EQUITY | EXPLORATION CONSULTANTS LTD.

# GeoSpark Logger ~ Drill Log

**Project:** KZK **Hole Number:** K98-192

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Prospect: | GP4F | Hole Type: | DD | Survey Type: | RTK DGPS | Logged By: | Rob Duncan |
| Grid: | NAD83_Z9 | Hole Diameter: | 75.7 | Survey By: | Challenger_Survey | Date Logging Start: | 5/24/2016 |
| UTM Easting | 419356.663 | Core Size: | NQ | Azimuth: | 180 | Date Logging Complete: | 5/24/2016 |
| UTM Northing: | 6813227.807 | Casing Pulled?: | No | Dip: | -74 | Drill Company: | |
| UTM Elev. (m): | 1356.733 | Casing Depth (m): | | Length (m): | 93.6 | Drill Rig: | |
| Local Easting: | 9350 | Stored?: | Yes | Claims Title | | Drill Started: | |
| Local Northing: | 3232 | Cemented?: | | Core Storage Loc.: | KZK Camp | Drill Completed: | |
| Local Elev. (m): | 1356.733 | | | Hole Completed?: | Completed | Purpose: | |
| 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 | -74 | 180 | | 180 | ACID | | | | ☑ | |
| 93.6 | -74 | 180 | | 180 | ACID | | | | ☑ | |

| From (m) | To (m) | Rocktype & Description |
|---|---|---|
| **0.00** | **9.30** | **OVBN Overburden** |
| **9.30** | **14.70** | **RHYvl Lapilli tuff** |

9.3 - 14.7: fuzzy feldspar only phenos 2-4mm, 7%. NO QE, NOT the GP4F FW RHYcf QE. Siliceous, unaltered

| | | |
|---|---|---|
| **14.70** | **17.50** | **PEL Equigranular biotite + calcite +/- quartz rock** |

14.7 - 17.5: Bi but not as much as BI-r, indication of symmetrical chil margins.

<<Min: 14.7 - 17.5 3% Min: Pyrrhotite>>

<<Alt: 14.7 - 17.5 Moderate-Strong Calcite>>

| | | |
|---|---|---|
| **17.50** | **22.10** | **RHYvl Lapilli tuff** |

17.5 - 22.1: as above, less CL-Bi in groundmass

<<Min: 17.5 - 22.1 1% Min: Pyrrhotite>>

<<Vein: 22 - 22.1 50% Quartz-Albite 45 deg. >> MAFi dyke effect

| From (m) | To (m) | Width | Sample | Au ppm | Ag ppm | Cu % | Pb % | Zn % |
|---|---|---|---|---|---|---|---|---|

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

**22.10 24.10 PEL Equigranular biotite + calcite +/- quartz rock**

22.1 - 24.1: as above central section is definitve CL-BI-CA mttled MAFi texture

<<Min: 22.1 - 24.1 3% Min: Pyrrhotite>>

<<Alt: 22.1 - 24.1 Moderate-Strong Calcite>>

**24.10 34.40 RHYva Coarse grained to ash tuff**

24.1 - 34.4: rare instances of possible feldspars. Wk MU overprint replacing BI in foliation planes giving it a pseudofrag texture. Not a Rhyv

<<Min: 24.1 - 34.4 1% Min: Pyrite>>

<<Min: 24.1 - 34.4 0.5% Min: Pyrrhotite>>

<<Alt: 24.1 - 34.4 Weak Muscovite>>

**34.40 35.60 PEL Equigranular biotite + calcite +/- quartz rock**

34.4 - 35.6: sharp contacts

<<Min: 34.4 - 35.6 3% Min: Pyrrhotite>>

<<Alt: 34.4 - 35.6 Moderate-Strong Calcite>>

**35.60 49.40 RHYv Rhyolite volcaniclastic**

35.6 - 49.4: less massive, no feldspar ghosts, more friable schistose.

<<Min: 35.6 - 45 0.5% Min: Pyrite>>

<<Min: 45 - 49.4 2% Min: Pyrite>>

<<Min: 45 - 49.4 0.5% Min: Pyrrhotite>>

<<Alt: 35.6 - 49.4 Weak Muscovite>>

<<Vein: 48.7 - 48.8 80% Quartz-Albite 80 deg. >>

<<Struc: 48.2 - 49.2 Weak Fault>> broken rubbled core

**49.40 51.80 PEL Equigranular biotite + calcite +/- quartz rock**

49.4 - 51.8: lower margin bleached, stil calcareous, 4mm co3 deformed veinlets.

<<Min: 49.4 - 51.8 2% Min: Pyrrhotite>>

<<Alt: 49.4 - 51.8 Moderate-Strong Calcite>>

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

**51.80 53.00 RHYva Coarse grained to ash tuff**

51.8 - 53: two bands of stg sil @53m and 52.7m

<<Min: 51.8 - 59 2% Min: Pyrite>>

<<Min: 51.8 - 59.9 0.5% Min: Pyrrhotite>>

<<Alt: 51.8 - 61.2 Weak-Moderate Muscovite>>

<<Alt: 51.8 - 61.4 Weak Chlorite>> replacing BI

<<Alt: 52.8 - 53 Moderate-Strong Silicification>>

**53.00 59.50 PEL Equigranular biotite + calcite +/- quartz rock**

53 - 59.5: lapilli tuff component, stg SIL @ 53.5- 53.7m

<<Min: 59 - 59.9 4% Min: Pyrite>>

<<Alt: 53 - 61.4 Weak-Moderate Calcite>>

<<Alt: 53.5 - 53.7 Moderate-Strong Silicification>>

<<Alt: 54.2 - 54.4 Moderate-Strong Silicification>>

<<Struc: 54.4 - 59 Weak Fault>> broken rubble core

**59.50 61.20 RHYvx Quartz and/or feldspar crystal tuff**

59.5 - 61.2: 10% 4mm QE correlates to HW RHYvx above GP4F elsewhere. Very narrow here and GP4F is not well developed here!

<<Min: 59.9 - 61.2 0.01% Min: Sphalerite>>

<<Min: 59.9 - 61.4 2% Min: Pyrrhotite>>

**61.20 61.40 PEL Equigranular biotite + calcite +/- quartz rock**

**61.40 63.50 PEL Equigranular biotite + calcite +/- quartz rock**

61.4 - 63.5: core is rusted, possible intercalated PEL present

<<Min: 61.4 - 63.5 1% Min: Sphalerite>>

<<Min: 61.4 - 63.5 7% Min: Pyrite>>

<<Alt: 61.4 - 65.3 Moderate Chlorite>>

<<Alt: 61.4 - 66.9 Moderate-Strong Muscovite>>

<<Struc: 63 - 63.2 Weak Fault>> broken rubble missing core

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

**63.50 65.30 OI Heavilly disseminated sulphides in host schist**

63.5 - 65.3: host rock is RHYva and minor PEL intercalated

<<Min: 63.5 - 65.3 5% Min: Sphalerite>>

<<Min: 63.5 - 65.3 15% Min: Pyrite>>

<<Min: 63.5 - 65.3 1% Min: Galena>>

<<Min: 63.5 - 65.3 0.5% Min: Chalcopyrite>>

<<Alt: 64 - 68 Weak-Moderate Calcite>>

**65.30 66.90 RHYv Rhyolite volcaniclastic**

65.3 - 66.9: some lapilli detected

<<Min: 65.3 - 68 4% Min: Pyrite>>

<<Min: 65.3 - 68 3% Min: Pyrrhotite>>

**66.90 68.00 PEL Equigranular biotite + calcite +/- quartz rock**

66.9 - 68: felsic ash component

**68.00 69.90 RHYva Coarse grained to ash tuff**

<<Min: 68 - 69.9 2% Min: Sphalerite>>

<<Min: 68 - 69.9 5% Min: Pyrite>>

<<Alt: 68 - 69.9 Moderate-Strong Muscovite>>

<<Alt: 68 - 69.9 Weak Chlorite>>

**69.90 72.20 OI Heavilly disseminated sulphides in host schist**

69.9 - 72.2: host rock is a RHYvl unit NOT RHYva here

<<Min: 69.9 - 72.2 5% Min: Sphalerite>>

<<Min: 69.9 - 72.2 10% Min: Pyrite>>

<<Min: 69.9 - 72.2 1% Min: Galena>>

<<Alt: 69.9 - 72.2 Moderate Silicification>>

<<Alt: 69.9 - 72.2 Moderate-Strong Muscovite>>

**72.20 72.70 PEL Equigranular biotite + calcite +/- quartz rock**

<<Min: 72.2 - 72.7 2% Min: Pyrrhotite>>

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

<<Alt: 72.2 - 72.7 Weak-Moderate Calcite>>

<<Alt: 72.2 - 74.3 Moderate Muscovite>>

**72.70 74.30 RHYvl Lapilli tuff**

<<Min: 72.7 - 74.3 2% Min: Sphalerite>>

<<Min: 72.7 - 74.3 10% Min: Pyrite>> stringer bands

<<Alt: 72.7 - 74.3 Weak Chlorite>>

<<Struc: 74.1 - 74.3 Weak Fault>> rubble

**74.30 76.60 SLT Siltstone - fine-grained sedimentary rock brown FG**

74.3 - 76.6: CALCAREOUS. Could call it SEDc, buff brown colour from Bi

<<Alt: 74.3 - 76.6 Intense Calcite>>

**76.60 78.20 RHYvx Quartz and/or feldspar crystal tuff**

76.6 - 78.2: 5% 2-4mm QE, bottom contact interbedded with PEL

<<Min: 76.6 - 78.2 3% Min: Pyrite>>

<<Alt: 76.6 - 78.2 Weak-Moderate Muscovite>>

<<Alt: 76.6 - 78.2 Weak Chlorite>>

**78.20 79.30 PEL Equigranular biotite + calcite +/- quartz rock**

<<Min: 78.2 - 79.3 1% Min: Pyrrhotite>>

<<Alt: 78.2 - 79.3 Moderate-Strong Calcite>>

**79.30 85.10 RHYvx Quartz and/or feldspar crystal tuff**

79.3 - 85.1: two 10cm PEL @ 81.6 and 82.5: LOWER CONTACT IS GRADATIONAL INTO RHYcf. Is RHYcf also a crystal tuff?

<<Min: 79.3 - 85.1 2% Min: Pyrite>>

<<Min: 79.3 - 85.1 0.5% Min: Pyrrhotite>>

<<Alt: 79.3 - 85.1 Weak Muscovite>>

<<Struc: 81.7 - 83 Weak Fault>> rubble

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

**85.10 86.60 RHYcf Feldspar & feldspar quartz porphyry**

85.1 - 86.6: crowded feldspar (14%) QE (7%)

<<Min: 85.1 - 86.6 0.5% Min: Pyrite>>

<<Min: 85.1 - 86.6 0.01% Min: Pyrrhotite>>

<<Alt: 85.1 - 86.6 Trace Muscovite>>

**86.60 87.70 PEL Equigranular biotite + calcite +/- quartz rock**

<<Min: 86.6 - 87.7 3% Min: Pyrrhotite>>

<<Alt: 86.6 - 87.7 Moderate-Strong Calcite>>

**87.70 89.10 RHYcf Feldspar & feldspar quartz porphyry**

87.7 - 89.1: as above

<<Min: 87.7 - 93.6 2% Min: Pyrite>>

**89.10 89.60 PEL Equigranular biotite + calcite +/- quartz rock**

**89.60 93.60 RHYvx Quartz and/or feldspar crystal tuff**

89.6 - 93.6: QE 6% Feldspar 4%. Biotite domains etc. Could be a sheared RHYcf but then how do you get the RHYva between

<<Alt: 89.6 - 93.6 Weak Muscovite>>

**End of Hole @ 93.6**