n Report ploration Project-
Inspection Date: February 28-29, 2008
Wildlife Observed
Bear:
Caribou:
☐ Moose:
□ Waterfowl:
Given Fish:
Other:
□ Water level Frying Pan Lake: Not Observed
□ Observed inflow: Yes No
□ Observed outflow: Yes No

- Sky Conditions: Clear
- Ground conditions: **Snow covered**

**Comments:** Overall all rigs were clean and orderly, and fuel storage spill containment measures were in place. All drilling operations appeared to be in compliance with associated water use and withdrawal permits with the possible exception of drill rig 6. From the air it appeared that the pumping station was located less than 100 feet from the kettle pond it was drawing water from. Pebble staff assured us it was more than 100 feet. Also, drill rig 5 was recycling drill water. Pebble staff informed us they did not want to discharge drill water onto the tundra because of the rig's proximity to a water body.

# **Recommendations:**

- Provide PLP with a name list and photographs of all agency personnel who will be taking part in the state site inspections. Included in this list should be personnel professional expertise and experience in or around mining operations. This would help PLP staff with safety training and make monitoring visits go more smoothly.
- Prior to visits, request from PLP to provide monitoring staff with updated operations map for the Pebble exploration projects. Also, inform monitoring staff of any new developments or changes in operational plans.

## **Actions Needed:**

• Verify that the pumping station for drill rig six is located at least 100 feet from water source.

Well/Site No.: 8402

# Activity: Operational (Current hole depth

# 2,556'; Proposed depth 5,000')

## **Condition of Drilling Site**

- Distance from water body: > 100 ft.
- Location of fuel storage: **On pad (Figure 3).**
- Sorbent Pads Present or Not: Yes
- Tundra Mat: Yes
- Dipe off Tundra: Yes
- Litter: None
- Activity: Set up but not operating during visit because of mechanical problems.
   Pebble staff informed us it would be operating by day's end.
- Trash Containment: Yes
- □ Sanitary Facilities: Yes
- Any spills or staining, or 'none' for that matter: **None**
- General impression of site: Clean. No disturbance to tundra.
- **Drilling Activity** 
  - Drill additives in use (list): NA
  - □ Water discharged: NA
  - □ Water recirculation: NA
  - Artesian zone encountered: NA
- **Gamp Pit** 
  - **L**ocation: **None observed**
  - Discharge trench: NA
  - Dimension pit: NA
  - In use: NA

# Rig: No. 2 Date.: February 29, 2008

# Sump Pit Cont'd

- Location and extent of discharged material: NA
- **D** Topsoil, muck, tundra stockpiled: **NA**
- □ Location of secondary sump pit: NA
- Hose color:

# **Drill Water Supply**

- Stream/Lake/Pond: Upper Talarik Creek (Figure 4)
- Location (see Figure 2)
- Adequate water flow and depth for fish passage in streams? **Yes**
- Evidence of significant impacts to riparian vegetation or stream banks? None
- **Relative water level?** Base Flow
- General impression of water body, i.e. clear, turbid, tannic colored, etc.? Clear. No indication of pollution or sedimentation.
- Intake structure: **Present**
- □ Structure clear of debris: NA
- □ Mesh size: N/A
- □ Submerged: NA
- $\Box$  Pump location to source: > 100 ft
- **Catch basin for fuel supply: Yes**
- Sorbent Pads Present or Not: Yes
- Hose color: **Black (insulated)**

Well/Site No.: 8403

# Activity: Operational (Current hole depth 948'; Proposed depth is 4,900')

# **Condition of Drilling Site**

- $\Box$  Distance from water body: > 100 ft.
- Location of fuel storage: **On pad (Figure 5).**
- Sorbent Pads Present or Not: Yes
- Tundra Mat: Yes
- Dipe off Tundra: Yes
- Litter: None
- Trash Containment: Yes
- □ Sanitary Facilities: Yes
- Any spills or staining, or 'none' for that matter: **None**
- ☐ General impression of site: Clean. No disturbance to tundra other than sump pit and trench. Over flow water (clean) discharged directly to tundra.

# **Drilling Activity**

- Drill additives in use (list): Unknown
- Drill water discharged: **Onto tundra (Figure 6).**
- □ Water recirculation: No
- Artesian zone encountered: Unknown

# **Gamp Pit**

- Location: NA
- Discharge trench: NA
- Dimension pit: NA
- In use: NA
- Location and extent of discharged material? NA

#### Rig: No. 3

#### **Date.:** February 29, 2008

# **Sump Pit Cont'd**

- Topsoil, muck, tundra stockpiled: NA
- Location of secondary sump pit: NA
- Hose color: NA

# **Drill Water Supply**

- Stream/Lake/Pond: Well
- Location: (see Figure 2)
- □ Adequate water flow and depth for fish passage in streams? NA
- Evidence of significant impacts to riparian vegetation or stream banks? NA
- **Relative water level?** NA
- General impression of water body, i.e. clear, turbid, tannic colored, etc.? **NA**
- Intake structure: In use. NA
- Structure clear of debris: Yes.
- □ Mesh size: NA
- Submerged: NA
- Dependence Pump location to source: NA
- **Catch basin for fuel supply: Yes.**
- Sorbent Pads Present or Not: Yes.
- Hose color: Black (insulated)

# Activity: Operational (Current hole depth

#### 5,901; Proposed depth 6,900')

#### **Condition of Drilling Site**

- $\Box \quad \text{Distance from water body:} > 100 \text{ ft.}$
- Location of fuel storage: **On pad.**
- □ Sorbent Pads Present or Not: Yes
- Tundra Mat: Yes
- Dependent Pipe off Tundra: Yes
- Litter: None
- **Spill Indications: None**
- Trash Containment: Yes
- □ Sanitary Facilities: Yes
- Any spills or staining, or 'none' for that matter: **None.**
- General impression of site: No disturbance to tundra other than sump pit and trench.

# **Drilling Activity**

- Drill additives in use (list): NA
- Drill water discharged: NA
- □ Water recirculation: NA
- Artesian zone encountered: Unknown

# **Gamp Pit**

- Location: Directly east of rig (Figures 7 & 8).
- Discharge trench: Yes.
- Dimension pit: Not measured.
- In use: Yes
- Location and extent of discharged material?
  Discharged contained to pit.

# Rig: No. 5

#### Date.: February 29, 2008

# **Sump Pit Cont'd**

- Topsoil, muck, tundra stockpiled: Yes
- Location of secondary sump pit: NA
- Hose color: Black (insulated).

# **Drill Water Supply**

- Stream/Lake/Pond: Kettle Pond
- Location: (see Figure 2)
- □ Adequate water flow and depth for fish passage in streams? NA
- Evidence of significant impacts to riparian vegetation or stream banks? No impact to stream bank observed.
- Relative water level? NA, pond was frozen over and snow covered.
- General impression of water body, i.e. clear, turbid, tannic colored, etc.? NA
- Intake structure: Not observed, lake was frozen and snow covered.
- Structure clear of debris: NA
- □ Mesh size: NA
- □ Submerged: Yes.
- Pump location to source: < 50 feet
- **Catch basin for fuel supply: Yes**
- Sorbent Pads Present or Not: Yes
- Hose color: Black (insulated)

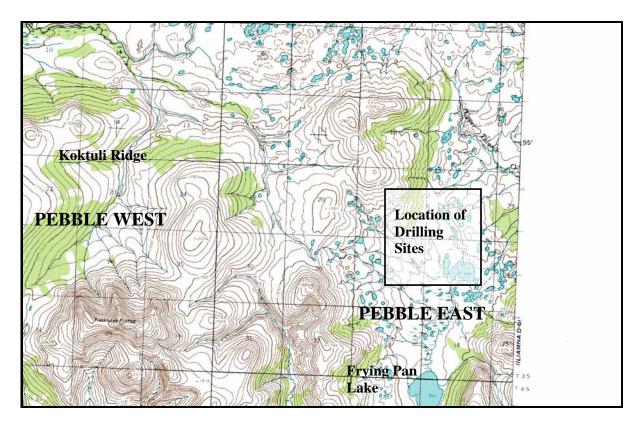


Figure 1. Location map of Pebble Project area and drilling sites.

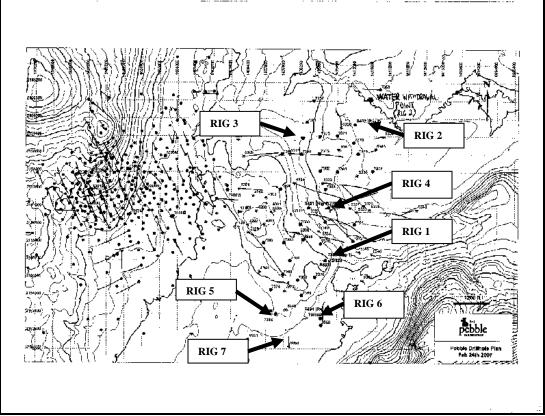


Figure 2. Location of drilling rigs.



Figure 3. Drill rig number 2.



Figure 4. Water withdrawal point, drill rig number 2, Upper Talarik Creek.



Figure 5. Fuel storage drill rig number 3



Figure 6. Drill water discharge, drill rig number 3.



Figure 7. Water recycle sump, drill rig number 5.



Figure 8. Water recycle sump, drill rig number 5.