

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-390

Prospect:	Infrastructure	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	David Nuttal	
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	7/15/2016	
UTM Easting	414323.128	Core Size:	HQ3	Azimuth:	360	Date Logging Complete:	7/17/2016	
UTM Northing:	6818778.591	Casing Pulled?:	Yes	Dip:	-90	Drill Company:	Hytech	
UTM Elev. (m):	1408.725	Casing Depth (m):	1.5	Length (m):	38.6	Drill Rig:	Tech 5000	
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	7/11/2016	
Local Northing:		Cemented?:	THM	Core Storage Loc.:	KZK Camp	Drill Completed:	7/12/2016	
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Geotech	
Comments:							Parent Hole:	

The purpose of K16-390 was to test the overburden and bedrock below the Class A storage facility, north extent. Three SPT tests were conducted in overburden and three packer tests in bedrock. Additionally, a thermistor was installed. Core from K16-390 is observed to be a package of interbedded mudstones and mafic tuffs from the Wind Lake Fm. Several faults intersect K16-390 leaving most of the core rubbly. Weak to partial oxidation was observed from 1.5 m to end of hole. No mineralization or strong alteration was present.

Downhole Surveys:

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-90	360	0	360	PLND-LiDAR	Knight Piésold	7/11/2016		<input checked="" type="checkbox"/>	

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
0.00	1.50	OVBN Overburden									
1.50	2.78	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Min: 1.5 - 38.6 0.5% Min: Pyrite>>											
<<Min: 1.5 - 38.6 0.1% Min: Pyrrhotite>>											
<<Alt: 1.5 - 23.85 Moderate Calcite>>											
<<Struc: 1.5 - 2.78 Weak Fault>>											
2.78	3.00	MAFt Mafic Volcaniclastics									
3.00	6.80	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Struc: 3 - 3.1 Weak Fault>>											
<<Struc: 4.3 - 6.8 Moderate Fault>> Rock rubble and gravel, no gouge present.											
6.80	25.10	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<p><<Alt: 23.85 - 32.86 Trace Calcite>></p> <p><<Struc: 10.1 - 12 Moderate Fault>> clay/sand gouge.</p> <p><<Struc: 12 - 19.1 Trace Fault>> Rock rubble and remobilized foliation.</p> <p><<Struc: 19.1 - 19.4 Moderate Fault>> sand and gravel filled fault,no cement.</p> <p><<Struc: 19.4 - 25.1 Trace Fault>> Top and bottom of interval are rubbly rock. Center of interval is disjointed to broken rock. Suspected to be due to faults above and below.</p> <p>25.10 26.17 MAFt Mafic Volcaniclastics</p> <p><<Struc: 25.1 - 25.2 Weak Fault>> Rock Rubble.</p> <p>26.17 27.15 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p><<Vein: 26.8 - 38.19 60% Quartz-Carbonate>></p> <p><<Struc: 27.05 - 27.15 Weak Fault>></p> <p>27.15 28.19 MAFt Mafic Volcaniclastics</p> <p>28.19 32.86 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p>32.86 34.00 MAFt Mafic Volcaniclastics</p> <p><<Alt: 32.86 - 38.6 Weak-Moderate Calcite>></p> <p>34.00 36.86 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p><<Vein: 34 - 35.6 35% Quartz-Carbonate>></p> <p><<Struc: 34.15 - 34.35 Weak Fault>></p> <p>36.86 37.56 MAFt Mafic Volcaniclastics</p> <p><<Struc: 36.86 - 37 Weak Fault>> Rubble to gravel fault gouge, no cement.</p> <p>37.56 38.60 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p>End of Hole @ 38.6</p>											