| Grid East | Grid North | Easting | Northing | Elev. (m) | Depth (m) |
|---|---|---|---|---|---|
| | | 509839 | 6795069 | 1329 | 306.32 |

**ZONE:**

**SECTION:**

**HOLE:** MARS-10-01

**CLAIM:**

Contractor: Beaudoin

Drill:

Core size: BTW

Casing depth: _____ in/out

Drilling dates: Sept. 5th-Sept. 12th, 2011

Geology logged by: K. Unger

**SURVEY**

| Depth (m) | Azimuth | Dip | Method | Depth (m) | Azimuth | Dip | Method |
|---|---|---|---|---|---|---|---|
| 0 | 45 | -45 | Compass | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

**TARGET:** Mars Cu-Au-Mo Porphyry

**SUMMARY**

| From (m) | To (m) | Interval | Unit | Comments |
|---|---|---|---|---|
| 0.00 | 2.57 | 2.57 | OVB | |
| 2.57 | 73.70 | 71.13 | MZN | |
| 73.70 | 76.20 | 2.50 | HFL | |
| 76.20 | 89.15 | 12.95 | MZN | |
| 89.15 | 103.83 | 14.68 | HFL | |
| 103.83 | 134.11 | 30.28 | MZN | |
| 34.11 | 149.90 | 115.79 | HFL | |
| 142.90 | 185.26 | 42.36 | MZN | |
| 185.26 | 188.92 | 3.66 | DIO | |
| 188.92 | 242.29 | 53.37 | MZN | |
| 242.29 | 263.37 | 21.08 | DIO | |
| 263.37 | 287.34 | 23.97 | MZN | |
| 287.34 | 291.94 | 4.60 | INT | |
| 291.94 | 306.32 | 14.38 | MZN | |
| | | | | |
| | | | | |

**SAMPLES**

Numbers: J981700 to J981838

Total: 139

Batch: 1, 2, 3, 4

Date Sent:

Certificate:

**COMMENTS**

| INTERVAL | | | LITHOLOGY | | | | | ALTERATION | | MINERALS | | DESCRIPTION | Photo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | From (m) | To (m) | Unit | Grain Size | Shade | Colour | Texture | Type | Intensity | Type | Conc. (%) | | |
| G | 0.00 | 2.57 | OVB | | | | | | | | | OVB/casing, no recovery. | |
| G | 2.57 | 73.70 | MZN | CG | | GY<br>PK | | POT<br>CHL | 3<br>2 | Py | 0.01 | medium grey to pink, MG to CG, quartz poor Monzonite with pink K-spar on selvages of fractures. Core is MG to CG, coarse feldspar crystals are supported in a MG to FG matrix with ~10% dark, irregular crystals of biotite and hornblende. Rock is dominated by feldspar (Plag>K-spar). Tabular phenocrysts of feldspar are up to 2mm in size, some exhibits zonation rims. Core is variably magnetic, more so where grey. Magnetisim is not typical in pink, potassic altered core. Clasts of dark green-black xenoliths are scattered throughout as angular to irregular FG-MG rock clasts up to 30 cm of core width. FG pyrite is present with calcite and dark greeen chlorite in intermittent veinlets. Core is fractured throughout. Dull white-beige calcite and green chlorite line most fractures, some appearing rusty. Trace disseminated silvery to yellow vFG to FG grains scattered throughout. | |
| D | 2.57 | 67.10 | MZN | CG | | GY<br>PK | | POT<br>CHL | 3<br>2 | Py | 0.01 | As general description. | |
| D | 67.10 | 73.70 | MZN | CG | | GY<br>PK | | POT<br>CHL | 4<br>2 | Py | 0.01 | Pink to grey, CG to MG variably magnetic "potassic flood" monzonite. Core grades from pink to grey in patches with pink K-spar matrix with CG white feldspar phenocrysts. Potassic altered zones up to 1.25 m wide with grey, finer grained MZN between pink patches. Core is variably magnetic from weak to strong, even where core is pink. Core is most magnetic where altered xenolith clasts and CG, black magnetite grains are visible. Xenoliths are scattered throughout, <1% of core and are up to 2.7 cm in size. FG-MG silvery yellow sulfides are variably disseminated, preferential to grey core. Dark mafic minerals in pink core appear altered dark green, fibrous and chloritic. | |
| G | 73.70 | 76.20 | HFL | | | PU<br>GN | | CHL | 3 | Py<br>Cp | 0.1<br>0.1 | Purple-brown to grey-green, FG-MG hornfes with disseminated FG to MG silvery yellow pyrite. Green and purple margins are irregular. Green, chloritic (phyllic?) alteration appears along fracture margins and as nebulous patches. Narrow healed fractures with variable orientations are seen throughout, 1 mm to <1 mm in width with grains of Py and Cp with clacite sometimes seen with handlens. | |
| G | 76.20 | 89.15 | MZN | CG | MD | GY<br>PK | | POT | 4 | | | Medium grey-green to pink, pervasively potassic altered monzonite. Coarse, zoned feldspar phenocrysts within a finer grained matrix of variably pink to green-grey potassic and chloritic altered mozonite. Core is magnetic wheregrey with disseminated, FG to CG magnentite in andhedral grains <1 mm in size. Magnetism drops off where pink. Trace FG to MG disseminated silvery-yellow pyrite grains are visible on some fractures. A few narrow, opaque Qz veinlets <2 mm wide are scattered throughout. Many narrow <1 mm wide healed fractures filled with clacite and chlorite (and sulfides?) throughout. | |
| G | 89.15 | 103.83 | HFL | | | PU<br>GN | | CHL | 2 | Py<br>Cp | 0.1<br>0.05 | Purple-brown, MG to FG hornfels with intermittent and variable cBX overprinting relict bedding. Core is variably magnetic, patches of core up to 3 cm long host disseminated magnetite and tension gash-like structures with calcite, chlorite and silvery-black magnetite being most magnetic. Trace silvery-yellow MG to FG sulfides are present on fractures (pyrite?). Chalcopyrite is present with some irregularly oriented calcite-chlorite veinlets/healed fractures as rare, anhedral, MG grains. cBX textures are local to intrusive rock on margins along 20 cm wide monzonite blocks within HFL, and is strong above lCN, decreasing in strength moving up hole. cBX is crosscut by narrow calcite+/- chlorite veinlets. Open fractures are rusty with some limonite throughout. | |

| INTERVAL | | | LITHOLOGY | | | | | ALTERATION | | MINERALS | | DESCRIPTION | Photo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | From (m) | To (m) | Unit | Grain Size | Shade | Colour | Texture | Type | Intensity | Type | Conc. (%) | | |
| | | | | | | PK | | POT | 3 | Py | 0.1 | Pink to grey-green CG monzonite with white cream coloured tabular phenocrysts of feldspar and irregular, dark green, fibrous altered mafics within pink to grey FG to MG matrix. Core is variably magnetic with disseminated magnetite and aggregates of CG magnetite where core is grey in colour. Magnetism less evident where core is pink and potassic. Numberous scattered xenoliths are present throughout, up to 1.9 cm, irregular in shape and often exhibit chloritic rims. Potassic alteration is pervasive, irregular clouds and halos along narrow fractures to broad bands up to 1.5 m wide all exhibit pink, potassic alteration. FG sulfides present with calcite-chlorite healed fractures as FG to MG chalcopyrite and pyrite. Cp is also seen with narrow Qz veinlets rarely seen throughout. | |
| G | 103.83 | 134.11 | MZN | CG | MD | GY | | | | Cp | 0.1 | | |
| | | | | | | PU | | CHL | 3 | Py | 0.1 | Purple to brown, MG to FG, variably chloritic altered hornfels. Core is blocky to rubbly with oxidized fracture faces throughout. Dark green to light green-grey chloritic alteration along margins of fractures. Trace silvery yellow MG to FG euhedral grains of pyrite visible on fracture faces and as oxidized limonitic grains on weathered fractures. A relict BD fabricc is present through HFL where not obliterated by CHL alteration. | |
| G | 134.11 | 142.90 | HFL | | | BN | | | | | | | |
| | | | | | | PK | | POT | 4 | Py | 0.1 | Pink to medium grey, CG to MG monzonite. White to grey, tabular feldspar phenocrysts are held in pink to grey matrix with irregular, black to dark green mafic minerals. Mafics appear dark green and altered where core is pink. Potassic alteration present in bands up to 9 m wide and as narrow selvages on fractures through grey MZN. Fracture faces are generally fresh, unlike rusty fractures seen elsewhere in the hole. Narrow calcite healed fractures with variable orientations seen throughout. Trace disseminated silvery-yellow euhedral grains of <1 mm prite visible on fracture faces. Core is variably magnetic, some disseminated magnetite present even where core is pink. Magnetisim present in bands up to 20 cm wide, most commonly where core is grey. | |
| G | 142.90 | 306.32 | MZN | CG | MD | GY | | CHL | 3 | | | | |
| | | | | | DK | GN | | POT | 1 | Mg | 5 | Dark green to grey, coarse grained diorite. Coarse grains of tabular grey to white feldspar with dark green pyroxene and dark grey hornblende. Pyroxene forms rare aggregates of radiating masses <1 cm wide, appearing almost as twinned crystals on core surface. Feldspar crystals up to 8 cm in size, but generally <2 mm. Pink K-Spar present along narrow fracture selvages. Core is variably magnetic throughout, irregular black magnetite crystals can be identified with a pen magnet and are <1 mm in size. Sulfides absent or are not visible with handlens. | |
| D | 185.26 | 188.92 | DIO | CG | | GY | | | | | | | |
| | | | | | | GY | | POT | 3 | Cp | 0.1 | Grey-green to pink, CG to MG quartz monzonite. Core is hard, not easily scratched. Core is variably magnetic, most evident where core is grey in colour. Euhedral, variably zoned, tabular, white-grey feldspar phenocrysts and irregular black to green mafics are in a grey to green matrix that appears pink where potassic altered. Narrow Qz veinlets are scattered throughout, grey Qz with white clacite and green chlorite. Healed fractures with variable orientations are seen throughout. Some fractures exhibit rare chacopyrite and pyrite as platy crystals to euhedral <1 mm grains. | |
| D | 188.92 | 242.29 | MZN | CG | | PK | | | | Py | 0.1 | | |
| | | | | | | PK | | POT | 5 | | | Pink, strongly POT altered, brecciated MG-CG MZN. BX and fractures are filled with soft, powdery biege calite with potassic alteration along veinlets/BX selvages. Relict MZN texture and colour present where alteration is weaker. Core is rubbly to blocky breaking easily along BX structures. | |
| D | 210.55 | 211.65 | MZN | CG | | GY | | | | | | | |
| | | | | | MD | GY | | | | | | Medium grey to black, MG-CG, non-magnetic monzodiorite(?). Core is darker and more fine grained than elsewhere. Core hosts irregularly oriented, rusty calcareous fractures with a platey black mineral (chalcocite?). Core is blocky to rubbly. | |
| D | 242.29 | 246.65 | DIO | MG | DK | GY | | | | | | | |

| INTERVAL | | | LITHOLOGY | | | | | ALTERATION | | MINERALS | | DESCRIPTION | Photo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | From (m) | To (m) | Unit | Grain Size | Shade | Colour | Texture | Type | Intensity | Type | Conc. (%) | | |
| | | | | | | OR | | OX | 3 | | | Rusty orange to grey, weathered/OX altered non-magnetic rock. Core is more FG than elsewhere, OX alteration is pervasive, propigating into rock off calcareous healed fractures. | |
| D | 246.65 | 249.26 | | MG | | GY | | | | | | | |
| | | | | | | BN | | | | Cp | 0.1 | Grey to brown, MG to CG, weakly potassic alterated monzodiorite. Mafics remain black, unaltered to chlorite. Core increases in grain size with depth, remaining brown-grey in colour. Mafics make up 5 to 10 % or core dominated by brownish grey feldspar grains. Narrow calcite +/- chlorite lined fractures seen throughout. Core is variably magnetic, more so with depth as core becomes more CG. Trace Cp is visible on rare veinlets/ fracture fills as bright, metallic yellow grains with calcite-chlorite. | |
| D | 249.26 | 263.37 | DIO | CG | | GY | | | | | | | |
| | | | | | | GY | | | | Cp | 0.1 | Grey-green to pink, CG, variably potassic and chlorite altered MZN. Core is CG to MG, dominated by grey-green to pink feldspars with subhedral, MG to CG chloritized mafics appearing dark green and soft. Core has higher fracture density than up hole, healed fractures with calcite +/- chlorite +/- sulfides are highly variable in orientation and more irregular than up hole. Pink potassic alteration with green selvages are narrow except where fracturing strongest, appearing cBX on 10 cm scales. Fractures appear more vuggy with a black mineral variably present on fractures both fresh and slightly weathered. | |
| D | 263.67 | 287.34 | MZN | | | PK | | | | Py | 0.1 | | |
| | | | | | DK | GN | | | | Cp | 0.01 | Dark green, MG to CG, variably magnetic dyke. Core is more green and more fine grained than surrounding MZN. Fractures are largely healed with calcite and trace Cp. Core is largely magnetic with patches of ligher green, more fine grained core less to non-magnetic scattered throughout. | |
| D | 287.34 | 291.94 | INT | MG | | | | | | | | | |
| | | | | | | GY | | | | Cp | 0.05 | Grey to pink CG MZN with narrow fractures and veinlets of variable orientations throughout. Core is pitted to vuggy where fracturing is strongest. Some veins with bladed crystals of Qz present. White to grey feldspar with zonation rims are supported by a grey-green to pink matrix. Potassic alteration present on selvages of healed fractures. Some fractures are open with CG brown calcite and brown-grey Qz. Qz veinlets are scattered throughout and few. Trae Cp seen with white calcite veinlets +/- green malachite. Trace Mo is present with some Ca veinlets. Core is slightly weathered with rusty oxides/malachite on some fractures. Magnetism decreases where core is weathered and pink. | |
| D | 291.94 | 306.32 | MZN | CG | | PK | | | | Ml | 0.01 | | |
| | | | | | | | | | | Mo | 0.01 | EOH. | |