

Field Monitoring Report -- Pebble Copper/Gold Exploration Project --

Personnel: Ron Benkert – ADF&G	Inspection Date: 10-13-2010
	Site Contact: Jeff Norberg
	APMA #: A106118
■ Inspection Type:	■ Wildlife Observed:
○ Complete: x	○ Bear: 1 brown bear – N. Fork Koktuli R.
○ Partial:	○ Caribou:
○ Follow-up:	○ Moose:
○ Response to Public Complaint:	○ Waterfowl:
	○ Fish:
■ Weather Conditions:	○ Other: bald eagle, ptarmigan – N. Fork
○ Temperature: 25 F	
○ Wind: 15 – 20 mph	■ Water level at Frying Pan Lake:
○ Precipitation: none	○ Observed inflow: Not observed
○ Visibility: unlimited	○ Observed outflow: Not observed
○ Sky Conditions: partly cloudy	Frying Pan Lake was frozen over
○ Ground Conditions: dry/freezing	
<p>Comments: ADF&G has verified inspected drill locations and water sources were properly noticed, per the PLP Water Withdrawal Notification Plan. The inspection included 2 regular drill rigs and 2 smaller geotechnical rigs. All sites were orderly and had proper tundra mats, fuel containment and spill supplies on hand. Screened intake structures were being used for water withdrawal at all sites. Each site was designated with the proper signage. All fuel sources were a minimum of 100 feet away from waterbodies. Rig #4 was in the process of being set up, but not in operation at the time of the inspection. Rig #4 water source had been signed, but no intake structure had been installed in the creek.</p>	
<p>Recommendations: None – all exploratory activities complied with permits this inspection.</p>	
<p>Actions Needed: None</p>	

Drill Hole/Site No.: 10523	Rig No.: 3
Activity: Exploratory Drilling	Date: 10-13-2010
Location: N 59.82994°,W -155.30426°	
■ Condition of Drilling Site: <ul style="list-style-type: none"> ○ Distance from waterbody: 0.31 miles ○ Location of fuel storage: Adjacent to rig ○ Sorbent pads present: Yes ○ Tundra mat: Yes ○ Pipe off tundra: Yes ○ Litter: None ○ Trash containment: Yes ○ Sanitary facilities: Yes ○ Any spills or staining: No ○ General impression: Good 	■ Sump Pit (continued): <ul style="list-style-type: none"> ○ Location and extent of discharged material: Just downslope from pits, 20 x 50 feet ○ Topsoil, muck, tundra stockpiled: Yes ○ Location of secondary sump pit: 4 sump pits total joined by 5 foot trenches ○ Hose color: White
■ Drilling Activity: <ul style="list-style-type: none"> ○ Drill additives in use: Quik-Trol Gold/Extreme One ○ Water recirculation: Yes ○ Water discharged: Yes ○ Artesian zone encountered: No 	■ Drill Water Supply: <ul style="list-style-type: none"> ○ Stream, lake, kettle pond: Lake ○ Location: N 59.83156°, W -155.31041° ○ Adequate water flow and depth for fish passage in streams: Yes ○ Evidence of significant impacts to riparian vegetation or stream banks: No ○ Relative water level: Full ○ General impression of water body, i.e. clear, turbid, tannic: Clear ○ Intake structure: Yes ○ Structure clear of debris: Yes ○ Mesh size: 1 x 12 mm ○ Submerged: Yes ○ Pump location to source: Approx. 110 ft.
■ Sump Pit: <ul style="list-style-type: none"> ○ Location: 50 feet from drill rig ○ Discharge trench: Yes ○ Dimensions of pit: 3 pits, 4x15 feet each ○ In use: Yes 	<ul style="list-style-type: none"> ○ Catch basin for fuel supply: Yes ○ Sorbent pads: Yes ○ Hose color: Yellow



Drill Rig #3 – Drill Hole 10523



Drill Rig #3 – Drill Hole 10523 - Fuel Containment and Spill Kit



Drill Rig #3 – Drill Hole 10523 – Sump Pit



Drill Rig #3 – Drill Hole 10523 – Discharge from Sump Pit



Drill Rig #3 – Drill Hole 10523 – Water Source and Signage



Drill Rig #3 – Drill Hole 10523 – Screened Intake Structure

Drill Hole/Site No.: GH 10226	Rig No.: 2
Activity: Geotechnical drill hole	Date: 10-13-2010
Location: N 59.85712°, W -155.28940°	
■ Condition of Drilling Site:	■ Sump Pit (continued):
○ Distance from waterbody: 530 ft.	○ Location and extent of discharged material: downhill of sump. Discharge covered an area approximately 30' x 60'.
○ Location of fuel storage: Adjacent to drill rig	○ Topsoil, muck, tundra stockpiled: Yes
○ Sorbent pads present: Yes	○ Location of secondary sump pit: N/A
○ Tundra mat: Yes	○ Hose color: Yellow
○ Pipe off tundra: Yes	
○ Litter: None	■ Drill Water Supply:
○ Trash containment: Yes	○ Stream, lake, kettle pond: Lake
○ Sanitary facilities: Yes	○ Location: N 59.85857°, W -15528891°
○ Any spills or staining: Minor amount of salt	○ Adequate water flow and depth for fish passage in streams: Yes
○ General impression: Good. Some salt (about 3 lbs.) spilled on ground from de-icing tundra mat.	○ Evidence of significant impacts to riparian vegetation or stream banks: No
	○ Relative water level: Full
■ Drilling Activity:	○ General impression of water body, i.e. clear, turbid, tannic: Clear
○ Drill additives in use: Poly-Drill Purevis	○ Intake structure: Yes
○ Water recirculation: No	○ Structure clear of debris: Yes
○ Water discharged: Yes	○ Mesh size: 1 x 12 mm
○ Artesian zone encountered: No	○ Submerged: Yes
	○ Pump location to source: 163 ft.
■ Sump Pit:	○ Catch basin for fuel supply: Yes
○ Location: Approximately 20 ft. from drill rig	○ Sorbent pads: Yes
○ Discharge trench: No	○ Hose color: Yellow
○ Dimensions of pit: 4' x 6'	
○ In use: Yes	



Drill Rig #2 – GH 10266 – Frying Pan Lake in Background



Drill Rig #2 – GH 10266 – Fuel Containment

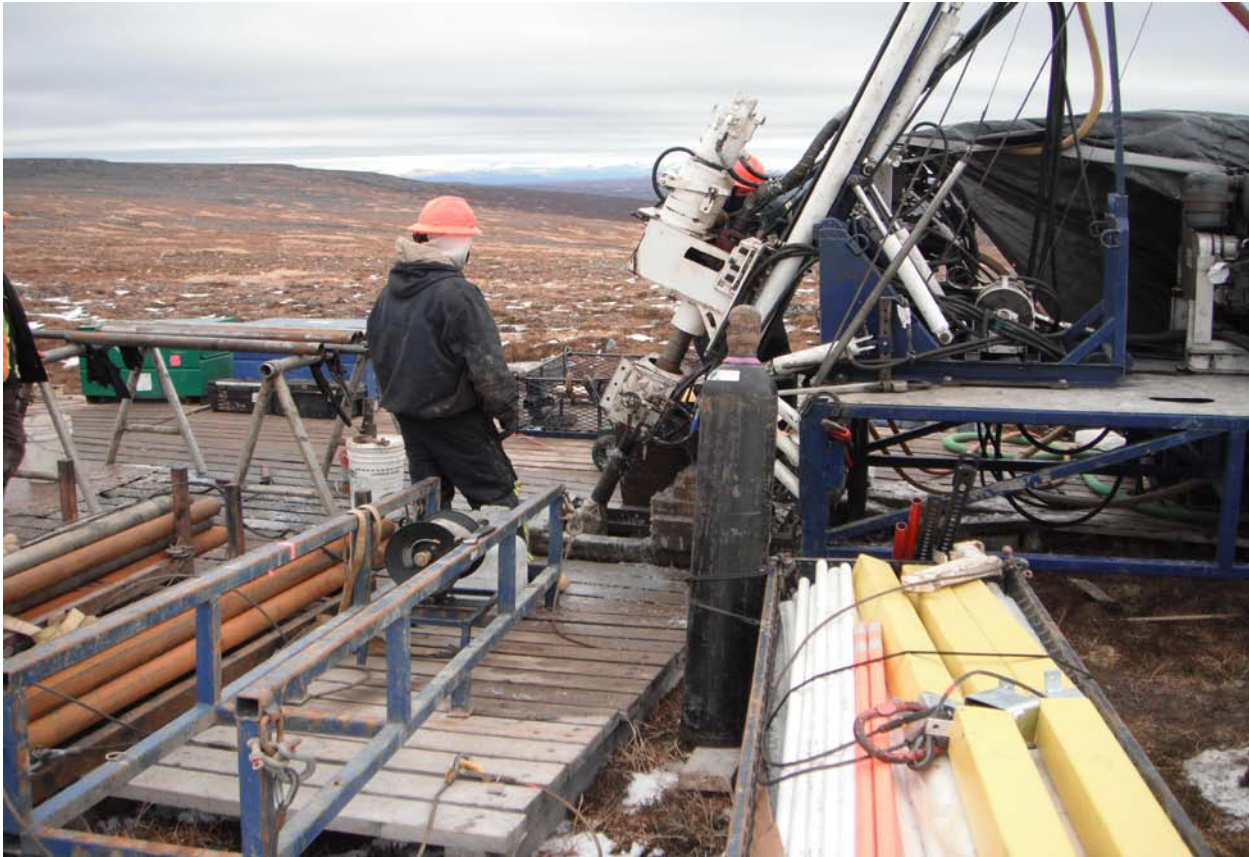


Drill Rig #2 – GH 10266 – Water Source Signage and Intake Structure (under ice)



Drill Rig #2 – GH 10266 – Water Source Pump Location and Fuel Containment

Drill Hole/Site No.: GH 10225	Rig No.: 1
Activity: Geotech drilling, depth at time of inspection 485'	Date: 10-13-2010
Location: N 59.88401°, W -155.44780°	
■ Condition of Drilling Site:	■ Sump Pit (continued):
○ Distance from waterbody: 1.6 miles	○ Location and extent of discharged material: Adjacent to drill rig, minimal discharge
○ Location of fuel storage: Adjacent to drill rig	○ Topsoil, muck, tundra stockpiled: Yes
○ Sorbent pads present: Yes	○ Location of secondary sump pit: N/A
○ Tundra mat: Yes	○ Hose color: Red
○ Pipe off tundra: Yes	
○ Litter: None	■ Drill Water Supply:
○ Trash containment: Yes	○ Stream, lake, kettle pond: Stream
○ Sanitary facilities: Yes	○ Location: N 59.88428°, W -155.44724°
○ Any spills or staining: No	○ Adequate water flow and depth for fish passage in streams: Yes
○ General impression: Drill site in snow, generally good condition	○ Evidence of significant impacts to riparian vegetation or stream banks: No
	○ Relative water level: Normal
■ Drilling Activity:	○ General impression of water body, i.e. clear, turbid, tannic: Clear
○ Drill additives in use: Maxgel, Purevis	○ Intake structure: Yes
○ Water recirculation: No	○ Structure clear of debris: Yes
○ Water discharged: Yes - minimal	○ Mesh size: 1 x 12 mm
○ Artesian zone encountered: No	○ Submerged: Yes
	○ Pump location to source: Approximately 120 ft.
■ Sump Pit:	○ Catch basin for fuel supply: Yes
○ Location: Adjacent to drill rig	○ Sorbent pads: Yes
○ Discharge trench: Yes	○ Hose color: Yellow
○ Dimensions of pit: 4' x 6'	
○ In use: Yes, minimal discharge	



Drill Rig #1 – GH 10225



Drill Rig #1 – GH 10225 – Fuel Containment and Spill Kit



Drill Rig #1 – GH 10225 – Sump Pit



Drill Rig #1 – GH 10225 – Water Intake and Signage

Drill Hole/Site No.: 10524	Rig No.: 4
Activity: Exploratory drilling	Date: 10-13-2010
Location: N 59.79461°, W -155.30318°	
<ul style="list-style-type: none"> ■ Condition of Drilling Site: 	<ul style="list-style-type: none"> ■ Sump Pit (continued):
<ul style="list-style-type: none"> ○ Distance from waterbody: 0.30 miles 	<ul style="list-style-type: none"> ○ Location and extent of discharged material: N/A
<ul style="list-style-type: none"> ○ Location of fuel storage: N/A 	<ul style="list-style-type: none"> ○ Topsoil, muck, tundra stockpiled: Yes
<ul style="list-style-type: none"> ○ Sorbent pads present: Yes 	<ul style="list-style-type: none"> ○ Location of secondary sump pit: 4 sump pits total joined by 4-5 foot trenches.
<ul style="list-style-type: none"> ○ Tundra mat: Yes 	<ul style="list-style-type: none"> ○ Hose color: N/A
<ul style="list-style-type: none"> ○ Pipe off tundra: Yes 	
<ul style="list-style-type: none"> ○ Litter: None 	<ul style="list-style-type: none"> ■ Drill Water Supply: Not in use
<ul style="list-style-type: none"> ○ Trash containment: Yes 	<ul style="list-style-type: none"> ○ Stream, lake, kettle pond: Stream
<ul style="list-style-type: none"> ○ Sanitary facilities: Yes 	<ul style="list-style-type: none"> ○ Location: N 59.79872, W -155.30606°
<ul style="list-style-type: none"> ○ Any spills or staining: None 	<ul style="list-style-type: none"> ○ Adequate water flow and depth for fish passage in streams: Yes
<ul style="list-style-type: none"> ○ General impression: Drill rig was not in operation, just being set up. 	<ul style="list-style-type: none"> ○ Evidence of significant impacts to riparian vegetation or stream banks: No
	<ul style="list-style-type: none"> ○ Relative water level: Normal
<ul style="list-style-type: none"> ■ Drilling Activity: 	<ul style="list-style-type: none"> ○ General impression of water body, i.e. clear, turbid, tannic: Clear
<ul style="list-style-type: none"> ○ Drill additives in use: N/A 	<ul style="list-style-type: none"> ○ Intake structure: Onsite
<ul style="list-style-type: none"> ○ Water recirculation: N/A 	<ul style="list-style-type: none"> ○ Structure clear of debris: N/A
<ul style="list-style-type: none"> ○ Water discharged: None 	<ul style="list-style-type: none"> ○ Mesh size: 1 x 12 mm
<ul style="list-style-type: none"> ○ Artesian zone encountered: N/A 	<ul style="list-style-type: none"> ○ Submerged: N/A
	<ul style="list-style-type: none"> ○ Pump location to source: N/A
<ul style="list-style-type: none"> ■ Sump Pit: 	<ul style="list-style-type: none"> ○ Catch basin for fuel supply: Yes
<ul style="list-style-type: none"> ○ Location: Adjacent to drill rig 	<ul style="list-style-type: none"> ○ Sorbent pads: Yes
<ul style="list-style-type: none"> ○ Discharge trench: Yes, 4 total 	<ul style="list-style-type: none"> ○ Hose color: Yellow
<ul style="list-style-type: none"> ○ Dimensions of pit: One was 17' x 5', 3 were 15' x 4' 	
<ul style="list-style-type: none"> ○ In use: No 	



Drill Rig #4 – DH 10524



Drill Rig #4 – DH 10524 – Discharge Trench



Drill Rig #4 – DH 10524 – Sump Pit and Water Recirculation Tank



Drill Rig #4 – DH 10524 – Fuel Containment



Drill Rig #4 – Water Source and Signage