

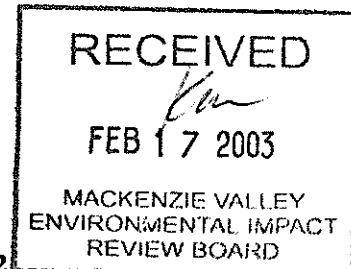


**CANADIAN ZINC
CORPORATION**

February 17, 2003

By Fax: 1-867-766-7074

Mr. Alan Ehrlich
A/Manager of Environmental Impact Assessment
Mackenzie Valley Environmental Impact Review Board
PO Box 938, 200 Scotia Centre, 5102 – 50th Ave.
Yellowknife, NT
X1A 2N7



Dear Mr. Ehrlich:

Re: **Gartner Lee Reports - Peer Review Comments - October 30, 2002**
- Statistical Analysis – January 14, 2003

We have reviewed the two abovenoted reports prepared by Gartner Lee for INAC as provided by the MVEIRB under cover dated February 10, 2003. The reports refer to a previous report submitted by INAC entitled Historical Water Quality of the Prairie Creek Project Area (Beavers, 2002) on which CZN has provided prior comment (CZN letter to Ed Hornby-INAC dated November 18, 2002 cc: MVEIRB).

In the interests of ensuring that the Board has the most factual data before it on which to undertake its deliberations, we would like to take this opportunity to bring to the Board's attention some inaccuracies and misleading statements we have identified in the reports.

In order to clearly demonstrate of our points we have attached copies of the original data spreadsheets provided by DIAND upon which the Beavers Report was based with referenced discharge limits and pertinent data points highlighted.

Peer Review Comments - October 30, 2002

Section 1.6.2 Sulphate and Ammonia

GLL states, "Since this parameter [ammonia] was one of the ones that frequently exceeded the CPFAL guideline, it would be useful to address the potential sources of ammonia at the site..."

Ammonia has not "frequently exceeded the CPFAL guideline" in waters to which the guideline applies. To the contrary, the data clearly show that the CPFAL guideline of 0.4 mg/l ammonia in open water has never been exceeded downstream of the mine in Prairie Creek at Galena Creek, the highest value recorded being 0.06. As stated in the Beavers report, the data also show that the settling pond discharge licence limit of 0.4 mg/l unionized ammonia has never been exceeded.

Section 1.6.3 Cadmium

GLL states, "the author appropriately observes that a number of licensed limits were exceeded and raises concerns about this contaminant."

The data clearly show that there have been no exceedances of licence limits for Cadmium. The settling pond discharge licence limit for a grab sample was 30 ug/l, the highest value recorded from the settling pond discharge was 20 ug/l on July 14, 1981. The majority of levels from the settling pond discharge are below 1 ug/l, an order of magnitude less than the licence limit.

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Section 1.6.6. Lead

GLL states, "the author focuses mainly on the exceedances of guidelines and licence limits, and convincingly documents concern about the levels of lead emanating from the site."

The settling pond discharge licence and MMER limits for a grab sample of 300 and 400 ug/l, respectively, have been exceeded on only a single occasion, that being 980 ug/l on May 12, 1982. With one exception, all other recorded levels are an order of magnitude less than the licence and MMER limits.

It should be noted that the May 12, 1982 sample is considered suspect. Examination of the data from this sample clearly show all individual parameter results to be unusually high for the settling pond discharge and more consistent with levels typically reported from the 870 portal.

The CPFAL guideline of 7.0 ug/l has been equaled on only one occasion (7.0 ug/l-June 30, 1992) and exceeded on only one occasion (8.0 ug/l-August 7, 1991) downstream of the mine in Prairie Creek at Galena Creek. On 24 other occasions the receiving water quality for lead has been well below the guideline and in 10 cases an order of magnitude less.

Section 1.6.9 Zinc

GLL states "The discussion of exceedances of licensed limits and various guidelines is appropriate and convincing."

Of the 26 samples recorded, the MMER limit of 1000 ug/l for a grab sample has been exceeded in the discharge from the settling pond on only a single occasion (1450 ug/l-May 12, 1982).

The licence limit of 600 ug/l has been exceeded on 4 occasions. Of these, 3 were in 1981-82 (780 ug/l-July 14, 1981; 1450 ug/l-May 12, 1982; 720 ug/l-June 16, 1982). As discussed previously, the May 12, 1982 sample is considered suspect. The June 16, 1982 is also suspect, as the DIAND Laboratory Results Data Sheet for that sample set has an asterisk beside the zinc results noting a "lab error". This is further supported by the fact that all zinc results in this sample set were unusually high, including Prairie Creek upstream and downstream at 480 and 490 ug/l, respectively. The July 14, 1981 sample had an unusually high total suspended solids content of 280 mg/l, which likely explains the high zinc level.

Eliminating these earlier suspect samples, only one sample has exceeded the licence limit in the last 20 years (851 ug/l-October 18, 1994)

Section 1.6.10 Summary

GLL states "The conclusions drawn by the author in terms of exceedances of guidelines or licensed limits are appropriate."

The foregoing discussion would suggest that in fact such exceedances have been overstated and have not been appropriately documented

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Statistical Analysis – January 14, 2003**Section 5 Discussion**

GLL states "...there is a key conclusion made in the original report (Beavers, 2002) that warrants repeating:

"At the final discharge point from the settling pond into Harrison Creek there have been violation of the limits established under the old water licence, and in some cases the MMLERs. One sample each of copper, lead and mercury exceeded the relevant water licence limit, 14% of samples collected exceeded the TSS limit, and 15% of samples collected exceeded the limit for zinc. The MMLERs were exceeded once by lead, TSS and zinc. "

"The lack of success in determining statistically significant differences... should not detract from the fact that various water licence limits and MMLER's (Metal Mining Liquid Effluent Regulations) have been exceeded."

As demonstrated in the foregoing these statements are clearly misleading:

- There have been no exceedances for copper of the settling pond discharge licence limit in a grab sample of 150 ug/l (maximum recorded level 127 ug/l-July 13, 1993)
- Single exceedance of lead, mercury and zinc are all from the same suspect sample (May 12, 1982)
- One exceedance of zinc appears to be documented as a lab error (June 16, 1982)
- Of the 21 recorded samples, there has been only a single exceedance of TSS (280 mg/l-July 14 1981) representing 4.8% not 14%. This would have occurred during construction of the mine. This is also a likely explanation for the exceedance of zinc in the same sample

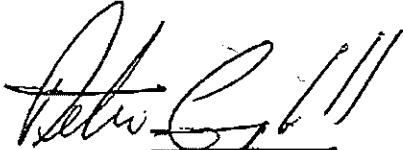
In conclusion, if we eliminate the 3 samples from 1981-1982, two of which are clearly suspect, there has only been a single exceedance of the licence limits (851 ug/l zinc-October 18, 1994) in the past 20 years. More recent samples collected by CZN in 2001 and 2002, the results of which have been provided to INAC, have confirmed that discharges continue to meet licence limits.

Clearly it is misleading and a misrepresentation of the data to intimate, as the referenced reports have, that licence discharge limits are being routinely exceeded. This has simply not been the case as the data clearly shows.

We trust our thoughts to be constructive. Should you have any questions or require any additional information please feel free to contact me at your convenience.

Yours very truly,

CANADIAN ZINC CORPORATION



J. Peter Campbell
Environmental Affairs Consultant

Encl.

932-4 Final discharge point from settling pond																				
Sample Date	Sample Station	Ammonia mg/L	Arsenic ug/L	Cadmium ug/L	Calcium ug/L	Chromium ug/L	Conductivity "S/cm	Copper ug/L	Cyanide mg/L	Iron mg/L	Lead ug/L	Manganese ug/L	Mercury ug/L	NO3-N+NO2 ug/L	pH	Sulphate mg/L	TDS mg/L	TSS mg/L	Turbidity NTU	Zinc ug/L
14-Jul-91	932-4	10.00	20.00	77.00	630.0	40.00	10.0000	0.240						8.20					100.00	
12-May-92	932-4	8.60	20.00	120.00	5.00	68.00	3.2500	0.000	0.000					17.00	7.30	240.0		5.00	150.00	
16-Jun-92	932-4	0.48	10.00	57.00		10.00	0.3300	120.000						1.20				22.00	241.00	
27-Aug-92	932-4	0.06	0.10	72.40		570.0	1.00							0.010	0.70			5.00	240.00	
5-May-93	932-4	0.68	1.90	9.39	82.60	670.0	2.00							6.600	0.260			5.00	50.00	
27-Jun-93	932-4	0.08	1.10	0.67	65.00	570.0	6.00		0.0050	3.800				0.052	8.10			5.00	190.00	
23-Aug-93	932-4	0.18	1.50	1.40	73.50	6.10	610.0		0.0150	8.460				0.060	0.16			5.00	330.00	
28-Sep-93	932-4	0.40	57.80	0.90	88.70	4.10	750.0	1.60						4.460	0.030	1.10	7.30	5.00	458.00	
24-May-94	932-4	0.03	1.00	0.40					4.30		0.0119	13.600		0.040	0.03				595.00	
18-Sep-94	932-4		1.00	0.60	76.80	0.30			680.0	3.40				0.0920	10.500			5.00	383.00	
26-Jul-95	932-4		1.50						630.0	12.50					8.65				19.30	
24-Sep-95	932-4	0.11	0.50		83.00	4.00			680.0	6.90				0.0261	9.400			5.00	169.00	
20-May-96	932-4	0.68	0.70	1.30	61.00	0.50			460.0	3.10				0.0782	27.500			5.00	483.00	
17-Jul-97	932-4	0.11	1.00	0.80	68.80	1.00			690.0	1.00				0.0080	9.000			2.00	510.00	
2-Aug-98	932-4	0.04	1.00	0.40					560.0	3.00				0.0240	11.000			2.00	206.00	
31-Aug-99	932-4		1.00	0.80	67.00	1.00			700.0	2.00				0.0030	12.000			3.00	404.00	
07-Aug-91	932-4		1.00	0.20	27.40	1.00			360.0	3.00				0.0650	2.000				6.00	
30-Jun-92	932-4		0.20	0.20	30.60	2.00			350.0	4.00				0.0730	1.000				20.00	
2-Jun-93	932-4		2.00	0.50	30.60				381.0	4.00								8.34	226.0	
13-Jul-93	932-4		0.30	0.60	24.62	1.00			352.0	127.00								8.35	240.0	
15-Sep-93	932-4		0.39	0.60	92.10	1.00			739.0	2.00								8.74	120.00	
23-Jun-94	932-4			0.60	85.30	1.20								0.0160	11.200				520.00	
18-Oct-94	932-4		0.39	0.10	209.30	4.10								0.0320	8.800				504.00	
15-Jun-95	932-4		*	0.50	0.70	93.80	6.00							0.0200	5.600				557.00	
3-Aug-95	932-4		0.60	0.90	78.50	1.90								0.0120	10.200				538.00	
28-Sep-95	932-4	0.40	0.70	82.40	2.70	738.0	1.60							0.0040	7.900				492.00	
																			547.00	

Discharge Limits	mg/L	uninonized	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NEL-3-0932 Mean Grab	0.2	150	15	150	75	150	150	150	150	150	150	150	150	150	150	150	150	150	150
MMER Mean Grab	0.4	300	30	300	30	300	300	300	300	300	300	300	300	300	300	300	300	300	300

CANADIAN ZINC PRAIRIE CREEK MINE

932-9 870 m portal drainage																			
Sample Date	Sample Station	Ammonia mg/L	Arsenic ug/L	Cadmium ug/L	Chromium ug/L	Conductivity $\mu\text{S}/\text{cm}$	Copper ug/L	Cyanide mg/L	Iron ug/L	Lead ug/L	Manganese ug/L	Mercury ug/L	NO3-N+NO2 mg/L	pH	Sulfate mg/L	TDS mg/L	TSS mg/L	Turbidity NTU	Zinc ug/L
18-Apr-80	932-9	24.00	5.00	65.00	10.00	752.0	5.00	0.9700	50.00	180.0	640.0	4.00	150.00	5.30	180.0	540.0	4.00	150.00	
22-Jul-80	932-9	2.00	31.00	88.00	10.00	831.0	86.00	4.2000	270.00	8.50	220.0	620.0	386.00	8.50	220.0	620.0	386.00	770.00	
6-Aug-80	932-9	35.00	10.00	110.00	920.0	50.00	0.5200	270.00	3.0000	7.70	210.0	350.0	99.00	7.70	210.0	350.0	99.00	6.40	
17-Sep-80	932-9	0.95	150.00	13.00	120.00	819.0	490.00	26.0000	7000.00	1.00	600.0	2900.00	1.00	7.60	600.0	2900.00	1.00	6100.00	
31-Mar-81	932-9	50.00	20.00	120.00	90.00	4.3000	860.00	6.7000	6.7000	7.50	450.0	390.00	390.00	7.50	450.0	390.00	210.0	4900.00	
30-Apr-81	932-9	0.70	10.00	110.00	910.0	40.00	0.3800	100.00	0.0400	8.53	59.0	19.00	19.00	8.53	59.0	19.00	15.0	2500.00	
20-May-81	932-9	10.00	10.00	110.00	950.0	20.00	0.0400	60.00	0.0400	1.90	7.80	590.0	590.0	10.00	10.00	5400.00	18.0	5400.00	
3-Aug-85	932-4	0.50	10.00	20.00	110.00	910.0	30.00	0.9500	50.00	0.2200	0.53	7.70	2800.0	5.00	5.00	5.00	5.00	6900.00	
17-Jun-81	932-9	0.50	10.00	20.00	110.00	920.0	80.00	0.3500	0.560	11.00	8.10	12.00	12.00	8.10	12.00	12.00	12.00	5800.00	
14-Jul-81	932-9	10.00	20.00	110.00	910.0	80.00	0.8600	1200.00	0.0700	0.2700	1.90	7.80	6300.00	18.00	18.00	18.00	18.00	5700.00	
21-Aug-81	932-9	2.10	30.00	110.00	910.0	10.00	14.00	850.0	60.00	0.1900	7.300	6.00	6.00	0.030	1.40	7.80	5.00	3400.00	
2-Feb-82	932-9	1.50	10.00	910.00	10.00	904.0	10.00	0.1900	320.00	0.030	0.60	7.40	7.40	7.40	0.60	7.40	7.40	4300.00	
12-Feb-82	932-9	4.20	10.00	81.00	7.00	376.0	5.00	0.0830	30.00	0.18	8.00	6.00	6.00	6.00	1.40	7.80	5.00	4300.00	
12-May-82	932-9	3.90	5.00	86.00	7.00	10.00	61.90	0.0830	30.00	0.030	0.60	7.40	7.40	7.40	0.60	7.40	7.40	4300.00	
16-Jun-82	932-9	2.20	10.00	61.90	51.00	43.70	51.00	0.0050	5.00	0.18	8.10	8.10	8.10	8.10	0.18	8.10	8.10	1200.00	
27-Aug-82	932-9	0.18	0.50	43.70	51.00	50.00	50.00	0.0050	7.600	0.16	8.30	8.30	8.30	8.30	0.16	8.30	8.30	50.00	
27-Jun-83	932-9	0.13	1.00	20.00	0.90	850.0	50.00	0.0050	1.100	0.16	5.00	5.00	5.00	5.00	0.16	5.00	5.00	6900.00	
31-May-84	932-9	0.00	5.00	100.00	100.00	40.00	0.0050	0.0100	45.000	0.60	210.0	210.0	210.0	210.0	0.60	210.0	210.0	4500.00	
27-Dec-84	932-9	2.40	1.00	100.00	2.40	990.0	99.00	0.0438	7.800	0.30	3.00	3.00	3.00	3.00	0.30	3.00	3.00	320.00	
24-Sep-85	932-9	0.02	18.80	100.00	2.40	950.0	89.10	0.0438	54.400	0.4050	7.80	7.80	7.80	7.80	0.60	7.80	7.80	540.00	
20-May-86	932-9	0.46	1.50	43.40	53.00	0.80	610.0	13.50	0.2070	13.000	0.2070	7.97	7.97	7.97	7.97	527.0	7.97	497.00	
30-Jun-92	932-9	0.80	75.00	12.70	10.00	950.0	98.00	0.0480	27.000	25.300	0.0280	25.300	25.300	25.300	0.0280	25.300	25.300	9070.00	
13-Jun-93	932-9	0.90	51.85	1.00	691.0	1.00	120.50	1.00	936.0	47.00	13.700	13.700	13.700	13.700	7.95	13.700	13.700	720.00	
15-Sep-93	932-9	0.30	16.90	1.00	64.60	943.3	20.60	0.0320	19.500	5.70	7.95	7.95	7.95	7.95	7.95	7.95	7.95	720.00	
23-Jun-94	932-9	4.10	125.70	3.40	963.0	32.80	0.0200	21.300	0.0190	0.0050	21.300	39.700	39.700	39.700	115.0	39.700	39.700	16000.00	
18-Oct-94	932-9	2.30	38.20	246.60	3.10	910.0	23.00	0.0190	4.80	7.67	320.0	7.67	7.67	7.67	3.00	320.0	320.0	8300.00	
15-Jun-95	932-9	1.10	41.60	134.00	0.20	1010.0	84.60	0.0190	0.0050	0.0050	84.60	115.0	115.0	115.0	3.00	84.60	84.60	12400.00	
3-Aug-95	932-9	2.80	111.00	134.00	2.90	1030.0	45.90	0.0060	27.200	7.60	7.91	7.91	7.91	407.0	407.0	7.91	7.91	12400.00	
28-Sep-95	932-9	2.10	67.90	124.00	3.20	1020.0	34.50	0.0030	0.030	6.10	0.010	0.010	0.010	0.010	0.010	0.010	0.010	980.00	
17-Aug-99	932-9	1.30	63.80	3.00	1110.0	34.50	0.0030	0.030	0.030	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	12.00	

Notes: The 870 portal drainage does not discharge directly to the receiving environment. It discharges to the site settling pond. The settling pond is the final discharge point from the site to the receiving environment to which discharge limits apply.

CANADIAN ZINC PRAIRIE CREEK MINE

Prairie Creek at the confluence of Galena Creek																			
Sample Date	Sample Station	Ammonia mg/L	Arsenic ug/L	Cadmium ug/L	Calcium ug/L	Chromium ug/L	Conductivity uS/cm	Copper ug/L	Cyanlife mg/L	Iron ug/L	Lead ug/L	Manganese ug/L	NO3-N+NO2 mg/L	pH	Sulphate ug/L	TDS mg/L	TSS mg/L	Turbidity NTU	Zinc ug/L
18-Apr-80	932-6	.....	10.00	10.00	6.90	.....	360.0	10.00	0.0400	50.000	.....	.....	10.000	.....	8.20	380.0	18.6	2.60	0.1
11-Jun-80	932-6	.....	10.00	10.00	6.90	.....	360.0	10.00	0.0400	50.000	.....	.....	10.000	.....	8.20	380.0	18.6	2.60	0.1
22-Jun-80	932-6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6-Aug-80	932-6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17-Sep-80	932-6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25-Feb-82	932-6	0.03	10.00	5.00	68.00	540.0	10.00	0.0500	50.000	0.0400	0.30	7.80	.....	.....	.....	.....	.....	.....	40.00
12-Feb-82	932-6	0.06	3.00	3.00	59.00	560.0	3.00	0.0200	30.000	0.0200	0.26	7.90	.....	.....	.....	.....	.....	.....	24.00
23-Apr-82	932-6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30-Apr-82	932-6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12-May-82	932-6	0.03	7.00	3.00000	47.00	5.00	370.0	5.00	0.4800	30.000	0.0200	0.20	8.20	.....	.....	.....	.....	.....	30.00
21-May-82	932-6	.....	10.00	5.00000	23.60	10.00	182.0	20.00	2.3500	50.000	7.90	13.0	.....	.....	.....	.....	.....	.....	87.00
16-Jun-82	932-6	0.03	10.00	10.00000	35.20	.....	1.00	0.8900	50.000	0.0100	0.14	8.10	.....	.....	.....	.....	.....	.....	49.00
27-Aug-82	932-6	0.05	1.00	0.10000	51.50	.....	1.00	2.0000	.....	0.0100	0.16	8.30	.....	.....	.....	.....	.....	.....	50.00
22-Feb-83	932-6	0.04	2.00	1.98000	65.05	1.00	500.0	0.50	0.0200	0.5000	0.0500	0.22	7.50	.....	.....	.....	.....	.....	5.00
5-May-83	932-6	0.03	1.00	1.50000	57.60	0.50	450.0	0.50	0.0100	0.0161	0.1000	0.0300	0.04	8.20	.....	.....	.....	.....	12.00
27-Jun-83	932-6	0.03	1.00	0.05000	46.00	0.50	.....	1.00	0.0200	0.2000	0.0100	0.10	.....	.....	.....	.....	.....	.....	5.00
23-Aug-83	932-6	0.03	1.50	0.05000	56.60	0.50	.....	0.60	0.0100	0.0130	0.1000	0.0300	0.07	8.20	.....	.....	.....	.....	5.00
28-Sep-83	932-6	0.03	30.10	0.10000	58.20	0.00	.....	0.50	0.0100	0.1000	0.0200	0.2000	0.07	8.20	.....	.....	.....	.....	28.00
24-Feb-84	932-6	0.03	1.00	0.14000	66.80	0.70	550.0	1.00	0.0050	1.0000	1.0000	0.0600	0.06	7.70	.....	.....	.....	.....	44.00
24-May-84	932-6	0.03	1.00	0.16000	34.80	2.30	300.0	1.40	0.00200	0.4110	1.0000	0.0100	0.03	8.30	.....	.....	.....	.....	41.00
9-Jan-85	932-6	0.02	1.00	0.16000	60.60	0.60	550.0	0.50	0.0010	0.0010	0.5000	0.062	0.26	7.90	.....	.....	.....	.....	30.20
28-Jul-85	932-6	0.03	1.00	0.60000	7.20	.....	300.0	7.20	0.2780	1.4000	0.1600	0.163	0.12	8.22	.....	.....	.....	.....	15.00
24-Sep-85	932-6	0.02	0.50	0.10000	58.00	2.40	450.0	6.80	0.02614	1.4000	1.4000	0.14	0.14	8.20	.....	.....	.....	.....	12.80
20-May-86	932-6	0.03	0.50	0.40000	35.00	0.60	250.0	0.50	0.1050	0.5000	0.5000	0.0500	0.06	8.20	.....	.....	.....	.....	15.00
17-Jun-87	932-6	0.03	1.00	0.50000	50.00	1.00	340.0	1.00	0.0630	1.0000	0.1140	0.1000	0.10	8.10	.....	.....	.....	.....	11.00
2-Aug-88	932-6	0.02	1.00	0.10000	57.00	1.00	0.10000	1.00	0.00719	1.0000	0.02514	1.4000	0.12	8.30	.....	.....	.....	.....	8.00
07-Aug-89	932-6	0.03	0.50	0.40000	74.50	1.00	580.0	3.00	0.00200	0.00200	0.00200	0.1200	0.05	8.30	.....	.....	.....	.....	216.00
30-Jun-92	932-6	0.50	0.25000	68.30	1.00	560.0	3.00	0.0230	7.600	0.0230	7.600	7.96	3.00	393.0	3.00	.....	.....	167.00	
2-Jun-93	932-6	0.70	0.20000	35.80	1.00	288.0	1.00	0.3900	2.0000	0.3900	2.0000	8.16	.....	.....	.....	.....	.....	9.00	
13-Jun-93	932-6	0.30	0.20000	50.97	1.00	415.0	1.00	0.0270	3.0000	0.0270	3.0000	8.31	.....	.....	.....	.....	.....	11.00	
15-Sep-93	932-6	0.30	0.20000	59.40	1.00	484.0	1.00	0.0100	5.5000	0.0100	5.5000	8.16	.....	.....	.....	.....	.....	7.00	
23-Jun-94	932-6	0.30	0.10000	50.20	1.90	391.0	0.20	0.0370	0.3000	0.0370	0.3000	8.28	.....	.....	.....	.....	.....	8.40	
18-Oct-94	932-6	0.30	0.10000	32.10	3.70	507.0	0.20	0.0200	0.6000	0.0200	0.6000	8.16	.....	.....	.....	.....	.....	10.00	
15-Jun-95	932-6	0.30	0.10000	51.50	4.80	498.0	0.10	0.0030	0.2000	0.0030	0.2000	8.20	.....	.....	.....	.....	.....	6.00	
3-Aug-95	932-6	0.30	0.10000	53.60	1.40	420.0	0.10	0.0300	1.500	0.0300	1.500	8.39	115.0	277.0	3.00	.....	.....	7.22	
28-Sep-95	932-6	0.30	0.10000	54.00	2.30	469.0	0.80	0.0140	1.600	0.0140	1.600	8.30	85.0	3.00	.....	.....	.....	8.80	
17-Aug-96	932-6	0.20	0.30000	3.00	2.00	496.0	2.00	0.0030	1.000	0.0030	1.000	8.31	0.15	8.31	3.00	.....	.....	10.00	
Receiving Water Criteria	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
CWQG FAL	ice open	1.9 0.4	0.063 30.0	1.0 30.0	4.0 7.0	0.1 30.0	1.0 30.0	4.0 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	0.1 30.0	

Note: Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life have been formulated as guidelines for receiving water quality, not as a measure of effluent discharge quality.

932-7 Prairie Creek upstream of the airstrip											
Sampling Date	Sample Station	Azotinania	Arsenic	Cadmium	Chromium	Conductivity	Copper	Cyanide	Iron	Manganese	Mercury
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	ug/L	ug/L
18-Apr-80	932-7	5.00	5.000000	36.02	10.00	476.0	5.00	0.0650	10.000	8.10	60.0
11-Jun-80	932-7	10.00	10.000000	6.83	10.00	50.000	0.1100	—	10.000	44.0	14.2
22-Jul-80	932-7	5.00	5.000000	47.00	10.00	354.0	6.00	0.0300	—	8.40	24.00
6-Aug-80	932-7	10.00	10.000000	47.00	10.00	409.0	0.1200	0.010	0.10	35.0	231.0
17-Sep-80	932-7	0.50	10.00	50.00	57.00	377.0	20.00	0.0400	50.000	43.0	250.0
2-Feb-82	932-7	0.03	10.00	68.00	10.00	540.0	10.00	0.0200	50.000	0.10	6.40
12-Feb-82	932-7	0.03	10.00	3.000000	69.00	540.0	3.00	0.0200	30.000	0.10	5.00
23-Apr-82	932-7	—	10.00	3.000000	73.00	540.0	5.00	0.2900	30.000	0.10	15.00
30-Apr-82	932-7	—	10.00	3.000000	65.00	540.0	5.00	0.1200	30.000	0.10	20.00
12-May-82	932-7	—	10.00	3.000000	48.00	540.0	5.00	0.2500	30.000	0.10	5.00
21-May-82	932-7	0.03	10.00	10.000000	35.50	—	1.00	0.2500	50.000	0.12	6.70
16-Jun-82	932-7	0.03	10.00	10.000000	50.40	—	1.00	0.2500	20.000	0.12	5.00
27-Aug-82	932-7	0.05	1.00	0.100000	—	350.0	—	0.010	—	0.15	480.00
22-Feb-83	932-7	—	—	—	—	—	—	—	—	—	20.00
5-May-83	932-7	0.03	1.00	1.000000	54.10	0.50	0.0100	0.0117	0.100	0.010	5.00
27-Jun-83	932-7	0.03	1.00	0.050000	45.80	0.70	—	0.0080	0.2000	0.07	5.00
23-Aug-83	932-7	0.03	1.50	0.050000	56.70	0.50	0.0103	0.0052	0.100	0.020	5.00
28-Sep-83	932-7	0.03	27.0	0.100000	55.10	0.50	0.0070	0.100	—	0.040	240.0
24-Feb-84	932-7	0.03	1.00	0.100000	57.70	0.50	0.0100	0.0050	1.000	0.050	5.00
24-May-84	932-7	0.03	1.00	0.100000	33.50	1.10	0.0100	0.6330	2.400	0.020	20.00
9-Jan-85	932-7	0.02	1.00	0.100000	—	0.50	0.0104	0.0052	0.500	0.05	5.00
26-Jul-85	932-7	0.03	1.00	0.300000	—	350.0	7.20	0.3950	1.600	0.26	8.20
24-Sep-85	932-7	0.03	0.01	0.100000	57.00	2.40	0.0261	1.4000	—	0.050	23.00
20-May-86	932-7	0.03	0.50	0.100000	38.00	0.80	0.0120	0.5000	0.500	0.03	48.00
17-Jul-87	932-7	0.03	1.00	0.500000	51.00	1.00	0.0560	1.0000	—	0.100	20.00
2-Aug-88	932-7	0.02	* 1.00	0.100000	—	350.0	1.00	0.0430	1.0000	0.11	3.00
31-Aug-88	932-7	1.00	0.102000	58.00	1.00	420.0	1.00	0.0630	1.0000	—	2.00
07-Aug-91	932-7	0.50	0.200000	62.90	2.00	410.0	1.00	0.0310	0.0900	0.16	3.00
30-Jun-92	932-7	0.20	0.200000	47.80	2.00	360.0	2.00	0.0310	1.0000	0.16	6.00
2-Jul-93	932-7	0.30	0.200000	34.70	—	284.0	1.00	0.3640	0.7000	0.15	13.00
13-Jul-93	932-7	0.30	0.200000	51.20	1.00	494.0	1.00	0.0110	0.7000	0.33	252.0
15-Sep-93	932-7	0.30	0.200000	55.30	1.00	444.0	1.00	0.0320	2.300	—	3.00
23-Jun-94	932-7	—	0.100000	49.10	—	383.3	0.20	—	—	—	1.90
18-Oct-94	932-7	0.30	0.160000	30.15	3.40	478.0	0.10	0.0200	0.500	0.31	2.30
15-Aug-95	932-7	0.30	0.160000	49.80	4.20	428.0	0.10	0.0300	0.200	0.14	5.00
3-Aug-95	932-7	0.30	0.200000	55.10	1.10	412.0	—	0.3300	2.000	0.40	6.00
28-Sep-95	932-7	0.30	0.100000	53.00	2.50	418.0	0.50	0.0120	1.800	0.31	3.10
17-Aug-99	932-7	0.20	0.300000	3.00	—	432.0	2.00	0.0330	1.000	0.14	7.00

Receiving Water Criteria	mgl	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
CWQG FAL	ice open	1.9	0.063	1.0	4.0	300	7.0	0.1	0.1	0.1	30.0
Note:	Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life have been formulated as guidelines for receiving water quality, not as a measure of effluent discharge quality.										

*Copy of June 16, 1982
Sample Data Sheet*

Note: "Lab error" annotation for Zinc analyses

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

WATER RESOURCES DIVISION -- NORTHWEST TERRITORIES

REQUEST FOR AND RESULTS OF LABORATORY ANALYSIS

LICENSEE CADILLAC EXPLORATIONS	LICENCE NO. IVSL3 932	LOCATION PRINCE RIVER				
DATE SAMPLED JUNE 16, 1982	DATE RECEIVED JUNE 16, 1982	DATE ANALYZED JUNE 28, 1982				
STATION NUMBER Settling Pond 932-4	PQ1132 932-6	PCU13 932-7	TP SUMP 932-8	Well 932-1	Harrison HARRISON	
LABORATORY NUMBER 20396	20397	20398	20399	20400	20400	
TESTS REQUIRED ✓ ✓ ✓ ✓ ✓ ✓ ✓						
pH (units)	8.7	8.1	8.2	7.4	7.5	8.2
Sp. Cond. (umho/cm)	510	270	370	600	700	390
Dissolved Oxygen						
Turbidity (JTU)						
Colour (colour U.)						
Suspended Solids	22	71	45	19	26	14
TDS, Residue						
Oil & Grease						
Phenols						
Calcium	57.0	35.2	35.5	61.9	80.2	44.1
Magnesium	21.4	11.1	11.1	26.3	27.4	18.3
Tot. Hardness as	230	130	130	260	310	190
Tot. Alkalinity CaCO ₃	180	120	110	120	140	150
Sodium	1.6	0.7	0.7	5.2	3.9	0.5
Potassium	0.9	0.3	0.3	1.9	0.6	0.5
Tot. Coliform cnt/						
Faecal Coli. 100						
Faecal Strep ml						
BOD ₅						
COD						
Carbon, IC						
Carbon, TOC						
Total Cyanide						
Chloride						
Sulphate						
Sulphide						
Ammonia Nitrogen as	0.48	<0.03	<0.03	2.2	<0.03	<0.03
Nitrite-N	1.2	0.14	0.12	0.60	0.19	0.27
Kjeldahl N N						
Phosphorus O-P as						
Phosphorus Tot. P	<0.05	<0.05	<0.05	0.41	<0.05	<0.05
Silica Reac. as SiO ₂						
Arsenic T	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium D						
Copper T	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron E	0.33	0.89	0.25	0.26	0.41	0.24
Lead T	0.12	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury E	2.2					<0.01
Nickel T	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Zinc T	0.72	0.49	0.48	1.2	2.6	1.5
Zinc E	0.01	<0.01	<0.01			

All results are expressed in mg/l except as noted