

Measured Correction Corrected

Survey Type

Survey By

## GeoSpark Logger ~ Drill Log

**Project: KZK Hole Number:** K16-383

Prospect:	Infrastructure	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Steve Bultitude
Grid:	NAD83_Z9	Hole Diameter:	96	Survey By:	Challenger_Survey	Date Logging Start:	7/14/2016
UTM Easting	414010.664	Core Size:	HQ3	Azimuth:	360	Date Logging Complete:	7/14/2016
UTM Northing:	6817774.191	Casing Pulled?:	Yes	Dip: -90		Drill Company:	Hytech
UTM Elev. (m):	1503.364	Casing Depth (m):	1.5	Length (m):	27.9	Drill Rig:	Tech 5000
Local Easting:		Stored?:	Yes	Claims Title		Drill Started:	7/6/2016
Local Northing:		Cemented?:	SP	Core Storage Loc.:	KZK Camp	Drill Completed:	7/7/2016
Local Elev. (m):				Hole Completed?:	Completed	Purpose:	Hydro
Comments:						Parent Hole:	

The purpose of hole K16-383 was to conduct a geotechnical investigation pertaining to the construction of a class B storage facility in the area. 1 SPT test and 3 packer tests were executed in overburden and bedrock respectively. A monitoring well was also installed. The stratigraphy covered in the area consists of mainly calcareous and carbonaceous mudstone interbedded with ashrich mafic tuffs. The mudstone/tuff package is underlain by a fine-grained mafic dyke. Weak to moderate muscovite and calcite alteration is present within the mudstone units, with weak biotite and strong calcite alteration characterization the mafic units. Sulphide mineralization is mainly PO, reaching 2% between 12.9 and 20.4 metres depth within the mudstone unit. Py is minor, occurring mainly as small blebs and disseminations.

Survey Date

Mag Field

Accept

Comments

## Downhole Surveys:

Depth (m)

Dopur (III)	Бір	Azimuth	Factor	Azimuth	Curvey Type	ourvey by	Curvey Bute		alues?	Ommonto					
0	-90	360	0	360	PLND-LiDAR	Knight Piésold	7/6/2016		<b>✓</b>						
From (m)	To (m)			Rocktype	e & Description			From (m)	To (m)	Width	Sample	Au ppm Ag ppm	Cu %	Pb %	Zn %
1.50	5.08	B MDS			us Mudstone Vudstone	& green-b	rown VFG								
< <alt: -<="" 1.5="" td=""><td>3.65 Mod</td><td>derate Musco</td><td>ovite&gt;&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></alt:>	3.65 Mod	derate Musco	ovite>>												
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< <alt: 3.65<="" td=""><td>- 5.08 Tra</td><td>ace Muscovi</td><td>te&gt;&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></alt:>	- 5.08 Tra	ace Muscovi	te>>												
5.08	5.68	MAFta	Coar	rse grair	ned to ash tuf	f green	FG								
		derate Calc		3		9									
< <alt: 5.08<="" td=""><td>- 5.68 W</td><td>eak Biotite&gt;&gt;</td><td>&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></alt:>	- 5.68 W	eak Biotite>>	>												
5.68	10.97	MDS			us Mudstone Vudstone	&	VFG								
< <alt: 5.68<="" td=""><td>- 10.97 T</td><td>race Muscov</td><td>vite&gt;&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></alt:>	- 10.97 T	race Muscov	vite>>												
< <alt: 5.68<="" td=""><td>- 10.97 V</td><td>Veak Calcite</td><td>&gt;&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></alt:>	- 10.97 V	Veak Calcite	>>												



## GeoSpark Logger ~ Drill Log

Project: KZK Hole Number: K16-383

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

10.97 11.64 MAFta Coarse grained to ash tuff dark grey MG

<<Alt: 10.97 - 11.64 Moderate Calcite>>

<<Vein: 11.47 - 11.64 70% Quartz-Carbonate>>

11.64 26.78 MDS Carbonaceous Mudstone & grey-green FMG
Tuffaceous Mudstone

<<Min: 12.9 - 20.4 0.1% Min: Pyrite>>

<<Min: 12.9 - 20.4 2% Min: Pyrrhotite>> Also occurs as coarse-grained disseminations and blebs

<<Alt: 11.64 - 26.78 Weak Calcite>>

<<Alt: 21.11 - 26.78 Weak-Moderate Muscovite>>

<<Alt: 21.75 - 27.9 Weak Biotite>>

<<Vein: 23.89 - 24.78 35% Quartz-Carbonate 25 deg. >>

<<Vein: 26.68 - 27.17 40% Carbonate-Chlorite>>

<<Struc: 16.65 - 16.65 Moderate dominant foliation>>

<<Struc: 22 - 22 Weak-Moderate dominant foliation>>

<<Struc: 24.2 - 24.2 Moderate-Strong Vein>>

26.78 27.90 MAFi Mafic Intrusions (primarily grey FG footwall mafic intrusion)

<<Min: 26.78 - 27.17 1% Min: Pyrite>> Also occursin large (2 cm) dissemination

<<Alt: 26.78 - 27.9 Moderate-Strong Calcite>> <<Vein: 27.65 - 27.85 80% Quartz-Carbonate>>

End of Hole @ 27.9