

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

INSPECTION REPORT

30 October 2006

DISCHARGER: Walker Mine

LOCATION & COUNTY: Walker Mine, Plumas County

CONTACT(S): None

INSPECTION DATE: 24-25 October 2006

INSPECTED BY: Steve Rosenbaum/Jeff Huggins

ACCOMPANIED BY: NA

OBSERVATIONS AND COMMENTS:

Board staff performed the annual fall inspection of the Walker Mine in Plumas County as required by Walker Mine Operations and Maintenance Procedures, dated June 1997.

MINE STRUCTURES

At the Walker Mine Portal area, hundreds of spent shell cartridges from handguns, rifles, and shotguns were strewn over the ground. The portal door at the mine entrance was securely locked upon our arrival, but had several new bullet holes that had penetrated the steel door. Inspection of the ventilation fan, the ventilation ducting and the Telog pressure data recorder showed no apparent damage from the shooting. There was some evidence of minor vandalism of the concreted stone around the entry into the mine.

Board staff downloaded and analyzed pressure data from the Telog data recorder during the inspection. The Telog data recorder is connected via a 2,500-foot long electronic cable to a Druck pressure sensor at the mine seal. Two times per day the data recorder measures and stores an electronic current measurement (mAmps) from the Druck pressure sensor. This data is converted mathematically by Board staff to feet of pressure head on the mine seal¹. At the time of the inspection, a current measurement of 8.32 mAmps (196 feet of pressure head) was recorded. A maximum pressure head of 232 feet was recorded from 20 June through 12 July 2006 due to snowmelt recharging the mine workings.

The batteries that power the Druck pressure sensor recorder were removed and replaced with recently purchased batteries during this inspection. All four of the heavy-duty locks on the portal doors were securely locked upon leaving the mine portal.

The drainage channel inside the corrugated section of the mine tunnel was working effectively and was not obstructed. The drainage channel between the mine portal and the waste dump was cleared of one minor obstruction. Board Staff did not perform an inspection of the access

¹ (Note: The Druck pressure sensor is scaled to transmit 4 to 20 mAmps for 0 to 300 psi).

Approved:		
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tunnel beyond the corrugated metal pipe (187 feet into the main drift). The timbered section, the unsupported section, and the mine seal were not inspected this year.

WATER QUALITY MONITORING

Surface water samples were taken from all but three of the usual sampling locations. There was no discharge from the settling pond (sample location number 19), thus no sample was taken from this location. Sample location number 10 was not sampled because of time constraints, and sample location number 23 was omitted. The South Branch of Ward Creek (sample location number 11) was dry. However sufficient water was present in a small pool at the culvert outfall to obtain a sample. All of the other sample locations had sufficient surface water to sample. Laboratory results are pending.

SUBSIDENCE AREAS

Staff inspected the diversion channel structures in the area of the Piute Pit workings. There was no water flowing in the diversion channels at the time of the inspection and it appeared that they have been dry for some time. Some cracking of the gunnited channels is starting to become evident and void spaces can be seen between the native ground and the channel walls in some areas that we inspected.

SUMMARY:

A semi annual inspection was made of the Walker Mine site. Surface water monitoring was performed and water pressure measurements on the mine seal were obtained. New batteries were installed for the data logger. Drainage channels at the mine portal and Piute Pit workings were inspected and some maintenance issues were identified.

RECOMMENDATIONS:

Shooting through the steel portal door continues to be a source of risk to the data logger and batteries. A simple solution would be to stack 3 to 4 concrete ready mix bags (90 lb bags) in front of the data logger and battery container. The stainless steel piping and valves at the mine seal should be inspected and physically tested to ensure their operability in accordance with the Board's Operations and Maintenance Plan for the Walker Mine.

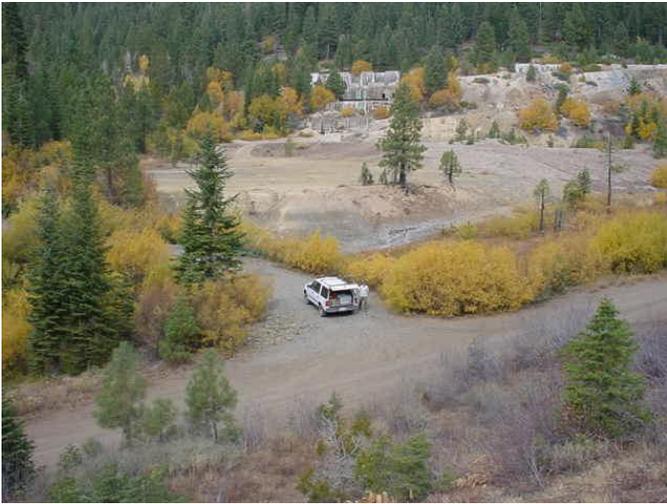
The flexible bag ducting outboard of the ventilation fan needs to be replaced before the next underground inspection. A thorough inspection of the access tunnel and the mine seal needs to be performed in the spring. The Federal Mine Safety and Health Administration (MSHA) and Cal-OSHA will on occasion provide underground mine safety inspection services if requested. A request for this service should be made early next spring and preparation for a through underground inspection should begin at the same time.



Walker Mine Portal Area.



Walker Mine Portal Area, waste dump located up gradient of Dolly Creek.



Walker Mine #3. Dolly Creek drainage is located just forward of the vehicle.



Walker Mine #3. Dolly Creek below mine access road.



Walker Mine #3. Dolly Creek Drainage.



Walker Mine #3. Dolly Creek below mine access road.



Walker Mine #1. Portal discharge sampling location.



Walker Mine Portal.



Walker Mine # 19. Settling pond downstream of mine portal.



Walker Mine Portal.



Walker Mine #19 area.



Walker Mine #11. South Branch of Ward Creek at USFS Road 25N42.



Walker Mine # 11, South Branch of Ward Creek (Road 25N42) Culvert Outlet. South Branch of Ward Creek was dry, however a small pool existed at the culvert outlet and this became the sample point.



Walker Mine #11. South Branch of Ward Creek, Culvert Outlet Pool.