



30 August 2009

Via E-Mail

Chief Administrative Officer
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU
X0B 1J0

Attention: Ms. Phyllis Beaulieu

Dear Ms. Beaulieu,

Reference: Tahera Diamond Corporation Jericho Diamond Mine Monthly SNP Report for July 2009

Deloitte & Touche, as “Agents” for INAC, is pleased to provide Nunavut Water Board (NWB) with the Jericho Diamond Mine (Jericho) monthly report for July 2009 as required under Water License 2AM-JER0410.

SNP Sampling

During the month of July 2009 samples were collected as required for the SNP sampling program. A summary of the sampling is provided in Table1.

Table 1: SNP Water Sampling Reports

SNP Station	Sampling Dates	Lab #	Comment
Various	June 8-18, 2009	Various	ALS

Sampling location JER-WQ11 was not sampled due to its remote location. Fecal Coliforms and BOD samples were damaged during transport to the lab facilities. Previous and subsequent testing have returned values well below water license criteria. All other samples were collected as per requirements under Water License 2AM-JER0410 for the month of July.

Note:

The diamond plant did not operate in July but there was discharge of supernatant water from the PKCA as part of the annual dewatering program under the guidelines of the water license.

Results

Water Sampling and Analysis Results

Table 2 provides the results for samples related to the SNP sampling requirements for the month of July 2009.

Flow and Volume Measurements

Table 3 provides a breakdown of flow and volume measurements and solid material moved as required under Part K, Items 12 and 13 of the water license.

Should you have any questions regarding the monthly report for July 2009 please contact the undersigned.

Yours truly,



Andrew Coster
Environmental Coordinator
Jericho Mine Site
Tel. (780) 644-9129
Fax (780) 644-9181
E-mail: jerichoenvironment@gmail.com

c. L. Staples, P. Bodin,

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	Project	Jericho Mine Site																						
2	Report To	Andrew Cosser, STAN DEAN & SONS LTD																						
3	ALS File No.	L793098						L800222		L800222														
4	Date Received	16-Jul-09						04-Aug-09		04-Aug-09														
5	Date	04-Aug-09						13-Aug-09		13-Aug-09														
6																								
7	RESULTS OF ANALYSIS																							
8	Sample ID	JER-SW4	JER-WQ1	JER-WQ2	JER-WQ2	JER-WQ2	JER-WQ2	JER-WQ2	JER-WQ4	JER-WQ5	JER-WQ6	JER-WQ7	JER-WQ8	JER-WQ9	JER-WQ10	JER-WQ12	JER-WQ13	JER-WQ14	JER-WQ15	JER-WQ16	JER-WQ17	JER-WQ18	JER-WQ21	JER-WQ3
9	Date Sampled	10-JUL-09	10-JUL-09	05-JUL-09	09-JUL-09	09-JUL-09	10-JUL-09	23-JUL-09	30-JUL-09	10-JUL-09	10-JUL-09	14-JUL-09	14-JUL-09	14-JUL-09	12-JUL-09	12-JUL-09	12-JUL-09	11-JUL-09	11-JUL-09	11-JUL-09	11-JUL-09	11-JUL-09	13-JUL-09	10-JUL-09
10	Time Sampled	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00	09:00
11	ALS Sample ID	L793098-1	L793098-2	L793098-3	L793098-4	L793098-5	L793098-6	L793098-7	L793098-8	L793098-9	L793098-10	L793098-11	L793098-12	L793098-13	L793098-14	L793098-15	L793098-16	L793098-17	L793098-18	L793098-19	L793098-20	L793098-21	L793098-22	L793098-23
12	Matrix	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
13																								
14	Physical Tests																							
15	Conductivity	203	16.4	170	198	201	199	200	14.3	13.4	14.9	14.7	14.9	14.8	11.9	98.5	85.8	14.4	14.3	16.9	19.9	26.5	10.8	169
16	Hardness (as CaCO3)	57.4	5.44	55.9	64.4	66.4	65.8	65.7	5.33	5.03	5.30	5.52	5.93	5.70	4.59	38.8	34.1	6.49	6.31	7.63	8.88	11.9	4.28	58.1
17	pH	6.74	6.48	7.21	7.70	7.95	7.91	7.93	6.57	6.56	6.63	6.57	6.60	6.59	6.61	6.52	7.89	6.58	6.59	7.94	6.70	7.71	6.70	7.71
18	Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
19	Total Dissolved Solids	112	19	98	111	117	117	114	13	13	14	15	12	12	<10	61	64	13	13	14	17	21	12	84
20	Turbidity	0.48	0.40	1.36	0.55	0.45	0.28	0.29	0.31	0.38	0.33	0.31	0.38	0.31	0.40	0.41	0.42	0.43	0.28	0.51	0.59	0.25	0.46	0.22
21																								
22	Anions and Nutrients																							
23	Acidity (as CaCO3)	7.0	2.8	4.1	5.6	4.7	1.1	1.1	1.8	2.4	2.8	2.6	2.5	2.4	2.3	5.6	4.1	1.7	2.5	2.8	3.1	3.0	1.9	5.0
24	Alkalinity, Bicarbonate (as CaCO3)	41.5	4.5	37.5	41.2	41.7	45.0	45.2	3.9	4.0	4.4	4.3	4.4	4.3	3.5	12.3	12.4	5.0	5.1	5.5	6.4	8.6	3.4	33.3
25	Alkalinity, Carbonate (as CaCO3)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
26	Alkalinity, Hydroxide (as CaCO3)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
27	Alkalinity, Total (as CaCO3)	41.5	4.5	37.5	41.2	41.7	45.0	45.2	3.9	4.0	4.4	4.3	4.4	4.3	3.5	12.3	12.4	5.0	5.1	5.5	6.4	8.6	3.4	33.3
28	Ammonia as N	0.0179	<0.0050	0.0181	0.0056	0.0182	0.0049	0.0112	<0.0050	0.0059	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0355	0.0175	<0.0050	<0.0050	0.0055	0.0055	0.0055	0.0136	0.0055
29	Chloride (Cl)	5.49	<0.50	7.55	8.60	8.56	9.47	8.55	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.71	3.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	8.10
30	Nitrate (as N)	3.59	0.0053	4.98	5.63	5.43	5.71	5.62	0.0098	0.0098	0.101	0.096	0.0796	0.0493	<0.0050	5.40	3.83	<0.0050	0.0090	0.108	0.0509	<0.0050	0.0095	4.82
31	Nitrite (as N)	<0.0010	<0.0010	0.0072	0.0025	0.0061	0.0164	0.0161	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0068	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
32	Ortho Phosphate as P	<0.0010	<0.0010	0.0013	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
33	Total Dissolved Phosphate As P	<0.0010	<0.0010	0.0040	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
34	Total Phosphate as P	0.0068	0.0022	0.0088	0.0075	0.0067	0.0040	0.0040	0.0031	0.0024	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0023	0.0023	0.0030	<0.0020	0.0034	0.0042	0.0047	0.0031	0.0031
35	Sulfate (SO4)	11.0	0.63	14.6	17.0	17.0	18.3	18.8	1.04	0.55	1.02	1.01	0.99	0.62	0.63	5.53	5.04	<0.50	<0.50	0.80	1.13	2.08	<0.50	15.7
36																								
37	Organic / Inorganic Carbon																							
38	Total Inorganic Carbon	8.67	0.66	7.19	8.98	8.93	7.83	7.40	0.51	<0.50	0.58	0.56	0.60	0.57	<0.50	2.36	2.30	0.69	0.67	0.76	0.98	1.55	<0.50	7.00
39	Total Organic Carbon	3.05	3.09	2.97	3.09	3.02	2.87	3.24	3.52	3.47	3.24	3.31	3.48	3.42	3.60	4.96	5.39	4.83	3.92	3.97	4.34	3.96	3.43	2.95
40																								
41	Total Metals																							
42	Aluminum (Al)-Total	0.00220	0.0280	0.0317	0.0243	0.0199	0.0150	0.0162	0.0420	0.0393	0.0332	0.0305	0.0302	0.0296	0.0376	0.0399	0.0454	0.0486	0.0493	0.0561	0.0588	0.0371	0.0364	0.0112
43	Antimony (Sb)-Total	0.00021	<0.0010	0.00016	0.00020	0.00022	0.00024	0.00022	0.00024	0.00010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.00016
44	Arsenic (As)-Total	0.00032	0.00015	0.00025	0.00011	0.00032	0.00025	0.00025	0.00020	0.00017	0.00016	0.00016	0.00016	0.00016	0.00018	0.00019	0.00019	0.00016	0.00016	0.00016	0.00016	0.00011	0.00011	0.00019
45	Barium (Ba)-Total	0.0427	0.00187	0.0061	0.0412	0.0420	0.0341	0.0334	0.00196	0.00188	0.00203	0.00195	0.00192	0.00189	0.00144	0.0102	0.00754	0.00216	0.00232	0.00213	0.00247	0.00210	0.00160	0.00204
46	Beryllium (Be)-Total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
47	Bismuth (Bi)-Total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
48	Boron (B)-Total	0.024	<0.010	0.023	0.023	0.025	0.023	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022
49	Calcium (Ca)-Total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
50	Calcium (Ca)-Total	14.5	1.21	12.7	13.6	14.9	13.5	14.4	1.27	1.14	1.33	1.26	1.33	1.30	0.969	7.66	6.98	1.62	1.64	1.74	1.98	2.66	0.986	12.0
51	Chromium (Cr)-Total	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
52	Cobalt (Co)-Total	<0.00010	<0.00010	0.00011	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
53	Copper (Cu)-Total	0.00179	0.00128	0.00169	0.00182	0.00188	0.00174	0.00162	0.00115	0.00116	0.00107	0.00102	0.00102	0.00109	0.00099	0.00232	0.00226	0.00152	0.00151	0.00161	0.00203	0.00139	0.00147	0.00124
54	Fluoride (F)-Total	<0.030	0.032	<0.030	0.039	<0.030	0.030	0.044	0.038	<0.030														

[illegible]

[illegible][illegible]

Result Summary

 Client: JER119
 Reference: 09-1321-01-TRS

Client: Jericho Mine Site; operation C/O Arctic Sunwest Charters

Sample: Jer-WQ2

Collection: collected on 2009/07/16 at 0800 by A. Coster

Receipt: received on 2009/07/20 at 1128 by E.A. Benner

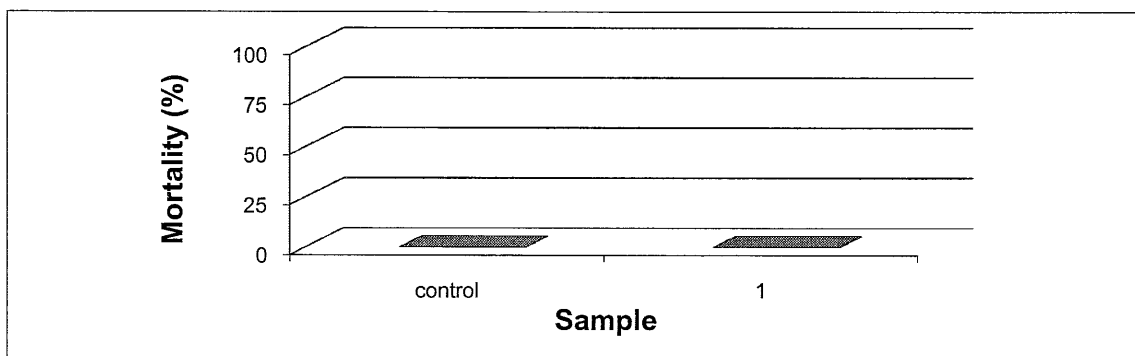
Containers: received 1 x 20L pail at 11 °C, in good condition with no seals and no initials

Description: type: water, collection method: grab

Test: started on 2009/07/20 ; ended on 2009/07/24

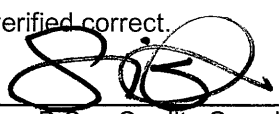
Result:

Sample	Client Code	Mortality (%)	Comment
control	lab control	0	
1	Jer-WQ2	0	not toxic as tested



The test data and results are authorized and verified correct.


 E. Blais, B.Sc., Technical Lead


 S. Krishnappa, B.Sc., Quality Coordinator

Test Conditions

Client: JER119 Reference: 09-1321-01-TRS

Method: Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout, 2000. Environment Canada, EPS 1/RM/13. Second Edition (amended 2007).

Test type: Trout 96-h Static Acute Test (HQ 4.4.4.1)

Species: *Oncorhynchus mykiss*

Organism source: Sun Valley Trout Farms (Batch 20090624TR)

Acclimation: 27 days (must be ≥ 2 weeks)

Stock mortality: 0.55% (seven days preceeding testing)

Sample initial chemistry: pH: 7.8; EC: 228 ($\mu\text{S}/\text{cm}$); DO: 9.7 (mg/L); temperature: 15 °C
hardness (mg CaCO_3/L): 78; colour: colourless; odour: odourless

Sample holding time: 4 days (must be ≤ 5 days)

Sample storage: $4 \pm 2^\circ\text{C}$ in darkness

Test vessel: The test was conducted in 22 L plastic pails with polyethylene liners

Test volume: 19 Litres (depth of solution in each test vessel $\geq 15\text{cm}$)

Sample pre-treatment: All test solutions and controls were pre-aerated for 30 minutes at $6.5 \pm 1 \text{ mL}/\text{min}/\text{L}$
Dissolved oxygen in full strength sample was 9.3 mg/L after pre-aeration
The sample was not filtered or pH adjusted prior to or during testing

Loading density: 0.237 g/Litre (must be $\leq 0.5 \text{ g}/\text{Litre}$)

Control water: Dechlorinated City of Calgary water acclimated to test conditions

Test concentrations: Undiluted sample plus a negative control

Test replicates: One replicate per treatment; 10 fish per replicate

Feeding: Fish are not fed 24 hours before test initiation and no feeding during test

Measurements: pH, conductivity, dissolved oxygen and temperature measured daily

Aeration: All treatments aerated at $6.5 \pm 1 \text{ mL}/\text{min}/\text{L}$ by oil-free compressed air
passed through airline tubes connected to disposable air stones

Lighting: Overhead full spectrum fluorescent lights; 100-500 lux at surface

Photoperiod: 16h light:8h dark

Test temperature: $15 \pm 1^\circ\text{C}$

Endpoint: Mortality, % mortality at 96-h

Test validity: The control had 100% survival (must $\geq 90\%$)

Reference toxicant: 96-h test with Phenol ($\text{C}_6\text{H}_5\text{OH}$) initiated July 9, 2009; current results
(96-h LC50 and 95% confidence limits) = 0.81 (0.66-0.93) log (mg/L Phenol)

Note: Outlined sections are protocol deviations explained on the comment page; v/v, volume per volume

Test Data

 Client: JER119
 Reference: 09-1321-01-TRS

Test Log:

Date	Day	Time	Technician	Comment/Observation
2009/07/20	0	1455	S. Skinner/S. Ehman	test fish loaded at 1455 h
2009/07/21	1	0900	S. Skinner/H. Stewart	all test fish appear normal
2009/07/22	2	0930	S. Skinner/H. Stewart	all test fish appear normal
2009/07/23	3	0815	J. Amyotte/S. Ehman	all test fish appear normal
2009/07/24	4	0830	H. Stewart/S. Ehman	all test fish appear normal

Chemistry:

Sample	control	1						
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Day

pH (units)

0	8.3	8.1						
1	7.8	7.6						
2	8.0	7.8						
3	7.8	7.5						
4	8.4	7.9						

 Conductivity ($\mu\text{S}/\text{cm}$)

0	365	210						
1	377	204						
2	365	203						
3	365	209						
4	376	217						

Dissolved Oxygen (mg/L)

0	9.0	9.3						
1	8.6	8.7						
2	8.5	8.5						
3	8.5	8.4						
4	8.5	8.4						

 Temperature ($^{\circ}\text{C}$)

0	14	14						
1	15	15						
2	16	15						
3	16	16						
4	16	16						

Test Data

Client: JER119
Reference: 09-1321-01-TRS

Number Alive:

Sample	control	1						
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Day

0	10	10						
1	10	10						
2	10	10						
3	10	10						
4	10	10						

Mortality (%)

4	0	0						
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Biology Summary Tables:

Control Fish	Length (cm)	Wet Weight(g)
1	2.7	0.2
2	3.5	0.5
3	3.8	0.7
4	3.4	0.5
5	2.7	0.2
6	3.4	0.5
7	3.6	0.6
8	3.2	0.4
9	2.8	0.2
10	3.9	0.7

Sample	Group Wet Weight (g)
control	4.5
1	3.7

average	3.3	0.5
sd	0.4	0.2
cv(%)	13.3	43.5

Notes: nd, not done; na, not applicable;
 sd, standard deviation; cv(%), coefficient of variation

Comments/Statistics

Client: JER119 Reference: 09-1321-01-TRS

Test Result Comments:

None

Data Analysis:

None

Protocol Deviations:

None

Test Method: Trout 96h Static Acute Test. (LC50, five or more treatments plus a control)
 HydroQual Test Method Manual, section: 4.4.4.1

Reference: Biological Test Method: Reference Method for Determining Acute Lethality of
 Effluents to Rainbow Trout, 1990. Environment Canada, EPS 1/RM/13.
 including May 1996 and December 2000 amendments.

Test Organism: test species: <i>Oncorhynchus mykiss</i> culture source: Sun Valley temperature (°C): 15 ± 1 dissolved oxygen: saturated stock mortality (last 7d): 0.11% batch number: 20090624TR	Test Design: vol. of test vessel (L): 22 test volume depth: >15 cm replicates per treatment: 1 fingerlings per replicate: 10 loading (g fish/L): <0.5 temperature (°C): 15 ± 1 photoperiod: 16h light: 8h dark light level (water surface): 100-500 lux control/dilution water: dechlorinated tap water
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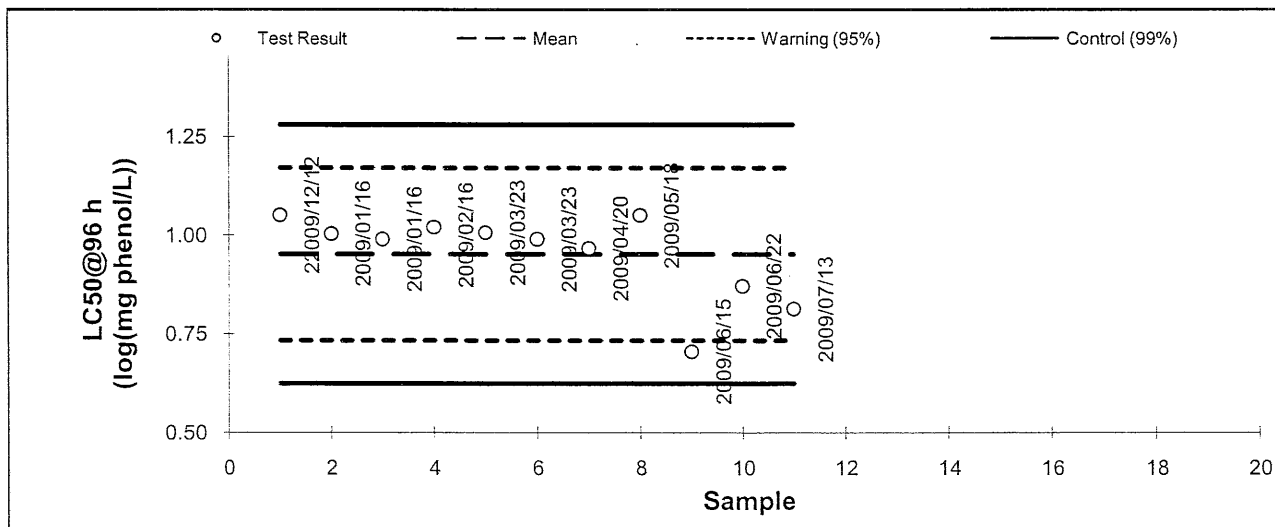
Current Test

toxicant phenol (C ₆ H ₅ OH)				
started on 2009/07/09		ended on 2009/07/13		
Result (LC50 @ 96h)	0.81	log (mg phenol/L); geometric mean		
Confidence Limits (95%)	lower	0.66	upper	0.93

Historical Values

mean	0.95	sd	0.11	cv(%):	11
	lower	upper			
warning limits (±2 sd)	0.73	1.17	(95% confidence limits)		
control limits (±3 sd)	0.62	1.28	(99% confidence limits)		

notes: sd, standard deviation; cv, coefficient of variance



Quality Assurance Unit:

Authorized by S. Krishnappa, B.Sc., Quality Assurance Coordinator
 The test data and results are verified correct.

Our liability is limited to the cost of the test requested on the sample as received. No liability in whole or in part is assumed for the collection, handling or transport of the sample, application or interpretation of the test data or results in part or in whole.

Result Summary

Client: JER119
 Reference: 09-1321-01-DAS

Client: Jericho Mine Site; operation C/O Arctic Sunwest Charters

Sample: Jer-WQ2

Collection: collected on 2009/07/16 at 0800 by A. Coster

Receipt: received on 2009/07/20 at 1128 by E.A. Benner

Containers: received 1 x 20L pail at 11 °C, in good condition with no seals and no initials

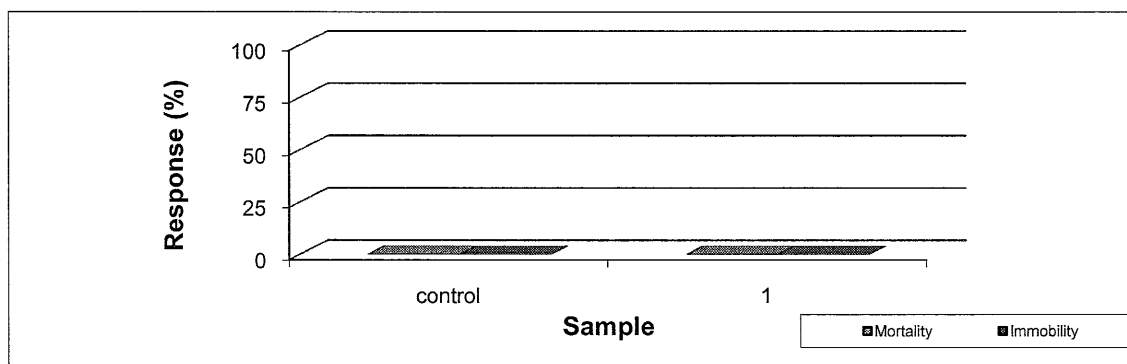
Description: type: water, collection method: grab

Test: started on 2009/07/20 ; ended on 2009/07/22

Result:

Sample	Client Code	Average Mortality (%)	Average Immobility (%)	Comment
control	lab control	0	0	
1	Jer-WQ2	0	0	not toxic as tested

Notes: sd, sample standard deviation; cv, coefficient of variation; nd, not done; na, not applicable;



The test data and results are authorized and verified correct.


 E. Blais, B.Sc., Technical Lead


 S. Krishnappa, B.Sc., Quality Coordinator

Test Conditions

Client: JER119 Reference: 09-1321-01-DAS

Method: Biological Test method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna*, 2000. Environ. Can., EPS 1/RM/14. Second Edition.

Test type: *Daphnia* 48-h Static Acute Test (HQ 4.4.3.1)

Species: *Daphnia magna*

Age: < 24 hours old

Organism source: in-house culture

Stock mortality: 7%

Culture brood data: 10 days to first brood
22 neonates per average brood

Sample initial chemistry: pH: 7.8; EC: 228 ($\mu\text{S}/\text{cm}$); DO: 9.7 (mg/L); temperature: 15 °C
hardness (mg CaCO_3/L): 78; colour: colourless; odour: odourless

Sample holding time: 4 days (must be ≤ 5 days)

Sample storage: $4 \pm 2^\circ\text{C}$ in darkness

Test vessel: 385 mL plastic vessels

Test volume: 150 mL

Sample pre-treatment: The sample was not filtered or pH adjusted prior to or during testing
The sample was pre-aerated for 0 minutes (rate of $37.5 \pm 12.5 \text{ mL}/\text{min} \cdot \text{L}^{-1}$)
The hardness of the sample was not adjusted (mg CaCO_3/L) prior to or during testing

Loading density: One daphnid/15 mL (must ≤ 1 organism/15 mL)

Control water: Dechlorinated City of Calgary water acclimated to test conditions
The hardness of the control/dilution water was 134 mg CaCO_3/L

Test concentrations: Undiluted sample plus a negative control

Test replicates: Three replicates per treatment, 10 daphnids per replicate

Feeding: None

Aeration: None

Measurements: pH, conductivity, dissolved oxygen and temperature at test initiation and termination

Lighting: Cool white fluorescent lights; 400-800 lux at surface

Photoperiod: 16h light:8h dark

Test temperature: $20 \pm 2^\circ\text{C}$

Note: Outlined sections are protocol deviations explained on the comment page

Test Conditions

Client: JER119 Reference: 09-1321-01-DAS

Endpoint: Mortality, % mortality at 48-h
Immobility, % immobility at 48-h

Test validity: The control had 100% survival (must $\geq 90\%$)
Control had 0% abnormal behaviour (must $\leq 10\%$), e.g. immobility

Reference toxicant: 48-h test with NaCl initiated July 20, 2009; current results
(48-h LC50 and 95% confidence limits) = 0.74 (0.70-0.78) log (g/L NaCl)

Note: Outlined sections are protocol deviations explained on the comment page

Test Data

 Client: JER119
 Reference: 09-1321-01-DAS

Test Log:

Date	Day	Time	Technician	Comment/Observation
2009/07/20	0	1330	S. Skinner	test <i>Daphnia</i> appear normal
2009/07/21	1	0915	S. Ehman	test <i>Daphnia</i> appear normal
2009/07/22	2	1030	T. Kloschinsky	test <i>Daphnia</i> appear normal

Chemistry:

Sample	control			1		
replicate	a	b	c	a	b	c

Day	pH (units)					
0	8.0	8.0	8.1	8.1	8.0	7.9
2	7.9	8.1	8.1	8.1	8.0	7.9

	Conductivity (µS/cm)					
0	333	341	341	209	201	200
2	328	334	342	217	208	206

	Dissolved Oxygen (mg/L)					
0	8.5	8.5	8.5	8.6	8.6	9.1
2	8.2	8.1	8.1	8.1	8.1	8.0

	Temperature (°C)					
0	20	20	20	20	20	19
2	19	19	19	19	19	19

Biology:

Sample	control			1		
replicate	a	b	c	a	b	c

Day	Number Alive and Behavior (behavior is in brackets)					
1	10	10	10	10	10	10
2	10	10	10	10 (3B)	10	10

Notes: F, floating; I, immobile; B, stuck on bubble; D, caught in debris

	Mortality (%)					
2	0	0	0	0	0	0

	Immobility (%)					
2	0	0	0	0	0	0

Comments/Statistics

Client: JER119 Reference: 09-1321-01-DAS

Test Result Comments:

None

Data Analysis:

None

Protocol Deviations:

None

Quality Assurance Information

Test Method: *Daphnia* Static Acute Test (LC50, five or more treatments plus a control)
 HydroQual Test Method Manual, section: 4.4.3.1

Reference: Biological Test Method: Reference Method for Determining the Acute Lethality of Effluents to *Daphnia magna*, 1990. Environment Canada, EPS 1/RM/14. including May 1996 and December 2000 amendments.

Test Organism:		Test Design:	
test species:	<i>Daphnia magna</i>	vol. of test vessel (mL):	500
culture source:	in-house	toxicant:	sodium chloride
original culture source:	Environment Canada	test volume (mL):	150
days to first brood:	10	replicates per treatment:	1
mean brood size:	22	neonates per replicate:	10
ephippia in stock culture:	no	volume per neonate (mL):	15
age of test organisms:	<24 hours old	samples preaerated:	no
culture mortality (%):	14%	hardness adjustment:	no
		temperature (°C):	20
		photoperiod:	16h light:8h dark
		light level (water surface):	400-800 lux
		control/dilution water:	dechlorinated tap water

Current Test

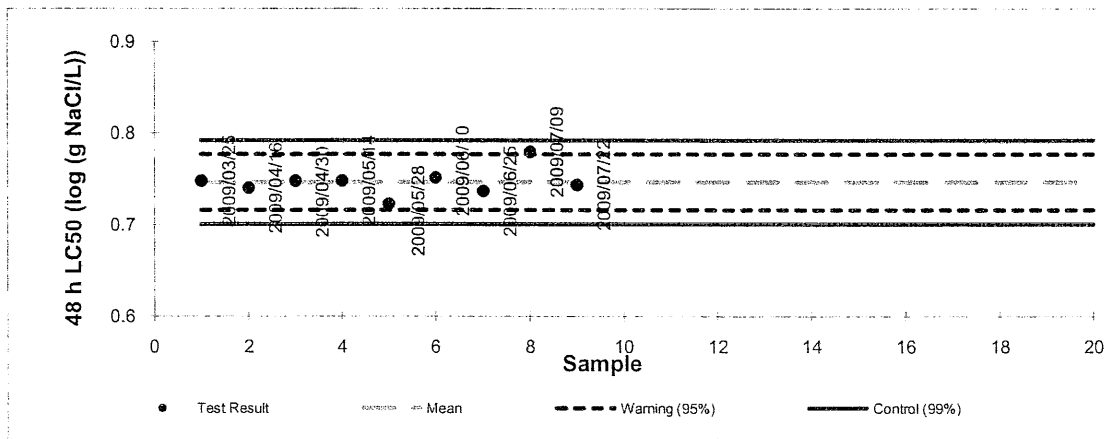
toxicant	Sodium Chloride (NaCl)		
started on	2009/07/20	ended on	2009/07/22
Result (LC50 @ 48h)	0.74	log (g NaCl/L); geometric mean	
Confidence Limits (95%)	lower	0.70	upper 0.78

Historical Values

mean	0.75	sd	0.02	cv(%):	2
	lower	upper			
warning limits (± 2 sd)	0.72	0.78	(95% confidence limits)		
control limits (± 3 sd)	0.70	0.79	(99% confidence limits)		

notes: sd, standard deviation; cv, coefficient of variance

Comments: None.



Quality Assurance Unit:

Authorized by S. Krishnappa, B.Sc., Quality Assurance Coordinator
 The test data and results are verified correct.

Our liability is limited to the cost of the test requested on the sample as received. No liability in whole or in part is assumed for the collection, handling or transport of the sample, application or interpretation of the test data or results in part or in whole.

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DA Ref. Tox.v 3.0