Denison Environmental Services
a division of Denison Mines Inc.

FIELD MEMORANDUM

Faro Mine Closure

TO: Jay Cherian, DES
DATE: May 20, 2010
FROM: Jessie Luchinski & Kevin Ramsay, DES
SUBJECT: Special Project - S-Wells Area Monitoring – April and May 2010

Background

On April 21, May 1 and May 3 2010, water sampling events took place in the area of the S-Wells at the Faro Mine Complex. This water quality monitoring was undertaken at the request of J. Brodie of Brodie Consulting Ltd (BCL), a member of the technical advisory team to the Yukon Government.

Descriptions of monitored locations are summarized below. Monitoring location coordinates are included in Table 1, as located by GPS.

Field parameters (pH, temperature, and conductivity) were measured on all samples at the time of collection using a Hanna Instruments Combo pH/EC meter, and analysis of total and dissolved zinc was performed at the Faro Mine Complex Laboratory (FMC Lab) the following day.

At the FMC Lab, analysis of total zinc was performed using an Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES) following digestion of samples with nitric acid (HNO_3) in a Multiwave 3000 microwave digestor. Samples were analyzed for dissolved zinc by first filtering, and then analyzing zinc concentrations using the ICP-OES. Results of all analyses are summarized in Table 1 along with GPS coordinates for sampling locations. Figure 1 provides a record of monitored locations (annotated photograph). In addition, pictures of all sites sampled (Photos 1 to 5) can be found in the attached photo log.

Monitoring Summary

April 21, 2010

On April 21, 2010, samples were collected from three locations (refer to Figure 1):

- Location #4: the marsh on the edge of the creek,
- Location #3: the construction sump, and
- Location #1: the end of the ditch.

Samples were refrigerated overnight and analyzed on April 22, 2010.
Sampled by: Kevin Ramsay, Noella Gardiner

May 1, 2010

On May 1, 2010, samples were collected from four locations (refer to Figure 1):

- Location #4: the marsh on the edge of the creek,
- Location #3: the construction sump,
- Location #1: at the end of the ditch, and
- Location #5: along the access road where it drains to tailings.

Samples collected May 1 were analyzed upon receipt at the FMC Lab.
Sampled by: Kevin Ramsay, Ben Bekk

May 3, 2010

On May 3, 2010, samples were collected from one location (refer to Figure 1):

- Location #2: at the ponded area on the S-wells area access road.

The sample was refrigerated overnight and analyzed on May 4, 2010.
Sampled by: Kevin Ramsay, Tracey Parkin

Table 1-Coordinates and analysis results for water samples collected from S-Wells area.

Location	GPS Coordinates*		Date	Time	Temp (°C)	pH	EC (µS)	Zn-T (mg/L)	Zn-D (mg/L)
	Easting	Northing							
Marsh (#4)	584513	6913090	Apr 21	17:10	3.0	7.0	1760	20.30	22.01
			May 1	10:25	1.2	8.62	920	13.3	13.3
Sump (#3)	584481	6913104	Apr 21	17:05	3.1	7.2	964	6.340	6.691
			May 1	10:36	5.4	8.09	2800	52.9	60.72
Ditch (#1)	584486	6913126	Apr 21	17:00	4.3	7.4	947	2.202	1.719
			May 1	10:32	4.4	8.60	1180	1.14	1.03
Road (#5)	584124	6913051	May 1	11:16	6.0	8.69	320	0.076	0.043
Wet Area (#2)	584518	6913109	May 3	17:30	-	7.95	2250	4.57	1.35

* Datum: WSG84

Figure 1: Annotated Photo* Showing S-Wells Area Monitored Locations

(* photo provided by J. Brodie, May 3rd, 2010)

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Photo Log:
Special Project – S-Wells Area Monitoring
April and May 2010

Photo 1: Location #4—S-Wells Marsh on edge of creek (May 1, 2010)

Photos 2: Location #3—S-Wells Construction Sump (May 1, 2010)

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Photo Log:
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Photo 3: Location #1—End of ditch at S-Wells (May 1, 2010)

Photo 4: Location #5—Water along S-Wells access road where it drains to tailings (May 1, 2010)

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Photo 5: Location #2—Wet area on road at S-Wells (May 3, 2010)