

ZONE: \_\_\_\_\_

SECTION: \_\_\_\_\_

Grid East	Grid North	Easting	Northing	Elev. (m)	Depth (m)
		509126	6795502	1362	329.18

HOLE: **MARS-10-02**

CLAIM: \_\_\_\_\_

Contractor: Beaudoin

Drill: \_\_\_\_\_

Core size: BTW

Casing depth: \_\_\_\_\_ in/out

Drilling dates: Sept. 12th to Sept. 19th, 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	3.05	3.05	OVb	
3.05	18.97	15.92	HFL	
18.97	31.92	12.95	INT	
31.92	95.05	63.13	HFL	
95.05	113.18	18.13	MZN	
113.18	145.25	32.07	HFL	
145.25	176.53	31.28	MZN	
176.53	198.45	21.92	VOL	
198.45	288.60	90.15	MZN	
288.60	298.58	9.98	MZN/INT	
298.58	315.9	17.32	INT	
315.90	329.18	13.28	MZN	

SAMPLES
Numbers: J981839-J981899, L836051-L836130
Total: <u>141</u>
Batch: <u>4, 5, 6, 7, 8</u>
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	3.05	OVB									OVB/casing, no recovery.	
G	3.05	145.25	HFL			PU GN		CHL OX	3 1	Py	0.1	Purple brown to green, FG to CG hornfels crosscut by green, FG to CG intrusive rock. Relict bedding variable seen throughout, though often obscured by hornfels alteration. Green dykes typically FG to MG, <50 cm wide with irregular margins, though widths of 3 m for CG dykes is also seen. Sulfides seen within some healed fractures and as FG disseminations within HFL and INT bodies. Some white-yellow sulfides associated a soft, black, FG mineral in some healed fractures. Core is blocky, rubbly to competent with variable recovery throughout. Most fractures are lined with calcite and appear rusty, oxidation pervasive along fractures.	
D	18.97	31.92	INT	CG		GN		SIL CHL	4 3			Green, CG intrusive with light grey tabular to ovoid grains within green FG matrix with irregular black mafic minerals (<10%). Core at times is hard and cloudy in appearance, exhibiting SIL alteration. Trace sulfides present as FG to MG disseminations of silver to white-yellow grains, and as fracture fills with calcite or a soft black mineral. Contacts defined by breccia textures up to 1.4 m in width into HFL. Strong CHL alteration halo along margins of intrusive.	
D	95.05	113.18	MZN	CG		GY PK		POT	3	Py	0.1	Grey brown to pink, MG to CG quartz poor MZN with white to creamy, tabular phenocrysts ~1mm in size in a grey-pink matrix with irregular and variably oriented calcite healed fractures. Pink potassic alteration present along selvages of fractures appearing pervasive where fracturing is strongest. Silvery yellow flecks of sulfides present as disseminations, as aggregates forming blobs with sooty black tims in calcite veinlets. Core is competent to blocky, open fractures lined with platy, dirty calcite and powdery grey-yellow minerals (clay?) with occasional green chlorite. Some open fractures are rusty. Core is variably magnetic throughout, strong where black subhedral grains of magnetite visible in MZN.	
D	113.18	145.25	HFL	FG		PU GY		SIL CHL	3 2	Py	0.5	Purple-brown to grey-green variably SIL altered and fractured HFL. Relict bedding is visible, appearing cryptic where SIL is strongest, appearing swaly and deformed where fracturing increases. Stockwork fracturing variable throughout, mineralized fractures seen 0 degrees to 70 degrees TCA. CHL alteration is present on margins of fractures filled with calcite and pyrite.	
G	145.25	176.53	MZN	CG		GY		CHL OX	3 2	Py Cp	0.5 0.1	Grey to green, CG MZN with phenocrysts of white to grey feldspar with variably MG to CG mafics in grey to grey-green matrix. Matrix is FG with FG disseminated white-yellow sulfides. Mafics are euhedral when CG, more irregular when MG. Some patches of pink, potassic alteration are present in widths up to 10 cm with zones of green altered rock and where calcite healed fractures are higher in frequency. Some blocks and clasts of xenoliths/HFLs 1 cm to 2.2 cm in size scattered throughout. Open fractures are variably oxidized. Core is weathered most where most broken, patchy malachite visible on fractures faces where core is most oxidized. Trace Cp in some calcite-chlorite veinlets, often with subhedral, MG to CG grains of pyrite. Rare instances of Py appear more brassy and irregular in crystal habit (bornite?) in veinlets with chalcopyrite. sulfides are FG to CG, visible on almost all fracture faces fresh and old. Some red hematitic alteration present on some weathered fractures.	
										MI	0.01		
D	160.20	163.00	MZN	CG		OR GY		OX	4			Rusty orange to grey oxidized MZN. Fracture faces rusty brown and limonitic, orange oxidation pervasive as halos on fractures to rubbly bands of core seen up to 1.5 m wide. Core is blocky to rubbly, black, orange and green oxidized minerals present on fracture faces throughout.	

INTERVAL			LITHOLOGY					ALTERATION		MINERALS		DESCRIPTION	Photo
Type	From (m)	To (m)	Unit	Grain Size	Shade	Colour	Texture	Type	Intensity	Type	Conc. (%)		
G	176.53	198.45	VOL	FG		GN						Green, FG to CG laminated to thinly bedded siltstone VOL(hornfels?) with fine sandy beds. Rock is dark green to green-grey alternating beds <1 mm to 3.5 cm thick. Core is variably fractured by intermittent black cBX throughout. White calcite filled stockwork-like veinlets with some sulfides throughout, chalcopyrite is present as MG to CG grains in calcite veinlets. Yellow pyrite is seen as FG disseminations and CG euhedral cubes on fractures and veinlets along black cBX structures. Some fracture faces exhibit rusty OX alteration, most appear black with platy yellow-white pyrite patches.	
G	198.45	329.18	MZN	CG		GY PK		CHL POT	3 3	Cp Mo Py	0.5 0.05 0.5	Grey to pink, CG, variably fractured MZN cut by several dark green, MG to FG dykes. Narrow stockwork veinlets variably oriented and intermittent throughout. White calcite veinlets uphole become sulfide veinlets with depth, locally sulfide concentrations up to 5% on 30 cm scale, typically ~1% or less throughout. Brilliant metallic yellow chalcopyrite present as irregular blebs and veinlets alone or with Ca-Py-chlorite. Mo is present as very soft metallic silvery stockwork veinlets and fracture linings where core is pink and potassic altered. Py is present as euhedral disseminations to CG grains in some calcite veinlets. Pink K-spar alteration seen as halos along fractures, pervasive where fracturing is strongest. Green CHL alteration of MZN is seen on margin of dykes. Core is variably magnetic, with narrow magnetite veinlets can pull magnet from fingers to patches with disseminated magnetite in MZN or dykes. Some fractures filled with red hematitic minerals, some open fractures are rusty and host limonite rims around partially weathered grains of sulfides. Dykes up to 4 m wide, margins are variably oriented. Core becomes more albitic with depth (?), appearing lighter in colour, mafic grains appear altered to epidote and chlorite in albitic alteration.	
D	288.60	298.58	MZN/INT	CG		GY GN		ALB CHL	4 3	Cp	0.5	Grey to green, CG albitized (?) MZN with CG white and grey feldspar phenocrysts with irregular, green-grey CHL/epidote altered mafics. Bands of pink K-spar are overprinted by albitization, mafics in K-spar appear same as mafics in albite altered core. Healed fractures are variably oriented and scattered throughout, appearing rusty where open. Core is moderately magnetic with disseminated magnetite. Trace Cp present in healed fractures and as blebs in narrow dykes <20 cm in width, and as disseminations associated with altered mafic grains. Some brown secondary(?) biotite appears to replace mafics under handlens.	
D	298.58	315.90	MZN	MG	DK	GN GY		CHL OX	4 1	Cp Py	0.1 0.1	Core is more green and finer grained (dyke?) with patches of potassic alteration less frequent and narrower than uphole. Core is variably magnetic as irregular veinlets and disseminations of magnetite are scattered throughout. Fracture faces are rusty, some halos of OX alteration are up to 2 mm wide. Sulfides are less evident than up hole, but still visible with handlens in narrow healed fractures. Hematitic masses and veinlets are scattered throughout, most common as veinlets but can form nebulous masses with dark green chlorite up to 4.4 cm in width. Calcite healed fractures are seen throughout.	
D	315.90	329.18	MZN	CG	DK	GY PK		POT OX	2 1	Py	0.1	Dark grey to pink, CG MZN. Core is strongly magnetic throughout with disseminated CG magnetite. Potassic alteration is moderate to strong, most commonly seen as dark pink selvages on healed fractures. Trace euhedral MG-CG Py with calcite filled fractures and veinlets, often with potassic altered pink selvages. Some fractures are open and weathered with rusty yellow and red coatings.	
												EOH.	