

July 14, 2005

Mr. Michael F. Gearheard  
Director, Office of Water, Region 10  
United States Environmental Protection Agency  
1200 Sixth Avenue, OW-133  
Seattle, WA 98101

**Subject: NPDES Permit #AK-003865-2 (Mine Site), Discharge Monitoring Report,  
June 2005**

Dear Mr. Gearheard:

Attached are the results of monitoring as required by the NPDES Wastewater Discharge Permit #AK-003865-2 (Permit) for the Teck Cominco Alaska Incorporated (Teck Cominco) Red Dog Mine.

On August 22, 2003 a modification to the Permit became effective. On August 28, 2003 the Permit expired and was administratively extended until a renewed permit is issued.

The permit regulates Outfall 001, Industrial Treated Wastewater Effluent, and Outfall 002, Domestic Sewage Treatment Plant Effluent.

**OUTFALL 001**

Notification of the start of grayling spawning was made on May 24, 2005. The first spawned-out (spent) fish were observed until June 4, 2005. Written notification of the end of grayling spawning was received on June 6, 2005.

**I. INORGANIC PARAMETERS**

Inorganic monitoring for NPDES permit parameters was conducted and the results are contained in Attachment I. All monitored parameters were within permitted and Compliance Order limits during June 2005.

Table A contains results of an expanded cyanide sampling program conducted in June 2005. This is a small portion of a much larger ongoing cyanide analytical investigation. Teck Cominco plans to conduct monthly sampling similar to what is contained in the Table for the remainder of the 2005 discharge season.

**Table A. Outfall 001 Cyanide Analysis, June 2005**

Date	Lab	Not Sulfide Field Fixed		Sulfide Field Fixed	
		Total CN (µg/l)	WAD CN (µg/l)	Total CN (µg/l)	WAD CN (µg/l)
06-02-2005	ACZ	<3.0	<3.0	<3.0	<3.0
	NCA	<0.6	1.9J	<0.6	2.4J
06-06-2005	ACZ	<3.0	<3.0	<3.0	<3.0
	NCA	<0.6	2.7J	<0.6	2.4J
06-13-2005	ACZ	<3.0	<3.0	<3.0	<3.0
	NCA	3.4	2.8J	4.0	4.0
06-20-2005	ACZ	<3.0	<3.0	<3.0	<3.0
	NCA	1.7J	2.1J	1.5J	2.9J
06-27-2005	ACZ	<3.0	<3.0	<3.0	<3.0
	NCA	1.7J	2.7J	2.4J	2.4J

J = Estimated value between the MDL and MRL.

As Table A indicates, samples were split between two separate analytical laboratories and each sample was split again, with one split being field treated to remove sulfides per the permit specified cyanide analytical method, SM 4500 CN. As has been discussed with members of your staff on numerous occasions, the total cyanide method continues to yield highly variable results. Total cyanide results from ACZ laboratory were used in Attachment I.

## II. ORGANIC PARAMETERS

An Organic Priority Pollutant Scan (OPPS) was not required in June 2005.

## III. WHOLE EFFLUENT TOXICITY

Whole Effluent Toxicity (WET) tests were conducted in June 2005 and the results for *Pimephales promelas* and *Ceriodaphnia dubia* are contained in Attachment I. WET test results were within permitted limits for both species tested. In addition to the permit required WET tests, tests were conducted on a mock effluent that contained an identical concentration and total dissolved solids (TDS) composition as the Outfall 001 water tested. The test was designed to mimic the TDS toxicity of the effluent without any other possible toxin present. Table D contains the results of the WET and mock effluent tests.

**Table D. Results of *C. dubia* Tests Conducted on Outfall 001, June 2005**

First Aliquot Collection Date	Lab	Whole Effluent (TUc)	Mock Effluent (TUc)
06/07/05	ENSR	3.65	4.72
06/07/05	CH2M Hill	3.30	4.74

As Table D indicates, all of the effluent toxicity can be attributed to TDS, which is already regulated by the permit downstream of the Outfall to be protective of human health and the environment. All *C. dubia* WET tests were conducted per the Red Dog Mine 2004 WET Test Protocols submitted to EPA in May 2004 and resubmitted in May 2005.

#### IV. TOTAL DISSOLVED SOLIDS (TDS)

TDS monitoring requirements specified in the in Section I.A.8 of the Permit and in the compliance order were conducted during June 2005, and results are contained in Attachment VI. All monitored parameters were within the permit and compliance order limits.

#### V. MINE DRAINAGE

Mine drainage is captured and pumped to the tailings impoundment. A daily log of water volumes pumped in June 2005 is contained in Attachment II.

#### VI. AMBIENT AND RECEIVING STREAM MONITORING

No exploratory work was conducted in the vicinity of the Clean Water Ditch tributaries during June 2005.

##### Inorganic Parameters

Inorganic monitoring of ambient and receiving streams was conducted for June 2005. The results are contained in the Attachment I.

##### Whole Effluent Toxicity

WET tests were conducted on samples collected in June 2005. Results for *Pimephales promelas* and *Ceriodaphnia dubia* are contained in Attachment I.

A. Streamflow Measurements

Streamflow data are contained in Attachment III, Hydrographs.

VII. PRECIPITATION AND EVAPORATION

Daily precipitation values for June 2005 are presented in Attachment IV, Precipitation Data.

OUTFALL 002

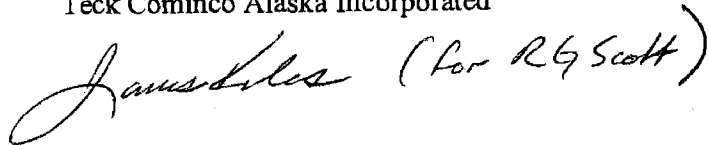
The Construction Personnel Accommodations Complex (ConPAC), which utilizes Outfall 002, was decommissioned on November 30, 2001. No sewage treatment plant effluent was discharged through Outfall 002 during the reporting period.

SUMMARY

Please accept this as the June Mine Discharge Monitoring Report (DMR) for 2005. If there are any questions, please contact Mark Thompson at (907) 426-9145 or myself at (907) 426-9127.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,  
Teck Cominco Alaska Incorporated

A handwritten signature in cursive script, appearing to read "J. Janssen (for R.G. Scott)".

R. G. Scott  
General Manager

cc: P. McGee, ADEC/Fairbanks  
A. Ott, ADNR-OHMP/Fairbanks  
J. Dau, ADF&G/Kotzebue  
R. Schaeffer, NWAB/Kotzebue  
W. Sampson, NANA/Kotzebue  
L. Jones, Noatak IRA  
O. Knox, Kivalina City Council  
J. Norton, Kivalina IRA Council  
E. Shiedt, Maniilaq Subsistence  
R. Davis, Hartig Rhodes  
C. Caunce, Teck Cominco Limited  
R. Barr, NANA/Anchorage  
File, 6.60.30.10 2005

ATTACHMENT I  
Discharge Monitoring Report

**National Pollutant Discharge Elimination System (NPDES)  
Discharge Monitoring Report (DMR)**

**Permittee Name**  
Teck Cominco Alaska Incorporated  
3105 Lakeshore Drive, Bld. A, Ste. 101  
Anchorage, Alaska 99517  
Red Dog Operations

Kolzebue, Alaska 99752

Permit No. AK-003865-2 (2-16) Discharge No. 001 A (17-19)

Monitoring Period  
From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30 (26-27, 28-29, 30-31)

No Discharge

Parameter (32-37)	(46-53) Average	(54-61) Maximum	Units	(38-45) Minimum	(46-53) Average	(54-61) Maximum	Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
Temperature, Water, Deg. Centigrade 00010 1 0 0					12.8	19.6	°C	n/a	2/day	grab
Effluent Gross Value				n/a	REPORT	REPORT			daily	grab
Turbidity 00070 1 0 0					0.49	1.02	NTU	n/a	5/month	Composite
Effluent Gross Value				n/a	REPORT	REPORT			weekly	24 comp
BOD (Biochemical Oxygen Demand), 5 Day (20 Deg. C) 00310 1 0 0					3.4	3.4	mg/L	n/a	1/month	Composite
Effluent Gross Value				n/a	REPORT	REPORT			monthly	24 comp
pH 00400 1 0 0					9.4	10.2	S.U.	0	2/day	grab
Effluent Gross Value				6.0	n/a	10.5			weekly	grab
Solids Total Suspended 00530 1 0 0					1.6 *	8.0	mg/L	0	5/month	Composite
Effluent Gross Value				n/a	20.0	30.0			weekly	24 comp
Nitrogen, Ammonia Total (As N) 00610 1 0 0					4.7	5.7	mg/L	0	5/month	Composite
Effluent Gross Value				n/a	REPORT	REPORT			weekly	24 comp
Cyanide, total (As CN) 00720 1 0 0					<3.0 **	<3.0	µg/L	0	5/month	Grab
Effluent Gross Value				n/a	9.0	9.0			weekly	grab

Name/Title Principal Executive Officer: *R. G. Scott*  
 General Manager: *R. G. Scott*  
 Comments & Explanations:  
 \* Indicates four non detect values used  
 \*\* Indicates five non detect values used

Telephone: 907-426-9127 Date: 2005-07-14  
 Alpha code - number: year mo day

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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 Kolzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **001 A**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05 - 06 - 01** To: (26-27, 28-29, 30-31) **05 - 06 - 30**

No Discharge

Parameter (32-37)	(3 card only) Quantity/Loading (20-21, 22-23, 24-25)			(4 card only) Quantity or Concentrations (26-27, 28-29, 30-31)			Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(38-45) Minimum				
Hardness, Total (as CaCO3) 00980 1 0 0				2386	2690		mg/L	n/a	5/month	Composite
Effluent Gross Value				REPORT	REPORT				weekly	24 comp
Iron, Total Recoverable 00980 1 0 0				<69.5 **	<129.0		µg/L	n/a	2/month	Composite
Effluent Gross Value				REPORT	REPORT				monthly	24 comp
Selenium, Total Recoverable 00981 1 0 0				<6.0 *	<6.0		µg/L	0	5/month	Composite
Effluent Gross Value				REPORT	REPORT				weekly	24 comp
Nickel, Total Recoverable 01074 1 0 0				4.7 *	20.2		µg/L	n/a	5/month	Composite
Effluent Gross Value				REPORT	REPORT				weekly	24 comp
Silver, Total Recoverable 01079 1 0 0				<0.04 **	<0.05		µg/L	n/a	2/month	Composite
Effluent Gross Value				REPORT	REPORT				monthly	24 comp
Zinc, Total Recoverable 01094 1 0 0				32.9	44.6		µg/L	0	5/month	Composite
Effluent Gross Value				REPORT	REPORT				weekly	24 comp
Aluminum, Total Recoverable 01104 1 0 0				2.6	3.0		µg/L	n/a	2/month	Composite
Effluent Gross Value				REPORT	REPORT				monthly	24 comp

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Signature: *R.G. Scott* (For R.G. Scott)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone 907-426-9127  
 Date 2005-07-14  
 year mo day



Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **001 A**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05 - 06 - 01** To: (26-27, 28-29, 30-31) **05 - 06 - 30**

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations		Units	# of Ex. (62-63)	Freq (64-68)	Sample Type (69-70)
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average				
Cadmium, Total Recoverable 01113 1 0 0				<b>0.40</b>	µg/L	<b>0</b>	5/month	Composite
Effluent Gross Value			n/a	3.4			weekly	24 comp
Lead, Total Recoverable 01114 1 0 0				<b>&lt;0.5</b>	µg/L	<b>0</b>	5/month	Composite
Effluent Gross Value			n/a	8.1			weekly	24 comp
Chromium, Total Recoverable 01118 1 0 0				<b>&lt;0.40</b>	µg/L	n/a	5/month	Composite
Effluent Gross Value			n/a	REPORT			weekly	24 comp
Copper, Total Recoverable 01119 1 0 0				<b>1.2 ****</b>	µg/L	<b>0</b>	5/month	Composite
Effluent Gross Value			n/a	43.7			weekly	24 comp
Manganese, Total Recoverable 1123 1 0 0				<b>9.1</b>	µg/L	n/a	5/month	Composite
Effluent Gross Value			n/a	REPORT			weekly	24 comp
Coliform, Fecal MF, MFC Broth, 44.5C 31616 1 0 0				<b>N/A</b>	1/100 col.	<b>N/A</b>	N/A	Grab^
Effluent Gross Value			n/a	200			1/2mos	24 comp
Chlorine, Total Residual 50060 1 0 0				<b>&lt;0.1 *</b>	mg/L	n/a	1/month	Grab
Effluent Gross Value			n/a	REPORT			monthly	grab

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Name/Title Principal Executive Officer: *Jana Kuba*  
 R.G. Scott  
 General Manager (for R.G. Scott)  
 Telephone: 907-426-9127  
 Date: 2005-07-14  
 year mo day

Comments & Explanations:  
 \* Indicates the number of non detect values used per EPA written instructions.

**Permittee Name**  
Teck Cominco Alaska Incorporated  
3105 Lakeshore Drive, Bld. A, Ste. 101  
Anchorage, Alaska 99517

**Permit No.** AK-003865-2  
Red Dog Operations

Kolzebu, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
Discharge Monitoring Report (DMR)**

**Permit No.** (2-16) **001 A** **Discharge No.** (17-19)  
Monitoring Period  
**From:** 05-06-01 **To:** 05-06-30  
(20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32-37)	(3 card only) Quantity/Loading			(4 card only) Quantity or Concentrations			Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(38-45) Minimum				
Toxicity, Ceriodaphnia Chronic 61426 1 0 0				3.3	3.3	n/a	T <sub>u</sub> c	0	1/month	Composite
Effluent Gross Value				9.7	12.2				monthly	24 comp
Toxicity Pimephales Chronic 61428 1 0 0				1.2	1.2	n/a	T <sub>u</sub> c	0	1/month	Composite
Effluent Gross Value				9.7	12.2				monthly	24 comp
Solids Total Dissolved 70295 1 0 0				3920	4124	n/a	mg/L	0*	5/month	Grab
Effluent Gross Value				3900	3900				weekly	24 comp
Mercury, Total (as HG) 71900 1 0 0				<0.1 **	<0.2		µg/L	0	2/month	Composite
Effluent Gross Value				0.50	0.50				monthly	Grab
Flow 74076 0 0 0		624					MG/Year	0	cont	continuous
Effluent Gross Value		YTD Total							cont	continuous
Flow 74076 1 0 0		319.6					MG/Month	0	cont	continuous
Effluent Gross Value		Monthly Total							cont	continuous
Organics, Tot Purge Ables (Method 624) 76029 1 0 0				N/A	N/A			N/A	N/A	24 comp
Effluent Gross Value				REPORT	REPORT				May, July Sept	24 comp

**Name/Title** Principal Executive Officer  
*R.G. Scott*  
**General Manager** *(for R.G. Scott)*  
**Comments & Explanations:**  
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Telephone** 907-426-9127  
**Date** 2005-07-14  
year mo day

**Permittee Name**  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)**

(2-16) Permit No. **AK-003865-2** Discharge No. **001 A**  
 Monitoring Period From: **05-06-01** To: **05-06-30**  
(20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32-37)	Quantity/Loading (4 card only)			Quantity or Concentrations (4 card only)			Units	# of Ex. (62-63)	Freq (64-66) May July Sept	Sample Type (69-70)
	Average (46-53)	Minimum (38-45)	Maximum (54-61)	Average (46-53)	Minimum (38-45)	Maximum (54-61)				
Base Neutrals & Acid (Method 825), Total 76030 1 0 0				N/A		N/A		N/A	N/A	24 comp
Effluent Gross Value		n/a		REPORT		REPORT				24 comp
Sample Measurement										
Permit Requirement										

Name/Title **Principal Executive Officer**  
**R.G. Scott**  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone **907-426-9127** Date **2005-07-14**  
year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Dr  
 Anchorage, AK 99517  
 Red Dog Operations

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. AK-003865-2  
 (17-19) 002 A Discharge No.  
 Monitoring Period  
 From: 05-06-01 To: 05-06-30  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge  
 XXXXXXXXXX

Parameter (32-37)	Quantity/Loading (20-21, 22-23, 24-25)		Quantity or Concentrations (4 card only)		Units	Frequency (64-66)	Sample Type (69-70)
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average			
BOD, 5 Day (20 DEG. C) 00310 G 0 0 RAW SEW / INFLUENT	Report Mo Avg	Report Wkly Ave		Report Mo Avg	mg/L	1/mo	composite
BOD, 5 Day (20 DEG. C) 00310 1 0 0 EFFLUENT GROSS VALUE	Report Mo Avg	Report Wkly Ave		30 Mo Avg	mg/L	1/mo	composite
PH 00400 1 9 0 EFFLUENT GROSS VALUE			6.5 Minimum	9.0 Maximum	SU	1/day	grab
SOLIDS, TOTAL SUSPENDED 00530 G 0 0 RAW SEW / INFLUENT	Report Mo Avg	Report Wkly Ave		45 Wkly Ave	mg/L	1/mo	composite
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	Report Mo Avg	Report Wkly Ave		30 Mo Avg	mg/L	1/mo	composite
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 0 0 EFFLUENT GROSS VALUE	Report Mo Avg	Report Wkly Ave		45 Wkly Ave	mg/L	1/mo	composite
COLIFORM, FECAL MF, M FC BROTH, 44.5C 31616 1 0 0 EFFLUENT GROSS VALUE	Report Mo Avg	Report Wkly Ave		Report Mo Avg	mg/L	1/quarter	grab
	Report Mo Avg	Report Wkly Ave		200 Mo Geo	#/100 ML	1/mo	grab

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Signature: *[Signature]*  
 Title: Principal Executive Officer  
 Telephone: 907-429-9127  
 Date: 2005-07-14  
 area code - number year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Dr  
 Anchorage, AK 99517  
 Red Dog Operations

National Pollutant Discharge Elimination System (NPDES)  
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No Discharge  
 XXXXXXXXXX

Parameter (32 - 37)	Sample Measurement	Quantity/Loading (4 card only)				Units	Quantity or Concentrations (5 card only)				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type measurement	
		(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average		(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum					
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 9 0	Sample Measurement	0.000	0.000	0.000	MGD										
EFFLUENT GROSS VALUE	Permit Requirement	Report Mo Avg	Report Wkly Avg												
CHLORINE, TOTAL RESIDUAL 50060 1 0 0	Sample Measurement														
EFFLUENT GROSS VALUE	Permit Requirement	Report Mo Avg	Report Wkly Avg												
BOD, 5 DAY PERCENT REMOVAL 81010 K 9 0	Sample Measurement														
PERCENT REMOVAL	Permit Requirement	Report Mo Avg	Report Wkly Avg												
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 K 9 0	Sample Measurement														
PERCENT REMOVAL	Permit Requirement	Report Mo Avg	Report Wkly Avg												

Name/Title Principal Executive Officer  
 R. G. Scott  
 General Manager  
 Comments & Explanations:  
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Reference attachments here

Telephone 907-429-9127  
 Date 2005-07-14  
 area code - number year mo day

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National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2  
 (2-16)  
 Rec Sta 140  
 Discharge No.  
 05-06-01  
 (20-21, 22-23, 24-25)  
 Monitoring Period  
 05-06-30  
 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	(46-53) Average		Units	(54-61) Maximum		Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	Sample Measurement	Permit Requirement		Minimum	Average				
Temperature				2.4	4.4	°C	n/a	2/month	Grab
Turbidity	Sample Measurement			REPORT	REPORT			2/mo	grab
	Permit Requirement			1.31	1.72	NTU	n/a	3/month	Grab
pH	Sample Measurement			REPORT	REPORT			3/mo	grab
	Permit Requirement			6.9	7.2	units	n/a	2/month	Grab
Total Dissolved Solids	Sample Measurement			116	120	mg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT			2/mo	grab
Total Ammonia as N	Sample Measurement			<0.05**	<0.10	mg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT			2/mo	grab
Hardness as CaCO3	Sample Measurement			74	75	mg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT			2/mo	grab
Iron, total recoverable	Sample Measurement			109	130	µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT			2/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone 907-426-9127  
 Date 2005-07-14  
 area code-number yr mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kolzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16) Discharge No. (17-19)  
**Rec Sta 140**

Monitoring Period  
 From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading (4 card only) Quantity or Concentrations		Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum				
Selenium, total recoverable	<1.0 **	<1.0	µg/L	n/a	2/month	Grab
Nickel, total recoverable	REPORT	REPORT	µg/L	n/a	2/mo	grab
Silver, total recoverable	17.3	17.6	µg/L	n/a	2/month	Grab
Zinc, total recoverable	REPORT	REPORT	µg/L	n/a	2/mo	grab
Aluminum, total recoverable	<0.3 **	<0.50	µg/L	n/a	2/month	Grab
Cadmium, total recoverable	REPORT	REPORT	µg/L	n/a	2/mo	grab
Lead, total recoverable	2370	2620	µg/L	n/a	2/month	Grab
	REPORT	REPORT	µg/L	n/a	2/mo	grab
	73.3	80.0	µg/L	n/a	2/month	Grab
	REPORT	REPORT	µg/L	n/a	2/mo	grab
	11.7	11.7	µg/L	n/a	2/month	Grab
	REPORT	REPORT	µg/L	n/a	2/mo	grab
	15.8	18.8	µg/L	n/a	2/month	Grab
	REPORT	REPORT	µg/L	n/a	2/mo	grab

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Name/Title: **R.G. Scott**  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

Telephone: **907-426-9127**  
 Area code-number  
 Date: **2005-07-14**  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Rec Sta 140 (17-19)  
 Discharge No. (20-21, 22-23, 24-25)  
 Monitoring Period  
 From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	Sample Measurement Permit Requirement	Sample Measurement Permit Requirement	Sample Measurement Permit Requirement	(3 card only) Quantity/Loading (4 card only) Quantity or Concentrations			Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
				(46-53) Average	(38-45) Minimum	(54-61) Maximum				
Chromium, total recoverable				<0.7 **		<1.0	µg/L	n/a	2/month	Grab
Copper, total recoverable				4.3		4.7	µg/L	n/a	2/month	grab
Manganese, total recoverable				128.5		136.0	µg/L	n/a	2/month	Grab
Conductivity				93		96	µMHOS/cm	n/a	2/month	grab
Stream Flow				19	41		MGD	n/a	Cont.	Recorder
									daily	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 (Reference attachments here)

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Telephone 907-426-9127  
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 yr. mo. day



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 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Sta 20**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05-06-01** To: (26-27, 28-29, 30-31) **05-06-30**

No Discharge

Parameter (32 - 37)	Quantity/Loading (4 card only)		Quantity or Concentrations (4 card only)		Units	# of Ex. (62-63)	Freq (64-66)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)				
Cyanide, weak acid dissociable					µg/L	n/a	2/month	Grab
Sample Measurement								
Permit Requirement					REPORT		2/mo	grab

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Name/Title **Principal Executive Officer**

**R.G. Scott**  
 General Manager  
 Comments & Explanations:

\* Indicates the number of non detect values used

Telephone **907-426-9127** Date **2005-07-14**

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**Permittee Name**  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
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 Kotzebue, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)**

(2-16) Permit No. **AK-003865-2** (17-19) **Rec Sta 9** Discharge No. \_\_\_\_\_  
 Monitoring Period  
 From: **05 - 06 - 01** To: **05 - 06 - 30**  
(20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(54-61) Maximum	(54-61) Minimum	(46-53) Average	(54-61) Maximum	(54-61) Minimum	(54-61) Average				
Temperature			4.0		6.1		n/a	2/month	Grab	
pH	Sample Measurement		REPORT		REPORT			2/mo	grab	
	Permit Requirement			7.1		7.3	n/a	2/month	Grab	
Total Dissolved Solids	Sample Measurement		161		REPORT		n/a	2/mo	grab	
	Permit Requirement				REPORT	190	n/a	2/month	Grab	
Total Ammonia as N	Sample Measurement		0.05 *		REPORT		n/a	2/mo	grab	
	Permit Requirement				REPORT	0.10	n/a	2/month	Grab	
Hardness as CaCO3	Sample Measurement		106		REPORT		n/a	2/mo	grab	
	Permit Requirement				REPORT	107	n/a	2/month	Grab	
Iron, total recoverable	Sample Measurement		306		REPORT		n/a	2/mo	grab	
	Permit Requirement				REPORT	390	n/a	2/month	Grab	
Selenium, total recoverable	Sample Measurement		<1.0 **		REPORT		n/a	2/mo	grab	
	Permit Requirement				REPORT	<1.0	n/a	2/month	Grab	

Name/Title **R.G. Scott** Principal Executive Officer  
 General Manager  
 Comments & Explanations:  
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Telephone **907-426-9127** Date **2005-07-14**  
area code-number year mo day

Permittee Name  
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 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Rec Sta 9 Discharge No. (17-19)  
 Monitoring Period  
 From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	Sample Measurement Permit Requirement	(3 card only) Quantity/Loading			(4 card only) Quantity or Concentrations			Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
		(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.				
Nickel, total recoverable	Sample Measurement Permit Requirement				10.7	11.4	REPORT	µg/L	n/a	2/month	Grab
Silver, total recoverable	Sample Measurement Permit Requirement				<0.04 **	<0.05	REPORT	µg/L	n/a	2/month	grab
Zinc, total recoverable	Sample Measurement Permit Requirement				212	251	REPORT	µg/L	n/a	2/month	grab
Aluminum, total recoverable	Sample Measurement Permit Requirement				57.1	64.0	REPORT	µg/L	n/a	2/month	grab
Cadmium, total recoverable	Sample Measurement Permit Requirement				0.8	0.9	REPORT	µg/L	n/a	2/month	grab
Lead, total recoverable	Sample Measurement Permit Requirement				0.8	1.1	REPORT	µg/L	n/a	2/month	grab
Chromium, total recoverable	Sample Measurement Permit Requirement				0.3 *	0.5	REPORT	µg/L	n/a	2/month	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
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 Anchorage, Alaska 99517

Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Sta 9**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05-06-01** To: (26-27, 28-29, 30-31) **05-06-30**

No Discharge

Parameter (32-37)	Quantity/Loading (3 card only)		Quantity of Concentrations (4 card only)		Units	Units	Frequency (64-68)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)				
Copper, total recoverable				<b>1.0*</b>	µg/L	µg/L	2/month	Grab
Manganese, total recoverable				<b>82</b>	µg/L	µg/L	2/month	Grab
Ambient Toxicity, Ceriodaphnia Chronic				<b>4.7</b>	TUC	TUC	1/month	Grab
Ambient Toxicity, Pimephales Chronic				<b>1.0</b>	TUC	TUC	1/month	Grab
Stream Flow	<b>166</b>	<b>500</b>			MGD		Cont	Recorder
Conductivity				<b>127</b>	µMHOS/cm	µMHOS/cm	2/month	Grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager

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 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kolzebu, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. **AK-003865-2** (2-16) Discharge No. **12** (17-19)  
 Monitoring Period From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	Quantity/Loading		Quantity of Concentrations				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.				
Temperature				3.7	6.9		°C	n/a	2/month	Grab
Turbidity				2.16	2.63		NTU	n/a	3/month	grab
pH			7.0		7.4		units	n/a	2/month	grab
Total Dissolved Solids				234	250		mg/L	n/a	2/month	grab
Total Ammonia as N				0.004 *	<0.1		mg/L	n/a	2/month	grab
Hardness as CaCO3				163	178		mg/L	n/a	2/month	grab
Iron, total recoverable				128	190		µg/L	n/a	2/month	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager

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Telephone **907-426-9127**  
 Date **2005-07-14**  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. **AK-003865-2** (17-19) **Rec Sta 12** Discharge No.   
 Monitoring Period From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	Quantity/Loading (4 card only)		Quantity or Concentrations (4 card only)		Units	# of Ex. (62-63)	Freq (64-66)	Sample Type (68-70)
	Average (46-53)	Maximum (54-57)	Minimum (38-45)	Maximum (54-61)				
Selenium, total recoverable	0.5 *	1.0	REPORT	REPORT	µg/L	n/a	2/month	Grab
Nickel, total recoverable	4.5	5.3	REPORT	REPORT	µg/L	n/a	2/month	grab
Silver, total recoverable	<0.02 **	<0.05	REPORT	REPORT	µg/L	n/a	2/month	Grab
Zinc, total recoverable	8.4	8.8	REPORT	REPORT	µg/L	n/a	2/month	Grab
Aluminum, total recoverable	43.7	62.0	REPORT	REPORT	µg/L	n/a	2/month	grab
Cadmium, total recoverable	0.03 *	0.05	REPORT	REPORT	µg/L	n/a	2/month	Grab
Lead, total recoverable	0.20	0.30	REPORT	REPORT	µg/L	n/a	2/month	Grab

Name/Title **R.G. Scott** Principal Executive Officer  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Permittee Name  
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 Anchorage, Alaska 99517  
 Red Dog Operations

Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. **AK-003865-2** (2-76)  
 Rec Sta **12** (17-19) Discharge No.

Monitoring Period  
 From: **05 - 06 - 01** (20-21, 22-23, 24-25) To: **05 - 06 - 30** (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		Quantity or Concentrations		Units	# of Ex. (62-63)	Freq (64-68)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)				
Chromium, total recoverable				<b>0.2*</b>	µg/L	n/a	2/month	Grab
Permit Requirement				REPORT				
Copper, total recoverable				<b>0.5*</b>	µg/L	n/a	2/month	grab
Permit Requirement				REPORT				
Manganese, total recoverable				<b>8.5</b>	µg/L	n/a	2/month	Grab
Permit Requirement				REPORT				
Ambient Toxicity, Ceriodaphnia Chronic				<b>&lt;1.0*</b>	TUc	n/a	1/month	Grab
Permit Requirement				REPORT				
Ambient Toxicity Pimephales Chronic				<b>&lt;1.0*</b>	TUc	n/a	1/month	Grab
Permit Requirement				REPORT				
Stream Flow	<b>43</b>	<b>140</b>			MGD		1/mo	grab
Permit Requirement	REPORT	REPORT					Cont.	Recorder
Conductivity				<b>171</b>	µMHOS/cm	n/a	2/month	Grab
Permit Requirement				REPORT			2/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
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National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Sta 10**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05-06-01** To: (26-27, 28-29, 30-31) **05-06-30**

No Discharge

Parameter (32-37)	Quantity/Loading (3 card only)		Quantity or Concentrations (4 card only)		Units	Average (46-53)	Maximum (54-61)	# of Ex. (62-69)	Freq (64-68)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Maximum (54-61)						
Temperature	Sample Measurement					5.5	12.5	n/a	5/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab
pH	Sample Measurement		7.0				7.3	n/a	5/month	Grab
	Permit Requirement		REPORT				REPORT		2/mo	grab
Total Dissolved Solids	Sample Measurement					609	1100	n/a	5/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab
Total Ammonia as N	Sample Measurement					0.6	1.0	n/a	2/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab
Cyanide, total	Sample Measurement					6.5	9.0	n/a	2/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab
Hardness as CaCO3	Sample Measurement					523	782	n/a	2/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab
Iron, total recoverable	Sample Measurement					90	150	n/a	2/month	Grab
	Permit Requirement					REPORT	REPORT		2/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
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National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. **AK-003865-2** (2-16) **Rec Sta 10** (17-19) Discharge No. \_\_\_\_\_  
 Monitoring Period  
 From: **05 - 06 - 01** (20-21, 22-23, 24-25) To: **05 - 06 - 30** (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	(46-53) Average		(54-61) Maximum		(62-69) # of Ex.		Units	Sample Type (68-70)
	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-69) # of Ex.	(64-68) Freq	(68-70) Sample Type		
Selenium, total recoverable		0.5 *	1.0	REPORT	n/a	2/month	µg/L	Grab
Nickel, total recoverable		7.2	7.9	REPORT	n/a	2/month	µg/L	grab
Silver, total recoverable		<0.04 **	<0.05	REPORT	n/a	2/month	µg/L	Grab
Zinc, total recoverable		612	796	REPORT	n/a	2/month	µg/L	grab
Aluminum, total recoverable		26.0 *	52.0	REPORT	n/a	2/month	µg/L	Grab
Cadmium, total recoverable		4.3	5.6	REPORT	n/a	2/month	µg/L	Grab
Lead, total recoverable		3.4	5.0	REPORT	n/a	2/month	µg/L	Grab

Name/Title **R.G. Scott** Principal Executive Officer  
 Telephone **907-426-9127**  
 Date **2005-07-14**  
 year mo day  
 Comments & Explanations:  
 \* Indicates the number of non detect values used  
 I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16) Discharge No. (17-19)  
 Rec Sta 10  
 Monitoring Period From: 05 - 06 - 01 To: 05 - 06 - 30  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		Quantity of Concentrations				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.				
Chromium, total recoverable	Sample Measurement			0.2 *	0.4		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				2/mo	grab
Copper, total recoverable	Sample Measurement			1.85	2.00		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				2/mo	grab
Manganese, total recoverable	Sample Measurement			23.5	24.5		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				2/mo	grab
Stream Flow	Sample Measurement	72	196				MGD	n/a	Cont.	grab
	Permit Requirement	REPORT	REPORT						daily	grab
Conductivity	Sample Measurement			491	846		µMHOS/cm	n/a	5/month	Grab
	Permit Requirement			REPORT	REPORT				2/mo	grab

Name/Title Principal Executive Officer  
 R.C. Scott  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone 907-426-9127  
 Date 2005-07-14  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Rec Sta 2 Discharge No. (17-19)  
 Monitoring Period  
 From: 05-06-01 (20-21, 22-23, 24-25) To: 05-06-30 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32-37)	Quantity/Loading (20-21, 22-23, 24-25)		Quantity of Concentrations (38-45)		Average (46-53)	Maximum (54-61)	Units	# of Ex. (62-69)	Freq (64-68)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Maximum (54-61)						
Temperature				6.7	REPORT	7.7	°C	n/a	2/month	Grab
pH			7.2	REPORT	REPORT	7.4	units	n/a	2/month	grab
Total Dissolved Solids				178	REPORT	220	mg/L	n/a	2/month	Grab
Total Ammonia as N				0.01	REPORT	<0.1	mg/L	n/a	2/month	Grab
Cyanide, total				1.0	REPORT	1.0	µg/L	n/a	1/month	Grab
Hardness as CaCO3				117	REPORT	122	mg/L	n/a	2/month	Grab
Iron, total recoverable				327	REPORT	350	µg/L	n/a	2/month	Grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
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 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. AK-003865-2  
 (17-19) Rec Sta 2 Discharge No.  
 Monitoring Period  
 From: 05 - 06 - 01 To: 05 - 06 - 30  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	Quantity/Loading (3 card only)		Quantity or Concentrations (4 card only)				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum					
Selenium, total recoverable	Sample Measurement			<1.0 **			µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT					1/mo	grab
Nickel, total recoverable	Sample Measurement			2.0	2.4		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab
Silver, total recoverable	Sample Measurement			<0.02 **	<0.05		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab
Zinc, total recoverable	Sample Measurement			20.1	27.2		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab
Aluminum, total recoverable	Sample Measurement			148	185		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab
Cadmium, total recoverable	Sample Measurement			0.2	0.2		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab
Chromium, total recoverable	Sample Measurement			0.3 *	0.6		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				1/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone 907-426-9127  
 Date 2005-07-14  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Discharge No. (77-19)  
**Rec Sta 2**  
 Monitoring Period  
 From: **05 - 06 - 01** (20-21, 22-23, 24-25) To: **05 - 06 - 30** (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32-37)	Sample Measurement		Permit Requirement		Quantity/Loading (20-21, 22-23, 24-25)	Quantity or Concentrations (4 card only)			Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average		(54-61) Maximum						
Copper, total recoverable						1.2	1.2	REPORT	µg/L	n/a	2/month	Grab
Lead, total recoverable						0.6	0.8	REPORT	µg/L	n/a	2/month	grab
Manganese, total recoverable						10.1	11.8	REPORT	µg/L	n/a	2/month	Grab
Stream Flow	2018 monthly average	5461 monthly maximum			MGD			REPORT		N/A	Cont.	Recorder
Conductivity						144	155	REPORT	µMHOS/cm	n/a	2/month	Grab
								REPORT			1/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations.  
 \* indicates the number of non detect values used

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Telephone 907-426-9127  
 Date 2005-07-14  
 year mo day  
 area code - number

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Rec Sta 150 (17-19) Discharge No.  
 Monitoring Period  
 From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32-37)	Quantity/Loading (3 card only)		Quantity or Concentrations (4 card only)				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.				
Temperature	Sample Measurement			5.8	12.5		°C	n/a	9/month	Grab
pH	Permit Requirement			REPORT	REPORT				2/mo	grab
	Sample Measurement		6.9				units	n/a	9/month	Grab
Total Dissolved Solids	Permit Requirement		REPORT						2/mo	grab
	Sample Measurement			385	630		mg/L	n/a	9/month	Grab
Total Ammonia as N	Permit Requirement			REPORT	REPORT				2/mo	grab
	Sample Measurement			0.1 *	0.2		mg/L	n/a	2/month	Grab
Cyanide, total	Permit Requirement			REPORT	REPORT				2/mo	grab
	Sample Measurement			3.4	5.0		µg/L	n/a	2/month	Grab
Hardness as CaCO3	Permit Requirement			REPORT	REPORT				2/mo	grab
	Sample Measurement			186	232		mg/L	n/a	2/month	Grab
Iron, total recoverable	Permit Requirement			REPORT	REPORT				2/mo	grab
	Sample Measurement			252	340		µg/L	n/a	2/month	Grab
	Permit Requirement			REPORT	REPORT				2/mo	grab

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Name/Title  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

Telephone  
 907-426-9127  
 Date  
 2005-07-14  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3106 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. AK-003865-2 (17-19) **Rec Sta 150** Discharge No. \_\_\_\_\_  
 Monitoring Period  
 From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	Sample Measurement	Permit Requirement	Quantity/Loading (4 card only)			Quantity or Concentrations			Units	# of Ex. (62-63)	Freq (64-66)	Sample Type (69-70)
			Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)	Maximum (54-61)					
Selenium, total recoverable	Sample Measurement	Permit Requirement				<1.0 **	REPORT	<1.0	REPORT	n/a	2/month	Grab
Nickel, total recoverable	Sample Measurement	Permit Requirement				9.2	REPORT	10.6	REPORT	n/a	2/month	grab
Silver, total recoverable	Sample Measurement	Permit Requirement				<0.04 **	REPORT	<0.05	REPORT	n/a	2/month	grab
Zinc, total recoverable	Sample Measurement	Permit Requirement				281	REPORT	318	REPORT	n/a	2/month	grab
Aluminum, total recoverable	Sample Measurement	Permit Requirement				48.7	REPORT	56.0	REPORT	n/a	2/month	grab
Cadmium, total recoverable	Sample Measurement	Permit Requirement				1.6	REPORT	1.7	REPORT	n/a	2/month	grab
Lead, total recoverable	Sample Measurement	Permit Requirement				1.4	REPORT	1.9	REPORT	n/a	2/month	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager

Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone  
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 area code - number  
 Date  
 2005-07-14  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16) Discharge No. (69-70)  
 Rec Sta 150  
 Monitoring Period From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30 (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	Quantity/Loading (3 card only)		Quantity or Concentrations (4 card only)				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)	Maximum (54-61)	Units				
Chromium, total recoverable				0.2 *	0.4	µg/L	n/a	2/month	Grab	
Copper, total recoverable				0.90 *	1.80	µg/L	n/a	2/month	grab	
Manganese, total recoverable				64	74	µg/L	n/a	2/month	grab	
Stream Flow	299	775				MGD	n/a	Cont.	Record	
Conductivity				235	325	µMHOS/cm	n/a	9/month	grab	

Name/Title: R.G. Scott, General Manager  
 Signature: *R.G. Scott*  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

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Telephone: 907-426-9127  
 Date: 2005-07-14  
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Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Rachel Ck**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05-06-01** To: (26-27, 28-29, 30-31) **05-06-30**

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations		Units	# of Ex. (62-63)	Freq (64-68)	Sample Type (69-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)				
Iron, total recoverable				554	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Nickel, total recoverable				65	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Zinc, total recoverable				187	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Aluminum, total recoverable				603	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Cadmium, total recoverable				1.4	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Lead, total recoverable				3.6	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Chromium, total recoverable				<0.4*	µg/L	N/A	1/month	Grab
Permit Requirement				REPORT			1/mo	grab

Name/Title **R.G. Scott** Principal Executive Officer  
 General Manager  
 Comments & Explanations:  
 I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone **907-426-9127** Date **2005-07-14**  
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\* Indicates the number of non detect values used

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517

Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Rachel Ck**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05 - 06 - 01** To: (26-27, 28-29, 30-31) **05 - 06 - 30**

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations		Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(54-61) Maximum				
Copper, total recoverable				<b>39</b>	µg/L	N/A	1/month	Grab
				REPORT			1/mo	grab
Manganese, total recoverable				<b>518</b>	µg/L	N/A	1/month	Grab
				REPORT			1/mo	grab

Name/Title Principal Executive Officer

R.G. Scott  
 General Manager  
*R.G. Scott*

Comments & Explanations:

Indicates the number of non detect values used

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Date

2005-07-14

year mo day

**Permittee Name**  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kolzebue, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)**

(2-16) Permit No. **AK-003865-2** Discharge No. **Station 145\***  
 (17-19)  
 Monitoring Period  
 From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	Quantity/Loading (3 card only)		Quantity or Concentrations (4 card only)				Units	# of Ex. (62-63)	Freq (64-66)	Sample Type (68-70)
	Average (46-53)	Maximum (54-61)	Minimum (38-45)	Average (46-53)	Maximum (54-61)	Units				
Copper, total recoverable				3.0	3.0	µg/L	n/a	1/month	Grab	
Manganese, total recoverable				112	112	µg/L	n/a	1/month	grab	
				REPORT	REPORT			1/mo	grab	
				REPORT	REPORT			1/mo	grab	

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager

Comments & Explanations:  
 \*Indicates the number of non detect values used  
 Red Dog Creek above Hilltop Creek

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone **907-426-9127** Date **2005-07-14**  
 area code - number year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. **AK-003865-2** (17-19) **Rec Connie Ck** Discharge No. \_\_\_\_\_  
 Monitoring Period  
 From: **05-06-01** To: **05-06-30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32-37)	Quantity/Loading (4 card only)		Quantity or Concentrations		Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average				
Iron, total recoverable	360	360		360	µg/L	n/a	1/month	Grab
Nickel, total recoverable	REPORT	REPORT		7	µg/L	n/a	1/mo	grab
Zinc, total recoverable	REPORT	REPORT		21	µg/L	n/a	1/mo	grab
Aluminum, total recoverable	REPORT	REPORT		44	µg/L	n/a	1/month	Grab
Cadmium, total recoverable	REPORT	REPORT		0.1	µg/L	n/a	1/mo	grab
Lead, total recoverable	REPORT	REPORT		0.8	µg/L	n/a	1/month	Grab
Chromium, total recoverable	REPORT	REPORT		<0.4*	µg/L	n/a	1/month	Grab

Name/Title **R.G. Scott** Principal Executive Officer  
 General Manager *[Signature]*  
 Comments & Explanations:  
 \* Indicates the number of non detect values used

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone **907-426-9127** Date **2005-07-14**  
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**Permittee Name**  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)**

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Rec Connie Ck**  
 Monitoring Period From: (20-21, 22-23, 24-25) **05 - 06 - 01** To: (26-27, 28-29, 30-31) **05 - 06 - 30**  
 No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.				
Copper, total recoverable				2	2	µg/L	n/a	1/month	Grab	
				REPORT	REPORT			1/mo	grab	
Manganese, total recoverable				96	96	µg/L	n/a	1/month	Grab	
				REPORT	REPORT			1/mo	grab	

Name/Title **Principal Executive Officer**  
**R.G. Scott**  
 General Manager  
 Comments & Explanations:  
 I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone **907-426-9127** Date **2005-07-14**  
 area code - number year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

(2-16) Permit No. **AK-003865-2** (17-19) **Shelly Ck** Discharge No. \_\_\_\_\_  
 Monitoring Period  
 From: **05 - 06 - 01** To: **05 - 06 - 30**  
 (20-21, 22-23, 24-25) (26-27, 28-29, 30-31)

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations		Units	# of Ex. (62-63)	Freq (64-68)	Sample Type (69-70)
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(54-61) Maximum				
Iron, total recoverable				<b>131</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Nickel, total recoverable				<b>2.6</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Zinc, total recoverable				<b>66</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Aluminum, total recoverable				<b>47</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Cadmium, total recoverable				<b>0.7</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Lead, total recoverable				<b>1.0</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab
Chromium, total recoverable				<b>&lt;0.4*</b>	µg/L	n/a	1/month	Grab
Permit Requirement				REPORT			1/mo	grab

Name/Title **Principal Executive Officer**  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 \* indicates the number of non detect values used

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather, evaluate, and report the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Telephone **907-426-9127** Date **2005-07-14**  
 year mo day

Permittee Name  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. (2-16) **AK-003865-2** Discharge No. (17-19) **Shelly Ck**

Monitoring Period  
 From: (20-21, 22-23, 24-25) **05 - 06 - 01** To: (26-27, 28-29, 30-31) **05 - 06 - 30**

No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading			(4 card only) Quantity or Concentrations			Units	# of Ex. (62-63)	Freq (64-66)	Sample Type (68-70)
	(46-53) Average	(54-61) Maximum	(54-61) Minimum	(46-53) Average	(54-61) Maximum	(54-61) Minimum				
Copper, total recoverable				1.7	1.7		µg/L	n/a	1/month	Grab
				REPORT	REPORT				1/mo	grab
Manganese, total recoverable				24	24		µg/L	n/a	1/month	Grab
				REPORT	REPORT				1/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager

Telephone 907-426-9127  
 Date 2005-07-14

Comments & Explanations:  
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**Permittee Name**  
 Teck Cominco Alaska Incorporated  
 3105 Lakeshore Drive, Bld. A, Ste. 101  
 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

**National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)**

Permit No. **AK-003865-2** (2-16) **Rec Sulfur Ck** (17-19) Discharge No. **05-06-30** (26-27, 28-29, 30-31)  
 Monitoring Period  
 From: **05-06-01** (20-21, 22-23, 24-25) To: **05-06-30** (26-27, 28-29, 30-31)  
 No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading		(4 card only) Quantity or Concentrations				Units	(62-63) # of Ex.	(64-68) Freq	(69-70) Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(69-70) Sample Type				
Iron, total recoverable				173	173	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Nickel, total recoverable				3.8	3.8	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Zinc, total recoverable				1800	1800	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Aluminum, total recoverable				74	74	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Cadmium, total recoverable				12	12	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Lead, total recoverable				770	770	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									
Chromium, total recoverable				<0.4*	<0.4	µg/L	n/a	1/month	Grab	
	Sample Measurement			REPORT	REPORT			1/mo	grab	
	Permit Requirement									

Name/Title Principal Executive Officer  
 R.G. Scott  
 General Manager  
 Comments & Explanations:  
 \*Indicates the number of non detect values used

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Permittee Name  
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 Anchorage, Alaska 99517  
 Red Dog Operations  
 Kotzebue, Alaska 99752

National Pollutant Discharge Elimination System (NPDES)  
 Discharge Monitoring Report (DMR)

Permit No. AK-003865-2 (2-16)  
 Rec Sulfur Ck (17-19)  
 Discharge No. (26-27, 28-29, 30-31)  
 Monitoring Period  
 From: 05 - 06 - 01 (20-21, 22-23, 24-25) To: 05 - 06 - 30  
 No Discharge

Parameter (32 - 37)	(3 card only) Quantity/Loading			(4 card only) Quantity or Concentrations			Units	Sample Type
	(46-53) Average	(54-61) Maximum	(38-45) Minimum	(46-53) Average	(54-61) Maximum	(62-63) # of Ex.		
Copper, total recoverable				5.2	5.2	n/a	1/month	Grab
Manganese, total recoverable				9.0	9.0	n/a	1/month	grab
				REPORT	REPORT		1/mo	grab
				REPORT	REPORT		1/mo	Grab
				REPORT	REPORT		1/mo	grab

Name/Title Principal Executive Officer  
 R.G. Scott  
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 Comments & Explanations:  
 I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiries of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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 Date 2005-07-14  
 area code - number year mo day

ATTACHMENT II  
Mine Sump Pumping Log

**Mine Drainage Pumped  
to Tailings Impoundment  
June 2005**

<b>Date</b>	<b>Gallons</b>	
1-Jun-05	4,063,501	
2-Jun-05	3,344,389	
3-Jun-05	3,610,615	
4-Jun-05	3,727,365	
5-Jun-05	3,588,343	
6-Jun-05	3,112,906	
7-Jun-05	2,059,337	
8-Jun-05	2,628,134	
9-Jun-05	2,211,471	
10-Jun-05	1,794,808	
11-Jun-05	3,072,036	
12-Jun-05	3,011,355	
13-Jun-05	2,161,599	
14-Jun-05	1,151,720	
15-Jun-05	3,004,116	
16-Jun-05	1,923,397	
17-Jun-05	2,059,801	
18-Jun-05	3,029,191	
19-Jun-05	1,587,977	
20-Jun-05	2,362,794	
21-Jun-05	1,565,816	
22-Jun-05	2,089,316	
23-Jun-05	1,945,412	
24-Jun-05	1,265,858	
25-Jun-05	1,983,200	
26-Jun-05	1,334,142	
27-Jun-05	1,411,759	
28-Jun-05	1,331,117	
29-Jun-05	1,408,093	
30-Jun-05	1,267,435	
	<b>69,107,003</b>	<b>Total</b>
	<b>2,303,567</b>	<b>Average</b>
	<b>225,347,912</b>	<b>Year to Date Total</b>

# ATTACHMENT III

## Hydrographs

**Red Dog Hydrograph (cfs)  
June 2005**

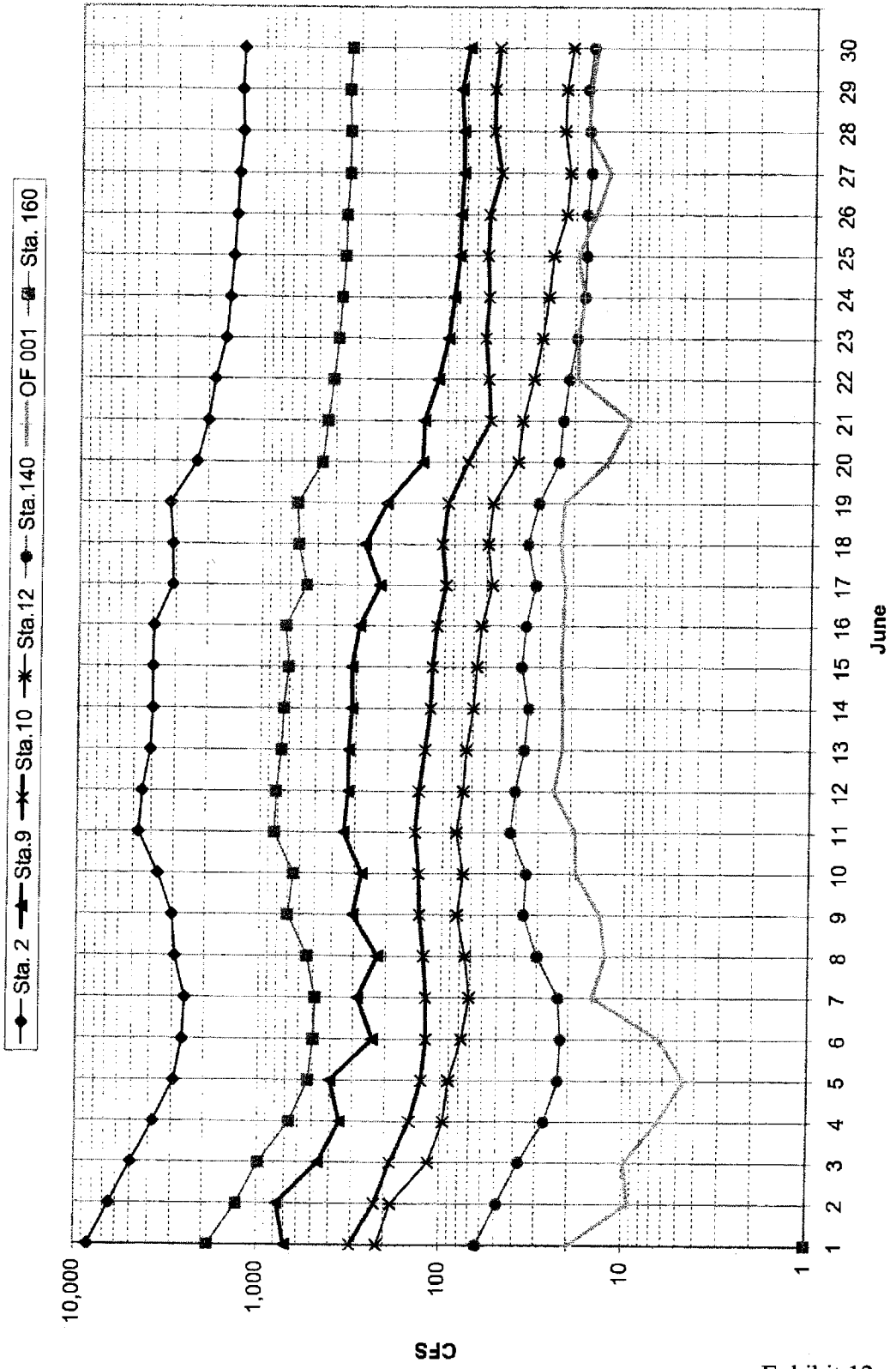
Date	Sta. 2	Sta. 160	Sta.9	Sta.10	Sta.12	Sta.140	OF 001	Sta.8
1	8,450	1,854	698	303	217	63	20	1,001
2	6,480	1,290	773	225	183	49	9	998
3	4,980	980	461	185	116	37	10	646
4	3,790	668	353	147	96	27	6	500
5	2,930	528	400	128	91	23	5	528
6	2,640	496	234	121	78	22	6	355
7	2,560	486	284	121	71	23	15	405
8	2,920	542	222	126	75	30	13	348
9	3,040	696	305	133	83	36	14	438
10	3,660	653	274	135	77	35	19	409
11	4,711	833	346	141	85	43	19	487
12	4,516	816	328	136	78	41	25	464
13	4,074	768	328	127	76	36	22	455
14	3,962	747	315	118	69	35	22	434
15	3,977	707	317	116	67	38	23	434
16	3,933	733	289	111	63	36	22	400
17	3,110	568	226	99	56	32	22	325
18	3,139	632	273	104	59	35	23	377
19	3,234	641	209	97	56	31	23	307
20	2,324	474	135	77	41	24	13	212
21	2,007	442	133	58	39	23	10	191
22	1,844	414	112	60	34	21	19	172
23	1,614	389	99	62	30	19	19	162
24	1,536	374	93	60	28	18	18	153
25	1,474	359	87	61	27	17	20	148
26	1,421	354	86	60	23	17	16	146
27	1,383	341	83	52	22	17	13	135
28	1,321	339	84	57	23	17	17	141
29	1,339	345	86	57	23	17	17	143
30	1,306	335	78	54	21	16	15	132
<b>Ave (CFS)</b>	3,122	627	257	111	67	29	16	368
<b>Ave (MGD)</b>	2,018	405	166	72	43	19	11	238
<b>Max (MGD)</b>	5,461	1,198	500	196	140	41	16	647

Outfall 001 is metered.

Station 8 is calculated by adding Stations 9 and 10.

The remaining Stations are gauged using standard USGS recognized methods.

Red Dog Hydrograph : June 2005



# ATTACHMENT IV

## Precipitation Data

## Red Dog Mine Precipitation Report for June 2005

Date	Precipitation Inches	Evaporation Inches
6/1/2005	0.00	
6/2/2005	0.00	
6/3/2005	0.00	
6/4/2005	0.01	
6/5/2005	0.00	
6/6/2005	0.00	
6/7/2005	0.00	
6/8/2005	0.00	
6/9/2005	0.00	0.01
6/10/2005	0.00	0.18
6/11/2005	0.00	0.23
6/12/2005	0.00	0.21
6/13/2005	0.00	0.18
6/14/2005	0.00	0.21
6/15/2005	0.00	0.27
6/16/2005	0.00	0.21
6/17/2005	0.00	0.43
6/18/2005	0.44	-0.16
6/19/2005	0.13	-0.04
6/20/2005	0.00	0.21
6/21/2005	0.00	0.18
6/22/2005	0.00	0.26
6/23/2005	0.00	0.09
6/24/2005	0.00	0.14
6/25/2005	0.00	0.18
6/26/2005	0.00	0.20
6/27/2005	0.00	0.21
6/28/2005	0.00	0.25
6/29/2005	0.00	0.26
6/30/2005	0.02	0.14
<b>Total</b>	<b>0.61</b>	<b>3.85</b>



ATTACHMENT VI  
TDS Monitoring Data

Station 10

Date	Time	Station Water Temperature (°C)	Station Stage (ft)	Station Conductivity (uS/cm)	Station <sup>a</sup> Flow (gpm)	Outfall Discharge (gpm)	Station <sup>b</sup> Specific Conductance (uS/cm)	Calculated <sup>c</sup> Station TDS (mg/l)	Suggested <sup>d</sup> New Outfall Discharge (gpm)
6/1/2005	700	0.9	10.41	237	139,687	10,106	437	302	51,503
6/1/2005	1900	5.1	10.36	340	125,758	8,901	546	399	43,147
6/2/2005	700	0.7	10.27	266	103,333	6,048	494	353	35,366
6/2/2005	1900	6.3	10.21	172	90,142	0	266	150	30,107
6/3/2005	700	0.7	10.18	253	84,041	5,663	469	330	29,976
6/3/2005	1900	3.5	10.15	316	78,253	4,535	533	388	26,064
6/4/2005	700	1.2	10.09	304	67,577	3,385	555	407	21,650
6/4/2005	1900	5.2	10.05	350	61,091	2,553	562	413	18,980
6/5/2005	700	0.3	10.00	276	53,652	2,073	520	375	16,997
6/5/2005	1900	6.6	10.02	363	56,541	2,234	559	411	17,469
6/6/2005	700	1.7	10.01	242	55,082	2,172	433	298	18,544
6/6/2005	1900	5.9	9.99	415	52,249	3,601	651	492	20,908
6/7/2005	700	1.3	9.98	345	50,875	6,949	626	471	24,159
6/7/2005	1900	9.7	10.02	662	56,541	4,560	934	745	18,595
6/8/2005	700	2.2	10.03	506	58,029	5,201	891	706	20,335
6/8/2005	1900	9.2	10.01	601	55,082	5,678	859	678	20,562
6/9/2005	700	2.9	10.03	381	58,029	5,286	656	497	24,406
6/9/2005	1900	6.3	10.04	496	59,545	6,652	769	597	24,318
6/10/2005	700	2.7	10.04	508	59,545	8,352	880	697	24,071
6/10/2005	1900	10.6	10.06	671	62,667	8,835	924	736	24,571
6/11/2005	700	3.0	10.07	464	64,273	8,275	797	622	26,814
6/11/2005	1900	10.6	10.06	499	62,667	5,982	688	526	26,050
6/12/2005	700	3.9	10.06	570	62,667	11,066	952	760	26,301
6/12/2005	1900	9.6	10.03	625	58,029	11,223	885	701	26,463
6/13/2005	700	4.6	10.02	626	56,541	8,641	1,024	825	21,187
6/13/2005	1900	11.6	10.02	809	56,541	10,425	1,084	878	21,977
6/14/2005	700	5.2	10.00	631	53,652	9,901	1,012	814	21,993
6/14/2005	1900	11.3	9.98	750	50,875	10,154	1,013	815	21,602
6/15/2005	700	5.6	9.99	630	52,249	10,905	998	801	22,898
6/15/2005	1900	13.5	9.99	791	52,249	10,381	1,011	813	22,173
6/16/2005	700	5.6	9.99	586	52,249	10,432	928	739	23,495
6/16/2005	1900	12.9	9.94	840	45,644	9,817	1,090	884	19,058
6/17/2005	700	6.0	9.93	677	44,401	10,154	1,059	856	19,550
6/17/2005	1900	14.2	9.93	899	44,401	10,205	1,131	920	18,671
6/18/2005	700	7.7	9.95	711	46,912	9,158	1,060	857	19,074
6/18/2005	1900	8.2	9.95	783	46,912	11,154	1,151	938	19,816
6/19/2005	700	5.7	9.94	695	45,644	10,949	1,097	889	20,106
6/19/2005	1900	10.4	9.89	878	39,683	9,484	1,217	996	16,053
6/20/2005	700	6.4	9.86	840	36,398	10,088	1,300	1,070	15,226
6/20/2005	1900	13.9	9.83	1043	33,321	10,000	1,321	1,089	14,497
6/21/2005	700	5.4	9.76	281	27,188	0	447	311	10,626
6/21/2005	1900	12.8	9.70	454	23,168	9,286	591	439	17,363
6/22/2005	700	7.1	9.70	880	23,168	8,857	1,335	1,102	11,887
6/22/2005	1900	14.2	9.78	1138	28,629	8,919	1,430	1,187	11,868
6/23/2005	700	8.2	9.78	1023	28,629	9,158	1,505	1,253	11,483
6/23/2005	1900	13.7	9.76	1158	27,188	9,117	1,473	1,225	11,577
6/24/2005	700	8.6	9.74	998	25,799	10,311	1,450	1,204	12,822
6/24/2005	1900	13.3	9.76	1198	27,188	7,015	1,540	1,284	8,945
6/25/2005	700	8.5	9.77	1002	27,902	9,033	1,460	1,213	11,668
6/25/2005	1900	15.7	9.75	1305	26,487	7,604	1,584	1,323	9,145
6/26/2005	700	9.3	9.76	1101	27,188	8,641	1,569	1,310	10,341
6/26/2005	1900	17.3	9.74	1390	25,799	7,861	1,629	1,363	9,022
6/27/2005	700	9.1	9.65	589	20,150	0	844	664	5,536
6/27/2005	1900	18.0	9.72	1229	24,459	7,066	1,418	1,176	9,670
6/28/2005	700	11.4	9.74	1135	25,799	7,454	1,529	1,275	8,364
6/28/2005	1900	19.4	9.73	1376	25,122	7,846	1,540	1,284	9,626
6/29/2005	700	12.1	9.74	1158	25,799	8,029	1,536	1,260	9,893
6/29/2005	1900	19.7	9.72	1399	24,459	7,070	1,557	1,300	8,680
6/30/2005	700	12.8	9.72	1145	24,459	7,802	1,492	1,241	9,880
6/30/2005	1800	17.0	9.70	1346	23,168	6,883	1,586	1,325	8,216

<sup>a</sup> flow = if (stage > 9.78) then (24\*(stage-8.5)\*3.96)\*7.48\*60; else (28.39\*(stage-8.5)\*3.2795)\*7.48\*60  
 USGS developed rating equation Updated July 6/30/2005 and applied to June Data

<sup>b</sup> Sc = con/((1+0.019\*(temp-25))

<sup>c</sup> TDS = Sc\*0.8906x-87.314

<sup>d</sup> See equations in paragraph 22 of Docket No. CWA-10-2005-0165 Compliance Order by Request and Consent

<sup>e</sup> Highest effluent TDS concentration observed is 4,130 mg/L

Outfall 001  
TDS Composition Analysis  
June 2005

Result Date	Alk (mg/L)	Ca (mg/L)	Cl (mg/L)	CO3 (mg/L)	Cond (µMHO/cm)	HCO3 (mg/L)	K (mg/L)	Mg (mg/L)	Na (mg/L)	OH (mg/L)	SO4 (mg/L)	TDS (mg/L)	TempW (°C)
6/2/2005 10:00					2,566								10.7
6/2/2005 10:00	21	954	23	18		3	38.3	53.1	74.6	<2.0	2,430	3690*	
6/6/2005 14:15					2,380								8.6
6/6/2005 14:15	14	941	23	10		4	35	49.2	71.6	<2.0	2,550	3778*	
6/13/2005 11:30					2,720								12.9
6/13/2005 11:30	25	931	24	25		<2.0	36.4	43.9	70.5	<2.0	2,580	3900*	
6/20/2005 9:20					2942								13.2
6/20/2005 9:20	24.7	977	22.2	24.5		<0.4	34.7	40.1	64.4	<0.4	2,880	4108*	
6/26/2005 12:00					3,160								17.1
6/26/2005 12:00	23.1	861	22.2	<0.4		23.1	40.6	53.5	78.9	<0.4	3,170	4124*	

\* Indicates samples were analyzed 5 times and the average reported. The individual analysis are shown in the table below.

TDS replicates and the averages

Date	TDS	Date	TDS	Date	TDS	Date	TDS	Average
6/2/2005 10:00	3,680	6/6/2005 14:15	3,740	6/13/2005 11:30	3,920	6/20/2005 9:20	4,110	4,120
6/2/2005 10:00	3,740	6/6/2005 14:15	3,780	6/13/2005 11:30	3,860	6/20/2005 9:20	4,110	4,130
6/2/2005 10:00	3,690	6/6/2005 14:15	3,760	6/13/2005 11:30	3,910	6/20/2005 9:20	4,110	4,130
6/2/2005 10:00	3,660	6/6/2005 14:15	3,810	6/13/2005 11:30	3,900	6/20/2005 9:20	4,100	4,120
6/2/2005 10:00	3,680	6/6/2005 14:15	3,800	6/13/2005 11:30	3,910	6/20/2005 9:20	4,110	4,120
<b>Average</b>	<b>3690</b>	<b>Average</b>	<b>3778</b>	<b>Average</b>	<b>3900</b>	<b>Average</b>	<b>4108</b>	<b>4124</b>

Station 151\*  
TDS Composition Analysis  
June 2005

Result Date	Alk (mg/L)	Ca (mg/L)	Cl (mg/L)	CO3 (mg/L)	Cond (µMHOS/cm)	HCO3 (mg/L)	K (mg/L)	Mg (mg/L)	Na (mg/L)	OH (mg/L)	SO4 (mg/L)	TDS (mg/L)	TempW (°C)
6/2/2005 9:05	46	94.9	2	<2.0	299	46	3	7.7	6.8	<2.0	220	370	1.4
6/7/2005 8:00					324								1.2
6/7/2005 8:00	69	103	2	<2.0		69	2.8	9.3	6.7	<2.0	230	460	
6/10/2005 11:00					533								5
6/10/2005 11:00	59	177	4	<2.0		59	5.1	12	11.5	<2.0	370	630	
6/13/2005 9:45					631								4.8
6/13/2005 9:45	56	195	4	<2.0		56	6.2	12.9	13.8	<2.0	500	810	
6/16/2005 15:15					805								11.4
6/16/2005 15:15	57	205	5	<2.0		57	7.1	14.6	14.9	<2.0	530	860	
6/19/2005 11:05					795								7.4
6/19/2005 11:05	60.6	262	5	<0.4		60.6	8.1	14.9	16.4	<0.4	634	990	
6/22/2005 10:22					709								7.6
6/22/2005 10:22	73.3	208	4.1	<0.4		73.3	7	18	15.5	<0.4	530	833	
6/27/2005 15:10					1,159								15.7
6/27/2005 15:10	67.4	306	6.2	<0.4		67.4	10.9	22.2	23.9	<0.4	822	1,250	
6/30/2005 11:50					1,198								13.8
6/30/2005 11:50	73.2	341	6.7	<0.4		73.2	12	24.9	26	<0.4	883	1,380	

\* Station 151 is located at the end of the mixing zone in Red Dog Creek

Station 10  
TDS Composition Analysis  
June 2005

Result Date	Alk (mg/L)	Ca (mg/L)	Cl (mg/L)	CO3 (mg/L)	Cond (µMHOS/cm)	HCO3 (mg/L)	K (mg/L)	Mg (mg/L)	Na (mg/L)	OH (mg/L)	SO4 (mg/L)	TDS (mg/L)	TempW (°C)
6/2/2005 8:30	45	79.1	2	< 2.0	254	45	2.3	6.8	5.6	< 2.0	180	310	1.1
6/2/2005 8:30	67	90.8	2	< 2.0	290	67	2.4	8.8	5.9	< 2.0	200	410	0.7
6/5/2005 8:20	55	174	4	< 2.0	603	55	5.9	12	12.6	< 2.0	470	760	4.9
6/13/2005 9:30	64.3	285	5.6	< 0.4	846	64.3	9.1	17	19	< 0.4	721	1,100	8.3
6/20/2005 10:55	81.7	119	1.9	< 0.4	461	81.7	3.6	12.9	8.5	< 0.4	268	464	12.5

Station 150\*  
TDS Composition Analysis  
June 2005

Result Date	Alk (mg/L)	Ca (mg/L)	Cl (mg/L)	CO3 (mg/L)	Cond (µMHOS/cm)	HCO3 (mg/L)	K (mg/L)	Mg (mg/L)	Na (mg/L)	OH (mg/L)	SO4 (mg/L)	TDS (mg/L)	TempW (°C)
6/2/2005 8:20					137								0.8
6/2/2005 8:20	47	36.9	1	<2.0		47	0.9	6.5	2.6	<2.0	70	160	0.8
6/5/2005 8:00					161								0.8
6/5/2005 8:00	65	41.4	1	<2.0		65	0.8	8.6	2.9	<2.0	70	70	1.8
6/7/2005 7:00					181								1.8
6/7/2005 8:00	66	46.8	1	<2.0		66	0.8	9.3	3.2	<2.0	90	250	3.8
6/13/2005 9:20	55	55.3	1	<2.0		55	1.5	7.6	3.9	<2.0	140	270	7.9
6/16/2005 13:30					287								7.9
6/16/2005 13:30	58	66.2	15	<2.0		58	2	9.1	4.7	<2.0	150	630	6.8
6/19/2005 12:30	63	77.3	1.5	<0.4		63	1.8	9.4	4.4	<0.4	174	314	6.1
6/22/2005 8:55					300								6.1
6/22/2005 8:55	72.3	92	1.7	<0.4		72.3	2.5	13.7	6.7	<0.4	210	381	11.8
6/27/2005 13:25					223								11.8
6/27/2005 13:25	77.6	52.9	0.8	<0.4		77.6	1.2	11.9	4	<0.4	94.4	220	12.5
6/30/2005 11:45					325								12.5
6/30/2005 11:45	77.7	65.1	1.1	<0.4		77.7	1.5	13.1	4.8	<0.4	126	273	12.5

\* Station 150 is co-located with the end of the mixing zone in Ikalukrok Creek - TDS sampling requirements for both locations are satisfied with the data in the table above.

Station 160  
TDS Composition Analysis  
June 2005

Result Date	Alk (mg/L)	Ca (mg/L)	Cl (mg/L)	CO3 (mg/L)	Cond (µMHOS/cm)	HCO3 (mg/L)	K (mg/L)	Mg (mg/L)	Na (mg/L)	OH (mg/L)	SO4 (mg/L)	TDS (mg/L)	TempW (°C)
6/2/2005 7:55	51	34.2	1	< 2.0	131	51	0.8	6.6	2.4	< 2.0	60	140	1.6
6/2/2005 7:55					174								4.9
6/5/2005 15:15	74	39.1	1	< 2.0		74	0.8	8.6	2.7	< 2.0	60	220	
6/5/2005 15:15					201								5.4
6/13/2005 9:00	64	48.7	1	< 2.0		64	1.1	8.8	3.4	< 2.0	100	220	
6/19/2005 12:10					238								10.5
6/19/2005 12:10	70.3	57.2	1.3	< 0.4		70.3	1.1	9.4	3.3	< 0.4	115	247	
6/30/2005 11:30					401								13.4
6/30/2005 11:30	87.7	88.3	1.9	< 0.4		87.7	2	15.6	6.7	< 0.4	189	375	