

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

Prospect:	Krakatoa	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Roger Hulstein
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	5/7/2016
UTM Easting	414914.6391	Core Size:	HQ3	Azimuth:	36.3	Date Logging Complete:	5/11/2016
UTM Northing:	6815008.8992	Casing Pulled?:	Yes	Dip:	-65	Drill Company:	Hytech
UTM Elev. (m):	1386.364	Casing Depth (m):	24	Length (m):	240	Drill Rig:	Tech 5000
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	5/6/2016
Local Northing:		Cemented?:	Yes	Core Storage Loc.:	KZK Camp	Drill Completed:	5/10/2016
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Resource Definition
Comments:						Parent Hole:	

K16-339 replaces K16-338 which was abandoned at 76.4m due excessive deviation. The drill hole was successful in intersecting the Krakatoa Main lens (145.62 - 173.60 m). The overall stratigraphic package and style of mineralization is very similar to adjacent drill holes although obvious RHYi is absent. A massive quartz vein was intersected from 127.15 - 144.26 m (approx 75% quartz) which may be related to the RHYi unit.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-65	34.9	1.4	36.3	APS	Chris Hughes	5/6/2016		<input checked="" type="checkbox"/>	Rig aligned to true north (measured azimuth). Grid convergence of 1.4 deg applied to correct to UTM azimuth.
30	-65.8	12.8	22.1	34.9	ReflexEZS	Hytech	5/6/2016	5869	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
54	-66	12	22.1	34.1	ReflexEZS	Hytech	5/6/2016	5781	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
81	-66.6	11	22.1	33.1	ReflexEZS	Hytech	5/7/2016	5777	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
105	-67.5	5.9	22.1	28	ReflexEZS	Hytech	5/7/2016	5859	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth. Azimuth may be off due to magnetotellurics - sulfides at 105 m are not especially magnetic and magnetic field is 'as usual'.
111	-67.6	11.7	22.1	33.8	ReflexEZS	Hytech	5/7/2016	5818	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
135	-68.6	9	22.1	31.1	ReflexEZS	Hytech	5/8/2016	5816	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
159	-69	9.3	22.1	31.4	ReflexEZS	Hytech	5/8/2016	5689	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
183	-69.4	10.8	22.1	32.9	ReflexEZS	Hytech	5/8/2016	5785	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
207	-69.8	10.6	22.1	32.7	ReflexEZS	Hytech	5/8/2016	5782	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
240	-69.6	6.5	22.1	28.6	ReflexEZS	Hytech	5/9/2016	5721	<input checked="" type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description			From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
0.00	24.99	OVBN	Overburden											
24.99	25.50	OJ	Heavily disseminated sulphides and/or stringer style mineralization in proximal altered rock	green	FMG	24.99	25.50	0.51	B00291086	0.911	157	0.5	2.13	7.92
24.99 - 25.5: Core marker interval 24.0-25.5m: 0.93m core recovered of which the upper 0.42 m is considered to be felsic boulders and the lower 0.51m in situ sulfides. Sulfide interval followed by RHY rubble (<10 cm recovered: 25.5-27.0m), followed by MAFI from 27.0m to xx. 24.99-25.06 (2 pieces) is typical OB mineralization with buckshot texture. 25.06-25.50m: more typical OJ mineralization, noncalcareous, 10 cm pyrrhotite rich section and most of unit has 10-20% dark chlorite, blebs - diss py and pyrite buckshot texture.														
<<Min: 24.99 - 25.5 3% Min: Sphalerite>> concentrated in 7cm section of typical OB														
<<Min: 24.99 - 25.5 30% Min: Pyrite>> and diss - buckshot														
<<Min: 24.99 - 25.5 4% Min: Pyrrhotite>> wispy bands over 10cm width														
<<Min: 24.99 - 25.5 0.1% Min: Galena>>														
<<Min: 24.99 - 25.5 3% Min: Chalcopyrite>>														
<<Alt: 24.99 - 25.5 Weak-Moderate Chlorite>> crude bands, patches and blebs														
<<Alt: 24.99 - 25.5 Weak Calcite>> 7cm of typical OB mineralization contains calcite, rest of chlorite OJ unit is non calcareous.														
<<Struc: 25.06 - 25.39 Moderate-Strong Foliation>> sulfide banding metallurgical														
25.50	27.00	RHY	undifferentiated rhyolite	cream		25.50	27.00	1.50	B00291087	0.008	0.7	0.01	-0.01	0.03
25.5 - 27: <10 cm core recovered. Same lithological sequence as K16-337: OB-RHY-MAFi.														
<<Min: 25.5 - 27 0.1% Min: Pyrrhotite>> next to no core recovery														
<<Alt: 25.5 - 27 Moderate Calcite>>														
<<Alt: 25.5 - 30.7 Moderate-Strong Chlorite>>														
<<Struc: 25.5 - 28.5 Weak-Moderate Fault>> Poor core recovery; due to proximity to surface, driller error or fault zone??														
27.00	97.82	MAFi	Mafic Intrusions (primarily footwall mafic intrusion)	green		27.00	28.50	1.50	B00291088	0.012	0.8	-0.01	-0.01	0.02
27 - 97.82: 27-31.5: has what was formerly called disseminated 'leucoxene' - 1 to <1mm buff light brown porphyroblastic crystals. Lower contact marked by increase in pyrite, texture massive, less banded - foliated and 0.5-1.0cm light green clay gouge contact at 32 degrees. Very sharp contact indeed!														
<<Min: 27 - 97.82 0.01% Min: Pyrite>> trace py!														
<<Alt: 27 - 29.8 Trace Biotite>>														
28.50	30.00	1.50	B00291089	0.009	0.4	-0.01	-0.01	0.02						
30.00	31.50	1.50	B00291090	0.008	0.6	-0.01	-0.01	0.01						

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Alt: 27 - 43.4 Moderate Calcite>>			31.50	33.00	1.50	B00291091	0.007	-0.3	-0.01	-0.01	0.01
<<Alt: 29.8 - 36.45 Moderate Biotite>>	biotite increases in chloritic fault zone		33.00	34.00	1.00	B00291092	0.007	2.2	0.01	0.02	-0.01
<<Alt: 30.7 - 33.2 Moderate-Strong Chlorite>>	Dense dark green chlorite (talc-serpentine?), associated with faulting and calcite veining. Might be original??		34.00	35.00	1.00	B00291093	0.007	-0.3	-0.01	-0.01	-0.01
<<Alt: 33.2 - 73.9 Weak-Moderate Biotite>>			89.20	90.70	1.50	B00291094	0.009	-0.3	-0.01	-0.01	0.01
<<Alt: 33.2 - 97.76 Moderate Chlorite>>	patchy but always present.		90.70	92.20	1.50	B00291095	0.007	-0.3	-0.01	-0.01	0.02
<<Alt: 43.4 - 57 Weak-Moderate Calcite>>			92.20	93.50	1.30	B00291096	0.006	0.3	-0.01	-0.01	0.02
<<Alt: 57 - 73.6 Moderate Calcite>>			93.50	95.00	1.50	B00291097	0.005	-0.3	-0.01	-0.01	0.01
<<Alt: 73.6 - 97.82 Moderate-Strong Calcite>>			95.00	96.35	1.35	B00291098	0.007	0.3	-0.01	-0.01	0.01
<<Alt: 73.9 - 80 Moderate-Strong Biotite>>			96.35	97.82	1.47	B00291099	0.01	0.6	-0.01	-0.01	0.03
<<Alt: 80 - 81.4 Weak-Moderate Biotite>>											
<<Alt: 81.4 - 84.6 Moderate-Strong Biotite>>											
<<Alt: 84.6 - 97.53 Weak-Moderate Biotite>>											
<<Alt: 97.53 - 97.82 Moderate-Strong Biotite>>	Biotite content picks up near lower contact, medium grained										
<<Vein: 29 - 29.15 45% Quartz-Carbonate 45 deg. >>											
<<Vein: 29 - 75 5% Calcite>>	occasionally foliaform.										
<<Vein: 33.25 - 33.35 100% Quartz-Carbonate>>	in fault zone										
<<Vein: 33.35 - 97.56 5% Calcite>>	average of 5% clacite veinlets crosscutting and foliaform, intensity increases within fault - shear zones.										
<<Vein: 80 - 80.6 70% Quartz-Carbonate 35 deg. >>	brecciated vein in fault zone. Lower contact at 35 deg.										
<<Struc: 27 - 28.5 Moderate-Strong dominant foliation>>											
<<Struc: 28.5 - 29 Moderate dominant foliation>>	unusual steep foliation, due to nearby faulting?										
<<Struc: 29 - 29.15 Weak-Moderate Fault>>	Shearing and qtz-calcite vein.										
<<Struc: 29.15 - 33 Moderate-Strong Fault>>	moderate and low angle shear planes, locally with slicks on chlorite and or calcite vein surfaces. Zones of core rubble, calcite and fracture and breccia filling. Crushed core but no real gouge recovered. Trace hematite on sheared surfaces.										
<<Struc: 33 - 34.6 Fault>>											
<<Struc: 34 - 35 Moderate dominant foliation>>											
<<Struc: 37.7 - 39 Moderate dominant foliation>>											
<<Struc: 42.1 - 42.4 Moderate Fault>>	broken core, missing core, trace hematite on sheared surfaces										
<<Struc: 47 - 48 Weak-Moderate dominant foliation>>											
<<Struc: 49 - 49.55 Weak Fault>>	0.5 cm gouge crushed zones parallel to foliation and at low angle (10deg).										
<<Struc: 52.9 - 54.3 Moderate dominant foliation>>											
<<Struc: 58 - 58.2 Weak Fault>>											
<<Struc: 64.21 - 64.35 Moderate-Strong Fault>>											

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %		
<<Struc: 79.33 - 81.11 Strong Fault>> Significant fault zone.													
<<Struc: 90.61 - 94.87 Moderate-Strong Shear>> Low angle shear, mottled texture is obliterated, calcite veined.													
<<Struc: 94.87 - 96.8 Moderate-Strong dominant foliation>>													
<<Struc: 97.2 - 97.3 Moderate-Strong dominant foliation>>													
<<Struc: 97.75 - 97.85 Intense Contact>>													
97.82	100.00	OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	FMG	97.82	98.31	0.49	B00291102	1.65	308	0.54	3.16	13.4
97.82 - 100: Typical massive OB, faint - crude banding. Sharp contacts conformable to foliation. Upper contact marked by 0.5cm gouge.													
<<Min: 97.82 - 97.87 5% Min: Pyrrhotite>> at upper contact													
<<Min: 97.82 - 98.31 25% Min: Sphalerite>>													
<<Min: 97.82 - 98.31 50% Min: Pyrite>>													
<<Min: 97.82 - 98.31 5% Min: Galena>>													
<<Min: 98.31 - 100 12% Min: Sphalerite>>													
<<Min: 98.31 - 100 60% Min: Pyrite>>													
<<Min: 98.31 - 100 2% Min: Galena>>													
<<Alt: 97.82 - 98.31 Weak Calcite>> mostly in thin fractures, weakly diss.													
<<Alt: 98.31 - 100 Strong Calcite>> cc forms part of the groundmass													
<<Struc: 97.85 - 98.06 Weak Foliation>>													
100.00	102.23	RHY	undifferentiated rhyolite	green	100.00	101.00	1.00	B00291105	0.026	1.7	-0.01	-0.01	0.02
100 - 102.23: Bleached, qtz-sericite altered.													
<<Min: 100 - 102.23 0.01% Min: Pyrite>>													
<<Alt: 100 - 102.23 Moderate-Strong Muscovite>> fine muscovite - sericite folia													
<<Alt: 100 - 102.23 Trace Calcite>>													
<<Struc: 100 - 101.2 Moderate-Strong dominant foliation>>													
<<Struc: 101.2 - 102 Moderate Fault>> Missing core and broken core, trace gouge on foliation.													
<<Struc: 102.2 - 102.23 Moderate-Strong Contact>> contact between RHY and OJ													

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description			From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
102.23	102.81	OJ	Heavilly disseminated sulphides and/or stringer style mineralization in proximal altered rock	green	MG	102.23	102.81	0.58	B00291107	1.32	99.2	1.04	0.3	5.11
102.23 - 102.81: Green dense chlorite banded OJ with buckshot pyrite. Trace diss pyrrhotite. Contacts parallel with foliation. Lower contact marked by absence of chlorite.														
<<Min: 102.23 - 102.81 3% Min: Sphalerite>> <<Min: 102.23 - 102.81 15% Min: Pyrite>> <<Min: 102.23 - 102.81 3% Min: Pyrrhotite>> <<Min: 102.23 - 102.81 3% Min: Chalcopyrite>> <<Alt: 102.23 - 102.81 Strong Chlorite>> <<Struc: 102.23 - 102.87 Moderate-Strong dominant foliation>> <<Struc: 102.8 - 102.82 Moderate Contact>> Contact markd by decrease in chlorite and sulfides														
102.81	103.38	RHY	undifferentiated rhyolite	green	FMG	102.81	103.38	0.57	B00291108	0.315	47.7	0.11	0.47	1.89
102.81 - 103.38: Light green sericite-muscovite altered rhyolite.														
<<Min: 102.81 - 103.38 2% Min: Sphalerite>> <<Min: 102.81 - 103.38 5% Min: Pyrite>> <<Min: 102.81 - 103.38 0.1% Min: Galena>> <<Alt: 102.81 - 103.38 Moderate-Strong Muscovite>> <<Struc: 102.82 - 103.57 Moderate-Strong dominant foliation>> foliation parallel to banded rhyolite														
103.38	104.81	OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite		FMG	103.38	104.81	1.43	B00291109	1.07	188	0.13	1.94	10
103.38 - 104.81: Typical homogenous OB, sharp contacts, parallel to foliation, with traces of gouge.														
<<Min: 103.38 - 104.81 20% Min: Sphalerite>> <<Min: 103.38 - 104.81 65% Min: Pyrite>> <<Min: 103.38 - 104.81 3% Min: Galena>> <<Alt: 103.57 - 104.95 Strong Calcite>> forms part of the groundmass <<Struc: 103.56 - 103.58 Moderate-Strong Contact>> sharp contact <<Struc: 103.58 - 104.95 Weak Foliation>> banded sulfides														

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description			From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
104.81	107.40	OJ	Heavilly disseminated sulphides and/or stringer style mineralization in proximal altered rock	green	MCG	104.81	106.00	1.19	B00291110	0.104	14.9	0.1	0.15	2.76
104.81 - 107.4: Predominently OJ but unit is sheared and incorporates clasts of OB (total 30 cm in interval) and MAFi (104.81-105.01m & clasts throughout unit. Unit appears to have been originally MAFi, now sheared, mineralized and chloritized.														
<<Min: 104.81 - 106 5% Min: Sphalerite>>														
<<Min: 104.81 - 106 10% Min: Pyrite>>														
<<Min: 104.81 - 106 0.5% Min: Chalcopyrite>>														
<<Min: 106 - 108 5% Min: Sphalerite>>														
<<Min: 106 - 108 25% Min: Pyrite>> shear zone with OB clasts in sheared MAFi and OJ														
<<Min: 106 - 108 0.1% Min: Galena>>														
<<Min: 106 - 108 3% Min: Chalcopyrite>>														
<<Alt: 104.81 - 108 Moderate-Strong Chlorite>>														
<<Alt: 104.95 - 105.18 Strong Calcite>>														
<<Alt: 105.18 - 108 Weak Calcite>>														
<<Struc: 104.9 - 105 Moderate-Strong Contact>> sheared contact														
<<Struc: 105 - 105.2 Moderate dominant foliation>>														
<<Struc: 105.4 - 106.6 Weak-Moderate Shear>>														
<<Struc: 106.6 - 108.1 Moderate-Strong Shear>>														
107.40 108.00 No Core No Core														
108.00	111.00	RHYc	Rhyolite coherent volcanics	green										
108 - 111: Light green sericite - muscovite altered rhyolite, has silicic bands = RHYc.														
<<Min: 108 - 111 0.1% Min: Sphalerite>>														
<<Min: 108 - 111 5% Min: Pyrite>> concentrated in this bands and wisps along foliation.														
<<Alt: 108 - 111 Moderate-Strong Muscovite>> fine muscovite - sericite alteration														
<<Alt: 108 - 111 Weak-Moderate Calcite>>														
<<Struc: 108.1 - 109.2 Weak-Moderate Shear>>														
<<Struc: 109.2 - 111 Moderate-Strong Foliation>>														
<<Struc: 109.9 - 111 Moderate Fault>> broken and missing core														

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description		From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
111.00	111.93	OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	MCG	111.00	111.93	0.93	B00291114	1.31	416	0.05	3.82	12.4
111 - 111.93: OB, similar to the two OB units above (up hole).													
<<Min: 111 - 111.93 20% Min: Sphalerite>>													
<<Min: 111 - 111.93 35% Min: Pyrite>>													
<<Min: 111 - 111.93 3% Min: Galena>>													
<<Min: 111 - 111.93 3% Min: Chalcopyrite>>													
<<Alt: 111 - 113 Strong Calcite>>													
<<Struc: 111.92 - 111.94 Moderate-Strong Contact>> sulfide - MAFi contact													
111.93	127.15	MAFi	Mafic Intrusions (primarily footwall mafic intrusion)	green	111.93	113.00	1.07	B00291115	0.157	0.7	-0.01	-0.01	0.03
111.93 - 127.15: Sharp upper contact parallel to foliation. 112.4-113.0 m: aphanitic to fine grained intermediate rock, possible dyke? If so contacts are parallel to foliation. Lower contact is gradational with bleaching starting at about 123.25 and quartz veining - flooding increasing from 126.0 m.													
<<Min: 111.93 - 113 3% Min: Pyrite>>													
<<Min: 113 - 125.95 0.01% Min: Pyrite>>													
<<Min: 125.95 - 126.45 3% Min: Pyrite>>													
<<Min: 125.95 - 126.45 0.1% Min: Pyrrhotite>>													
<<Min: 126.05 - 144.26 0.01% Min: Sphalerite>> blebs and in thin sulfide bands													
<<Min: 126.05 - 144.26 0.01% Min: Galena>> blebs and in thin sulfide veinlets and bands													
<<Min: 126.45 - 144.26 0.1% Min: Pyrite>> blebs, diss and in thin sulfide bands													
<<Alt: 112.2 - 113 Trace Chlorite>>													
<<Alt: 113 - 116.8 Moderate-Strong Calcite>>													
<<Alt: 113 - 123.25 Weak Chlorite>>													
<<Alt: 116.8 - 126.95 Moderate-Strong Calcite>>													
<<Alt: 123.25 - 127.1 Trace Chlorite>> Originally lots of chlorite in MAFi unit but green chlorite now bleached and altered - no longer chlorite, due to close contact with qtz vein (perhaps actually a quartzolite? - fluid inclusions might help)													
<<Alt: 126 - 144.4 Weak Muscovite>> Muscovite - sericite altered rhyolite clasts													
<<Struc: 111.94 - 112.76 Moderate-Strong Foliation>> shearing at crosscutting foliation													
<<Struc: 112.76 - 114 Moderate dominant foliation>>													
<<Struc: 114 - 115.4 Moderate dominant foliation>>													
<<Struc: 115.4 - 118.4 Moderate dominant foliation>>													

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 118.4 - 121.5 Moderate dominant foliation>>											
<<Struc: 121.5 - 125 Moderate dominant foliation>>											
<<Struc: 123.03 - 123.22 Weak-Moderate Shear>>											
<<Struc: 125 - 126 Moderate dominant foliation>>											
127.15 144.26 RHY undifferentiated rhyolite											
127.15 - 144.26: Mostly white quartz vein (quartzolite? - fractionation end member after RHYi?) with clasts of light green - fine - medium grained intermediate 'dyke' rock. 137.0-140.3m: clasts (<20cm) of more typical RHY with silicic bands. Other clasts look very much like RHYi. Quartz has minor clots - patches of cream colored feldspar (?) crystals (ie. 133.2 m). Minor diss and irregular veinlets of py, +/-sp, +/-gr, often in or on margins of chloritized carbonaceous lithic clasts. Clasts are mostly well foliated with qtz vein parallel to foliation. Qtz not foliated.											
<<Alt: 132 - 134.6 Trace Calcite>>											
<<Alt: 134.6 - 145.62 Weak Calcite>>											
<<Vein: 127.15 - 144.26 75% Quartz>> 25% altered rhyolite clasts											
<<Vein: 137.3 - 137.31 75% Quartz-Tourmaline>>											
<<Struc: 131.3 - 132 Moderate Contact>> qt vein - rhy contact - qtz invading along foliation											
<<Struc: 138 - 140.2 Moderate dominant foliation>> foliation in Rhy clast											
144.26 145.62 RHY undifferentiated rhyolite											
144.26 - 145.62: 144.43-145.76: non-calcareous strongly muscovite-sericite altered to light grey fine grained siliceous bands and soft dark green chloritic RHY (or MAFi in part?). Includes 34 cm bleached sericite altered weak shear - fault zone.											
<<Min: 144.26 - 145.62 0.01% Min: Pyrite>>											
<<Alt: 144.4 - 145.62 Moderate Muscovite>>											
<<Alt: 144.4 - 145.62 Weak Chlorite>>											
<<Struc: 144.26 - 144.62 Moderate dominant foliation>>											
<<Struc: 145.04 - 145.34 Moderate Shear>> low angle shear planes (15-25 deg) within zone.											
<<Struc: 145.52 - 145.62 Moderate Contact>> low angle shears at contact 15-25 deg.											
145.62 147.06 OB Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite											
145.62 - 147.06: calcite - silica bands cutting OB at low angles- transitional to OK											
<<Min: 145.62 - 147.05 15% Min: Sphalerite>>											
<<Min: 145.62 - 147.05 50% Min: Pyrite>>											
<<Min: 145.62 - 147.05 3% Min: Galena>>											
<<Min: 147.05 - 148.44 10% Min: Sphalerite>>											
MG											
145.62 147.06 1.44 B00291131 0.898 286 0.03 4.97 7.53											

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %		
<<Min: 147.05 - 148.44 30% Min: Pyrite>>													
<<Min: 147.05 - 148.44 3% Min: Magnetite>>													
<<Min: 147.05 - 148.44 2% Min: Galena>>													
<<Min: 147.05 - 148.44 1% Min: Chalcopyrite>>													
<<Alt: 145.62 - 149.4 Moderate-Strong Calcite>>													
<<Struc: 145.62 - 149 Weak dominant foliation>> soupy low angle mineral banding													
147.06	148.44	OK	Heavily disseminated sulphides and/or stringer style mineralization associated with barite ± quartz ± carbonate gangue	FMG	147.06	148.44	1.38	B00291132	0.848	176	0.18	3.93	7.74
147.06 - 148.44: 147.06-149.44: silica - calcite flooded and locally brecciated.													
<<Min: 147.06 - 148.3 3% Min: Magnetite>>													
148.44	151.36	OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	FMG	148.44	149.50	1.06	B00291133	0.996	218	0.18	6.53	12.2
148.44 - 151.36: 148.44-149.0: siliceous and brecciated, approx 50% non sulfide - transitional to OK. 149.0-149.5: homogenous well mineralized OB. 149.5-151.36: OB, up to 20% grey silica - rhy clasts.													
<<Min: 148.44 - 149 5% Min: Sphalerite>>													
<<Min: 148.44 - 149 30% Min: Pyrite>>													
<<Min: 148.44 - 149 2% Min: Galena>>													
<<Min: 148.44 - 149 1% Min: Chalcopyrite>>													
<<Min: 149 - 149.5 15% Min: Sphalerite>>													
<<Min: 149 - 149.8 10% Min: Galena>>													
<<Min: 149 - 151.6 40% Min: Pyrite>>													
<<Min: 149 - 151.6 5% Min: Galena>>													
<<Min: 149.5 - 151.6 10% Min: Sphalerite>>													
<<Min: 149.5 - 151.6 1% Min: Chalcopyrite>>													
<<Alt: 149.4 - 151.36 Trace Calcite>>													
<<Struc: 150 - 150.7 Weak-Moderate dominant foliation>> Mineral banding													

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description		From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
151.36	153.13 OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	FMG	151.36	151.80	0.44	B00291136	1.68	196	0.22	4.16	5.85
151.36 - 153.13: Locally brecciated and qtz flooded with occasional blebs chalcopyrite in qtz.												
<<Min: 151.6 - 153.13 10% Min: Sphalerite>>												
<<Min: 151.6 - 153.13 50% Min: Pyrite>>												
<<Min: 151.6 - 153.13 3% Min: Galena>>												
<<Min: 151.6 - 153.13 3% Min: Chalcopyrite>> And as blebs.												
<<Alt: 151.36 - 156.2 Weak Calcite>>												
<<Struc: 152.95 - 153.55 Weak-Moderate dominant foliation>> Mineral banding												
153.13	155.29 OB	Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	FMG	153.13	154.60	1.47	B00291138	1.49	239	0.32	4.91	6.71
153.13 - 155.29: Mostly massive typical OB, minor zones of qtz-calcite (OK type).												
<<Min: 153.13 - 155.29 15% Min: Sphalerite>>												
<<Min: 153.13 - 155.29 50% Min: Pyrite>>												
<<Min: 153.13 - 155.29 3% Min: Galena>>												
<<Min: 153.13 - 155.29 2% Min: Chalcopyrite>> and as blebs in qtz												
155.29	158.20 OK	Heavily disseminated sulphides and/or stringer style mineralization associated with barite ± quartz ± carbonate gangue	FMG	155.29	156.81	1.52	B00291142	2.23	206	0.81	2.29	3.71
155.29 - 158.2: OK with zones of qtz-calcite flooding and brecciation.												
<<Min: 155.29 - 158.2 5% Min: Sphalerite>> and as blebs												
<<Min: 155.29 - 158.2 25% Min: Pyrite>>												
<<Min: 155.29 - 158.2 3% Min: Galena>> and as blebs												
<<Min: 155.29 - 158.2 1% Min: Chalcopyrite>> and as blebs												
<<Alt: 156.2 - 157.8 Weak-Moderate Calcite>>												
<<Alt: 157.8 - 165.6 Weak Calcite>>												

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
158.20	170.58	OB										
		Wispy laminar, fine buckshot textured, massive sulphide with lesser magnetite	FMG	158.20	159.00	0.80	B00291144	4.77	452	3.66	6.66	21.3
158.2 - 170.58: Mostly massive OB. 164.8-167.05m: increase in silica gangue clasts, up to 15%. 169.6-170.58; slight increase in cpy, OC patches or clasts. Poor recovery 158.2-160.2.												
<<Min: 158.2 - 159 5% Min: Galena>>			159.00	159.70	0.70	B00291145	2.21	232	1.18	6.41	12.7	
<<Min: 158.2 - 159 25% Min: Pyrite>>			159.70	160.20	0.50	B00291146	2.5	161	1.51	3.46	7.6	
<<Min: 158.2 - 159 35% Min: Sphalerite>>			160.20	160.64	0.44	B00291147	1.89	206	1.04	5.54	7.77	
<<Min: 158.2 - 159 10% Min: Chalcopyrite>> 15cm of OC type min			160.64	161.40	0.76	B00291148	1.99	222	1.11	5.83	10.6	
<<Min: 159 - 160.2 5% Min: Chalcopyrite>>			161.40	162.90	1.50	B00291149	2.22	217	1.05	5.17	10.2	
<<Min: 159 - 160.2 1% Min: Galena>>			162.90	164.00	1.10	B00291150	3.15	229	1.2	5.25	9.52	
<<Min: 159 - 160.2 60% Min: Pyrite>>			164.00	164.80	0.80	B00291151	2.23	199	0.99	4.48	9.02	
<<Min: 159 - 160.2 10% Min: Sphalerite>>			164.80	165.90	1.10	B00291152	3.42	250	0.8	5.58	10.1	
<<Min: 160.2 - 161.4 15% Min: Sphalerite>>			165.90	167.00	1.10	B00291153	3.28	262	0.68	4.28	11.3	
<<Min: 160.2 - 161.4 10% Min: Chalcopyrite>>			167.00	168.40	1.40	B00291154	2.02	294	0.52	6.07	11.5	
<<Min: 160.2 - 161.4 50% Min: Pyrite>>			168.40	169.60	1.20	B00291155	1.88	262	0.55	6.05	13.2	
<<Min: 160.2 - 161.4 3% Min: Galena>>			169.60	170.58	0.98	B00291156	1.73	236	0.46	3.97	11	
<<Min: 160.64 - 161.4 3% Min: Magnetite>>												
<<Min: 161.4 - 164.8 10% Min: Chalcopyrite>>												
<<Min: 161.4 - 164.8 5% Min: Galena>>												
<<Min: 161.4 - 164.8 40% Min: Pyrite>>												
<<Min: 161.4 - 164.8 15% Min: Sphalerite>>												
<<Min: 164.8 - 170.58 15% Min: Sphalerite>>												
<<Min: 164.8 - 170.58 5% Min: Chalcopyrite>>												
<<Min: 164.8 - 170.58 3% Min: Galena>>												
<<Min: 164.8 - 170.58 30% Min: Pyrite>>												
<<Alt: 165.6 - 167.6 Moderate Calcite>>												
<<Alt: 167.6 - 169.6 Trace Calcite>>												
<<Alt: 169.6 - 170.6 Weak Calcite>>												
<<Struc: 158.2 - 158.5 Strong Bedding>> pristine mineral (graded?) banding												
<<Struc: 168 - 168.3 Weak-Moderate dominant foliation>> mineral banding												

GeoSpark Logger ~ Drill Log

Project:
KZK
Hole Number:
K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %	
170.58	173.60	OC Chalcopyrite-pyrrhotite net textured sulphides	MCG	170.58	171.33	0.75	B00291157	2.94	334	3.41	4.53	13.3
170.58 - 173.6: High grade! Bands of chalcopyrite rich sulfides 10-30 cm wide separated by sphalerite rich bands of about same width. Locally very nicely banded, especially sphalerite mineralization - looks like original bedding.												
<<Min: 170.58 - 173.6 30% Min: Sphalerite>>			171.33	172.20	0.87	B00291158	4.41	426	5.45	4.94	17.8	
<<Min: 170.58 - 173.6 25% Min: Pyrite>>			172.20	173.60	1.40	B00291159	2.7	350	2.97	5.2	18.5	
<<Min: 170.58 - 173.6 1% Min: Magnetite>>												
<<Min: 170.58 - 173.6 5% Min: Galena>>												
<<Min: 170.58 - 173.6 30% Min: Chalcopyrite>> Approximately 6 rude bands or patches of CP, each 10 - 30 cm, of up to 50% CP. Intervals between CP rich zones are more OB type and SP rich.												
<<Alt: 170.6 - 173.4 Trace Calcite>>												
<<Alt: 173.4 - 173.6 Moderate-Strong Calcite>>												
<<Struc: 170.7 - 171.3 Moderate-Strong Bedding>> mineral banding												
<<Struc: 172 - 172.5 Moderate-Strong Bedding>> mineral banding												
<<Struc: 173 - 173.5 Moderate-Strong Bedding>> mineral banding												
173.60	176.35	RHY undifferentiated rhyolite		173.60	175.00	1.40	B00291161	0.133	30	0.07	0.35	1.35
173.6 - 176.35: 174.6-176.35; numerous foliaform pyrite bands.												
<<Min: 173.6 - 174.6 1% Min: Pyrite>>			175.00	176.35	1.35	B00291162	0.215	37.7	0.05	0.49	2.18	
<<Min: 174.6 - 176.35 20% Min: Pyrite>> diss and bands of py up to 10 cm wide parallel to foliation.												
<<Alt: 173.6 - 176.35 Strong Muscovite>> fine muscovite - sericite												
<<Alt: 173.6 - 176.35 Weak Calcite>>												
<<Struc: 173.75 - 173.85 Moderate-Strong Contact>>												
<<Struc: 175.4 - 176 Moderate dominant foliation>>												
176.35	178.68	MAFi Mafic Intrusions (primarily footwall mafic intrusion)		176.35	177.30	0.95	B00291163	-0.005	1.5	0.03	0.02	0.05
176.35 - 178.68: Good MAFi												
<<Min: 176.35 - 179.2 0.5% Min: Pyrite>>			177.30	178.68	1.38	B00291164	-0.005	1.2	0.01	0.02	0.06	
<<Alt: 176.35 - 178.68 Moderate Chlorite>>												
<<Alt: 176.35 - 178.68 Moderate-Strong Calcite>>												
<<Struc: 177.3 - 178.68 Moderate dominant foliation>>												

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %		
178.68	179.02	OH	Fine grained, megascopically homogeneous massive pyrite	FMG	178.68	179.02	0.34	B00291165	0.231	87	0.14	1.56	5.24
178.68 - 179.02: 179.2-179.42: massive py, minor diss sph. Interval is 0.35 cm to conform with minimum sample width.													
<<Min: 178.68 - 178.92 3% Min: Sphalerite>>													
<<Min: 178.68 - 178.92 75% Min: Pyrite>>													
<<Min: 178.92 - 179.7 1% Min: Sphalerite>>													
<<Min: 178.92 - 179.7 5% Min: Pyrite>> also in bands and patchy													
<<Min: 178.92 - 179.7 0.1% Min: Galena>>													
<<Alt: 178.68 - 179.7 Trace Calcite>>													
<<Alt: 178.92 - 179.7 Weak-Moderate Chlorite>> OJ mineralization													
179.02	179.70	OJ	Heavily disseminated sulphides and/or stringer style mineralization in proximal altered rock	FMG	179.02	179.70	0.68	B00291166	0.046	27.1	0.09	0.43	1.05
179.02 - 179.7: Weak OJ													
179.70	183.00	RHYc	Rhyolite coherent volcanics	light grey	179.70	180.20	0.50	B00291167	0.007	0.9	-0.01	0.02	0.01
179.7 - 183: good silicic bands.													
<<Min: 179.7 - 186 2% Min: Pyrite>>													
<<Alt: 179.7 - 197 Moderate-Strong Muscovite>> fine muscovite -sericite, very bleached rock.													
<<Struc: 179.82 - 179.92 Moderate-Strong Contact>>													
<<Struc: 180 - 181 Moderate dominant foliation>>													
183.00	196.78	RHY	undifferentiated rhyolite	light grey	183.00	184.50	1.50	B00291170	-0.005	-0.3	-0.01	-0.01	0.02
183 - 196.78: locally has silicic bands, strongly muscovite - sericite altered and bleached.													
<<Min: 186 - 187.4 0.5% Min: Sphalerite>>													
<<Min: 186 - 187.4 10% Min: Pyrite>>													
<<Min: 186 - 187.4 5% Min: Pyrrhotite>>													
<<Min: 187.4 - 199.5 3% Min: Pyrrhotite>>													
<<Alt: 184.7 - 187.3 Trace Biotite>>													
<<Alt: 193 - 196.78 Weak Calcite>>													
<<Alt: 195 - 196 Weak Chlorite>>													
<<Struc: 187.2 - 188 Moderate dominant foliation>>													

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 188 - 190 Moderate dominant foliation>>											
<<Struc: 190 - 191.5 Moderate dominant foliation>>											
<<Struc: 194.3 - 195 Moderate dominant foliation>> Suspect Reflex core mark as it doesn't match with 'normal' DFOL of 16-180 deg. All measurements from 194.3 - 197.8m are based on this one measurement.											
<<Struc: 195 - 195.5 Moderate dominant foliation>>											
<<Struc: 195.55 - 196 Moderate Shear>> shear planes											
<<Struc: 196.16 - 196.56 Moderate dominant foliation>> foliation and shear planes											
196.78 211.15 FLZ Fault Zone											
196.78 - 211.15: Strongly sheared - faulted zone with no original metamorphic fabric remaining. Gouge zones and missing core. Most shear planes at low angles, 10-40 deg. FLZ lithology is almost all RHY, couple 1x3 cm (avg) clasts of OB sulfide at 197.6m.											
<<Min: 199.4 - 214.8 3% Min: Pyrite>>											
<<Alt: 196.78 - 211.15 Moderate Calcite>>											
<<Alt: 197 - 211.5 Moderate-Strong Muscovite>> fine muscovite - sericite altered rhy clasts - likely OR not OP.											
<<Struc: 196.78 - 197 Moderate-Strong Shear>>											
<<Struc: 196.78 - 211.15 Intense Fault>> Strong fault zone - East Fault? RHY clasts similar to rhyolite above and below unit but small clasts of OB type mineralization noted at 197.6m. Most shear planes at low angle (<30 deg), numerous gouge and missing core zones 200-210m.											
<<Struc: 197 - 197.7 Intense Shear>>											
<<Struc: 197.2 - 197.4 Intense Shear>>											
<<Struc: 198 - 199 Intense Shear>>											
<<Struc: 204 - 207 Intense Shear>>											
<<Struc: 210.5 - 210.7 Intense Shear>>											
211.15 223.60 RHY undifferentiated rhyolite grey-green											
211.15 - 223.6: Possibly ash tuff?											
<<Min: 214.8 - 216.7 1% Min: Pyrrhotite>>											
<<Min: 216.7 - 220.6 5% Min: Pyrrhotite>> and in thin bands											
<<Min: 220.6 - 240 3% Min: Pyrrhotite>>											
<<Alt: 211.15 - 231.5 Trace Calcite>>											
<<Alt: 211.5 - 240 Moderate Muscovite>> fine muscovite - sericite											
<<Alt: 212.2 - 222 Trace Chlorite>>											
<<Struc: 211.35 - 212.2 Moderate-Strong dominant foliation>>											
<<Struc: 212 - 213.45 Weak-Moderate Fault>>											
<<Struc: 213.45 - 215.5 Moderate dominant foliation>>											

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-339

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 215.5 - 217 Moderate dominant foliation>>											
<<Struc: 216.75 - 216.8 Weak-Moderate Shear>>											
<<Struc: 216.8 - 216.9 Weak-Moderate Shear>>											
<<Struc: 217.2 - 221.2 Moderate-Strong Fault>> Fault zone; numerous approx 30 cm zones of intense shearing, wider sections of strong brecciation.											
<<Struc: 217.33 - 217.43 Moderate-Strong Shear>>											
<<Struc: 217.55 - 217.7 Weak-Moderate Shear>>											
<<Struc: 217.7 - 218.2 Moderate-Strong Shear>>											
<<Struc: 218.2 - 218.7 Moderate dominant foliation>>											
<<Struc: 220.3 - 220.45 Strong Shear>> gouge - brx zone											
<<Struc: 221.6 - 222 Moderate-Strong Foliation>> shear planes on foliation											
223.60 226.90 RHYc Rhyolite coherent volcanics light grey											
223.6 - 226.9: Silicic bands. Could also be sheared siliceous ash tuff... Unit is bracketed by fault - shear zones, what you would expect around a competent body.											
<<Struc: 224 - 225 Moderate dominant foliation>>											
<<Struc: 225.95 - 226 Strong Shear>>											
<<Struc: 226 - 226.9 Moderate Foliation>> shearing along foliation planes.											
226.90 240.00 RHYv Rhyolite volcaniclastic grey-green											
226.9 - 240: rare silicic bands, ash and lappilli more common.											
<<Struc: 230.2 - 230.6 Weak-Moderate dominant foliation>>											
<<Struc: 230.7 - 230.8 Weak-Moderate Shear>> shear plane, basically parallel to foliation.											
<<Struc: 233 - 236 Moderate dominant foliation>>											
<<Struc: 236.6 - 237 Moderate dominant foliation>>											
<<Struc: 237 - 240 Moderate dominant foliation>>											
End of Hole @ 240											