

# GeoSpark Logger ~ Drill Log

**Project:** KZK **Hole Number:** K98-195

Prospect:	Hole Type:	DD	Survey Type:	RTK DGPS	Logged By:	Jerome de Pasquale
Grid: NAD83_Z9	Hole Diameter:	75.7	Survey By:	Challenger_Survey	Date Logging Start:	5/2/2016
UTM Easting: 420541.531	Core Size:	NQ	Azimuth:	180	Date Logging Complete:	5/3/2016
UTM Northing: 6814410.754	Casing Pulled?:	No	Dip:	-60	Drill Company:	
UTM Elev. (m): 1347.7	Casing Depth (m):	9	Length (m):	200	Drill Rig:	
Local Easting: 10550	Stored?:	Yes	Claims Title		Drill Started:	
Local Northing: 4425	Cemented?:		Core Storage Loc.:	KZK Camp	Drill Completed:	
Local Elev. (m): 1347.7			Hole Completed?:		Purpose:	Exploration
Comments:					Parent Hole:	

Collared to test UTEM/HLEM conductor with near, flanking MAG approximately 300 metres SE of K98-194. Carbonaceous units are present. The unit intercepted from 41.13 m to 44.27 m seems easy to identify (glassy/unfoliated/silty-muddy/sorted/ dark blue/high silica content) and could be a good geological marker (logged as SLT\_crb).

**Downhole Surveys:**

Depth (m)	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Survey Type	Survey By	Survey Date	Mag Field	Accept Values?	Comments
0	-60	180		180	ACID				<input checked="" type="checkbox"/>	
98	-64	180		180	ACID				<input checked="" type="checkbox"/>	

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>0.00</b>	<b>9.10</b>	<b>OVBN Overburden</b>									
<b>9.10</b>	<b>13.81</b>	<b>MAFt Mafic Volcaniclastics</b>									
9.1 - 13.81: Lithology obscured by oxidation. CA in foliation.											
<<Min: 9.1 - 41.13 0.5% Min: Pyrrhotite>> in foliation.											
<<Min: 9.1 - 97.48 0.1% Min: Pyrite>> very rare.											
<<Alt: 9.1 - 15 Moderate-Strong Calcite>>											
<b>13.81</b>	<b>25.12</b>	<b>MAFw mafic volcanic flows</b>									
13.81 - 25.12: Or MAFt. Patch of BI. CA veining with sediments from 19.47 to 19.75. Lithology obscured by oxidation from 22.3 to 24.50.											
<<Alt: 15 - 29.58 Moderate Calcite>>											
<<Vein: 23.7 - 23.9 Quartz-Carbonate>> QZ/CA vein.											
<<Struc: 22.3 - 23.3 Weak Fault>> Few fault gouge and brokebn zone.											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>25.12</b>	<b>26.95</b>	<b>SED undifferentiated Sediment</b> 25.12 - 26.95: Bedded, foliated. CA veining in foliation. Some coarse grain beds (siltstone to sandstone). Lithology locally obscured by foliation. Some mafic material interbedded.									
<b>26.95</b>	<b>29.57</b>	<b>MAFw mafic volcanic flows</b> 26.95 - 29.57: BI/CA.CL. Irregular CA veining.  <<Vein: 29.45 - 29.6 Quartz-Carbonate>> QZ/CA vein.									
<b>29.57</b>	<b>31.06</b>	<b>SED undifferentiated Sediment</b> 29.57 - 31.06: Heterogeneous. Brown sediment containing QZ/BI beds and few CL. (sandy silty locally).  <<Alt: 29.58 - 37.99 Strong Calcite>>									
<b>31.06</b>	<b>33.06</b>	<b>SED undifferentiated Sediment</b> 31.06 - 33.06: CA veining I foliation.									
<b>33.06</b>	<b>34.62</b>	<b>MAFw mafic volcanic flows</b> 33.06 - 34.62: CL altered. Mafic flow crosscut by CL/QZ vein. Probably mixed with mudstone material.									
<b>34.62</b>	<b>37.90</b>	<b>SED undifferentiated Sediment</b> 34.62 - 37.9: BI rich schist. CA veining locally, possibly silicified patch.									
<b>37.90</b>	<b>38.94</b>	<b>MAFt Mafic Volcaniclastics</b> 37.9 - 38.94: Low CA content.  <<Alt: 37.99 - 41.13 Moderate-Strong Calcite>>									
<b>38.94</b>	<b>41.13</b>	<b>SED undifferentiated Sediment</b> 38.94 - 41.13: CA in foliation. Some strong siliceous bands.									
<b>41.13</b>	<b>44.27</b>	<b>SLT Siltstone - fine-grained sedimentary rock</b> 41.13 - 44.27: Silicified mudstone and siltstone, glassy, dark blue, unfoliated.  <<Alt: 41.13 - 44.27 Intense Silicification>> <<Vein: 43.6 - 59.4 Quartz-Carbonate>> Multiple QZ/CA vein, 10 to 15 cm wide..									
<b>44.27</b>	<b>47.60</b>	<b>SED undifferentiated Sediment</b> <<Min: 44.27 - 97.48 0.5% Min: Pyrrhotite>> And disseminated. Seems more concentrated in mafic units. <<Alt: 44.27 - 49.56 Moderate-Strong Calcite>>									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<p>&lt;&lt;Alt: 44.27 - 97.48 Weak-Moderate Silicification&gt;&gt;</p> <p>&lt;&lt;Struc: 46.6 - 53 Weak Fault&gt;&gt; Multiple narrow fault and broken zone.</p> <p><b>47.60 49.50 MAFt Mafic Volcaniclastics</b></p> <p><b>49.50 57.02 MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b></p> <p>49.5 - 57.02: Foliated mudstone crosscut by QZ/CA vein. Some graphitic bed and some silicified bed or highly siliceous.</p> <p>&lt;&lt;Alt: 49.56 - 52.24 Moderate Calcite&gt;&gt;</p> <p>&lt;&lt;Alt: 52.34 - 57 Weak Calcite&gt;&gt;</p> <p>&lt;&lt;Alt: 57 - 57.61 Strong Calcite&gt;&gt;</p> <p><b>57.02 57.61 MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b></p> <p>57.02 - 57.61: BI/CL. QZ vein at upper contact and QZ vein crosscutting the unit.</p> <p><b>57.61 58.56 MDSc Carbonaceous dominant mudstone</b></p> <p>57.61 - 58.56: Low CA content.</p> <p>&lt;&lt;Alt: 57.61 - 97.48 Weak-Moderate Calcite&gt;&gt;</p> <p><b>58.56 59.30 MAFt Mafic Volcaniclastics</b></p> <p>58.56 - 59.3: MAFi interbedded from 59.06 to 59.54. BI rich, blue, possibly andesitic composition.</p> <p><b>59.30 64.60 MDSc Carbonaceous dominant mudstone</b></p> <p>59.3 - 64.6: Or WCK. Thinly foliated. Sheared from 60.30 to 60.60. Could contain mafic material.</p> <p>&lt;&lt;Struc: 60.2 - 60.6 Weak-Moderate Shear&gt;&gt; Shearing marks.</p> <p>&lt;&lt;Struc: 64.5 - 67.75 Strong Fault&gt;&gt; Brittle and gouge in carbonaceous mudstone. Core loss.</p> <p><b>64.60 67.75 FLZ Fault Zone</b></p> <p>64.6 - 67.75: Sheared and faulted mudstone. Brittle and gouge.</p> <p><b>67.75 70.95 MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b></p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>70.95</b>	<b>72.05</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b> 70.95 - 72.05: Or MAFt mixed with mudstone.									
<b>72.05</b>	<b>76.69</b>	<b>MAFt Mafic Volcaniclastics</b> 72.05 - 76.69: Poorly foliated.									
<b>76.69</b>	<b>81.98</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 76.69 - 81.98: Some brown coarse grain beds, non carbonaceous. <<Vein: 79.62 - 79.85 Quartz-Carbonate>> QZ/CA vein. <<Struc: 77.1 - 77.49 Weak Fault>> 2 narrow fault gouges.									
<b>81.98</b>	<b>82.68</b>	<b>SED undifferentiated Sediment</b> 81.98 - 82.68: Brownish unit, poorly sorted. QZ grain, coarse matrix.									
<b>82.68</b>	<b>84.23</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 82.68 - 84.23: CA veining. Brown coarse grain bed at lower contact, SED showing MDS thinly interbedded..									
<b>84.23</b>	<b>85.21</b>	<b>MAFt Mafic Volcaniclastics</b>									
<b>85.21</b>	<b>86.28</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<b>86.28</b>	<b>87.37</b>	<b>MAFt Mafic Volcaniclastics</b> 86.28 - 87.37: Silicified on the edge, no foliation, green. QZ vein at lower contact.									
<b>87.37</b>	<b>87.95</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<b>87.95</b>	<b>89.75</b>	<b>MAFw mafic volcanic flows</b> 87.95 - 89.75: With 10 cm of mudstone interbedded. Could be MAFt.									
<b>89.75</b>	<b>90.01</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<b>90.01</b>	<b>90.44</b>	<b>RHY undifferentiated rhyolite</b> 90.01 - 90.44: Felsic, probably volcaniclastic, granular.									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>90.44</b>	<b>92.17</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> <<Alt: 92.14 - 93.77 Weak-Moderate Muscovite>> <<Struc: 91.2 - 91.3 Weak Fault>> Narrow, minor fault gouge.									
<b>92.17</b>	<b>93.77</b>	<b>RHYv Rhyolite volcaniclastic</b> 92.17 - 93.77: Felsic composition. Granular to clastic. Possibly rhyolite.									
<b>93.77</b>	<b>96.60</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<b>96.60</b>	<b>97.48</b>	<b>MAFt Mafic Volcaniclastics</b>									
<b>97.48</b>	<b>98.10</b>	<b>SED undifferentiated Sediment</b> 97.48 - 98.1: Felsic composition (80 to 90 percent of QZ), Bl. Meta sandstone/quartzite?. E.O.H. <<Alt: 97.48 - 98.01 Strong Silicification>>									
<b>End of Hole @ 200</b>											