

# GeoSpark Logger ~ Drill Log

**Project:** KZK **Hole Number:** K98-194

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:	5/1/2016
UTM Easting: 420336.919	Core Size:	NQ	Azimuth:	160	Date Logging Complete:	5/2/2016
UTM Northing: 6814626.854	Casing Pulled?:	No	Dip:	-60	Drill Company:	
UTM Elev. (m): 1314.318	Casing Depth (m):	15	Length (m):	95.7	Drill Rig:	
Local Easting: 10350	Stored?:	Yes	Claims Title		Drill Started:	8/22/1998
Local Northing: 4640	Cemented?:		Core Storage Loc.:	KZK Camp	Drill Completed:	8/24/1998
Local Elev. (m): 1314			Hole Completed?:		Purpose:	Exploration
Comments:					Parent Hole:	

**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"/>	
95.7	-65	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>16.20</b>	<b>OVBN Overburden</b>									
<b>16.20</b>	<b>22.80</b>	<b>RHYv Rhyolite volcaniclastic</b>									
16.2 - 22.8: Foliated, muscovite altered schist. QZ/CA vein. Some darker beds.											
<<Min: 16.2 - 30.07 2% Min: Pyrrhotite>>											
<<Alt: 16.2 - 30.07 Moderate-Strong Calcite>>											
<<Alt: 22.3 - 30.07 Weak Chlorite>> Heterogeneous sediment. Alteration controlled by lithology.											
<<Vein: 19.7 - 20.6 Quartz-Chlorite-Carbonate>> Discontinuous QZ/CA vein containing CL											
<b>22.80</b>	<b>23.98</b>	<b>SED undifferentiated Sediment</b>									
22.8 - 23.98: Irregular band size, heterogeneous composition. Strongly foliated, CA in foliation. Locally felsic material (rhyolitic).											
<b>23.98</b>	<b>24.43</b>	<b>MAFt Mafic Volcaniclastics</b>									
23.98 - 24.43: Chlorite altered, fine grain homogeneous unit. CA in foliation.											
<b>24.43</b>	<b>30.07</b>	<b>SED undifferentiated Sediment</b>									
24.43 - 30.07: Thinly banded, heterogeneous composition including mafic material.											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>30.07</b>	<b>31.63</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b>									
<p>30.07 - 31.63: Or MAFw. Chlorite altered, massive homogeneous unit, low BI content, CA content. Sharp upper contact, gradual lower contact.</p> <p>&lt;&lt;Min: 30.07 - 31.63 1% Min: Pyrrhotite&gt;&gt;</p> <p>&lt;&lt;Alt: 30.07 - 31.63 Weak-Moderate Chlorite&gt;&gt; Mafic dike.</p> <p>&lt;&lt;Alt: 30.07 - 31.63 Weak Calcite&gt;&gt;</p>											
<b>31.63</b>	<b>31.90</b>	<b>MAFt Mafic Volcaniclastics</b>									
<p>31.63 - 31.9: Foliated mafic tuff, CA veining.</p> <p>&lt;&lt;Min: 31.63 - 68 0.5% Min: Pyrrhotite&gt;&gt;</p> <p>&lt;&lt;Alt: 31.63 - 57.2 Moderate-Strong Calcite&gt;&gt;</p>											
<b>31.90</b>	<b>33.00</b>	<b>FLZ Fault Zone</b>									
<p>31.9 - 33: Fault gouge and core loss.</p> <p>&lt;&lt;Struc: 32.7 - 48.5 Weak-Moderate Fault&gt;&gt; Large broken zone. 2 set of fractures. Locally sheared and minor offset on micro fault (alpha angle 25).</p>											
<b>33.00</b>	<b>35.58</b>	<b>MAFt Mafic Volcaniclastics</b>									
<p>33 - 35.58: Foliated mafic tuff, CA veining.</p>											
<b>35.58</b>	<b>38.75</b>	<b>MAFt Mafic Volcaniclastics</b>									
<p>35.58 - 38.75: Mixed of mafic tuff and mudstone (60/40). Some argillitic siliceous bands. Thin foliation.</p>											
<b>38.75</b>	<b>48.93</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<p>38.75 - 48.93: Dominantly siliceous mudstone. Strong CA veining. Foliated and fractured with minor MAFt beds. Two massive QZ veins (from 45.69 to 46.45 and from 47.46 to 47.75). Locally sheared.</p> <p>&lt;&lt;Alt: 48.59 - 69.18 Moderate Silicification&gt;&gt; Locally strong. Silicification of mudstone and dikes. Lithology controlled.</p> <p>&lt;&lt;Vein: 45.69 - 46.45 Quartz-Chlorite-Carbonate&gt;&gt; QZ/CA massive vein containing mafic tuff.</p> <p>&lt;&lt;Vein: 47.46 - 48.93 Quartz-Carbonate&gt;&gt; QZ/CA vein.</p>											
<b>48.93</b>	<b>55.90</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b>									
<p>48.93 - 55.9: Siliceous mudstone. Few light grey band highly silicified (quartzite).</p>											

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>55.90</b>	<b>56.97</b>	<b>MAFt Mafic Volcaniclastics</b> 55.9 - 56.97: Moderately foliated. <<Struc: 56.77 - 57.96 Moderate-Strong Fault>> Strongly foliated, fault gouge, brittle.									
<b>56.97</b>	<b>57.36</b>	<b>FLZ Fault Zone</b> 56.97 - 57.36: Fault gouge and weak shearing. <<Alt: 57.2 - 92 Moderate Calcite>>									
<b>57.36</b>	<b>59.10</b>	<b>MAFt Mafic Volcaniclastics</b> 57.36 - 59.1: Fine grain, few CA discontinuous veinlets.									
<b>59.10</b>	<b>60.50</b>	<b>MAFw mafic volcanic flows</b> 59.1 - 60.5: Homogeneous, CL altered. Bl/feldspar. <<Alt: 59.1 - 60.56 Weak Chlorite>> Dike.									
<b>60.50</b>	<b>65.65</b>	<b>MAFt Mafic Volcaniclastics</b> 60.5 - 65.65: Interbedded with mudstone, Some siliceous argillite weakly foliated beds. Fractured, locally faulted. <<Struc: 63.6 - 63.9 Moderate Fault>> Fault gouge and brittle. <<Struc: 65 - 66.5 Moderate-Strong Fault>> Strongly fracture, powder and brittle.									
<b>65.65</b>	<b>67.31</b>	<b>MDSc Carbonaceous dominant mudstone</b> 65.65 - 67.31: Strong CA veining in foliation. Locally sheared and faulted.									
<b>67.31</b>	<b>68.09</b>	<b>MAFt Mafic Volcaniclastics</b> 67.31 - 68.09: Calcareous mafic tuff dominantly. Some mudstone interbedded. <<Min: 68 - 95.7 1% Min: Pyrrhotite>> Seems to be more concentrated in the brownish, soft beds.									
<b>68.09</b>	<b>69.18</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 68.09 - 69.18: Some brown coarser grain beds, soft, 8 to 12 cm wide.									
<b>69.18</b>	<b>70.65</b>	<b>SED undifferentiated Sediment</b> 69.18 - 70.65: Possibly felsic dike or metasandstone (quartzite). Light grey, homogeneous texture, Sl/few Bl. <<Alt: 69.18 - 70.63 Strong Silicification>> Dike <<Alt: 70.63 - 73.8 Moderate Silicification>>									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>70.65</b>	<b>73.80</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 70.65 - 73.8: Thinly foliated mudstone containing mafic tuff bands and QZ/CA veins.									
<b>73.80</b>	<b>74.59</b>	<b>SED undifferentiated Sediment</b> 73.8 - 74.59: Possibly felsic dike. Highly siliceous unit (quartzite?), bleached. Chill margin at lower contact. <<Alt: 73.8 - 74.58 Strong Silicification>> Dike.									
<b>74.59</b>	<b>76.59</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 74.59 - 76.59: CA banded. <<Alt: 76.39 - 77.17 Weak-Moderate Chlorite>> Dike.									
<b>76.59</b>	<b>77.17</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b> 76.59 - 77.17: CL altered. Silicified dike. Highly siliceous chill margins. Low BI content. CL concentrated in the middle of the unit. Similar contact than at 74.58. Possibly intermediate composition.									
<b>77.17</b>	<b>81.26</b>	<b>MDS Carbonaceous dominant mudstone</b> 77.17 - 81.26: Strong CA veining.									
<b>81.26</b>	<b>81.75</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b> 81.26 - 81.75: Silicified dike. Granular texture in the middle of the unit. Brown, soft, medium size grain bed at lower contact. <<Alt: 81.26 - 81.75 Moderate Chlorite>> Dike									
<b>81.75</b>	<b>87.34</b>	<b>MDS Carbonaceous Mudstone &amp; Tuffaceous Mudstone</b> 81.75 - 87.34: Mudstone containing brown, soft, coarse grain beds (5 to 10 cm wide) and at lower contact. Thin foliation.									
<b>87.34</b>	<b>87.86</b>	<b>SED undifferentiated Sediment</b> 87.34 - 87.86: Siliceous unit, quartzite? Crosscut by QZ vein. Homogeneous, QZ/BI, could be felsic dike. <<Alt: 87.34 - 89 Moderate Silicification>> <<Vein: 87.54 - 87.75 Quartz-Carbonate>> QZ/CA vein.									

From (m)	To (m)	Rocktype & Description	From (m)	To (m)	Width	Sample	Au ppm	Ag ppm	Cu %	Pb %	Zn %
<b>87.86</b>	<b>89.07</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b> 87.86 - 89.07: Brown, silicified. CA veinlets set. fine grain biotite, homogeneous, BI/feldspar. <<Vein: 88 - 89.07 Quartz-Carbonate 80 deg. >> QZ/CA veinlet set.									
<b>89.07</b>	<b>89.90</b>	<b>FLZ Fault Zone</b> 89.07 - 89.9: Fault gouge (MAFt)									
<b>89.90</b>	<b>92.80</b>	<b>MAFt Mafic Volcaniclastics</b> 89.9 - 92.8: Medium grain mafic tuff, CA in matrix and veining. <<Alt: 92 - 95 Moderate-Strong Calcite>> And in matrix in tuff. <<Struc: 89.9 - 91.7 Moderate-Strong Fault>> Fault gouge, core loss.									
<b>92.80</b>	<b>95.70</b>	<b>MAFi Mafic Intrusions (primarily footwall mafic intrusion)</b> 92.8 - 95.7: CL/BI/feldspar unit. CL altered. CA veinlet set. Fine grain. Gradual contact on the last 10 cm with highly siliceous unit, quartzite?. <<Alt: 95.51 - 95.7 Strong Silicification>>									
<b>End of Hole @ 95.7</b>											