

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-369

Prospect:	Krakatoa	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Dillon Hume	
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	6/27/2016	
UTM Easting	415240.268	Core Size:	HQ3	Azimuth:	31.7	Date Logging Complete:	7/1/2016	
UTM Northing:	6815212.141	Casing Pulled?:	Yes	Dip:	-70.9	Drill Company:	Hytech	
UTM Elev. (m):	1441.236	Casing Depth (m):	4.5	Length (m):	450	Drill Rig:	Tech 5000	
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	6/17/2016	
Local Northing:		Cemented?:	No	Core Storage Loc.:	KZK Camp	Drill Completed:	6/23/2016	
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Exploration	
Comments:							Parent Hole:	

K16-369 was drilled as a step out from K15-263 and tests the down-dip potential of the Krakatoa upper lens under the hypothesis that the upper lens is the equivalent of the ABM lens. K16-369 encountered bedrock at 4.5 m, where it collared into the Wind Lake Formation, which persists from 4.5-33.3 m, consisting of mudstones and mafic tuffs. Below the Wind Lake Formation, the felsic hanging wall (Kudz Ze Kayah Formation) was encountered to a depth of 369.2 m, where massive sulfide was first encountered. Moderate to strong MU-alteration is encountered from 301-369.2 m. From 369.2-372.8 m, heavily disseminated to massive mineralization was encountered, consisting of OF, OJ, and OI. From 372.8-385 m, strongly MU+/-CL altered rhyolite occurs. From 385-392.9 m massive and minor heavily disseminated sulfide was encountered, consisting of OA, OJ, and chalcopyrite-rich OC mineralization styles. Below the massive sulfide weak to moderately altered felsic volcanoclastics occur to the end of the hole (450 m). Note that no CL-BI-CA schist (MAFi) was encountered within this hole, yet the hanging wall and footwall are very similar to that observed elsewhere at Krakatoa and ABM.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-70.9	30.3	1.4	31.7	TN14	Steve Bultitude	6/17/2016		<input checked="" type="checkbox"/>	Rig aligned to true north (measured azimuth). Grid convergence of 1.4 deg applied to correct to UTM azimuth.
5	-71.03851	30.28047	1.4	31.68047	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
10	-71.13068	30.43471	1.4	31.83471	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
15	-71.34472	30.66865	1.4	32.06865	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
15.1	-71.5	11.7	22.1	33.8	ReflexEZS	Hytech	6/17/2016	5797	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
20	-71.38057	30.81234	1.4	32.21234	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
25	-71.60077	30.59639	1.4	31.99639	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
30	-72.02669	30.84625	1.4	32.24625	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
35	-72.08936	30.97576	1.4	32.37576	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
39	-72.4	11.2	22.1	33.3	ReflexEZS	Hytech	6/18/2016	5793	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
40	-72.19951	30.74048	1.4	32.14048	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
45	-72.40082	30.84672	1.4	32.24672	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
50	-72.55657	31.21169	1.4	32.61169	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
55	-72.77492	31.3398	1.4	32.7398	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
60	-72.918	31.55377	1.4	32.95377	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100

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Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
63	-73.4	13.2	22.1	35.3	ReflexEZS	Hytech	6/18/2016	5756	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
65	-73.09213	31.89491	1.4	33.29491	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
70	-73.3507	32.1773	1.4	33.5773	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
75	-73.61475	32.62928	1.4	34.02928	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
80	-73.85801	32.95085	1.4	34.35085	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
85	-74.00857	33.25993	1.4	34.65993	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
87	-74.4	12.6	22.1	34.7	ReflexEZS	Hytech	6/18/2016	5785	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
90	-74.13384	33.37655	1.4	34.77655	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
95	-74.26418	33.78295	1.4	35.18295	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
100	-74.35838	33.82604	1.4	35.22604	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
105	-74.56237	33.73238	1.4	35.13238	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
110	-74.8762	33.96636	1.4	35.36636	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
111	-74.8	14.3	22.1	36.4	ReflexEZS	Hytech	6/18/2016	5779	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
115	-75.04633	35.07927	1.4	36.47927	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
120	-75.36986	35.50944	1.4	36.90944	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
125	-75.67408	36.455	1.4	37.855	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
130	-75.86377	37.24467	1.4	38.64467	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
135	-75.96922	37.73599	1.4	39.13599	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
135.1	-76.1	17.6	22.1	39.7	ReflexEZS	Hytech	6/18/2016	5788	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
140	-76.1123	38.04675	1.4	39.44675	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
145	-76.17968	38.3732	1.4	39.7732	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
150	-76.17385	38.69636	1.4	40.09636	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
155	-76.36944	39.47531	1.4	40.87531	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
159	-76.6	18.2	22.1	40.3	ReflexEZS	Hytech	6/19/2016	5790	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
160	-76.56198	40.1876	1.4	41.5876	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
165	-76.68183	40.46913	1.4	41.86913	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
170	-76.71694	41.19836	1.4	42.59836	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
175	-76.82612	41.72949	1.4	43.12949	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
180	-76.93936	42.42482	1.4	43.82482	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
183	-77	21.6	22.1	43.7	ReflexEZS	Hytech	6/19/2016	5788	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.

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185	-76.97674	42.76669	1.4	44.16669	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
190	-77.02928	43.49009	1.4	44.89009	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
195	-77.05851	44.38987	1.4	45.78987	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
200	-77.11172	44.91155	1.4	46.31155	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
205	-77.2526	45.20865	1.4	46.60865	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
207	-77.6	25	22.1	47.1	ReflexEZS	Hytech	6/19/2016	5788	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
210	-77.34684	45.75938	1.4	47.15938	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
215	-77.46252	46.42105	1.4	47.82105	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
220	-77.62468	46.4912	1.4	47.8912	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
225	-77.79075	47.45238	1.4	48.85238	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
230	-77.94517	48.0428	1.4	49.4428	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
231	-78	26.9	22.1	49	ReflexEZS	Hytech	6/19/2016	5812	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
235	-78.24769	48.99533	1.4	50.39533	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
240	-78.85291	51.01327	1.4	52.41327	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
245	-79.66593	53.08647	1.4	54.48647	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
250	-80.31416	55.96863	1.4	57.36863	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
255	-80.13673	52.11894	1.4	53.51894	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
255.1	-80.9	37.6	22.1	59.7	ReflexEZS	Hytech	6/20/2016	5774	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
260	-80.49578	50.50639	1.4	51.90639	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
264	-81.3	34.2	22.1	56.3	ReflexEZS	Hytech	6/20/2016	5776	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
265	-80.9798	52.15673	1.4	53.55673	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
270	-81.32236	53.01428	1.4	54.41428	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
275	-81.41224	53.95768	1.4	55.35768	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
276	-81.7	29.7	22.1	51.8	ReflexEZS	Hytech	6/20/2016	5754	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
280	-81.65922	54.80182	1.4	56.20182	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
285	-81.85617	55.1459	1.4	56.5459	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
290	-81.87922	56.27361	1.4	57.67361	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
295	-81.96795	56.56943	1.4	57.96943	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
300	-81.95525	56.74354	1.4	58.14354	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
300.1	-82.4	37.8	22.1	59.9	ReflexEZS	Hytech	6/21/2016	5793	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.

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303	-82.3	38	22.1	60.1	ReflexEZS	Hytech	6/21/2016	5794	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
305	-82.09243	56.87879	1.4	58.27879	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
309	-82.2	37.2	22.1	59.3	ReflexEZS	Hytech	6/21/2016	5790	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
310	-82.25399	57.19964	1.4	58.59964	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
315	-82.32126	58.14341	1.4	59.54341	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
320	-82.48674	58.99015	1.4	60.39015	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
325	-82.72025	61.19595	1.4	62.59595	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
330	-82.89695	62.76594	1.4	64.16594	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
335	-82.99474	64.77516	1.4	66.17516	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
339	-83.4	48	22.1	70.1	ReflexEZS	Hytech	6/21/2016	5770	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
340	-83.0864	66.71295	1.4	68.11295	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
345	-83.20777	69.03396	1.4	70.43396	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
350	-83.25206	71.5177	1.4	72.9177	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
355	-83.33805	74.93805	1.4	76.33805	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
360	-83.45913	78.65414	1.4	80.05414	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
363	-83.8	64.4	22.1	86.5	ReflexEZS	Hytech	6/21/2016	5733	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
365	-83.51663	81.41515	1.4	82.81515	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
370	-83.47705	84.76902	1.4	86.16902	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
375	-83.55964	86.28744	1.4	87.68744	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
380	-83.72151	87.8876	1.4	89.2876	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
385	-83.85211	88.96603	1.4	90.36603	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
387	-83.9	60.4	22.1	82.5	ReflexEZS	Hytech	6/21/2016	6018	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
390	-83.86259	90.24789	1.4	91.64789	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
395	-83.79393	88.47271	1.4	89.87271	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
400	-83.83877	88.54874	1.4	89.94874	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
405	-83.78474	88.27314	1.4	89.67314	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
410	-83.85685	89.59012	1.4	90.99012	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
411	-83.9	70.5	22.1	92.6	ReflexEZS	Hytech	6/22/2016	5844	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
415	-83.73671	92.58932	1.4	93.98932	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
420	-83.82345	97.26138	1.4	98.66138	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100

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425	-83.88616	101.77847	1.4	103.17847	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
430	-84.02896	104.46737	1.4	105.86737	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
435	-84.07609	108.69515	1.4	110.09515	Gyro	Steve Bultitude	6/23/2016		<input checked="" type="checkbox"/>	100
435.1	-84.6	121.8	22.1	143.9	ReflexEZS	Hytech	6/22/2016	5626	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.
450	-84.4	108.1	22.1	130.2	ReflexEZS	Hytech	6/22/2016	5784	<input type="checkbox"/>	Measured azimuth relative to magnetic north. Grid declination of 22.1 deg applied to correct to UTM azimuth.

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
0.00	4.50	OVBN Overburden									
4.50	6.80	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Min: 4.5 - 33.3 0.5% Min: Pyrite>> <<Alt: 4.5 - 19.4 Moderate-Strong Calcite>>											
6.80	8.40	MAFt Mafic Volcaniclastics									
8.40	19.40	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Vein: 10.8 - 10.9 100% Quartz-Carbonate>> Deformed QZ-CA vein <<Vein: 12.2 - 12.4 100% Quartz-Carbonate 60 deg. >> Massive QZ-CA vein <<Struc: 14.5 - 15.1 Moderate-Strong Fault>>											
19.40	26.00	RHY undifferentiated rhyolite									
19.4 - 26: Large interval of a massive QZ-vein with 2 (50 cm and 1 m wide) intervals of RHYva and RHYcw respectively <<Alt: 19.4 - 26 Weak Calcite>> <<Vein: 19.4 - 20 100% Quartz 50 deg. >> Massive QZ vein <<Vein: 20.7 - 23.5 100% Quartz>> Massive QZ vein <<Vein: 24.4 - 26 100% Quartz>> Massive QZ vein <<Struc: 20 - 20.15 Weak-Moderate Fault>> <<Struc: 23.5 - 23.6 Weak-Moderate Fault>>											
26.00	33.30	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Alt: 26 - 33.9 Trace Calcite>> <<Struc: 33.2 - 33.9 Moderate Fault>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
33.30	33.90	MDSt Rhyolite tuff dominant mudstone									
33.3 - 33.9: Faulted and ~gradational contact with the overlying Wind Lake?											
<<Min: 33.3 - 80.8 0.5% Min: Pyrrhotite>>											
33.90	64.20	RHYva Coarse grained to ash tuff									
33.9 - 64.2: Local zones of RHYvl and SED, but too small to note											
<<Alt: 33.9 - 80.8 Weak-Moderate Calcite>>											
<<Vein: 36.3 - 36.9 80% Quartz>> Massive clear QZ vein											
<<Struc: 33.9 - 34.7 Weak Fault>>											
<<Struc: 34.7 - 37 Moderate-Strong Fault>>											
<<Struc: 39.7 - 40 Weak Fault>>											
<<Struc: 46.5 - 46.6 Weak Fault>>											
<<Struc: 52.3 - 52.4 Weak Fault>>											
<<Struc: 56.6 - 56.8 Weak Fault>>											
<<Struc: 58.3 - 60.7 Weak Fault>>											
64.20	65.80	RHYc Rhyolite coherant volcanics									
65.80	80.80	RHYvl Lapilli tuff									
65.8 - 80.8: Gradational lower margin with RHYi											
<<Vein: 66.6 - 66.7 80% Quartz>> Deformed QZ vein in fault with minor smeared PY											
<<Struc: 66.5 - 67.7 Weak-Moderate Fault>>											
<<Struc: 71.06 - 71.07 Moderate dominant foliation>>											
<<Struc: 76.5 - 76.6 Weak Fault>>											
<<Struc: 78.2 - 78.21 Moderate dominant foliation>>											
80.80	95.50	RHYi Aphanitic Rhyolite (intrusion)									
<<Min: 80.8 - 102.3 1% Min: Pyrite>>											
<<Alt: 80.8 - 95.5 Weak Calcite>> FRA											
<<Vein: 87 - 89 10% Quartz>> Randomly oriented and deformed QZ veins											
<<Struc: 93.8 - 94 Weak Fault>>											
95.50	97.20	RHYvl Lapilli tuff									
<<Alt: 95.5 - 97.2 Weak-Moderate Calcite>>											
97.20	102.30	RHYi Aphanitic Rhyolite (intrusion)									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
		<<Alt: 97.2 - 102.3 Weak Calcite>> FRA									
		<<Vein: 100.8 - 101.4 100% Quartz>> Massive QZ vein									
		102.30 118.80 RHYvi Lapilli tuff									
		102.3 - 118.8: Patchy disseminated BI									
		<<Min: 102.3 - 129.7 0.5% Min: Pyrrhotite>>									
		<<Alt: 102.3 - 129.7 Weak-Moderate Calcite>>									
		<<Struc: 107.67 - 107.68 Moderate dominant foliation>>									
		<<Struc: 115.35 - 115.36 Weak-Moderate dominant foliation>>									
		118.80 121.00 PEL Equigranular biotite + calcite +/- quartz rock									
		<<Vein: 120.53 - 120.56 100% Quartz-Carbonate>> QZ-CA vein									
		121.00 129.70 RHYvi Lapilli tuff									
		121 - 129.7: Gradational contacts									
		<<Struc: 122.02 - 122.03 Weak-Moderate dominant foliation>>									
		129.70 131.20 RHYc Rhyolite coherent volcanics									
		<<Min: 129.7 - 135.4 1% Min: Pyrite>>									
		<<Alt: 129.7 - 135.4 Weak Calcite>>									
		<<Vein: 129.85 - 130.2 100% Quartz>> Massive QZ vein									
		131.20 134.10 RHYi Aphanitic Rhyolite (intrusion)									
		134.10 135.40 RHYc Rhyolite coherent volcanics									
		135.40 137.10 RHYv Rhyolite volcaniclastic									
		<<Min: 135.4 - 147.6 0.5% Min: Pyrite>>									
		<<Alt: 135.4 - 147.1 Weak-Moderate Calcite>>									
		137.10 147.10 RHYcw Curdy textured-flow banded (flows, subvolcanics)									
		<<Struc: 145.5 - 147 Moderate Fault>>									
		147.10 151.90 PEL Equigranular biotite + calcite +/- quartz rock									
		<<Min: 147.6 - 151.9 1% Min: Pyrite>>									
		<<Alt: 147.1 - 151.9 Moderate Calcite>>									
		<<Vein: 147.8 - 148.5 100% Quartz>> Massive QZ vein									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 149.11 - 149.12 Moderate dominant foliation>> 151.90 160.50 RHYvl Lapilli tuff <<Min: 151.9 - 161.9 0.5% Min: Pyrite>> <<Alt: 151.9 - 160.5 Weak-Moderate Calcite>> <<Vein: 152 - 153.3 10% Quartz>> Deformed/folded QZ veins <<Struc: 152.3 - 154.1 Weak Fault>> <<Struc: 158.2 - 158.4 Weak Fault>> 160.50 161.90 PEL Equigranular biotite + calcite +/- quartz rock <<Alt: 160.5 - 161.9 Moderate Calcite>> 161.90 163.20 RHYc Rhyolite coherant volcanics <<Min: 161.9 - 233.6 1% Min: Pyrite>> <<Min: 161.9 - 233.6 0.5% Min: Pyrrhotite>> <<Alt: 161.9 - 264.1 Weak Calcite>> 163.20 167.00 RHYif feldspar and quartz porphyry intrusions <<Vein: 164.3 - 167 30% Quartz>> Massive QZ vein with minor QZ-veins around it 167.00 172.80 RHYvx Quartz and/or feldspar crystal tuff <<Struc: 167.38 - 167.39 Weak dominant foliation>> 172.80 178.80 RHYcf Feldspar & feldspar quartz porphyry 178.80 184.40 RHYvl Lapilli tuff <<Struc: 179 - 179.8 Weak Fault>> <<Struc: 181 - 181.4 Weak-Moderate Fault>> 184.40 184.90 RHYvl Lapilli tuff 184.90 186.95 RHYvl Lapilli tuff 186.95 187.40 MAFi Mafic Intrusions (primarily footwall mafic intrusion) 187.40 190.40 RHYvl Lapilli tuff 190.40 194.60 RHYc Rhyolite coherant volcanics 194.60 202.50 RHYvl Lapilli tuff											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 195 - 195.01 Moderate dominant foliation>>											
<<Struc: 196.7 - 201.1 Weak-Moderate Fault>>											
<<Struc: 202.02 - 202.03 Moderate dominant foliation>>											
202.50	202.80	MAFi Mafic Intrusions (primarily footwall mafic intrusion)									
202.80	207.20	RHYvi Lapilli tuff									
207.20	207.70	RHYc Rhyolite coherant volcanics									
207.70	218.00	RHYvi Lapilli tuff									
<<Struc: 213.87 - 213.88 Moderate dominant foliation>>											
<<Struc: 216.8 - 216.9 Weak Fault>>											
218.00	224.10	RHYv Rhyolite volcanoclastic									
<<Struc: 218.79 - 218.8 Moderate dominant foliation>>											
<<Struc: 222.5 - 222.51 Moderate dominant foliation>>											
224.10	225.30	PEL Equigranular biotite + calcite +/- quartz rock									
225.30	230.10	RHYva Coarse grained to ash tuff									
<<Struc: 226.4 - 226.9 Weak Fault>>											
230.10	230.50	MAFi Mafic Intrusions (primarily footwall mafic intrusion)									
230.50	233.00	RHYvi Lapilli tuff									
233.00	233.60	MAFi Mafic Intrusions (primarily footwall mafic intrusion)									
233.60	264.10	RHYvi Lapilli tuff									
<<Min: 233.6 - 264.1 0.5% Min: Pyrite>>											
<<Min: 233.6 - 264.1 2% Min: Pyrrhotite>>											
<<Alt: 233.6 - 286 Weak Muscovite>>											
<<Struc: 236.63 - 236.64 Weak dominant foliation>>											
<<Struc: 243.3 - 243.5 Weak Fault>>											
<<Struc: 246.52 - 246.53 Weak-Moderate dominant foliation>>											
<<Struc: 249.3 - 250.1 Weak Fault>>											
<<Struc: 251.8 - 254.2 Weak Fault>>											
<<Struc: 255.9 - 255.91 Weak-Moderate dominant foliation>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 256.1 - 256.8 Weak-Moderate Fault>> <<Struc: 256.6 - 257.3 Weak-Moderate Fault>> <<Struc: 259.8 - 260.1 Weak Fault>> <<Struc: 260.6 - 260.8 Weak Fault>> 264.10 275.30 RHYva Coarse grained to ash tuff <<Min: 264.1 - 275.3 5% Min: Pyrrhotite>> <<Struc: 272.57 - 272.58 Weak dominant foliation>> 275.30 276.30 MAFi Mafic Intrusions (primarily brown footwall mafic intrusion) <<Min: 275.3 - 331.2 2% Min: Pyrrhotite>> 276.30 278.30 RHYvi Lapilli tuff 278.30 278.90 MAFi Mafic Intrusions (primarily brown footwall mafic intrusion) 278.90 279.80 RHYvi Lapilli tuff 279.80 280.20 MAFi Mafic Intrusions (primarily brown footwall mafic intrusion) 280.20 289.70 RHYv Rhyolite volcanoclastic 280.2 - 289.7: Altered fine grained volcanoclastic (?) rhyolite <<Alt: 286 - 301 Weak Muscovite>> <<Struc: 281.26 - 281.27 Weak-Moderate dominant foliation>> <<Struc: 282.2 - 283.9 Moderate Fault>> <<Struc: 289 - 290 Moderate Fault>> 289.70 301.00 RHYcw Curdy textured-flow banded (flows, subvolcanics) <<Struc: 292.5 - 292.8 Weak Fault>> <<Struc: 298.78 - 298.79 Weak-Moderate dominant foliation>> 301.00 331.20 RHYv Rhyolite volcanoclastic 301 - 331.2: Altered rhyolite with pervasive MU-cleavages and siliceous microlithons <<Alt: 301 - 368.5 Moderate-Strong Muscovite>> <<Vein: 302.5 - 303.1 100% Quartz>> Massive QZ vein <<Vein: 311.4 - 312.2 5% Quartz>> Minor QZ veins											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Vein: 314.4 - 314.6 20% Quartz>> Randomly oriented QZ veins <<Vein: 322.2 - 322.4 80% Quartz>> Massive QZ vein <<Struc: 301 - 307 Weak-Moderate Fault>> <<Struc: 307.3 - 307.31 Moderate dominant foliation>> <<Struc: 316.48 - 316.49 Moderate dominant foliation>> <<Struc: 320.76 - 320.77 Moderate-Strong dominant foliation>>											
331.20	334.10	OI Heavily disseminated sulphides in host schist									
331.2 - 334.1: Heavily disseminated PY in altered rhyolite host											
<<Min: 331.2 - 334.1 15% Min: Pyrite>>											
334.10	338.00	RHYc Rhyolite coherent volcanics									
334.1 - 338: MU-altered rhyolite with blebby to wavy siliceous bands											
<<Min: 334.1 - 368.5 5% Min: Pyrrhotite>>											
338.00	353.10	RHYvl Lapilli tuff									
338 - 353.1: Strongly MU-altered rhyolite with MU-cleavages, siliceous microlithons, and PO lpl											
<<Struc: 339.46 - 339.47 Moderate dominant foliation>>											
<<Struc: 346.4 - 346.41 Moderate dominant foliation>>											
<<Struc: 349.17 - 349.18 Moderate dominant foliation>>											
<<Struc: 352.82 - 352.83 Moderate dominant foliation>>											
353.10	369.20	RHYc Rhyolite coherent volcanics	366.20	367.70	1.50	B00291899	-0.005	1	0.01	0.01	0.06
353.1 - 369.2: Blebby to wavy siliceous bands with MU-groundmass/cleavages.											
<<Min: 368.5 - 369.2 2% Min: Sphalerite>>			367.70	369.20	1.50	B00291901	0.012	2.1	0.08	0.01	0.12
<<Min: 368.5 - 369.2 1% Min: Pyrite>>											
<<Min: 368.5 - 369.2 2% Min: Pyrrhotite>>											
<<Min: 368.5 - 369.2 2% Min: Chalcopyrite>>											
<<Alt: 368.5 - 369.2 Intense Muscovite>>											
<<Alt: 368.5 - 372.8 Trace Calcite>>											
<<Vein: 366.45 - 366.6 100% Quartz-Carbonate>> Massive QZ-carb vein with minor disseminated GL+SP+CP											
<<Vein: 368.7 - 369.1 100% Quartz>> Massive QZ-carbonate vein with recrystallized blebby cgr SP+PO+CP											
<<Struc: 358.23 - 358.24 Moderate dominant foliation>>											
<<Struc: 363.35 - 363.36 Weak dominant foliation>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Struc: 367.55 - 367.56 Moderate dominant foliation>>											
369.20	369.70	OF Pyrrhotite rich sulphides	369.20	369.70	0.50	B00291902	0.013	57.7	0.76	0.85	8.86
369.2 - 369.7: Massive PO with blebby CP and disseminated MG+CL+MU											
<<Min: 369.2 - 369.7 5% Min: Sphalerite>>											
<<Min: 369.2 - 369.7 5% Min: Pyrite>>											
<<Min: 369.2 - 369.7 75% Min: Pyrrhotite>>											
<<Min: 369.2 - 369.7 5% Min: Magnetite>>											
<<Min: 369.2 - 369.7 1% Min: Galena>>											
<<Min: 369.2 - 369.7 2% Min: Chalcopyrite>>											
<<Alt: 369.2 - 369.7 Moderate Muscovite>>											
<<Alt: 369.2 - 372.8 Moderate Chlorite>>											
369.70	370.20	OJ Heavilly disseminated sulphides and/or stringer style mineralization in proximal altered rock	369.70	370.20	0.50	B00291903	-0.005	10.3	0.14	0.18	0.88
369.7 - 370.2: Disseminated CL-after-Cl in intensely MU-altered rhyolite (?) with disseminated PO+PY.											
<<Min: 369.7 - 370.2 5% Min: Pyrite>>											
<<Min: 369.7 - 370.2 10% Min: Pyrrhotite>>											
<<Min: 369.7 - 370.2 1% Min: Chalcopyrite>>											
<<Alt: 369.7 - 370.2 Intense Muscovite>>											
370.20	370.65	OF Pyrrhotite rich sulphides	370.20	370.65	0.45	B00291904	0.011	44.4	0.22	0.87	8.23
370.2 - 370.65: Massive PO with disseminated CL+MU+MG and blebby PY+/-CP.											
<<Min: 370.2 - 370.65 5% Min: Sphalerite>>											
<<Min: 370.2 - 370.65 10% Min: Pyrite>>											
<<Min: 370.2 - 370.65 70% Min: Pyrrhotite>>											
<<Min: 370.2 - 370.65 2% Min: Magnetite>>											
<<Min: 370.2 - 370.65 1% Min: Galena>>											
<<Min: 370.2 - 370.65 1% Min: Chalcopyrite>>											
<<Alt: 370.2 - 370.65 Moderate Muscovite>>											
<<Vein: 370.4 - 372.8 20% Quartz-Carbonate>> Zone with fractured QZ-carb +/- disseminated sulfides veins											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
370.65	372.80	OI Heavily disseminated sulphides in host schist	370.65	372.00	1.35	B00291905	-0.005	21.4	0.08	0.35	4.38
370.65 - 372.8: Heavily disseminated to blebby PO+PY+/-CP with disseminated CL-after-CI and intense MU-alteration.											
<<Min: 370.65 - 372.8 3% Min: Sphalerite>>											
<<Min: 370.65 - 372.8 10% Min: Pyrite>>											
<<Min: 370.65 - 372.8 20% Min: Pyrrhotite>>											
<<Min: 370.68 - 372.8 0.5% Min: Chalcopyrite>>											
<<Alt: 370.65 - 372.8 Strong Muscovite>>											
372.80	385.00	RHY undifferentiated rhyolite	372.80	374.30	1.50	B00291907	-0.005	0.5	-0.01	-0.01	0.02
372.8 - 385: Strongly MU and/or CL-CI altered undifferentiated rhyolite											
<<Min: 372.8 - 381.3 1% Min: Pyrite>>											
<<Min: 372.8 - 381.3 1% Min: Pyrrhotite>>											
<<Min: 381.3 - 385 0.5% Min: Sphalerite>>											
<<Min: 381.3 - 385 2% Min: Pyrite>>											
<<Min: 381.3 - 385 2% Min: Pyrrhotite>>											
<<Alt: 372.8 - 382.8 Strong Muscovite>>											
<<Alt: 372.8 - 392.7 Trace Calcite>>											
<<Alt: 381.3 - 385 Weak Chlorite>>											
<<Alt: 382.8 - 385 Intense Muscovite>>											
<<Vein: 375 - 375.9 100% Quartz>> Massive QZ vein with patchy TML											
<<Vein: 383.4 - 383.6 20% Quartz>> Minor QZ veins with diss sulfides											
<<Struc: 379.7 - 379.8 Weak Fault>>											
<<Struc: 380 - 380.8 Moderate Fault>>											
385.00	386.00	OA Laminar or heavily disseminated magnetite bearing massive sulphide	385.00	386.00	1.00	B00291914	0.159	79.9	0.57	0.44	7.75
<<Min: 385 - 386 60% Min: Pyrite>>											
<<Min: 385 - 386 20% Min: Pyrrhotite>>											
<<Min: 385 - 386 15% Min: Magnetite>>											
<<Min: 385 - 386 3% Min: Chalcopyrite>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
386.00	386.75	OJ Heavilly disseminated sulphides and/or stringer style mineralization in proximal altered rock 386 - 386.75: Cgr disseminated sulfides in intense CL alteration with cgr CI porphyroblasts <<Min: 386 - 386.75 10% Min: Pyrite>> <<Min: 386 - 386.75 2% Min: Chalcopyrite>> <<Alt: 386 - 386.75 Strong Chlorite>> <<Alt: 386 - 386.75 Moderate Cordierite>>	386.00	386.75	0.75	B00291915	0.373	30.2	0.65	0.13	5.96
386.75	387.75	OA Laminar or heavilly disseminated magnetite bearing massive sulphide <<Min: 386.75 - 387.75 5% Min: Sphalerite>> <<Min: 386.75 - 387.75 70% Min: Pyrite>> <<Min: 386.75 - 387.75 20% Min: Magnetite>> <<Min: 386.75 - 387.75 3% Min: Chalcopyrite>> <<Alt: 386.75 - 388.25 Strong Chlorite>> <<Struc: 387.66 - 387.67 Moderate dominant foliation>>	386.75	387.75	1.00	B00291916	2.03	115	2.74	0.47	18.5
387.75	388.25	OC Chalcopyrite-pyrrhotite net textured sulphides 387.75 - 388.25: CP-PO massive sulfide with local CL and net-texture. Heavily disseminated MG throughout. <<Min: 387.75 - 388.25 5% Min: Sphalerite>> <<Min: 387.75 - 388.25 15% Min: Pyrite>> <<Min: 387.75 - 388.25 25% Min: Pyrrhotite>> <<Min: 387.75 - 388.25 10% Min: Magnetite>> <<Min: 387.75 - 388.25 15% Min: Chalcopyrite>> <<Alt: 387.75 - 388.25 Weak Cordierite>>	387.75	388.25	0.50	B00291917	3.35	221	7.78	0.48	19
388.25	392.90	OA Laminar or heavilly disseminated magnetite bearing massive sulphide 388.25 - 392.9: Wispy Magnetite OA. Local band of OF at lower contact (~20 cm). <<Min: 388.25 - 392.7 2% Min: Sphalerite>>	388.25	389.50	1.25	B00291918	1.27	245	2.27	1.63	11.9
			389.50	390.60	1.10	B00291919	0.341	34.9	0.57	0.17	14.2

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<<Min: 388.25 - 392.7 70% Min: Pyrite>> <<Min: 388.25 - 392.7 20% Min: Magnetite>> <<Min: 388.25 - 392.7 1% Min: Chalcopyrite>> <<Min: 392.7 - 392.9 95% Min: Pyrrhotite>> <<Min: 392.7 - 392.9 2% Min: Chalcopyrite>> <<Alt: 392.7 - 415.4 Weak Calcite>> <<Struc: 391.1 - 391.11 Moderate dominant foliation>>			390.60	391.70	1.10	B00291921	0.223	54.3	0.46	0.22	7.69
			391.70	392.90	1.20	B00291922	0.139	59.7	0.41	0.3	14.5
392.90 415.40 RHYv Rhyolite volcanoclastic 392.9 - 415.4: Mixed fgr ashy (?) tuff and lpl tuff. Weak-moderate MU-alteration.			392.90	394.40	1.50	B00291923	-0.005	1.5	-0.01	0.01	0.07
<<Min: 392.9 - 450 0.5% Min: Pyrite>> <<Min: 392.9 - 450 1% Min: Pyrrhotite>> <<Alt: 392.9 - 399 Moderate Muscovite>> <<Alt: 399 - 413.7 Weak Muscovite>> <<Alt: 413.7 - 418 Moderate Muscovite>> <<Vein: 396 - 396.5 50% Quartz-Albite>> Fractured massive QZ-carb vein <<Vein: 406.5 - 407.8 10% Quartz-Carbonate>> Massive QZ-carb veins in fault gouge <<Struc: 393.3 - 393.6 Weak-Moderate Fault>> <<Struc: 394 - 394.5 Weak-Moderate Fault>> <<Struc: 396.8 - 397.1 Moderate Fault>> <<Struc: 399.3 - 400 Weak Fault>> <<Struc: 406.4 - 407 Weak-Moderate Fault>> <<Struc: 413.35 - 413.36 Weak-Moderate dominant foliation>>			394.40	395.90	1.50	B00291924	-0.005	-0.3	0.06	0.01	0.03
			395.90	397.40	1.50	B00291925	-0.005	0.8	-0.01	0.02	0.01
			397.40	398.90	1.50	B00291926	-0.005	0.6	-0.01	0.02	0.01
415.40 428.00 RHYvx Quartz and/or feldspar crystal tuff 415.4 - 428: QZ eyes and BI-CL-CA lpl tuff. Weak MU-alteration.											
<<Alt: 415.4 - 428 Weak-Moderate Calcite>> <<Struc: 425.26 - 425.27 Weak-Moderate dominant foliation>>											
428.00 430.50 MAFi Mafic Intrusions (primarily brown footwall mafic intrusion) <<Alt: 428 - 430.5 Moderate Calcite>>											

GeoSpark Logger ~ Drill Log

Project:

KZK

Hole Number:

K16-369

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
430.50	450.00	RHYvx Quartz and/or feldspar crystal tuff									
<p>430.5 - 450: QZ eyes and BI-CL-CA lpl tuff. Weak MU-alteration.</p> <p><<Alt: 430.5 - 450 Weak-Moderate Calcite>></p> <p><<Struc: 446.29 - 446.3 Weak dominant foliation>></p> <p><<Struc: 447 - 448.2 Moderate Fault>></p> <p>End of Hole @ 450</p>											