite>>

<<Alt: 283.3 - 286.9 Trace Calcite>>

<<Alt: 286.9 - 290 Weak Calcite>>

<<Alt: 290 - 292.6 Weak Calcite>>

<<Struc: 282.7 - 283.3 Moderate-Strong dominant foliation>>

<<Struc: 284 - 286.6 Moderate-Strong dominant foliation>>

<<Struc: 285.5 - 286.6 Moderate-Strong dominant foliation>>

<<Struc: 287.4 - 290 Moderate-Strong Fault>> numerous narrow gouge zone on folia and crosscutting DFOL. Broken core, missing core, very soft ground.

<<Struc: 290 - 294.2 Strong Fault>> gouge and broken core, missing core

290.05 294.20 FLZ Fault Zone

290.05 - 294.2: zone of crushed and comminuted RHYvl (and RHY?) and bands of gouge. Sections of missing core.

<<Alt: 292.6 - 298.8 Trace Calcite>>

294.20 303.70 RHYvl Lapilli tuff

294.2 - 303.7: Faulted and sheared RHYvl with narrow sections of gouge.

<<Min: 297.5 - 297.7 5% Min: Pyrite>>

<<Min: 297.7 - 302.5 1% Min: Pyrite>>

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

<<Min: 302.5 - 308.2 3% Min: Pyrite>>

<<Alt: 298.8 - 302 Weak Calcite>>

<<Alt: 302 - 308.2 Trace Calcite>>

<<Vein: 297.5 - 297.7 100% Quartz-Carbonate-Sulphide 80 deg. >> brecciated qtz-cal-pyrite (in fracture filling) vein

<<Struc: 294.2 - 302.1 Moderate-Strong Fault>> numerous narrow gouge zone on folia and crosscutting DFOL. Broken core, missing core, very soft ground.

<<Struc: 295.5 - 296.6 Moderate dominant foliation>>

<<Struc: 299 - 301.2 Moderate dominant foliation>>

<<Struc: 302.1 - 308.2 Strong Fault>> gouge and broken core, missing core, very soff ground!

303.70 308.80 FLZ Fault Zone

303.7 - 308.8: Faulted and sheared with gouge zones, missing core. Blocks - sections with RHYvl, similar to lithologies above and below.

<<Min: 308.2 - 399 0.1% Min: Pyrite>>

<<Alt: 308.2 - 349.65 Weak Calcite>>

<<Vein: 304.1 - 304.3 100% Quartz-Carbonate-Sulphide 35 deg. >>

<<Vein: 305.93 - 306 100% Quartz-Carbonate 60 deg. >>

<<Struc: 305.93 - 306 Strong Vein>>

<<Struc: 308.2 - 310.4 Moderate dominant foliation>>

<<Struc: 308.2 - 314.7 Moderate-Strong Fault>> numerous narrow gouge zone on folia and crosscutting DFOL. Broken core, missing core, very soft ground.

308.80 323.60 RHYvl Lapilli tuff

308.8 - 323.6: Narrow sections of gouge. Approx, 317.50-318.40; RHYva. Bippo from 318.20m to 320m. Abundant calcareous lpl.

<<Vein: 318 - 318.4 10% Quartz-Carbonate 46 deg. >> calcite bands in RHYva at contact

<<Struc: 314.65 - 314.7 Moderate dominant foliation>>

<<Struc: 314.7 - 323.6 Weak-Moderate Fault>> Broken core with abundant zones of gougey faulting.

<<Struc: 318.5 - 319.5 Moderate dominant foliation>>

323.60 338.65 FLZ Fault Zone

323.6 - 338.65: Strongly-intensely faulted gouge to clast supported breccia. Dominated by felsic RHY clasts with minor dark PEL(?) clasts.

<<Struc: 323.6 - 330 Strong Fault>> Strongly faulted clast-supported fault gouge breccia

<<Struc: 330 - 336.4 Intense Fault>> Intense faulting. Gouge-supported fault gouge breccia

<<Struc: 336.4 - 338.65 Strong Fault>> Strongly faulted clast-supported fault gouge breccia

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

338.65 346.90 RHYv Rhyolite volcaniclastic

338.65 - 346.9: Moderate-strong faulting of volcaniclastic rhyolite with disseminated BI porphyroblasts.

<<Struc: 338.65 - 350.1 Moderate-Strong Fault>> Moderate-strongly faulted rhyolite. Abundant gouge zones and brecciated rock.

346.90 349.65 RHYc Rhyolite coherent volcanics

346.9 - 349.65: Moderate-strong faulting of silicic banded rhyolite.

349.65 352.50 PEL Equigranular biotite + calcite +/- quartz rock

349.65 - 352.5: Black, sheared and faulted, BI-CA schist, meta-pelite (?).

<<Alt: 349.65 - 352.5 Moderate-Strong Calcite>>

<<Vein: 349.7 - 350.05 65% Quartz-Carbonate>> Two massive QZ-carbonate veins

<<Struc: 350.1 - 352.5 Weak-Moderate Fault>> Weak-moderately faulted PEL in the middle of a larger fault zone.

352.50 361.70 FLZ Fault Zone

352.5 - 361.7: Strongly faulted zone varying from a gouge-supported fault breccia to strongly faulted RHY or PEL.

<<Alt: 352.5 - 372.85 Weak Calcite>>

<<Vein: 353.7 - 354.7 15% Quartz-Carbonate>> Clasts of massive QZ-carbonate vein within the fault zone

<<Struc: 352.5 - 353.7 Intense Fault>> Gouge-supported fault breccia.

<<Struc: 353.7 - 357 Strong Fault>> Strong fault with large zones of gouge. Original lithology is somewhat recognizable. Large clasts of RHY and PEL exist.

<<Struc: 357 - 361.7 Intense Fault>> Gouge-supported fault breccia

361.70 369.40 RHYvl Lapilli tuff

361.7 - 369.4: Medium grey, felsic lpl tuff, with siliceous lpl (maybe deformed FD?) and fine grained grey ash matrix.

<<Struc: 361.7 - 369.4 Weak-Moderate Fault>>

369.40 372.85 FLZ Fault Zone

369.4 - 372.85: Gouge-supported fault breccia with angular clasts of dominantly RHY and PEL.

<<Vein: 370 - 371.5 5% Quartz-Carbonate>> Clasts of massive QZ-carbonate vein within the fault zone

<<Struc: 369.4 - 372.85 Intense Fault>> Gouge-supported fault breccia

372.85 376.50 RHYvl Lapilli tuff

372.85 - 376.5: Moderately faulted near top of unit. Grey, lpl tuff with ~10% calcerous lpl, minor disseminated BI, and disseminated fine grained Ankerite.

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

<<Alt: 372.85 - 376.5 Weak-Moderate Calcite>>

<<Struc: 372.85 - 375 Moderate Fault>>

376.50 377.95 PEL Equigranular biotite + calcite +/- quartz rock

376.5 - 377.95: Black to grey, BI-MU-CA schist, mixed pelite and ash tuff.

<<Alt: 376.5 - 377.95 Moderate Calcite>>

377.95 386.20 RHYvl Lapilli tuff

377.95 - 386.2: Grey, lpl tuff with ~10% calcareous lpl, minor disseminated BI, and disseminated fine grained Ankerite.

<<Alt: 377.95 - 403.47 Weak-Moderate Calcite>>

<<Vein: 383.8 - 384.1 80% Quartz-Carbonate>> Zone with massive QZ-carbonate veining

<<Vein: 385.6 - 385.8 100% Quartz-Carbonate>> Massive QZ-carbonate vein

<<Struc: 378.7 - 385.4 Weak Fault>>

386.20 403.47 RHYvl Lapilli tuff

386.2 - 403.47: Grey, calcareous-lpl tuff with 10-15% disseminated fine-medium grained BI in a fine grained grey ash matrix.

<<Min: 399 - 403.47 0.5% Min: Pyrrhotite>>

<<Vein: 390.85 - 391.15 100% Quartz-Carbonate>> Massive QZ-carbonate vein

<<Struc: 386.35 - 386.36 Weak-Moderate dominant foliation>> Foliation in RHYvl

<<Struc: 397.75 - 397.76 Weak-Moderate dominant foliation>> Foliation in RHYvl

403.47 404.15 RHYc Rhyolite coherant volcanics

403.47 - 404.15: Silicic banded rhyolite. Grades downward into aphanitic rhyolite.

<<Min: 403.47 - 411.45 0.5% Min: Pyrite>>

<<Alt: 403.47 - 414 Trace Calcite>>

404.15 411.45 RHYi Aphanitic Rhyolite (intrusion)

404.15 - 411.45: Light grey to pink, aphanitic rhyolite with local mottled textured. Abundant QZ-veining throughout. Minor disseminated PY.

<<Vein: 404.15 - 411.6 10% Quartz-Carbonate>> QZ-carbonate veining in RHYi. Veins are patchy without sharp contacts. Vary from 1 to 30 cm in core width. Minor disseminated PY.

411.45 414.00 RHYc Rhyolite coherant volcanics

411.45 - 414: Silicic banded rhyolite. Grades upward into aphanitic rhyolite.

<<Min: 411.45 - 463 0.1% Min: Pyrite>>

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

<<Struc: 413.29 - 413.3 Moderate dominant foliation>> Silicic banding in RHYc

414.00 423.70 RHYva Coarse grained to ash tuff

414 - 423.7: Medium grey, fine grained ash tuff.

<<Alt: 414 - 488.05 Weak Calcite>>

<<Vein: 423.1 - 423.6 100% Quartz-Carbonate>> Massive QZ-carbonate vein with wallrock clasts

<<Struc: 417.5 - 421.5 Weak Fault>>

423.70 461.70 RHYvl Lapilli tuff

423.7 - 461.7: Grey, siliceous-lpl tuff in fine grained grey ash matrix. Lpl varies in composition locally from siliceous to calcareous to dark BI-CL and in abundance from ~25% to 5%. Minor bands of ash tuff with gradational contacts.

<<Min: 423.7 - 488.05 0.5% Min: Pyrrhotite>>

<<Vein: 442.74 - 442.78 100% Quartz-Carbonate>> QZ-carbonate vein

<<Vein: 455.3 - 488.05 3% Quartz-Carbonate 70 deg. >> ~1-2 QZ-carbonate veins (1-5 cm wide) per metre.

<<Struc: 423.7 - 426 Weak Fault>>

<<Struc: 440.7 - 440.71 Weak dominant foliation>> Foliation in RHYvl

<<Struc: 443.69 - 443.7 Weak dominant foliation>> Foliation in RHYvl

<<Struc: 444.45 - 444.9 Weak Fault>>

<<Struc: 446.86 - 446.87 Weak-Moderate dominant foliation>> Foliation in RHYvl

461.70 463.00 RHYva Coarse grained to ash tuff

461.7 - 463: Light greenish-brown, BI-MU-QZ schist. Mixed ash tuff and pelitic material?

<<Struc: 461.8 - 461.81 Moderate dominant foliation>> Foliation in RHYva.

463.00 465.25 RHYvl Lapilli tuff

463 - 465.25: Siliceous lpl in a fine grained grey-green ash matrix.

<<Min: 463 - 488.05 1% Min: Pyrite>>

465.25 468.65 RHYc Rhyolite coherant volcanics

465.25 - 468.65: Silicic banded rhyolite.

<<Struc: 466 - 466.6 Weak-Moderate Fault>>

468.65 488.05 RHYvl Lapilli tuff

468.65 - 488.05: Variable anbundance (~5-35%) of siliceous and/or calcareous lpl within fine grained grey-green ash matrix.

<<Struc: 477.18 - 477.19 Weak dominant foliation>> Weakly developed foliation in RHYvl

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

<<Struc: 480.18 - 480.19 Weak dominant foliation>> Weakly developed foliation in RHYvl

488.05 489.55 PEL Equigranular biotite + calcite +/- quartz rock

488.05 - 489.55: BI-CA schist with gradational contacts.

<<Alt: 488.05 - 489.55 Moderate Calcite>>

489.55 501.50 RHYvl Lapilli tuff

489.55 - 501.5: Light grey-green, siliceous-lpl rhyolite tuff. Upper portion of the unit (489.55-498 m) displays weak MU+SI alteration with patchy PY+PO+/-SP mineralization.

<<Min: 489.55 - 498 0.5% Min: Sphalerite>>

<<Min: 489.55 - 498 2% Min: Pyrrhotite>>

<<Min: 489.55 - 501.5 3% Min: Pyrite>>

<<Alt: 489.55 - 498 Weak Muscovite>> Pervasive MU-alteration with increased QZ-veining and patchy PY+PO+/-SP mineralization.

<<Alt: 489.55 - 501.5 Weak Calcite>>

<<Vein: 491.2 - 501.5 15% Quartz-Carbonate>> Series of QZ-carbonate veins. Highest density between 491.2-495.1 m.

<<Struc: 493.44 - 493.45 Weak-Moderate dominant foliation>> Foliation in RHYvl

<<Struc: 500.92 - 500.93 Weak dominant foliation>> Foliation in RHYvl

501.50 503.80 PEL Equigranular biotite + calcite +/- quartz rock

501.5 - 503.8: Laminated BI-CA schist with patchy/blebby CA.

<<Min: 501.5 - 503.8 1% Min: Pyrite>>

<<Alt: 501.5 - 503.8 Moderate-Strong Calcite>>

<<Vein: 502.9 - 503.05 80% Quartz-Carbonate>> Irregular/blebby QZ-carboanate vein

503.80 531.20 RHYvl Lapilli tuff

503.8 - 531.2: Grey, siliceous-lpl rhyolite tuff with a fine grained ash matrix. Locally RHYva or calcareous-lpl tuff.

<<Min: 503.8 - 531.2 0.5% Min: Pyrite>>

<<Min: 503.8 - 531.2 1% Min: Pyrrhotite>>

<<Alt: 503.8 - 601.3 Weak Calcite>>

<<Vein: 531.15 - 531.2 100% Quartz-Carbonate>> QZ-carbonate vein at contact of RHYvl and RHYif.

<<Struc: 509 - 509.2 Weak Fault>>

<<Struc: 513.32 - 513.33 Weak dominant foliation>> Weakly developed foliation in RHYvl

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

<<Struc: 518.67 - 518.68 Weak dominant foliation>> Weakly developed foliation in RHYvl

<<Struc: 527.14 - 527.15 Weak dominant foliation>> Weakly developed foliation in RHYvl

<<Struc: 529.73 - 529.74 Weak dominant foliation>> Weakly developed foliation in RHYvl

531.20 560.50 RHYif feldspar and quartz porphyry intrusions

531.2 - 560.5: Light grey, glassy groundmass, coarse grained subhedral FD and fine grained anhedral QZ (QZ-eyes) phyric rhyolite. Porphyritic intrusion? Appears similar to the RHYcf below the GP4F mineralization horizon. Contacts with RHYv display minor veining and silver MU-alteration.

<<Min: 531.2 - 560.5 3% Min: Pyrite>>

<<Alt: 532.1 - 560.5 Strong Silicification>> Very siliceous FD-phyric RHYif

<<Vein: 531.2 - 560.5 2% Quartz-Carbonate>> ~1 QZ-carbonate veins per metre varying from 1 cm to 1.5 m.

<<Struc: 539.32 - 539.33 Trace dominant foliation>> Weakly developed foliation in RHYif

<<Struc: 542.42 - 542.43 Trace dominant foliation>> Weakly developed foliation in RHYif

<<Struc: 551.52 - 551.53 Trace dominant foliation>> Weakly developed foliation in RHYif

<<Struc: 556.82 - 556.83 Trace dominant foliation>> Weakly developed foliation in RHYif

560.50 563.65 RHYvl Lapilli tuff

560.5 - 563.65: Light green-grey, fine grained ash tuff with calcareous lpl.

<<Min: 560.5 - 563.65 1% Min: Pyrite>>

563.65 579.05 RHYif feldspar and quartz porphyry intrusions

563.65 - 579.05: Light grey, glassy groundmass, coarse grained subhedral FD and fine grained anhedral QZ (QZ-eyes) phyric rhyolite. Porphyritic intrusion? Appears similar to the RHYcf below the GP4F mineralization horizon. Contacts with RHYv display minor veining and silver MU-alteration.

<<Min: 563.65 - 579.05 2% Min: Pyrite>>

<<Alt: 563.65 - 579.05 Strong Silicification>>

<<Vein: 563.65 - 609.5 1% Quartz-Carbonate>> ~1 1 cm wide QZ-carbonate vein per metre

<<Struc: 568.8 - 575 Weak-Moderate Fault>>

579.05 583.77 RHYvl Lapilli tuff

579.05 - 583.77: Light green-grey, fine grained ash tuff with siliceous and calcareous lpl.

<<Min: 579.05 - 583.77 2% Min: Pyrite>>

<<Struc: 581.29 - 581.3 Weak-Moderate dominant foliation>> Foliation in RHYvl

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

583.77 601.30 RHYif feldspar and quartz porphyry intrusions

583.77 - 601.3: Light grey, aphanitic to glassy MU-silica groundmass, coarse grained subhedral FD and fine grained anhedral QZ (QZ-eyes) phyric rhyolite. Porphyritic intrusion? Appears similar to the RHYcf below the GP4F mineralization horizon.

<<Min: 583.77 - 601.3 3% Min: Pyrite>>

<<Min: 583.77 - 601.3 0.5% Min: Pyrrhotite>>

<<Alt: 583.77 - 601.3 Moderate Silicification>>

<<Struc: 589.67 - 589.68 Trace dominant foliation>> Weakly developed foliation in RHYif

<<Struc: 591.88 - 591.89 Trace dominant foliation>> Weakly developed foliation in RHYif

<<Struc: 599.34 - 599.35 Trace dominant foliation>> Weakly developed foliation in RHYif

601.30 609.50 RHYv Rhyolite volcaniclastic

601.3 - 609.5: Light greenish-grey, QZ-phyric, fine grained QZ-MU schist. Local zones with blebby siliceous lpl. Minor disseminated QZ-eyes (round blue QZ-phenocrysts). Lowe portion of the unit displays moderate MU-alteration.

<<Min: 601.3 - 609.5 2% Min: Pyrite>>

<<Min: 601.3 - 609.5 4% Min: Pyrrhotite>>

<<Alt: 601.3 - 609.5 Weak-Moderate Muscovite>>

<<Alt: 601.3 - 609.5 Weak-Moderate Calcite>>

<<Struc: 607.82 - 607.83 Weak-Moderate dominant foliation>> Foliation in RHYv

609.50 610.15 MDSt Rhyolite tuff dominant mudstone

609.5 - 610.15: Dark grey to black, carbonaceous tuff with disseminated QZ-eyes.

<<Min: 609.5 - 614.45 1% Min: Pyrrhotite>>

<<Alt: 609.5 - 610.15 Weak Calcite>>

<<Vein: 609.5 - 614.45 3% Quartz-Carbonate 70 deg. >> ~5-10 ~.5 cm QZ-carbonate veins per metre

610.15 612.83 RHYv Rhyolite volcaniclastic

610.15 - 612.83: Medium grey-green, volcaniclastic dacite/andesite (?) Minor disseminated BI and calcareous veining.

<<Alt: 610.15 - 612.83 Weak-Moderate Calcite>>

612.83 613.60 PEL Equigranular biotite + calcite +/- quartz rock

612.83 - 613.6: Dark green-black, laminated BI-CL-CA schist.

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

<<Alt: 612.83 - 613.6 Moderate Calcite>>

613.60 614.45 RHYv Rhyolite volcaniclastic

613.6 - 614.45: Medium grey-green, MU-CL-CA-BI schist, with disseminated medium grained BI and CA appearing as lpl (?).

<<Alt: 613.6 - 618 Weak Calcite>>

614.45 618.00 RHY undifferentiated rhyolite

614.45 - 618: Strongly MU-SI alteration. Light yellow-green, banded, QZ-MU schist with minor blebby to disseminated PO+SP+PY+/-GL.

<<Min: 614.45 - 618 2% Min: Sphalerite>>

<<Min: 614.45 - 618 1% Min: Pyrite>>

<<Min: 614.45 - 618 2% Min: Pyrrhotite>>

<<Min: 614.45 - 618 0.1% Min: Galena>>

<<Alt: 614.45 - 618 Moderate-Strong Silicification>>

<<Alt: 614.45 - 618 Strong Muscovite>>

<<Vein: 614.45 - 618 5% Quartz-Carbonate>> Zone with strong MU-SI alteration and 5-10 QZ-carbonate veins (may be part of alteration?) per metre. Veining contains blebby bright green chlorite and minro disseminated sulfides.

<<Struc: 617.48 - 617.49 Strong dominant foliation>> Strongly foliated MU-SI altered RHY

618.00 622.30 RHYv Rhyolite volcaniclastic

618 - 622.3: Grey-green, fine grained ash volcaniclastic rhyolite (?). Abundant QZ-carb veining makes texture difficult to determine.

<<Min: 618 - 622.3 1% Min: Pyrrhotite>>

<<Alt: 618 - 622.3 Moderate Calcite>>

<<Vein: 618 - 622.3 25% Quartz-Carbonate>> Abundant small (.2-1 cm wide) QZ-carbonate veins

622.30 624.30 MDSt Rhyolite tuff dominant mudstone

622.3 - 624.3: Dark grey-black, siliceous mudstone. Silica flooding of carbonaceous mudstone?

<<Min: 622.3 - 656.47 2% Min: Pyrrhotite>>

<<Alt: 622.3 - 624.3 Trace Calcite>>

<<Vein: 622.3 - 624.3 10% Quartz-Carbonate>> Silicified mudstone with some distinct QZ-carbonate veins

<<Struc: 623.6 - 623.95 Weak Fault>>

624.30 631.13 RHYva Coarse grained to ash tuff

624.3 - 631.13: Light grey, fine grained ash tuff (QZ-MU schist) with disseminated PO.

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

<<Alt: 624.3 - 650.3 Weak Calcite>>

<<Vein: 624.3 - 631.13 1% Quartz-Carbonate>> Minor ~1-2 cm wide QZ-carbonate veins

<<Struc: 630.62 - 630.63 Weak-Moderate dominant foliation>> Foliation in RHYva

631.13 633.77 MDSt Rhyolite tuff dominant mudstone

631.13 - 633.77: Upper portion of the unit can be characterized as a siliceous mudstone. The lower portion of the unit is an ash tuff with ~5-10% cabonaceous material or clasts of mudstone (fiamme?).

<<Vein: 631.13 - 638.65 3% Quartz-Carbonate>> Minor 1-3 cm wide QZ-carbonate veins with some smaller (.1-.5 cm wide) veins as well.

<<Struc: 633.25 - 633.26 Weak-Moderate dominant foliation>> Foliation in MDSt

633.77 638.65 RHYva Coarse grained to ash tuff

633.77 - 638.65: Grey with speckled black, BI-phyric (medium grained), fine grained ash tuff.

638.65 644.00 RHYvl Lapilli tuff

638.65 - 644: Light green-grey, siliceous-lpl in fine grained ash tuff matrix. Lpl varies from ~5-30%.

<<Vein: 638.65 - 650.3 0.5% Quartz-Carbonate>> Trace ~.1-.5 cm wide QZ-carbonate veins

<<Struc: 643.24 - 643.25 Weak-Moderate dominant foliation>> Foliation in RHYva

644.00 650.30 RHYva Coarse grained to ash tuff

644 - 650.3: Grey with speckled black, BI-phyric (medium grained), fine grained ash tuff.

<<Struc: 650.1 - 650.11 Weak dominant foliation>> Foliation in RHYva

650.30 652.70 MDSc Carbonaceous dominant mudstone

650.3 - 652.7: Black, carbonaceous mudstone with local silicified portion and disseminated PO.

<<Alt: 650.3 - 656.47 Moderate Calcite>>

<<Vein: 650.3 - 656.47 20% Quartz-Carbonate>> Abundant QZ-carbonate veining. Locally ptigmatic structure. As well minor TML+PO+/-CP veining

652.70 656.47 SED undifferentiated Sediment

652.7 - 656.47: Medium green-black, BI-CL-MU-CA-QZ schist. Appears to have local clastic txture. Texture is obscured by QZ-carb veining (locally ptigmatic). Disseminated PO throughout, with trace disseminated CP+TML in veins.

<<Min: 655.65 - 655.95 0.5% Min: Chalcopyrite>>

<<Struc: 656.13 - 656.14 Weak-Moderate dominant foliation>> Foliation in SED

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

656.47 663.21 RHYvl Lapilli tuff

656.47 - 663.21: Light green-grey, siliceous-lpl in fine-grained, ash tuff matrix. Medium-grained biotite ppo, and silicic alteration are localized.

<<Min: 656.47 - 663.21 0.1% Min: Pyrrhotite>>

<<Min: 656.47 - 680.45 0.5% Min: Pyrite>>

<<Alt: 656.47 - 663.21 Weak Silicification>>

<<Alt: 656.47 - 663.21 Weak-Moderate Calcite>>

<<Alt: 656.47 - 663.21 Weak Biotite>> BI ppo.

<<Vein: 662.63 - 662.8 Quartz-Carbonate>> DEF quartz veins with patchy-carbonate, and specks of chlorite.

<<Struc: 657.22 - 657.23 dominant foliation>>

<<Struc: 662.55 - 662.56 dominant foliation>>

663.21 680.45 MDSt Rhyolite tuff dominant mudstone

663.21 - 680.45: Dark grey-black, tuff-dominant mudstone with calcareous banding, and disseminated PY and PO. Disseminated CP is localized.

<<Min: 663.21 - 668.92 3% Min: Pyrrhotite>> Disseminated bands.

<<Min: 663.61 - 664.88 0.5% Min: Chalcopyrite>>

<<Min: 668.92 - 680.45 2% Min: Pyrrhotite>> Disseminated bands.

<<Alt: 663.21 - 678.74 Trace Biotite>>

<<Alt: 663.21 - 679.29 Moderate Calcite>>

<<Alt: 663.21 - 680.45 Trace Chlorite>>

<<Alt: 678.74 - 681.46 Weak Biotite>>

<<Alt: 679.29 - 687 Weak Calcite>>

<<Vein: 663.99 - 664.42 Quartz-Carbonate>> Quartz veins with patches of carbonate.

<<Struc: 663.21 - 663.22 Contact>> RHYvl-MDSt CNT

<<Struc: 665.32 - 665.33 dominant foliation>>

<<Struc: 671 - 671.26 Weak Fault>> Small zones of fractured mudstone with minor gouge (< 10%).

<<Struc: 671.3 - 671.31 dominant foliation>>

<<Struc: 675.31 - 675.32 dominant foliation>>

<<Struc: 677.35 - 677.4 Weak-Moderate Fault>> Sheared-gougey mudstone.

<<Struc: 677.58 - 677.59 dominant foliation>>

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

680.45 691.07 RHYva Coarse grained to ash tuff

680.45 - 691.07: Light green-grey, ash-dominant tuff with siliceous-lpl, and quartz eyes. Fining-upward sequence. Silica-alteration is prominent between 687 - 690.09m; alteration is proximal to the massive quartz vein (690.09-691.07m).

<<Min: 680.45 - 683.39 0.5% Min: Pyrite>>

<<Min: 680.45 - 683.39 1% Min: Pyrrhotite>>

<<Min: 682.91 - 683.39 0.5% Min: Chalcopyrite>> Disseminated bands.

<<Min: 683.39 - 686.43 0.5% Min: Pyrrhotite>>

<<Min: 683.39 - 716 0.1% Min: Pyrite>>

<<Min: 686.43 - 693.24 0.1% Min: Pyrrhotite>>

<<Alt: 686.09 - 686.86 Weak Biotite>>

<<Alt: 687 - 690.09 Moderate Silicification>>

<<Alt: 687 - 691.36 Weak Muscovite>>

<<Alt: 687 - 691.36 Trace Calcite>> Calcite aggregates occur within quartz veins.

<<Vein: 689.03 - 689.09 Quartz-Carbonate>> Quartz vein with patches of carbonate.

<<Vein: 690.09 - 691.07 Quartz-Carbonate>> Fractured quartz vein with calcite FRA and patches.

<<Struc: 680.82 - 680.83 Foliation>>

<<Struc: 683.47 - 683.48 dominant foliation>>

<<Struc: 688.62 - 688.63 Crenulation cleavage>>

691.07 709.08 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

691.07 - 709.08: Medium green-black, biotite altered mudstone with localized bands of relict-limestone (?) Disseminated PO occurs throughout the unit; CP is patchy, and prominent between 696.85 - 696.90m.

<<Min: 693.24 - 696.85 1% Min: Pyrrhotite>> Disseminated bands.

<<Min: 696.85 - 697 5% Min: Chalcopyrite>>

<<Min: 696.85 - 697 10% Min: Pyrrhotite>>

<<Min: 697 - 705.35 2% Min: Pyrrhotite>> Disseminated bands; aggregates within quartz veins.

<<Min: 702 - 702.1 0.1% Min: Chalcopyrite>> Disseminated CP within quartz vein.

<<Min: 705.35 - 714.95 1% Min: Pyrrhotite>>

<<Alt: 691.15 - 694.59 Weak Biotite>>

<<Alt: 691.36 - 708.24 Moderate Calcite>>

<<Alt: 694.59 - 717.3 Trace Biotite>>

<<Alt: 708.24 - 723.13 Moderate-Strong Calcite>>

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

<<Vein: 692.41 - 693.24 Quartz-Carbonate-Sulphide>> Massive quartz veins with calcite FRA, and patches of calcite and pyrrhotite (< 2%).

<<Vein: 702 - 702.1 Quartz-Carbonate-Sulphide 70 deg. >> Quartz-carbonate vein with patches of pyrrhotite.

<<Vein: 704.05 - 704.2 Quartz-Carbonate>> Quartz veins with patchy-carbonate.

<<Struc: 692.02 - 692.03 dominant foliation>>

<<Struc: 698.35 - 698.36 dominant foliation>>

<<Struc: 701.7 - 701.71 dominant foliation>>

<<Struc: 707.72 - 708.49 Trace Fault>> Broken core; minor gouge within fractures.

709.08 723.34 MDSc Carbonaceous dominant mudstone

709.08 - 723.34: Dark grey, carbonaceous mudstone. Localized zones with crenulated-foliation. Biotite alteration (disseminated) increases toward the end of the unit. Upper and lower CNT are gradational.

<<Min: 714.95 - 726.9 0.1% Min: Pyrrhotite>>

<<Min: 716 - 716.42 0.5% Min: Pyrite>> Medium-grained PY within MDS gouge.

<<Min: 716.42 - 741.21 0.1% Min: Pyrite>>

<<Min: 719.06 - 721.26 0.01% Min: Galena>> Trace GL within quartz veins.

<<Alt: 717.3 - 724.56 Weak Biotite>> Disseminated-patchy BI.

<<Alt: 723.13 - 724.16 Weak-Moderate Calcite>> Calcite bands; aggregates occur within the quartz veins.

<<Vein: 714.44 - 714.52 Quartz-Carbonate 64 deg. >> Brecciated quartz-carbonate vein with sub-angular clasts, and traces of pyrrhotite.

<<Vein: 717.96 - 720.58 Quartz-Carbonate 73 deg. >> Quartz-carbonate veins (1-5cm wide) with traces of disseminated sulphides (GL).

<<Vein: 721.1 - 721.25 Quartz-Carbonate 50 deg. >> Quartz vein with patchy-carbonate.

<<Struc: 711.51 - 711.6 Weak Fault>> Sheared MDS; minor gouge.

<<Struc: 712.28 - 712.29 dominant foliation>>

<<Struc: 713.87 - 713.88 dominant foliation>>

<<Struc: 715.94 - 716.42 Moderate-Strong Fault>> MDS gouge with cm-size, brecciated mudstone clasts, and medium-grained pyrite.

<<Struc: 719.98 - 719.99 dominant foliation>>

<<Struc: 723.08 - 723.09 dominant foliation>>

723.34 728.13 RHYvl Lapilli tuff

723.34 - 728.13: Light green-grey, volcaniclastic lapilli tuff with quartz eyes (< 3%). Upper and lower CNT are gradational; biotite alteration occurs near the margins. Minor sulphides (CP+PO+GL) are visible within quartz veins.

<<Min: 726.9 - 727.08 0.5% Min: Sulphosalts>> SS (?) FRA within quartz vein.

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

<<Min: 726.9 - 727.08 0.5% Min: Pyrrhotite>>

<<Min: 726.9 - 727.08 0.1% Min: Galena>>

<<Min: 726.9 - 727.08 0.5% Min: Chalcopyrite>>

<<Alt: 724.16 - 724.56 Moderate Calcite>>

<<Alt: 724.56 - 728.13 Weak Calcite>> Localized within quartz veins; calcite FRA.

<<Alt: 728.04 - 743 Weak Biotite>>

<<Vein: 723.54 - 727.8 Quartz-Carbonate>> Regular-massive quartz veins with patchy-carbonate, and traces of sulphides (PO, CP, + GL).

<<Struc: 725.53 - 725.54 dominant foliation>>

728.13 729.75 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

728.13 - 729.75: Biotite-altered (weak) mudstone intercalated with felsic volcaniclastics, containing quartz eyes.

<<Alt: 728.13 - 730.46 Moderate Calcite>>

729.75 733.40 RHYvx Quartz and/or feldspar crystal tuff

729.75 - 733.4: Quartz-rich, MU-altered RHYvx with quartz eyes (< 3%) and disseminated biotite (10%). Minor intercalated MDS.

<<Alt: 730.46 - 733.4 Trace Calcite>> Disseminated CA; rare banding.

<<Struc: 731.8 - 731.81 Crenulation cleavage>>

733.40 736.30 MDS Carbonaceous Mudstone & Tuffaceous Mudstone

733.4 - 736.3: Mudstone intercalated with felsic volcaniclastics, containing quartz eyes. Moderate FLT from 735 - 736.3m; approx 50% recovered within FLT zone.

<<Alt: 733.4 - 738.76 Weak-Moderate Calcite>> Banded CA; patchy within quartz veins.

<<Vein: 733.65 - 734.9 Quartz-Carbonate 80 deg. >> Quartz veins with patchy-carbonate.

<<Struc: 735 - 736.3 Moderate Fault>> Sheared MDS and gouge, with cm-size, sub-angular quartz-carbonate clasts. ~ 50% recovered.

736.30 743.16 RHYv Rhyolite volcaniclastic

736.3 - 743.16: Volcaniclastic RHY with disseminated biotite (<10%), and biotite ppo. Two massive quartz veins are intercepted between 741.23-741.99m and 742.45-743m; MU alteration and shearing is common along the margins of the veins.

<<Min: 741.21 - 741.69 0.5% Min: Pyrite>>

<<Min: 741.21 - 741.69 2% Min: Pyrrhotite>>

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

<<Min: 741.69 - 747.1 0.1% Min: Pyrite>>

<<Alt: 738.76 - 741.21 Weak Calcite>>

<<Alt: 741.21 - 743.16 Weak-Moderate Calcite>> CA FRA and blebs within quartz veins; CA is pervasive within altered RHY.

<<Alt: 741.99 - 746.76 Weak Muscovite>> Weak MU alteration visible along foliated RHYv. MU alteration is stronger adjacent to the two massive quartz veins.

<<Vein: 741.23 - 741.99 Quartz-Carbonate-Sulphide>> Massive quartz vein with calcite (<5%) and pyrrhotite (2%) FRA.

<<Vein: 742.45 - 743 Quartz-Carbonate>> Massive quartz vein with calcite FRA.

<<Struc: 737.3 - 737.31 dominant foliation>>

<<Struc: 741.14 - 741.15 Foliation>> Carbonate banding.

743.16 746.76 RHYv Rhyolite volcaniclastic

743.16 - 746.76: Light grey, quartz-rich RHYv with quartz eyes, and weak muscovite alteration. Minor FLTing is evident between 745.6-746.3m.

<<Min: 743.16 - 747.1 0.5% Min: Pyrrhotite>> Disseminated blebs-bands; trace disseminated PO within quartz veins.

<<Alt: 743.16 - 746.76 Trace Calcite>>

<<Struc: 743.25 - 743.26 dominant foliation>>

<<Struc: 743.31 - 743.46 Moderate Fault>> Sericitic gouge and shear zone, with mm-size quartz clasts.

<<Struc: 745.34 - 745.35 Crenulation cleavage>>

<<Struc: 745.6 - 746.3 Weak-Moderate Fault>> Sharp boundaries; upper and lower CNT range between 15 - 20 deg. Fractured, MU-altered RHY, with sericitic gouge.

746.76 747.10 PEL Equigranular biotite + calcite +/- quartz rock

746.76 - 747.1: Biotite-rich pelite with quartz-carbonate veining; veins contain traces of disseminated pyrrhotite.

<<Alt: 746.76 - 747.1 Moderate-Strong Calcite>> Pervasive within PEL; patchy-CA within quartz veins.

<<Vein: 746.82 - 747.1 Quartz-Carbonate-Sulphide>> Quartz-carbonate veins with disseminated PO (<1%).

747.10 752.00 RHYvl Lapilli tuff

747.1 - 752: Light green-grey, MU-altered (weak) lapilli tuff. Lapilli range in size from 1-10mm wide; localized zones contain up to 30% lapilli. Quartz eyes are rare. Minor FLTing is prominent throughout the unit.

<<Min: 747.1 - 752.01 0.5% Min: Pyrite>> FRA within FLT zone (weak); trace FD throughout RHY.

<<Min: 747.1 - 752.01 0.5% Min: Pyrrhotite>> Localized FRA throughout weakly-faulted RHY; disseminated blebs within quartz-carbonate veins.

<<Alt: 747.1 - 752.01 Weak Calcite>> CA alteration within lapilli; FRA.

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

<<Alt: 747.1 - 752.9 Weak Muscovite>> Weak MU alteration within lapilli tuff; alteration is most prominent within the sheared-FLT zones, and along the margins of quartz-carbonate veins.

<<Struc: 747.18 - 749.65 Weak Fault>> Several zones of incompetent, sheared-fractured RHY with occasional bands of sericitic gouge.

<<Struc: 749.95 - 749.96 Crenulation cleavage>>

752.00 755.55 MAFt Mafic Volcaniclastics

752 - 755.55: Medium green, biotite-rich, mafic volcaniclastics. Quartz-carbonate veins contain traces of disseminated pyrrhotite.

<<Min: 752.01 - 755.55 0.5% Min: Pyrrhotite>> Disseminated PO blebs within quartz veins.

<<Min: 752.01 - 758.15 0.1% Min: Pyrite>>

<<Alt: 752.01 - 755.55 Weak-Moderate Calcite>> CA is pervasive throughout the mafic volcaniclastics; CA is stronger within quartz-carbonate veins, and FRA.

<<Vein: 752.01 - 752.05 Quartz-Carbonate-Sulphide 50 deg. >> Quartz-carbonate vein with disseminated PY+PO (<2%).

<<Vein: 752.56 - 752.72 Quartz-Carbonate-Sulphide>> Massive quartz-carbonate vein with dissseminated PO (<1%).

<<Vein: 752.8 - 754.38 Quarzt-Chlorite-Carbonate>> DEF quartz veins with patchy-carbonate, chloritic blebs, and trace disseminated pyrrhotite.

<<Vein: 755.33 - 755.46 Quarzt-Chlorite-Carbonate>> Quartz-carbonate vein with chloritic blebs, and traces of disseminated pyrite.

<<Struc: 754.35 - 754.36 Foliation>>

755.55 756.43 RHYvl Lapilli tuff

755.55 - 756.43: Quartz-rich, volcaniclastic-lapilli tuff with disseminated biotite alteration (weak), and trace disseminated pyrrhotite.

<<Min: 755.55 - 758.15 0.5% Min: Pyrrhotite>>

<<Alt: 755.55 - 756.43 Weak Calcite>>

<<Alt: 755.55 - 756.43 Weak Biotite>> 5-10% disseminated biotite.

<<Vein: 756.42 - 758.15 Quartz-Carbonate 75 deg. >> Quartz-carbonate banding within PEL.

<<Struc: 755.7 - 755.75 Weak-Moderate Fault>> Gouge-crumbled RHY.

756.43 758.15 PEL Equigranular biotite + calcite +/- quartz rock

756.43 - 758.15: Biotite-rich pelite intercalated with minor felsic volcaniclastics. Quartz-carbonate banding is common throughout the unit.

<<Alt: 756.43 - 758.15 Weak-Moderate Calcite>>

<<Struc: 757.07 - 757.08 dominant foliation>>

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

758.15 762.45 RHYvl Lapilli tuff

758.15 - 762.45: Light green-grey, volcaniclastic lapilli tuff intercalated with minor pelite. Disseminated biotite alteration (weak), and trace disseminated pyrrhotite occur throughout the unit; quartz eyes are rare (<2%). Pyrite FRA.

<<Min: 758.15 - 762.45 0.5% Min: Pyrite>>

<<Min: 758.15 - 762.45 1% Min: Pyrrhotite>> Disseminated-foliated PO.

<<Alt: 758.15 - 762.45 Weak Calcite>> Disseminated-blebs.

<<Alt: 758.15 - 762.45 Trace Biotite>> Trace-weak biotite alteration.

<<Vein: 761.31 - 761.46 Quartz-Carbonate>> Quartz-carbonate veins with trace disseminated PO.

<<Vein: 762.35 - 762.4 Quarzt-Chlorite-Carbonate>> Quartz-carbonate vein with chloritic blebs.

762.45 762.83 PEL Equigranular biotite + calcite +/- quartz rock

<<Min: 762.45 - 771 0.5% Min: Pyrrhotite>>

<<Min: 762.45 - 783 0.1% Min: Pyrite>>

<<Alt: 762.45 - 762.83 Weak-Moderate Calcite>>

762.83 763.49 RHYvl Lapilli tuff

<<Alt: 762.83 - 763.49 Weak Calcite>> Quartz-carbonate veining.

<<Alt: 762.83 - 763.49 Trace Biotite>>

763.49 764.00 PEL Equigranular biotite + calcite +/- quartz rock

763.49 - 764: Biotite-rich pelite intercalated with minor felsic volcaniclastics.

<<Alt: 763.49 - 764 Weak-Moderate Calcite>> Quartz-carbonate veining.

764.00 780.67 RHYvl Lapilli tuff

764 - 780.67: Volcaniclastic ash-rich, lapilli tuff intercalated with minor pelitic sediments. Disseminated biotite, biotite ppo, and quartz eyes (localized) are visible throughout the unit.

<<Alt: 764 - 768.75 Weak Calcite>> Disseminated-blebs of CA; quartz-carbonate veining.

<<Alt: 764 - 773.9 Weak-Moderate Biotite>> Trace-weak disseminated biotite, with disseminated-patchy, moderate zones.

<<Alt: 768.75 - 773.9 Weak-Moderate Calcite>> Disseminated blebs-banded.

<<Alt: 773.9 - 779.6 Trace Calcite>> Trace disseminated CA; banded within rare pelitic sediments.

<<Alt: 773.9 - 780.67 Weak Biotite>> Trace-weak disseminated biotite.

<<Alt: 779.6 - 780.67 Weak Calcite>>

<<Vein: 765.89 - 768.03 Quartz-Carbonate>> DEF-FOD quartz-carbonate veins with trace chlorite FRA.

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

<<Vein: 770.55 - 774.47 Quartz-Carbonate>> DEF-FOD quartz-carbonate veins (0.1-5cm wide).

<<Vein: 775.85 - 776.4 Quartz-Carbonate>> Quartz veins (2-8cm wide) with patchy-carbonate.

<<Vein: 777.75 - 779.49 Quartz-Carbonate>>

<<Struc: 764.11 - 764.12 Foliation>> Biotite banding.

<<Struc: 769.06 - 769.07 dominant foliation>>

<<Struc: 770.39 - 770.4 dominant foliation>>

<<Struc: 772.86 - 772.87 dominant foliation>>

<<Struc: 777.42 - 777.43 dominant foliation>>

<<Struc: 778.13 - 778.44 Moderate Fault>> RHY clay-gouge containing mm-size quartz clasts, and disseminated biotite; ~ 70% recovered.

780.67 780.92 PEL Equigranular biotite + calcite +/- quartz rock

<<Alt: 780.67 - 780.92 Weak-Moderate Calcite>>

<<Struc: 780.82 - 780.83 dominant foliation>>

780.92 786.87 RHYvl Lapilli tuff

780.92 - 786.87: Volcaniclastic ash-rich, lapilli tuff intercalated with minor, ankerite-altered, pelitic sediments. Disseminated biotite (<10%) alteration is weak; quartz eyes are rare (<1%). Minor FLTing below 786m.

<<Min: 780.92 - 786.87 0.5% Min: Pyrrhotite>> Disseminated PO; mm-size blebs within quartz veins.

<<Min: 783 - 783.1 0.5% Min: Chalcopyrite>> Disseminated-FRA within quartz vein.

<<Min: 783 - 784.8 0.5% Min: Pyrite>> Fine to coarse-grained PY visible on fractured surfaces.

<<Min: 783.53 - 783.85 0.1% Min: Sulphosalts>> Black, fine-grained SS(?) FRA within massive quartz vein.

<<Min: 784.8 - 792.6 0.1% Min: Pyrite>> Rare FRA.

<<Alt: 780.92 - 786.87 Weak Calcite>> Disseminated blebs-bands.

<<Alt: 780.92 - 788.19 Weak Biotite>>

<<Alt: 784.8 - 785.1 Weak Ankerite>> Disseminated ankerite(?) blebs within intercalated pelite-felsic volcaniclastics.

<<Vein: 782.24 - 782.34 Quartz-Carbonate>> Quartz-carbonate veins with chlorite FRA.

<<Vein: 783 - 783.25 Quartz-Carbonate>> Quartz-carbonate vein with minor disseminated chlorite, chalcopyrite, and pyrrhotite.

<<Vein: 783.55 - 783.85 Quartz-Carbonate>> Massive quartz-carbonate vein with trace chlorite, PY, and SS (?) FRA.

<<Struc: 781.15 - 781.22 Weak Fault>> Fractured RHY.

<<Struc: 781.57 - 781.58 dominant foliation>>

<<Struc: 786.15 - 786.21 Moderate Fault>> Sericitic-gouge with disseminated biotite, and mm-size quartz and RHY clasts.

<<Struc: 786.7 - 786.87 Moderate-Strong Fault>> Clay-gouge and broken RHY; ~ 50% recovered.

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

786.87 788.19 RHYva Coarse grained to ash tuff

786.87 - 788.19: Ash-dominant, volcaniclastic RHY with weak biotite alteration, and minor intercalated PEL.

<<Alt: 786.87 - 788.19 Weak-Moderate Calcite>>

<<Vein: 787.01 - 787.12 Quarzt-Chlorite-Carbonate>> Quartz vein with patchy-carbonate, and chloritic blebs.

788.19 788.74 PEL Equigranular biotite + calcite +/- quartz rock

788.19 - 788.74: Minor intercalated felsic volcaniclastics.

<<Alt: 788.19 - 788.74 Moderate Calcite>>

<<Struc: 788.32 - 788.33 dominant foliation>>

788.74 805.77 RHYva Coarse grained to ash tuff

788.74 - 805.77: Light green volcaniclastic ash tuff with biotite ppo, trace disseminated bioite, and localized lapilli; hairline PY FRA and banding.

<<Min: 792.6 - 795.4 1% Min: Pyrite>> Med-grained PY visible on fractured surfaces; disseminated blebs occur within quartz veins.

<<Min: 792.65 - 793.74 0.5% Min: Pyrrhotite>> Disseminated blebs-FRA within quartz veins.

<<Min: 795.4 - 798.83 0.1% Min: Pyrite>> Trace disseminated PY; rare FRA.

<<Min: 798.83 - 800.38 2% Min: Pyrite>> PY veinlet, and disseminated PY along foliation.

<<Min: 800.38 - 807.35 0.1% Min: Pyrite>>

<<Min: 805.06 - 814.26 0.5% Min: Pyrrhotite>> Disseminated PO within RHY; blebs within quartz veins.

<<Alt: 788.74 - 793.77 Weak Calcite>>

<<Alt: 788.74 - 793.77 Trace Biotite>>

<<Alt: 793.77 - 794.22 Moderate Biotite>>

<<Alt: 793.77 - 797.5 Weak-Moderate Calcite>>

<<Alt: 794.22 - 795.64 Weak Biotite>> Trace-weak, disseminated-patchy biotite.

<<Alt: 795.64 - 797.18 Weak-Moderate Biotite>>

<<Alt: 797.18 - 804.91 Trace Biotite>> Trace-weak, disseminated-patchy biotite.

<<Alt: 797.5 - 811.4 Weak Calcite>> Disseminated-banded CA; more intense within quartz-carbonate veins and pelitic sediments.

<<Alt: 804.91 - 805.68 Weak Biotite>>

<<Alt: 805.68 - 807.4 Weak Biotite>> Patches of disseminated biotite.

<<Vein: 791.17 - 792.98 Quartz-Carbonate>> DEF quartz-carbonate veins; rare veins contain sub-angular, brecciated quartz clasts.

<<Vein: 793.01 - 793.5 Quartz>> Massive quartz veins with calcite FRA and disseminated PO (<0.5%).

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

<<Vein: 798.87 - 799.37 Quartz-Carbonate>> Quartz-carbonate veins with trace chlorite and pyrite; pyrite veinlets.

<<Struc: 791.26 - 791.27 Foliation>>

<<Struc: 795.06 - 795.07 dominant foliation>>

<<Struc: 798.5 - 798.51 dominant foliation>>

<<Struc: 802.8 - 802.81 dominant foliation>>

<<Struc: 803.78 - 803.79 dominant foliation>>

<<Struc: 805.4 - 805.41 dominant foliation>>

805.77 809.40 RHYvl Lapilli tuff

805.77 - 809.4: Light green, volcaniclastic lapilli tuff with trace-weak disseminated biotite, and trace disseminated pyrite.

<<Min: 807.35 - 811.4 1% Min: Pyrite>>

<<Alt: 807.4 - 809.4 Trace Biotite>>

<<Vein: 807.04 - 807.11 Quartz-Carbonate>> DEF quartz vein with patchy-carbonate.

<<Struc: 806.4 - 806.41 dominant foliation>>

<<Struc: 808.7 - 808.71 dominant foliation>>

809.40 810.04 PEL Equigranular biotite + calcite +/- quartz rock

<<Struc: 809.4 - 809.41 Contact>> RHYvl-PEL CNT.

<<Struc: 809.65 - 809.66 dominant foliation>>

810.04 811.40 RHYvl Lapilli tuff

810.04 - 811.4: Trace disseminated pyrite.

<<Alt: 810.04 - 811.4 Trace Biotite>>

<<Struc: 811.24 - 811.25 dominant foliation>>

811.40 814.26 PEL Equigranular biotite + calcite +/- quartz rock

811.4 - 814.26: Pelite intercalated with biotite-altered, felsic volcaniclastics (~30%). Massive quartz vein from 811.64-811.91m.

<<Min: 811.4 - 818.15 0.5% Min: Pyrite>>

<<Alt: 811.4 - 814.26 Weak-Moderate Calcite>> Disseminated-banded.

<<Vein: 811.64 - 811.91 Quartz>> Massive quartz vein with patchy-carbonate; carbonate contains disseminated pyrrhotite, pyrite, and chlorite.

<<Vein: 813.93 - 814.9 Quartz-Carbonate 80 deg. >>

<<Struc: 812.22 - 812.23 dominant foliation>>

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

814.26 820.30 RHYva Coarse grained to ash tuff

814.26 - 820.3: Light grey-green, biotite-altered (weak) ash tuff intercalated with minor pelitic sediments. Minor FLT from 818.64-819.1m.

<<Min: 815.45 - 834 0.5% Min: Pyrrhotite>> Disseminated PO throughout interval; blebs within quartz veins.

<<Min: 818.15 - 834 0.1% Min: Pyrite>> Disseminated PY; trace FRA within FLT (826.39-827.75m).

<<Alt: 814.26 - 816.1 Trace Calcite>> Trace disseminated CA within bands and quartz veins.

<<Alt: 814.26 - 820.3 Weak Biotite>> Trace-weak, disseminated-patchy biotite.

<<Alt: 816.1 - 816.6 Weak-Moderate Calcite>> Banded CA; blebs within quartz veins.

<<Alt: 816.6 - 819.82 Weak Calcite>>

<<Alt: 819.82 - 821.26 Weak Ankerite>>

<<Alt: 819.82 - 821.45 Weak-Moderate Calcite>> Banded-blebs.

<<Vein: 815.16 - 815.3 Quartz-Carbonate>> Massive DEF quartz vein with patchy-carbonate, and traces of chlorite, biotite, and pyrite.

<<Vein: 815.45 - 815.52 Quartz>> Quartz veins with disseminated calcite and chlorite.

<<Vein: 816.34 - 816.6 Quartz>> Massive quartz veins with blebby-calcite.

<<Struc: 814.26 - 814.27 Contact>> PEL-RHYva CNT.

<<Struc: 815.78 - 815.79 dominant foliation>>

<<Struc: 818.64 - 819.1 Weak-Moderate Fault>> Clay-gouge, and fractured RHY.

820.30 821.26 PEL Equigranular biotite + calcite +/- quartz rock

820.3 - 821.26: Biotite-rich pelite intercalated with felsic volcaniclastics (<20%). Minor ankerite alteration.

821.26 834.00 RHYva Coarse grained to ash tuff

821.26 - 834: Trace-weak biotite alteration (disseminated); intercalated with minor pelitic sediments. FLTing between 822.77-823.03m, and 826.39-827.75m. Localized quartz-rich lapilli.

<<Alt: 821.26 - 830 Trace Biotite>>

<<Alt: 821.45 - 823.73 Weak Calcite>> Disseminated blebs-bands.

<<Alt: 823.73 - 828.5 Weak-Moderate Calcite>> Banded-pervasive; quartz-carbonate veins.

<<Alt: 828.5 - 834 Weak Calcite>> Disseminated-pervasive; rare FRA.

<<Alt: 830 - 831.62 Weak Biotite>>

<<Alt: 831.62 - 834 Trace Biotite>>

<<Vein: 826.8 - 827.12 Quartz-Carbonate>> Quartz-carbonate veins, and subrounded, quartz-carbonate clasts within FLT BRX.

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

<<Vein: 827.76 - 828 Quartz-Carbonate>> Massive quartz-carbonate vein, intercepted by a DEF tourmaline veinlet sub-parallel TCA. Trace BI and MU FRA.

<<Vein: 829.09 - 831.16 Quartz-Carbonate>> Cm-size quartz-carbonate veins, parallel to foliation.

<<Struc: 822.29 - 822.3 dominant foliation>>

<<Struc: 822.76 - 823.03 Weak-Moderate Fault>> Sharp upper and lower CNT. Clay-gouge, with pulverized RHY. FLT is most intense between 822.76-822.86m.

<<Struc: 824.47 - 824.48 Crenulation cleavage>>

<<Struc: 825.93 - 825.94 dominant foliation>>

<<Struc: 826.39 - 827.75 Weak Fault>> FLT BRX: sheared-RHY to gouge matrix with 1-20 mm-size, subrounded quartz and RHY clasts. Trace disseminated PY within gouge. FLT is weaker-less competent along outer margins.

<<Struc: 830.23 - 830.24 dominant foliation>>

<<Struc: 833.74 - 833.75 dominant foliation>>

End of Hole @ 834