

GeoSpark Logger ~ Drill Log

Project: KZK **Hole Number:** K16-402

Prospect:	Infrastructure	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Dillon Hume	
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	7/24/2016	
UTM Easting:	415844.03	Core Size:	HQ3	Azimuth:	360	Date Logging Complete:	7/25/2016	
UTM Northing:	6816485.059	Casing Pulled?:	Yes	Dip:	-90	Drill Company:	Hytech	
UTM Elev. (m):	1443.365	Casing Depth (m):	6.3	Length (m):	70.6	Drill Rig:	Tech 5000	
Local Easting:		Stored?:	Yes	Claims Title:		Drill Started:	7/22/2016	
Local Northing:		Cemented?:	THM	Core Storage Loc.:	KZK Camp	Drill Completed:	7/24/2016	
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Hydro	
Comments:							Parent Hole:	

K16-402 was drilled to test the geotechnical properties of the proposed Class C Storage Facility. 4 SPT tests were performed in the overburden, and 6 packer tests in the bedrock. A thermistor was installed.
 K16-402 encounters bedrock at 6.3 m, and consists of intercalated mudstone, wackes, and mafic tuffs of the Wind Lake Formation.

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	7/22/2016		<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	6.30	OVBN Overburden									
6.30	22.30	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
6.3 - 22.3: Minor interbedded tuffaceous horizons											
<<Min: 6.3 - 22.3 1% Min: Pyrite>>											
<<Alt: 6.3 - 22.3 Moderate Calcite>>											
22.30	23.20	SED undifferentiated Sediment									
22.3 - 23.2: Beige, fine grained, QZ-sericite-PY sandstone/siltstone											
<<Min: 22.3 - 23.2 3% Min: Pyrite>>											
<<Alt: 22.3 - 23.2 Weak Calcite>>											
23.20	24.80	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
<<Min: 23.2 - 24.8 1% Min: Pyrite>>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<p><<Alt: 23.2 - 42.7 Moderate Calcite>></p> <p>24.80 30.40 MAFt Mafic Volcaniclastics</p> <p>24.8 - 30.4: Light green to beige mafic tuff/flow (?) partially sericite altered. Disseminated BI+CA phenocrysts.</p> <p><<Min: 24.8 - 30.4 3% Min: Pyrite>></p> <p>30.40 35.10 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p><<Min: 30.4 - 35.1 2% Min: Pyrite>></p> <p>35.10 36.10 SED undifferentiated Sediment</p> <p>35.1 - 36.1: Beige, fine grained, QZ-sericite-PY sandstone/siltstone</p> <p><<Min: 35.1 - 36.1 5% Min: Pyrite>></p> <p><<Vein: 35.7 - 35.8 100% Quartz-Carbonate 60 deg. >> QZ-CA vein with carbonaceous material</p> <p>36.10 42.70 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p><<Min: 36.1 - 42.7 2% Min: Pyrite>></p> <p><<Vein: 38.1 - 38.5 100% Quartz-Carbonate 70 deg. >> Massive QZ-Carb vein with blebby PY</p> <p>42.70 43.60 SED undifferentiated Sediment</p> <p>42.7 - 43.6: Beige, fine grained, QZ-sericite-PY sandstone/siltstone</p> <p><<Min: 42.7 - 43.6 10% Min: Pyrite>></p> <p><<Alt: 42.7 - 43.6 Weak Calcite>></p> <p>43.60 49.10 MDS Carbonaceous Mudstone & Tuffaceous Mudstone</p> <p><<Min: 43.6 - 49.1 3% Min: Pyrite>></p> <p><<Alt: 43.6 - 64.4 Moderate Calcite>></p> <p>49.10 52.70 MAFt Mafic Volcaniclastics</p> <p>49.1 - 52.7: Strong-intense sericitic alteration associated with QZ-veining. Poor recovery and RQD.</p> <p><<Min: 49.1 - 68 5% Min: Pyrite>> Maybe associated with veining??</p> <p><<Alt: 49.1 - 50 Strong Muscovite>> Massive sericite, associated with faulting and veining?</p> <p><<Vein: 50 - 54 40% Quartz-Carbonate>> Zone of massive QZ-carb+/-blebby PY veining</p> <p><<Struc: 49.1 - 54.1 Moderate Fault>></p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
52.70	58.60	MDS Carbonaceous Mudstone & Tuffaceous Mudstone <<Vein: 56.7 - 56.9 80% Quartz-Carbonate>> Massive QZ-carb vein with minor sericite+/-PY blebs									
58.60	61.00	MAFt Mafic Volcaniclastics 58.6 - 61: Strong sericite alteration with minor bands of PY. Associated with massive QZ+/-vuggy CA veins. <<Alt: 58.6 - 61 Strong Muscovite>> Massive sericite, associated with faulting/veining? <<Vein: 59 - 62.3 50% Quartz-Carbonate>> Zone with massive QZ-Carb (locally vuggy) veins with blebby carbonaceous material and trace specular hematite <<Struc: 58.6 - 62.7 Moderate Fault>>									
61.00	64.40	MDS Carbonaceous Mudstone & Tuffaceous Mudstone									
64.40	65.80	MAFt Mafic Volcaniclastics 64.4 - 65.8: Moderately altered to fuchsite. <<Alt: 64.4 - 65.8 Moderate Muscovite>> Fuchsite alteration <<Alt: 64.4 - 65.8 Weak Calcite>>									
65.80	66.80	MDS Carbonaceous Mudstone & Tuffaceous Mudstone <<Alt: 65.8 - 70.6 Moderate Calcite>>									
66.80	70.60	MAFt Mafic Volcaniclastics 66.8 - 70.6: Upper ~1 m has weak-moderate sericite alteration (wacke?) <<Min: 68 - 70.6 1% Min: Pyrite>> <<Alt: 66.8 - 68.4 Moderate Muscovite>> Sericite alteration of MAFt <<Vein: 66.8 - 67.1 100% Quartz-Carbonate>> Massive QZ-carb vein with blebby pyrite									
End of Hole @ 70.6											