(In reply, please refer to)
Our File: 092156

DILLON
CONSULTING

4920
47th Street
Suite 303
Box 1409
Yellowknife
Northwest Territories
Canada
X1A 2P1
Telephone
(867) 920-4555
Fax
(867) 873-3328

March 22nd, 2011

Attention:
Steven Mapsalak, Hamlet of Repulse Bay
Sean Joseph, Nunavut Water Board

Re: Sampling Results

Dear Mr. Mapsalak/Mr. Joseph:

Please note that due to flight schedules, and timing of training and site visits, the samples collected during the training exercise most likely did not arrive at the laboratory within the recommended time limits for some of the sampling parameters. As well, there is concern that the coolers used to ship the samples were not kept at cool enough temperatures during transport. Therefore, the attached sampling results (from samples taken during the sampling training exercise on August 11th, 2010) may be compromised. Should you require further information, please do not hesitate to contact me at (867) 920-4555.

Yours truly,

Dillon Consulting Limited

Gary Strong, P.Eng.

GS/encl.

MaxXam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

(Acute Aquatic Toxicity Test)

Client Name :	***Dillon Consulting Ltd***
Location :	***Yellowknife, NT***

Sample Data :

Sample Description :	**Repulse Bay REP-5**		
Visual Description:	**Clear**		
Sampling Location :	**Rep 5**		
Sampling Method :	**Grab**		
Volume Obtained :	**1 L**		
Sampled By :	**n/g**		
	YY MM DD		
Sample Date :	**10 08 11**	*Time :*	**n/g**
Date Received :	**10 08 14**	*Time :*	**1040**
Bioassay Date :	**10 08 14**	*Time :*	**1300**
Report Date :	**10 08 19**		
Deviations from Method :	**none**		

Bioassay Results :

Sample Endpoint	Rep1	Rep2	Rep3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Control Endpoint	C1	C2	C3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Note: Results relate only to the item tested.

General Comments:

Data & QA/QC Reviewed By : _____ **Jay Abbott, Bioassay Supervisor**

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

Detailed Test Information :

Type of Bioassay :	**48 hour static bioassay**
Test Species :	***Daphnia magna***
Test Protocol :	**Environment Canada EPS 1/RM/14 (December 2000 ed.)**
Test Endpoint:	**Mortality and/or Immobility**
% Mortality in Culture 7 days Prior to Testing :	**4%**
Age of Test Animals :	**Neonates (young), less than 24 hours old**
Time, in Days, to First Brood :	**9**
Average Number of Neonates per Brood :	**24**
Source of Test Species :	**In house culture initiated through Environment Canada *Daphnia magna***
Date Animals Obtained :	**May 1991**
Source of Culturing and Dilution Water :	**Reconstituted water**
Size of Test Container :	**220 mL**
Material of Test Container :	**Polyethylene beaker**
Volume of Test Solution per Container :	**200 mL**
Standard Concentrations of Test Material :	**0, 100% in Triplicate**
Number of Neonates per Container :	**10**
Volume of Solution per Daphnid :	**20 mL**
Hardness Adjustment :	**None (Checked with Hach Kit for Total Hardness, 20-400mg/L)**
pH Adjustment :	**None**

MaxXam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

		Temperature °C	pH @ 20°C	EC µS cm-1	Dissolved Oxygen mg/l
Setup	Effluent Properties Prior To Initial Setup:	14.2	7.9	338.0	11.0
Analyst ND	Preparation Time (at rate of 50 mL / min / L) :	30 min			

Time	Description	Controls			100% Effluent Samples		
		C1	C2	C3	Rep1	Rep2	Rep3
Start	Temperature °C	19.2	19.1	19.1	19.8	19.8	19.8
	pH @ 20°C	8.2	8.2	8.2	8.1	8.1	8.1
	EC µS cm-1	554	556	557	376	376	376
	Dissolved Oxygen mg/L	9.3	9.7	9.4	9.8	9.8	9.8
Analyst: ND	Hardness mg/L CaCO3	180 mg/L			200 mg/L		
1 Hour	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
4 Hours	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
24 Hours	Number Dead	0	0	0	0	0	0
Analyst: MW	Atypical/Stressed Behaviour	0	0	0	0	0	0
48 Hours	Temperature °C	19.5	19.8	19.9	19.3	20.1	20.3
	pH @ 20°C	8.3	8.4	8.4	8.4	8.4	8.4
	EC µS cm-1	562	560	561	381	376	375
	Dissolved Oxygen mg/L	9.0	9.0	8.8	8.8	8.8	8.8
	Number Dead	0	0	0	0	0	0
Analyst: ND	Atypical/Stressed Behaviour	0	0	0	0	0	0

Observation Codes: I: Immobile F: Floating

Project : B071696-W23869

Results of Sodium Chloride Reference Bioassay :

Sample Description : Repulse Bay REP-5

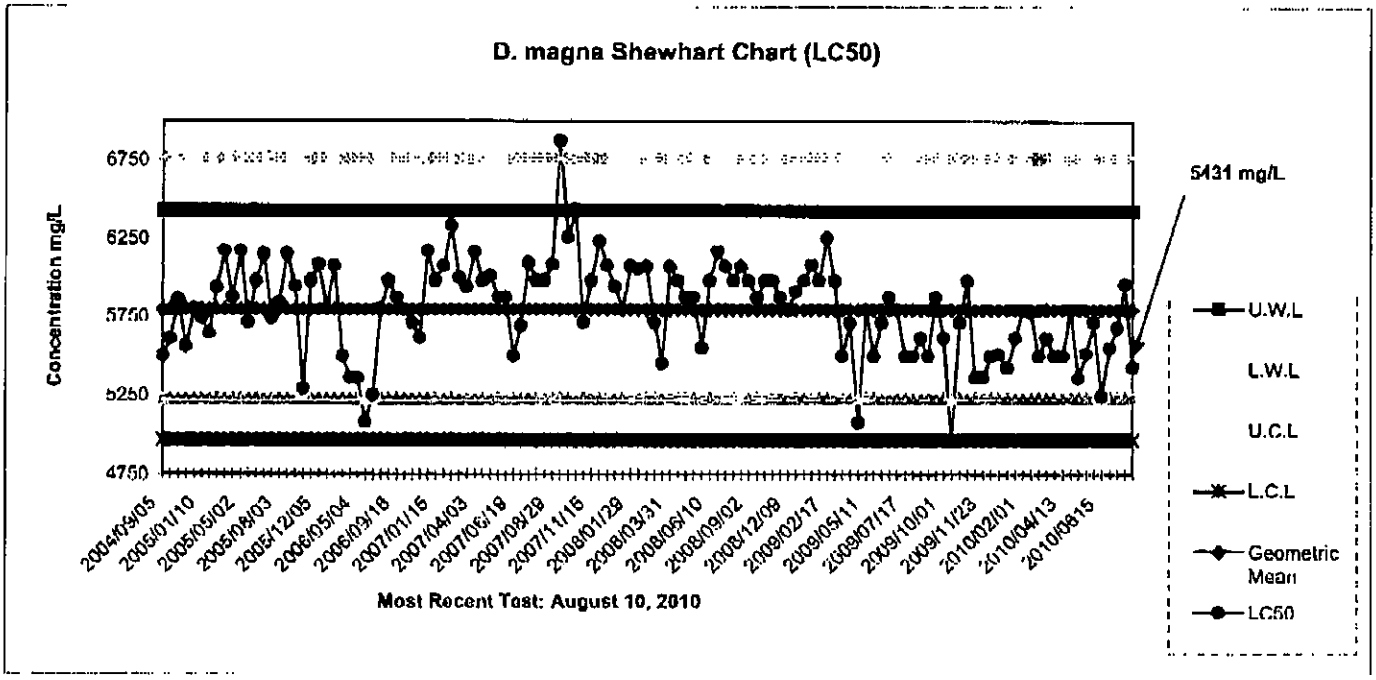
Current

LC50 @ 48 Hours :	**5431 mg/L**
95 % Confidence Interval :	**5028<5431<5840**
Method :	**Probit**
Date Initiated	**10 08 10**

Historical

Geometric Mean :	**5800 mg/L**
Warning Limits :	**5235<5800<6427**
Method :	**Shewhart**

The reference toxicant is conducted under the same conditions as the definitive testing (EENVSOP-00152).



Maxxam Analytics

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Your Project #: REPULSE BAY
Your C.O.C. #: 97105-01

Attention: JENNIFER SPENCER
DILLON CONSULTING LTD.
BOX 1409
SUITE 303, 4920 - 47th STREET
YELLOWKNIFE, NT
CANADA X1A ZP1

Report Date: 2010/08/25

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B071696
Received: 2010/08/14, 10:40

Sample Matrix: Soil
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Boron (Hot Water Soluble)	1	2010/08/19	2010/08/19	AB SOP-00042	EPA 200.7
BTEX/F1 by HS GC/MS (MeOH extract)	1	2010/08/17	2010/08/17	EENVSOP-00005 EENVSOP-00002	EPA 8260C/CCME
Hexavalent Chromium	1	2010/08/18	2010/08/18	EENVSOP-00131	SM 3500-Cr B
CCME Hydrocarbons (F2-F4 in soil)	1	2010/08/17	2010/08/19	EENVSOP-00007 AB WI-00016	CCME PHC CWS
Elements by ICPMS - Soils	1	2010/08/18	2010/08/18	AB SOP-00043	EPA 200.8
Moisture	1	N/A	2010/08/18	EENVSOP 00139	Carter SSMA 51.2

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
See Attached Results	2	2010/08/18	2010/08/19		
BTEX/F1 in Water by HS GC/MS	3	N/A	2010/08/17	EENVSOP-00004 EENVSOP-00002	EPA 8260C/CCME
Total Coliforms and E.Coli	1	2010/08/14	2010/08/15	EENV SOP-00162	SM 9223 A,B
Mercury (Total)	3	2010/08/17	2010/08/17	EENVSOP-00031	EPA 245.1
Elements by ICPMS - Dissolved	3	N/A	2010/08/17	AB SOP-00043	EPA 200.8
Elements by ICPMS - Total	3	2010/08/18	2010/08/19	AB SOP-00043	EPA 200.8
Oil and Grease (Gravimetric, n-Hexane)	3	N/A	2010/08/20	EENVSOP-00093	SM 5520B
Polychlorinated Biphenyls (1)	3	2010/08/25	2010/08/25	CAL SOP-00149	EPA 3510C, EPA 8082A
Phenols (4-AAP)	3	N/A	2010/08/18	EENVSOP 00061	EPA 420.2

(1) This test was performed by Maxxam Calgary

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Your Project #: REPULSE BAY
Your C.O.C. #: 97105-01

Attention: JENNIFER SPENCER
DILLON CONSULTING LTD.
BOX 1409
SUITE 303, 4920 - 47th STREET
YELLOWKNIFE, NT
CANADA X1A ZP1

Report Date: 2010/08/25

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TANYA EUGINE, M.Sc., Project Manager
Email: tanya.eugine@maxxamanalytics.com
Phone# (780) 577-7100

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

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Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

AT1 BTEX AND F1-F4 IN SOIL (SOIL)

Maxxam ID		W24240		
Sampling Date				
COC Number		97105-01		
	Units	REPULSE BAY REP-5	RDL	QC Batch
Physical Properties				
Moisture	%	4.8	0.3	4190305
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	4188045
F3 (C16-C34 Hydrocarbons)	mg/kg	15	10	4188045
F4 (C34-C50 Hydrocarbons)	mg/kg	14	10	4188045
Reached Baseline at C50	mg/kg	Yes	N/A	4188045
Volatiles				
Benzene	mg/kg	<0.0050	0.0050	4186177
Toluene	mg/kg	<0.020	0.020	4186177
Ethylbenzene	mg/kg	<0.010	0.010	4186177
Xylenes (Total)	mg/kg	<0.040	0.040	4186177
m & p-Xylene	mg/kg	<0.040	0.040	4186177
o-Xylene	mg/kg	<0.020	0.020	4186177
F1 (C6-C10) - BTEX	mg/kg	<12	12	4186177
(C6-C10)	mg/kg	<12	12	4186177
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	100	N/A	4186177
D10-ETHYLBENZENE (sur.)	%	100	N/A	4186177
D4-1,2-DICHLOROETHANE (sur.)	%	108	N/A	4186177
D8-TOLUENE (sur.)	%	102	N/A	4186177
O-TERPHENYL (sur.)	%	112	N/A	4188045

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

REGULATED METALS (CCME/AT1)

Maxxam ID		W24240		
Sampling Date				
COC Number		97105-01		
	Units	REPULSE BAY REP-5	RDL	QC Batch
Elements				
Soluble (Hot water) Boron (B)	mg/kg	0.2	0.1	4193730
Hex. Chromium (Cr 6+)	mg/kg	<0.15	0.15	4188255
Total Antimony (Sb)	mg/kg	<1	1	4190976
Total Arsenic (As)	mg/kg	1	1	4190976
Total Barium (Ba)	mg/kg	11	10	4190976
Total Beryllium (Be)	mg/kg	<0.4	0.4	4190976
Total Cadmium (Cd)	mg/kg	<0.1	0.1	4190976
Total Chromium (Cr)	mg/kg	10	1	4190976
Total Cobalt (Co)	mg/kg	2	1	4190976
Total Copper (Cu)	mg/kg	<5	5	4190976
Total Lead (Pb)	mg/kg	2	1	4190976
Total Mercury (Hg)	mg/kg	<0.05	0.05	4190976
Total Molybdenum (Mo)	mg/kg	<0.4	0.4	4190976
Total Nickel (Ni)	mg/kg	5	1	4190976
Total Selenium (Se)	mg/kg	<0.5	0.5	4190976
Total Silver (Ag)	mg/kg	<1	1	4190976
Total Thallium (Tl)	mg/kg	<0.3	0.3	4190976
Total Tin (Sn)	mg/kg	<1	1	4190976
Total Uranium (U)	mg/kg	<1	1	4190976
Total Vanadium (V)	mg/kg	14	1	4190976
Total Zinc (Zn)	mg/kg	<10	10	4190976

RDL = Reportable Detection Limit

Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		W23669	W24111	W24112		
Sampling Date						
COC Number		97105 01	97105-01	97105-01		
	Units	**REPULSE BAY REP-5**	**REP 5 FIELD BLANK**	**REP 5 TRIP BLANK**	**RDL**	**QC Batch**
Industrial						
Remark	N/A	SEE ATTACH	SEE ATTACH	N/A	N/A	4189266
Microbiological Param.						
E.Coli DST	mpn/100mL	102	N/A	N/A	1	4192133
Total Coliforms DST	mpn/100mL	205	N/A	N/A	1	4192133
Misc. Organics						
Extractable (n-Hex.) Oil and grease	mg/L	<2	<2	<2	2	4184619
Phenols	mg/L	<0.002	<0.002	<0.002	0.002	4189285

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		W23889	W24111	W24112		
Sampling Date						
COC Number		97105-01	97105-01	97105-01		
	Units	REPULSE BAY REP-5	REP 5 FIELD BLANK	REP 5 TRIP BLANK	RDL	QC Batch
Polychlorinated Biphenyls						
Aroclor 1016	mg/l	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1221	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1232	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1242	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1248	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1254	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1260	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1262	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Aroclor 1268	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Total Aroclors	mg/L	<0.000050	<0.000050	<0.000050	0.000050	4206733
Surrogate Recovery (%)						
NONACHLOROBIPHENYL (sur.)	%	61	64	65	N/A	4206733

N/A = Not Applicable
RDL = Reportable Detection Limit

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Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD
Client Project #: REPULSE BAY

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		W23869	W24111	W24112		
Sampling Date						
COC Number		97105-01	97105-01	97105-01		
	Units	REPULSE BAY REP-5	REP 5 FIELD BLANK	REP 5 TRIP BLANK	RDL	QC Batch
Elements						
Total Arsenic (As)	mg/L	0.0004	<0.0002	<0.0002	0.0002	4190958
Dissolved Cadmium (Cd)	mg/L	0.000013	<0.000005	<0.000005	0.000005	4184579
Dissolved Chromium (Cr)	mg/L	<0.001	<0.001	<0.001	0.001	4184579
Dissolved Cobalt (Co)	mg/L	<0.0003	<0.0003	<0.0003	0.0003	4184579
Dissolved Copper (Cu)	mg/L	0.0048	<0.0002	<0.0002	0.0002	4184579
Dissolved Lead (Pb)	mg/L	0.0008	<0.0002	<0.0002	0.0002	4184579
Dissolved Nickel (Ni)	mg/L	0.0009	<0.0005	<0.0005	0.0005	4184579
Total Zinc (Zn)	mg/L	0.018	<0.003	<0.003	0.003	4190958
Low Level Elements						
Total Mercury (Hg)	ug/L	<0.005	<0.005	<0.005	0.005	4184543

RDL = Reportable Detection Limit

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Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

VOLATILE ORGANICS BY GC-MS (WATER)

Maxxam ID		W23869	W24111	W24112		
Sampling Date						
COC Number		07105-01	07105-01	07105-01		
	Units	REPULSE BAY REP.5	REP 5 FIELD BLANK	REP 5 TRIP BLANK	RDL	QC Batch
Volatiles						
Benzene	ug/L	<0.4	<0.4	<0.4	0.4	4184488
Toluene	ug/L	<0.4	<0.4	<0.4	0.4	4184488
o-Xylene	ug/L	<0.4	<0.4	<0.4	0.4	4184488
m & p-Xylene	ug/L	<0.8	<0.8	<0.8	0.8	4184488
Xylenes (Total)	ug/L	<0.8	<0.8	<0.8	0.8	4184488
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	99	98	96	N/A	4184488
D4-1,2-DICHLOROETHANE (sur.)	%	105	104	98	N/A	4184488
D8-TOLUENE (sur.)	%	92	92	94	N/A	4184488

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B071696
Report Date: 2010/08/25

DILLON CONSULTING LTD.
Client Project #: REPULSE BAY

General Comments

Sample W23869-01. Client supplied DM bottle contained particulate.

Results relate only to the items tested.

DILLON CONSULTING LTD
Attention: JENNIFER SPENCER
Client Project #: REPULSE BAY
P.O. #:
Site Reference:

Quality Assurance Report

Maxxam Job Number: EB071898

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4184488 AO1	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		101	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		100	%	70 - 130
		D8-TOLUENE (sur.)	2010/08/17		97	%	70 - 130
		Benzene	2010/08/17		96	%	70 - 130
		Toluene	2010/08/17		86	%	70 - 130
		o-Xylene	2010/08/17		90	%	70 - 130
		m & p-Xylene	2010/08/17		92	%	70 - 130
	Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		100	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		99	%	70 - 130
		D8-TOLUENE (sur.)	2010/08/17		96	%	70 - 130
		Benzene	2010/08/17		97	%	70 - 130
		Toluene	2010/08/17		86	%	70 - 130
		o-Xylene	2010/08/17		89	%	70 - 130
		m & p-Xylene	2010/08/17		92	%	70 - 130
	Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		98	%	70 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		108	%	70 - 130
		D8-TOLUENE (sur.)	2010/08/17		92	%	70 - 130
		Benzene	2010/08/17	<0.4		ug/l	
		Toluene	2010/08/17	<0.4		ug/L	
		o-Xylene	2010/08/17	<0.4		ug/L	
		m & p-Xylene	2010/08/17	<0.8		ug/L	
		Xylenes (Total)	2010/08/17	<0.8		ug/L	
	RPD	Benzene	2010/08/17	NC		%	40
		Toluene	2010/08/17	NC		%	40
		o-Xylene	2010/08/17	NC		%	40
		m & p-Xylene	2010/08/17	NC		%	40
		Xylenes (Total)	2010/08/17	NC		%	40
4184543 NC3	Matrix Spike	Total Mercury (Hg)	2010/08/17		105	%	85 - 115
	QC Standard	Total Mercury (Hg)	2010/08/17		97	%	85 - 115
	Spiked Blank	Total Mercury (Hg)	2010/08/17		101	%	85 - 115
	Method Blank	Total Mercury (Hg)	2010/08/17	<0.005		ug/L	
	RPD	Total Mercury (Hg)	2010/08/17	NC		%	20
4184579 EO1	Matrix Spike	Dissolved Cadmium (Cd)	2010/08/17		105	%	80 - 120
		Dissolved Chromium (Cr)	2010/08/17		91	%	80 - 120
		Dissolved Cobalt (Co)	2010/08/17		91	%	80 - 120
		Dissolved Copper (Cu)	2010/08/17		89	%	80 - 120
		Dissolved Lead (Pb)	2010/08/17		98	%	80 - 120
		Dissolved Nickel (Ni)	2010/08/17		89	%	80 - 120
	Spiked Blank	Dissolved Cadmium (Cd)	2010/08/17		104	%	80 - 120
		Dissolved Chromium (Cr)	2010/08/17		93	%	80 - 120
		Dissolved Cobalt (Co)	2010/08/17		94	%	80 - 120
		Dissolved Copper (Cu)	2010/08/17		93	%	80 - 120
		Dissolved Lead (Pb)	2010/08/17		100	%	80 - 120
		Dissolved Nickel (Ni)	2010/08/17		92	%	80 - 120
	Method Blank	Dissolved Cadmium (Cd)	2010/08/17	<0.000005		mg/L	
		Dissolved Chromium (Cr)	2010/08/17	<0.001		mg/L	
		Dissolved Cobalt (Co)	2010/08/17	<0.0003		mg/L	
		Dissolved Copper (Cu)	2010/08/17	<0.0002		mg/L	
		Dissolved Lead (Pb)	2010/08/17	<0.0002		mg/l	
		Dissolved Nickel (Ni)	2010/08/17	<0.0005		mg/L	
4186177 AN1	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		104	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2010/08/17		98	%	30 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		105	%	60 - 140
		D8-TOLUENE (sur.)	2010/08/17		101	%	60 - 140
		Benzene	2010/08/17		110	%	60 - 140

Maxxam Analytics

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DILLON CONSULTING LTD.
Attention: JENNIFER SPENCER
Client Project #: REPULSE BAY
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: EB071696

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4186177 AN1	Matrix Spike	Toluene	2010/08/17		106	%	60 - 140
		Ethylbenzene	2010/08/17		107	%	60 - 140
		m & p-Xylene	2010/08/17		110	%	60 - 140
		o-Xylene	2010/08/17		108	%	60 - 140
		(C6-C10)	2010/08/17		132	%	60 - 140
	Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		105	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2010/08/17		90	%	30 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		104	%	60 - 140
		D8-TOLUENE (sur.)	2010/08/17		102	%	60 - 140
		Benzene	2010/08/17		92	%	60 - 140
		Toluene	2010/08/17		91	%	60 - 140
		Ethylbenzene	2010/08/17		96	%	60 - 140
		m & p-Xylene	2010/08/17		99	%	60 - 140
		o-Xylene	2010/08/17		95	%	60 - 140
		(C6-C10)	2010/08/17		114	%	60 - 140
	Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/08/17		101	%	60 - 140
		D10-ETHYLBENZENE (sur.)	2010/08/17		90	%	30 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/08/17		107	%	60 - 140
		D8-TOLUENE (sur.)	2010/08/17		100	%	60 - 140
		Benzene	2010/08/17	<0.0050		mg/kg	
		Toluene	2010/08/17	<0.020		mg/kg	
		Ethylbenzene	2010/08/17	<0.010		mg/kg	
		Xylenes (Total)	2010/08/17	<0.040		mg/kg	
		m & p-Xylene	2010/08/17	<0.040		mg/kg	
		o-Xylene	2010/08/17	<0.020		mg/kg	
		F1 (C6-C10) - BTEX	2010/08/17	<12		mg/kg	
		(C6-C10)	2010/08/17	<12		mg/kg	
	RPD	Benzene	2010/08/17	10.5		%	50
		Toluene	2010/08/17	NC		%	50
		Ethylbenzene	2010/08/17	NC		%	50
		Xylenes (Total)	2010/08/17	NC		%	50
		m & p-Xylene	2010/08/17	NC		%	50
		o-Xylene	2010/08/17	NC		%	50
		F1 (C6-C10) - BTEX	2010/08/17	NC		%	50
		(C6-C10)	2010/08/17	NC		%	50
4188045 LD2	Matrix Spike	O-TERPHENYL (sur.)	2010/08/19		95	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/08/18		87	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2010/08/19		77	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2010/08/19		81	%	50 - 130
	Spiked Blank	O-TERPHENYL (sur.)	2010/08/18		102	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/08/19		97	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2010/08/19		91	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2010/08/19		95	%	80 - 120
	Method Blank	O-TERPHENYL (sur.)	2010/08/18		116	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/08/19	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2010/08/19	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2010/08/19	<10		mg/kg	
	RPD	F2 (C10-C16 Hydrocarbons)	2010/08/19	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2010/08/19	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2010/08/19	NC		%	50
4188255 EC4	Matrix Spike	Hex. Chromium (Cr 6+)	2010/08/18		96	%	75 - 125
	Spiked Blank	Hex. Chromium (Cr 6+)	2010/08/18		100	%	80 - 120
	Method Blank	Hex. Chromium (Cr 6+)	2010/08/18	<0.15		mg/kg	
	RPD	Hex. Chromium (Cr 6+)	2010/08/18	NC		%	35
4189285 CR4	Matrix Spike	Phenols	2010/08/18		100	%	80 - 120

DILLON CONSULTING LTD.
Attention: JENNIFER SPENCER
Client Project #: REPULSE BAY
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: EB071898

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4189285 CR4	Spiked Blank	Phenols	2010/08/18		98	%	80 - 120
	Method Blank	Phenols	2010/08/18	<0.002		mg/L	
	RPD	Phenols	2010/08/18	NC		%	20
4190305 APA	Method Blank	Moisture	2010/08/18	<0.3		%	
	RPD	Moisture	2010/08/18	0		%	20
4190958 EO1	Matrix Spike	Total Arsenic (As)	2010/08/19		100	%	80 - 120
		Total Zinc (Zn)	2010/08/19		97	%	80 - 120
	Spiked Blank	Total Arsenic (As)	2010/08/19		89	%	80 - 120
		Total Zinc (Zn)	2010/08/19		85	%	80 - 120
	Method Blank	Total Arsenic (As)	2010/08/19	<0.0002		mg/L	
		Total Zinc (Zn)	2010/08/19	<0.003		mg/L	
4190976 SG8	Matrix Spike	Total Arsenic (As)	2010/08/19		82	%	75 - 125
		Total Barium (Ba)	2010/08/19		NC	%	75 - 125
		Total Beryllium (Be)	2010/08/19		80	%	75 - 125
		Total Cadmium (Cd)	2010/08/19		87	%	75 - 125
		Total Cobalt (Co)	2010/08/19		85	%	75 - 125
		Total Copper (Cu)	2010/08/19		79	%	75 - 125
		Total Lead (Pb)	2010/08/19		87	%	75 - 125
		Total Mercury (Hg)	2010/08/19		87	%	75 - 125
		Total Molybdenum (Mo)	2010/08/19		99	%	75 - 125
		Total Nickel (Ni)	2010/08/19		82	%	75 - 125
		Total Selenium (Se)	2010/08/19		78	%	75 - 125
		Total Silver (Ag)	2010/08/19		90	%	75 - 125
		Total Thallium (Tl)	2010/08/19		89	%	75 - 125
		Total Tin (Sn)	2010/08/19		93	%	75 - 125
		Total Vanadium (V)	2010/08/19		82	%	75 - 125
		Total Zinc (Zn)	2010/08/19		84	%	75 - 125
	QC Standard	Total Arsenic (As)	2010/08/19		107	%	50 - 150
		Total Barium (Ba)	2010/08/19		106	%	69 - 131
		Total Chromium (Cr)	2010/08/19		98	%	41 - 159
		Total Cobalt (Co)	2010/08/19		98	%	75 - 125
		Total Copper (Cu)	2010/08/19		88	%	72 - 127
		Total Lead (Pb)	2010/08/19		91	%	54 - 146
		Total Mercury (Hg)	2010/08/19		93	%	75 - 125
		Total Nickel (Ni)	2010/08/19		98	%	61 - 139
		Total Vanadium (V)	2010/08/19		114	%	50 - 150
		Total Zinc (Zn)	2010/08/19		79	%	72 - 128
	Spiked Blank	Total Antimony (Sb)	2010/08/18		95	%	75 - 125
		Total Arsenic (As)	2010/08/18		88	%	75 - 125
		Total Barium (Ba)	2010/08/18		93	%	75 - 125
		Total Beryllium (Be)	2010/08/18		83	%	75 - 125
		Total Cadmium (Cd)	2010/08/18		90	%	75 - 125
		Total Chromium (Cr)	2010/08/18		91	%	75 - 125
		Total Cobalt (Co)	2010/08/18		92	%	75 - 125
		Total Copper (Cu)	2010/08/18		88	%	75 - 125
		Total Lead (Pb)	2010/08/18		97	%	75 - 125
		Total Mercury (Hg)	2010/08/18		92	%	75 - 125
		Total Molybdenum (Mo)	2010/08/18		103	%	75 - 125
		Total Nickel (Ni)	2010/08/18		89	%	75 - 125
		Total Selenium (Se)	2010/08/18		82	%	75 - 125
		Total Silver (Ag)	2010/08/18		95	%	75 - 125
		Total Thallium (Tl)	2010/08/18		97	%	75 - 125
		Total Tin (Sn)	2010/08/18		97	%	75 - 125
		Total Uranium (U)	2010/08/18		91	%	75 - 125
		Total Vanadium (V)	2010/08/18		94	%	75 - 125

DILLON CONSULTING LTD.
Attention: JENNIFER SPENCER
Client Project #: REPULSE BAY
P O #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: EB071686

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4190976 SG8	Spiked Blank	Total Zinc (Zn)	2010/08/18		82	%	75 - 125
	Method Blank	Total Antimony (Sb)	2010/08/18	<1		mg/kg	
		Total Arsenic (As)	2010/08/18	<1		mg/kg	
		Total Barium (Ba)	2010/08/18	<10		mg/kg	
		Total Beryllium (Be)	2010/08/18	<0.4		mg/kg	
		Total Cadmium (Cd)	2010/08/18	<0.1		mg/kg	
		Total Chromium (Cr)	2010/08/18	<1		mg/kg	
		Total Cobalt (Co)	2010/08/18	<1		mg/kg	
		Total Copper (Cu)	2010/08/18	<5		mg/kg	
		Total Lead (Pb)	2010/08/18	<1		mg/kg	
		Total Mercury (Hg)	2010/08/18	<0.05		mg/kg	
		Total Molybdenum (Mo)	2010/08/18	<0.4		mg/kg	
		Total Nickel (Ni)	2010/08/18	<1		mg/kg	
		Total Selenium (Se)	2010/08/18	<0.5		mg/kg	
		Total Silver (Ag)	2010/08/18	<1		mg/kg	
		Total Thallium (Tl)	2010/08/18	<0.3		mg/kg	
		Total Tin (Sn)	2010/08/18	<1		mg/kg	
		Total Uranium (U)	2010/08/18	<1		mg/kg	
		Total Vanadium (V)	2010/08/18	<1		mg/kg	
		Total Zinc (Zn)	2010/08/18	<10		mg/kg	
	RPD	Total Antimony (Sb)	2010/08/19	NC		%	35
		Total Arsenic (As)	2010/08/19	NC		%	35
		Total Barium (Ba)	2010/08/19	0.8		%	35
		Total Beryllium (Be)	2010/08/19	NC		%	35
		Total Cadmium (Cd)	2010/08/19	NC		%	35
		Total Chromium (Cr)	2010/08/19	1.8		%	35
		Total Cobalt (Co)	2010/08/19	NC		%	35
		Total Copper (Cu)	2010/08/19	NC		%	35
		Total Lead (Pb)	2010/08/19	1.7		%	35
		Total Mercury (Hg)	2010/08/19	NC		%	35
		Total Molybdenum (Mo)	2010/08/19	NC		%	35
		Total Nickel (Ni)	2010/08/19	NC		%	35
		Total Selenium (Se)	2010/08/19	NC		%	35
		Total Silver (Ag)	2010/08/19	NC		%	35
		Total Thallium (Tl)	2010/08/19	NC		%	35
		Total Tin (Sn)	2010/08/19	NC		%	35
		Total Uranium (U)	2010/08/19	NC		%	35
		Total Vanadium (V)	2010/08/19	NC		%	35
		Total Zinc (Zn)	2010/08/19	NC		%	35
4192133 HW	Method Blank	E.Coli DST	2010/08/15	<1		mpn/100mL	
		Total Coliforms DST	2010/08/15	<1		mpn/100mL	
4193738 KL4	Matrix Spike	Soluble (Hot water) Boron (B)	2010/08/19		103	%	75 - 125
	Spiked Blank	Soluble (Hot water) Boron (B)	2010/08/19		98	%	80 - 120
	Method Blank	Soluble (Hot water) Boron (B)	2010/08/19	<0.1		mg/kg	
	RPD	Soluble (Hot water) Boron (B)	2010/08/19	NC		%	35
4194619 KSC	Method Blank	Extractable (n-Hex.) Oil and grease	2010/08/20	<2		mg/L	
4208733 VM	Spiked Blank	NONACHLOROBIPHENYL (sur.)	2010/08/25		69	%	30 - 130
		Aroclor 1260	2010/08/25		105	%	30 - 130
	Method Blank	NONACHLOROBIPHENYL (sur.)	2010/08/25		72	%	30 - 130
		Aroclor 1016	2010/08/25	<0.000050		mg/L	
		Aroclor 1221	2010/08/25	<0.000050		mg/L	
		Aroclor 1232	2010/08/25	<0.000050		mg/L	
		Aroclor 1242	2010/08/25	<0.000050		mg/L	
		Aroclor 1248	2010/08/25	<0.000050		mg/L	
		Aroclor 1254	2010/08/25	<0.000050		mg/L	

DILLON CONSULTING LTD.
Attention: JENNIFER SPENCER
Client Project #: REPULSE BAY
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: EB071696

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4206733 VM	Method Blank	Aroclor 1260	2010/08/25	<0.000050		mg/L	
		Aroclor 1262	2010/08/25	<0.000050		mg/L	
		Aroclor 1268	2010/08/25	<0.000050		mg/L	
		Total Aroclors	2010/08/25	<0.000050		mg/L	

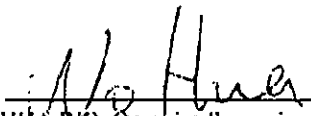
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Validation Signature Page

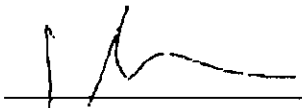
Maxxam Job #: B071696

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

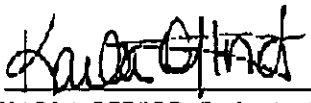
DINA TLEUGABULOVA, Ph.D., Scientific Specialist



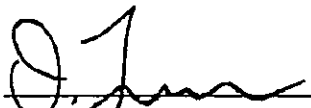
HUA WO, Organics Supervisor



JAY ABBOTT, Bioassay Supervisor



KARLA OFFORD, Senior Analyst



OREA JORGENSEN, Organics Supervisor

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

PBR Laboratories Inc.

MAXXAM 100817-06 (10-BWI)

CONFIDENTIAL ANALYSIS REPORT

REPORT #: 100817-06

WO #: 10-BWI

PO #: B071748

CLIENT: MAXXAM Analytics Inc.
9331 48 Street
Edmonton, Alberta
T6B 2R4

ATTENTION: Jeremy Wakaruk
Tel: (780) 577-7105
Fax: (780) 450-4187

SAMPLE DESCRIPTION: Water Samples

DATE AND TIME OF SAMPLE COLLECTION: August 11, 2010 / 09:30

DATE AND TIME OF SAMPLE RECEIPT: August 14, 2010/13:29

SAMPLE TEMPERATURE WHEN RECEIVED: 10° Celsius

TEST PERFORMED: Fecal Coliform by MF

TEST START DATE: August 14, 2010

DATE COMPLETED: August 16, 2010

CERTIFICATE OF ANALYSIS: See Page 2

Certificate of Analysis

PBR ID	Sample #	Client ID	Lot #	Test	Protocol	Quantity Analyzed	Result	Units	Comments
10-BWI-01		REPULSE BAY REP-2 Sampled 2010/08/11		Fecal Coliform by MF	APHA-9222D	100 ml	6	CFU/100ml	
10-BWI-02		REPULSE BAY REP-4 Sampled 2010/08/11		Fecal Coliform by MF	APHA-9222D	10 ml	810	CFU/100ml	
10-BWI-03		REP-4 FIELD BLANK Sampled 2010/08/11		Fecal Coliform by MF	APHA-9222D	100 ml	<1	CFU/100ml	1
10-BWI-04		REP-4 TRAVEL BLANK Sampled 2010/08/11		Fecal Coliform by MF	APHA-9222D	100 ml	83	CFU/100ml	

Comments
1 CFU = Colony Forming Unit.
< = No counts were detected based on the volume/dilution analyzed.

The reported results apply only to the items tested.

Kausalyah Gopalkrishnan (Analyst)
Date: Aug 17 2010

Approved By: _____
Narayan Pokharel Ph.D.
Date: Aug 17 2010

PBR

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

(Acute Aquatic Toxicity Test)

Client Name :	***Dillon Consulting Ltd***
Location :	***Yellowknife, NT***

Sample Data :

Sample Description :	**Repulse Bay REP-5**		
Visual Description:	**Clear**		
Sampling Location :	**Rep 5**		
Sampling Method :	**Grab**		
Volume Obtained :	**1 L**		
Sampled By :	**n/g**		
	YY MM DD		
Sample Date :	**10 08 11**	*Time :*	**n/g**
Date Received :	**10 08 14**	*Time :*	**1040**
Bioassay Date :	**10 08 14**	*Time :*	**1300**
Report Date :	**10 08 19**		
Deviations from Method :	**none**		

Bioassay Results :

Sample Endpoint	Rep1	Rep2	Rep3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Control Endpoint	C1	C2	C3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Note: Results relate only to the item tested.

General Comments:

Data & QA/QC Reviewed By : _____ **Jay Abbott, Bioassay Supervisor**

MaxXam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

Detailed Test Information :

Type of Bioassay :	**48 hour static bioassay**
Test Species :	***Daphnia magna***
Test Protocol :	**Environment Canada EPS 1/RM/14 (December 2000 ed.)**
Test Endpoint:	**Mortality and/or Immobility**
% Mortality in Culture 7 days Prior to Testing :	**4%**
Age of Test Animals :	**Neonates (young), less than 24 hours old**
Time, in Days, to First Brood :	**9**
Average Number of Neonates per Brood :	**24**
Source of Test Species :	**In house culture initiated through Environment Canada *Daphnia magna***
Date Animals Obtained :	**May 1991**
Source of Culturing and Dilution Water :	**Reconstituted water**
Size of Test Container :	**220 mL**
Material of Test Container :	**Polyethylene beaker**
Volume of Test Solution per Container :	**200 mL**
Standard Concentrations of Test Material :	**0, 100% in Triplicate**
Number of Neonates per Container :	**10**
Volume of Solution per Daphnid :	**20 mL**
Hardness Adjustment :	**None (Checked with Hach Kit for Total Hardness, 20-400mg/L)**
pH Adjustment :	**None**

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

		Temperature °C	pH @ 20°C	EC µS cm-1	Dissolved Oxygen mg/L
Setup	Effluent Properties Prior To Initial Setup:	14.2	7.9	336.0	11.0
Analyst: ND	Preaeration Time (at rate of 50 mL / min / L) :	30 min			

Time	Description	Controls			100% Screen Samples		
		C1	C2	C3	Rep1	Rep2	Rep3
Start	Temperature °C	19.2	19.1	19.1	19.8	19.8	19.8
	pH @ 20°C	8.2	8.2	8.2	8.1	8.1	8.1
	EC µS cm-1	554	556	557	378	376	376
	Dissolved Oxygen mg/L	9.3	9.7	9.4	9.8	9.9	9.9
Analyst: ND	Hardness mg/L CaCO3	180 mg/L			200 mg/L		
1 Hour	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
4 Hours	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
24 Hours	Number Dead	0	0	0	0	0	0
Analyst: MW	Atypical/Stressed Behaviour	0	0	0	0	0	0
48 Hours	Temperature °C	19.5	19.8	19.9	19.3	20.1	20.3
	pH @ 20°C	8.3	8.4	8.4	8.4	8.4	8.4
	EC µS cm-1	562	560	561	381	376	375
	Dissolved Oxygen mg/L	9.0	9.0	8.8	8.8	8.8	8.8
	Number Dead	0	0	0	0	0	0
Analyst: ND	Atypical/Stressed Behaviour	0	0	0	0	0	0

Observation Codes: I: Immobile F: Floating

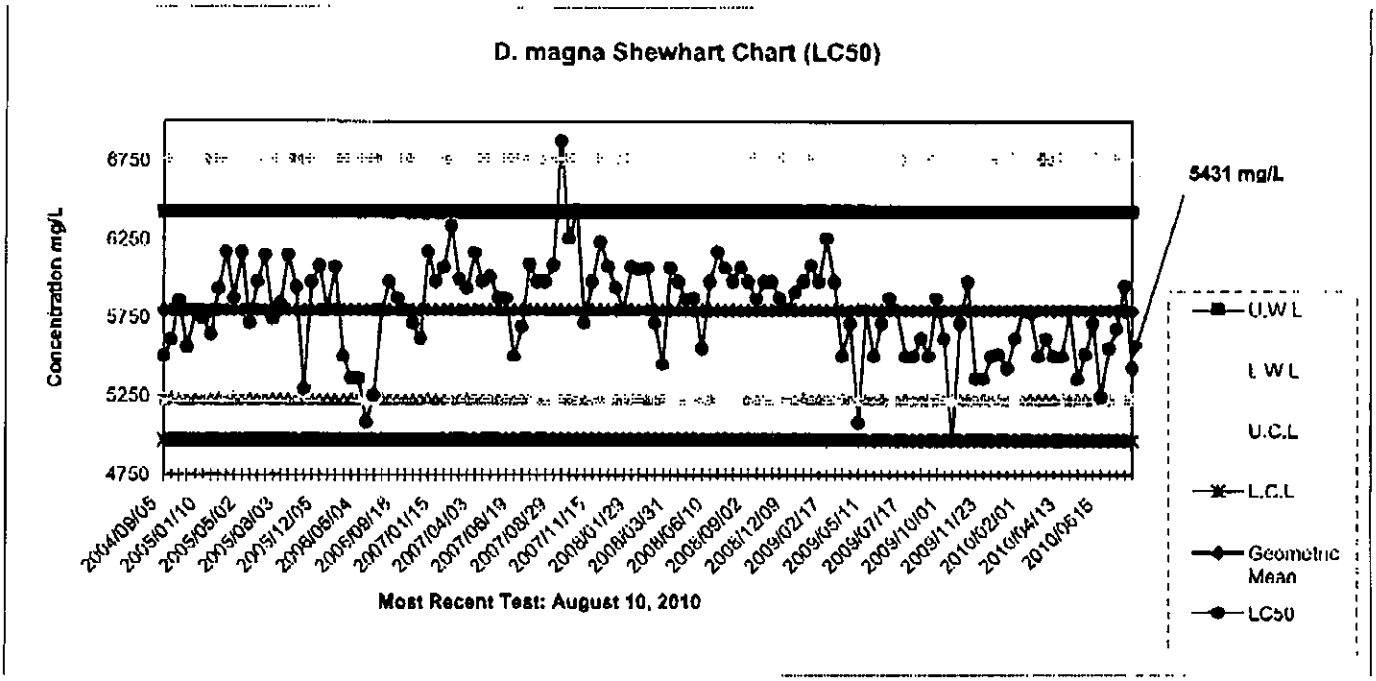
Project : B071696-W23869

Results of Sodium Chloride Reference Bioassay :

Sample Description : Repulse Bay REP-5

Current	
LC50 @ 48 Hours :	**5431 mg/L**
95 % Confidence Interval :	**5028<5431<5840**
Method :	**Probit**
Date Initiated	**10 08 10**
Historical	
Geometric Mean :	**5800 mg/L**
Warning Limits :	**5235<5800<6427**
Method :	**Shewhart**

The reference toxicant is conducted under the same conditions as the definitive testing (EENVSOP-00152).



Maxxam Analytics Inc

96hr *Rainbow Trout* Screen Bioassay Report

Project : B071696-W23869

(Acute Aquatic Toxicity Test)

Sample Data :

Company Name :	**Dillon Consulting Ltd**		
City .	**Yellowknife, NT**		
Sample Description :	**Repulse Bay REP-5**		
Sampling Location :	**Rep 5**		
Sampling Method .	**Grab**		
Volume obtained :	**20L**		
Sampled By :	**n/g**		
	YY MM DD		
Sample Date :	**10 08 11**	*Time :*	**n/g**
Date Received :	**10 08 14**	*Time :*	**1040**
Bioassay Date :	**10 08 14**	*Time :*	**1230**
Report Date :	**10 08 19**		
Deviations from method :	**none**		

Test Results :

% mortality @ 96 Hours :	**0%**

Note: The results relate only to the item tested.

Results of Phenol Reference Bioassay : ***CETIS Statistical Program***

LC50 @ 96 Hours :	**10.95 mg/L**
95 % Confidence Interval :	**10.0<11.0<12.0 mg/L**
Method :	**Probit**
95 % Confidence Interval :	**8.45<10.66<13.45**
Method :	**Schewhart Warning Limit**
Historical Mean ± 2SD :	**10.66+/-2.48**
Date of Reference Bioassay :	**10 07 23**

The reference toxicant is conducted under the same conditions as the definitive testing.

Report & QA/QC Reviewed By : _____ **Jay Abbott, Bioassay Supervisor**

Maxxam Analytics Inc

96hr *Rainbow Trout* Screen Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

Test Information :

Type of Bioassay :	**96 Hour Single Dilution Static Bioassay**		
Test Species :	***Oncorhynchus mykiss*** **(Rainbow Trout)**		
Test Protocol :	**Environment Canada EPS 1/RM/13 (Dec.2000 ed. with May 2007 amendments).**		
Source of Test Species :	**Rainbow Springs Trout Hatchery, Thamesford, ON.**		
Culture Lot # :	**RS0708-1**		
Mean (±1 SD) & Range Fork Length of Fish :	**3.7 ± 0.1 cm**	*Pop.Range* **3.5 - 3.9 cm**	**n=10**
Mean (±1 SD) & Range Weight of Fish :	**0.63 ± 0.11 g**	*Pop.Range* **0.5 - 0.8 g**	
Cummulative Mortality of Fish Lot in the 7 Days Prior to Test :	**0.0%**		
Source of Holding Water :	**Ammonia Free, Dechlorinated City of Edmonton Tap Water**		
Size of Test Container :	**38 L**		
Material of Test Container :	**Disposable Plastic Liner in Glass Tank**		
Volume of Test Solution in Each Test Vessel :	**20 L**		
Depth of Test Material in Each Test Vessel :	**≥ 15 cm**		
Concentrations of Test Material :	**0, 100%**		
Number of Fish per Container :	**10**		
Loading Density :	**0.32 g/L**		
Method of Aeration :	**Carbon Filtered, Compressed Air Through Air-stone**		
Aeration Rate during test :	**6.5 ± 1.0 mL/min./L**		
pH adjustment:	**No pH adjustment of sample was made during testing.**		

Maxxam Analytics Inc

96hr *Rainbow Trout* Screen Bioassay Report

Project : B071696-W23869

Sample Description : Repulse Bay REP-5

		Temperature °C	pH @ 20°C	EC µS cm-1	Dissolved Oxygen mg/L
Setup	Sample Properties Prior To Initial Setup:	14.6	8.0	343	10.9
Analyst: ND	Preparation Time (at rate of 6.5 ± 1.0 mL / min / L):	30 min			

Time	Description	Concentration (%)	
		0	100
Start	Temperature (°C)	14.8	14.7
	pH	8.2	8.1
	EC (µS cm-1)	348	325
Analyst: ND	Dissolved Oxygen (mg/L)	9.6	9.3
1/4 Hour	Number Dead		
Analyst:	Atypical/Stressed Behaviour		
1/2 Hour	Number Dead	0	0
Analyst:	Atypical/Stressed Behaviour	0	0
1 Hour	Number Dead	0	0
Analyst:	Atypical/Stressed Behaviour	0	0
2 Hours	Number Dead	0	0
Analyst:	Atypical/Stressed Behaviour	0	0
4 Hours	Number Dead	0	0
Analyst:	Atypical/Stressed Behaviour	0	0
24 Hours	Temperature (°C)	15.6	15.2
	pH	8.1	8.2
	EC (µS cm-1)	322	356
	Dissolved Oxygen (mg/L)	9.3	9.4
	Number Dead	0	0
Analyst: HW	Atypical/Stressed Behaviour	0	0
48 Hours	Temperature (°C)	15.7	15.7
	pH	8.1	8.2
	EC (µS cm-1)	313	350
	Dissolved Oxygen (mg/L)	9.4	9.6
	Number Dead	0	0
Analyst: RL	Atypical/Stressed Behaviour	0	0
72 Hours	Temperature (°C)	15.1	14.5
	pH	8.2	8.2
	EC (µS cm-1)	310	341
	Dissolved Oxygen (mg/L)	9.8	9.8
	Number Dead	0	0
Analyst: RL	Atypical/Stressed Behaviour	0	0
96 Hours	Temperature (°C)	15.0	14.9
	pH	8.2	8.2
	EC (µS cm-1)	311	347
	Dissolved Oxygen (mg/L)	9.6	9.4
	Number Dead	0	0
Analyst: RL	Atypical/Stressed Behaviour	0	0

Stress Codes: P: dark pigmentation D: light pigmentation I: lethargic H: hyperactive M: inhibited movement C: pronounced opercular movement F: Flashing S: extreme lethargic/shock O: disorientated

General Comments:

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W24111

(Acute Aquatic Toxicity Test)

Client Name :	***Dillon Consulting Ltd***
Location :	***Yellowknife, NT***

Sample Data :

Sample Description :	**Rep 5 Field Blank**		
Visual Description:	**Clear**		
Sampling Location :	**Rep 5**		
Sampling Method :	**Grab**		
Volume Obtained :	**1 L**		
Sampled By :	**n/g**		
	YY MM DD		
Sample Date :	**10 08 11**	*Time :*	**n/g**
Date Received :	**10 08 14**	*Time :*	**1040**
Bioassay Date :	**10 08 14**	*Time :*	**1300**
Report Date :	**10 08 19**		
Deviations from Method :	**none**		

Bioassay Results :

Sample Endpoint	Rep1	Rep2	Rep3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Control Endpoint	C1	C2	C3	Average
% Mortality @ 48 Hours:	0%	0%	0%	0%
% Immobility @ 48 Hours :	0%	0%	0%	0%

Note: Results relate only to the item tested.

General Comments:

Hardness of sample adjusted as initial conductivity reading was below 25 µS cm-1

Data & QA/QC Reviewed By : **Jay Abbott, Bioassay Supervisor**

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W24111

Sample Description : Rep 5 Field Blank

Detailed Test Information :

Type of Bioassay :	**48 hour static bioassay**
Test Species :	***Daphnia magna***
Test Protocol :	**Environment Canada EPS 1/RM/14 (December 2000 ed.)**
Test Endpoint:	**Mortality and/or Immobility**
% Mortality in Culture 7 days Prior to Testing :	**4%**
Age of Test Animals :	**Neonates (young), less than 24 hours old**
Time, in Days, to First Brood :	**9**
Average Number of Neonates per Brood :	**24**
Source of Test Species :	**In house culture initiated through Environment Canada *Daphnia magna***
Date Animals Obtained :	**May 1991**
Source of Culturing and Dilution Water :	**Reconstituted water**
Size of Test Container :	**220 mL**
Material of Test Container :	**Polyethylene beaker**
Volume of Test Solution per Container :	**200 mL**
Standard Concentrations of Test Material :	**0, 100% in Triplicate**
Number of Neonates per Container :	**10**
Volume of Solution per Daphnid :	**20 mL**
Hardness Adjustment :	**Yes**
pH Adjustment :	**None**

Maxxam Analytics

48hr *Daphnia magna* Bioassay Report

Project : B071696-W24111

Sample Description : Rep 5 Field Blank

		Temperature °C	pH @ 20°C	EC µS cm-1	Dissolved Oxygen mg/L
Setup	Effluent Properties Prior To Initial Setup:	14.1	8.6	1.7	10.4
Analyst: ND	Preparation Time (at rate of 50 mL / min / L) :	30 min			

Time	Description	Controls			100% Screen Samples		
		C1	C2	C3	Rep1	Rep2	Rep3
Start	Temperature °C	19.1	19.1	19.1	19.7	20.0	20.6
	pH @ 20°C	8.2	8.2	8.2	8.2	8.2	8.1
	EC µS cm-1	554	555	555	304	308	284
	Dissolved Oxygen mg/L	9.2	9.2	9.2	9.0	9.0	9.1
Analyst: ND	Hardness mg/L CaCO3	180 mg/L			80 mg/L		
1 Hour	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
4 Hours	Number Dead						
Analyst:	Atypical/Stressed Behaviour						
24 Hours	Number Dead	0	0	0	0	0	0
Analyst: MW	Atypical/Stressed Behaviour	0	0	0	0	0	0
48 Hours	Temperature °C	19.4	19.9	20.0	19.8	20.0	20.2
	pH @ 20°C	8.4	8.4	8.4	8.4	8.3	8.2
	EC µS cm-1	562	558	560	323	287	273
	Dissolved Oxygen mg/L	9.1	8.9	8.9	8.9	8.9	8.9
	Number Dead	0	0	0	0	0	0
Analyst: ND	Atypical/Stressed Behaviour	0	0	0	0	0	0

Observation Codes: I: Immobile F: Floating

Project : B071696-W24111

Results of Sodium Chloride Reference Bioassay :

Sample Description : Rep 5 Field Blank

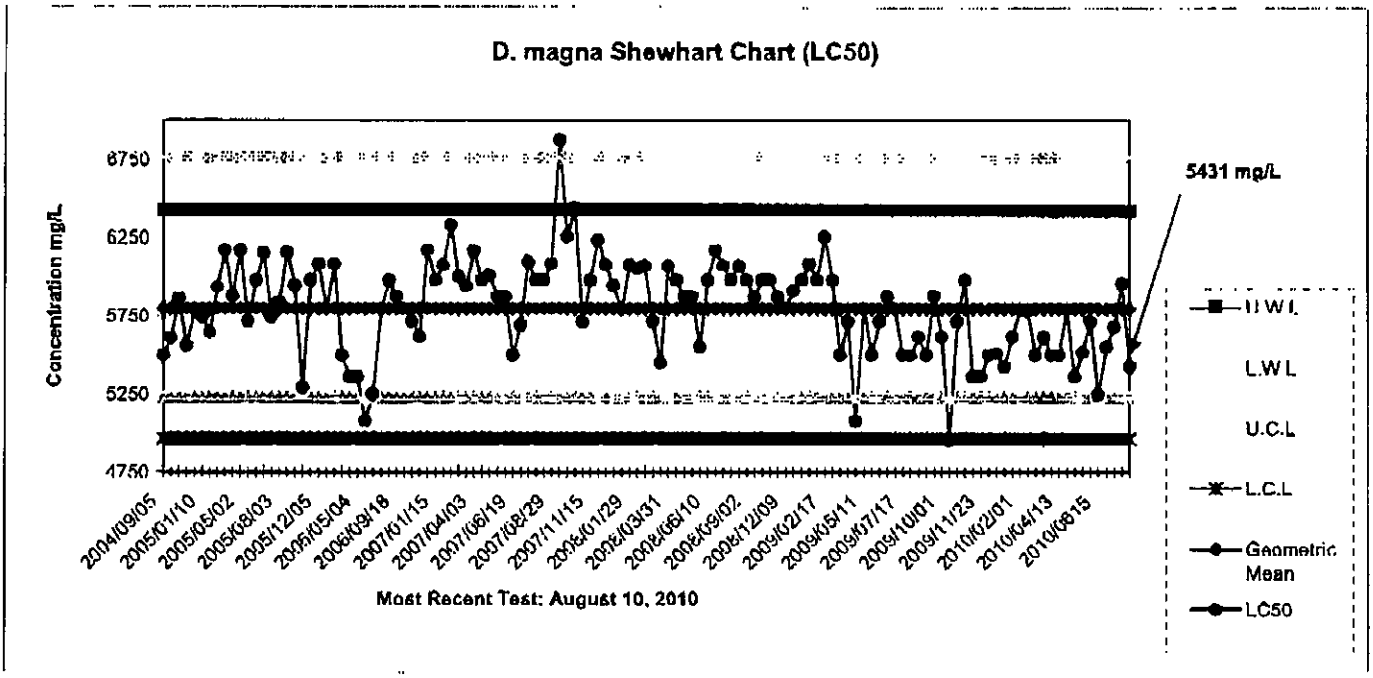
Current

LC50 @ 48 Hours :	**5431 mg/L**
95 % Confidence Interval :	**5028<5431<5840**
Method :	**Probit**
Date Initiated	**10 08 10**

Historical

Geometric Mean :	**5800 mg/L**
Warning Limits :	**5235<5800<6427**
Method :	**Shewhart**

The reference toxicant is conducted under the same conditions as the definitive testing (EENVSOP-00152).



Please also test for
REP-5
Arsenic
Mercury
Zinc
Total Phosphorous.

Total Coliform
Fecal Coliform
Total Suspended Solids (TSS)
CBOD

08/435 BOD TKN

B071696 /CO7/ kw/

MaXXam Analytics

CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE INFORMATION		REPORT INFORMATION		PROJECT INFORMATION		Laboratory Use Only	
Company Name:	72425 DILLON CONSULTING LTD.	Company Name:	451933 DILLON CONSULTING LTD.	Quotation #:		MAXXAM JOB #:	B071696
Contact Name:	JENNIFER SPENCER	Contact Name:	JENNIFER SPENCER	P.O. #:			
Address:	BOX 1409 SUITE 303, 4920 - 47th STREET	Address:	BOX 1409 SUITE 303, 4920 - 47th STREET	Project #:	REPULSE BAY		
	YELLOWKNIFE NT X1A 2P1		YELLOWKNIFE NT X1A 2P1	Project Name:		CHAIN OF CUSTODY #:	
Phone:	(867)920-4555 Fax: (867)873-3328	Phone:	(867)920-4555 Fax: (867)873-3328	Site #:	REP-5	PROJECT MANAGER:	
Email:	jspencer@dillon.ca	Email:	jspencer@dillon.ca	Sampled By:			

REGULATORY CRITERIA: ☐ AT1 ☐ CCME ☐ OTHER

SPECIAL INSTRUCTIONS:

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific)

#	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y/N)	Dissolved Cd, Cr, Co, Cu, Pb, Ni	Rainbow Trout screen	Daphnia screen, pH	Benzene, Toluene, Xylene	Phenols	Total Mercury	Total As, Zn	Oil & Grease (report in mg/L)	PCBs	BTEX F1-F4 and Regulated Metals Soil	# of Bottles	Comments
1		REPULSE BAY REP-5 WATER			W		X	X	X	X	X	X	X	X	X			Leachate from landfarm & metals dump.
2		REP-5 WATER FIELD BLANK			W		✓	✓	✓	✓	✓	✓	✓	✓	✓			
3		REP-5 WATER ~~FIELD BLANK~~ TRIP BLANK			W		✓	✓	✓	✓	✓	✓	✓	✓	✓			
4		REPULSE BAY REP-5 SOIL			SOIL											X		
5		REP-5 SOIL FIELD BLANK			SOIL													
6		REP-5 SOIL TRAVEL BLANK			SOIL													
7																		
8																		
9																		
10																		

TURNAROUND TIME (TAT) REQUIRED:
PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Regular (Standard) TAT: ☑
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission) ☐
Date Required:
Rush Confirmation Number:

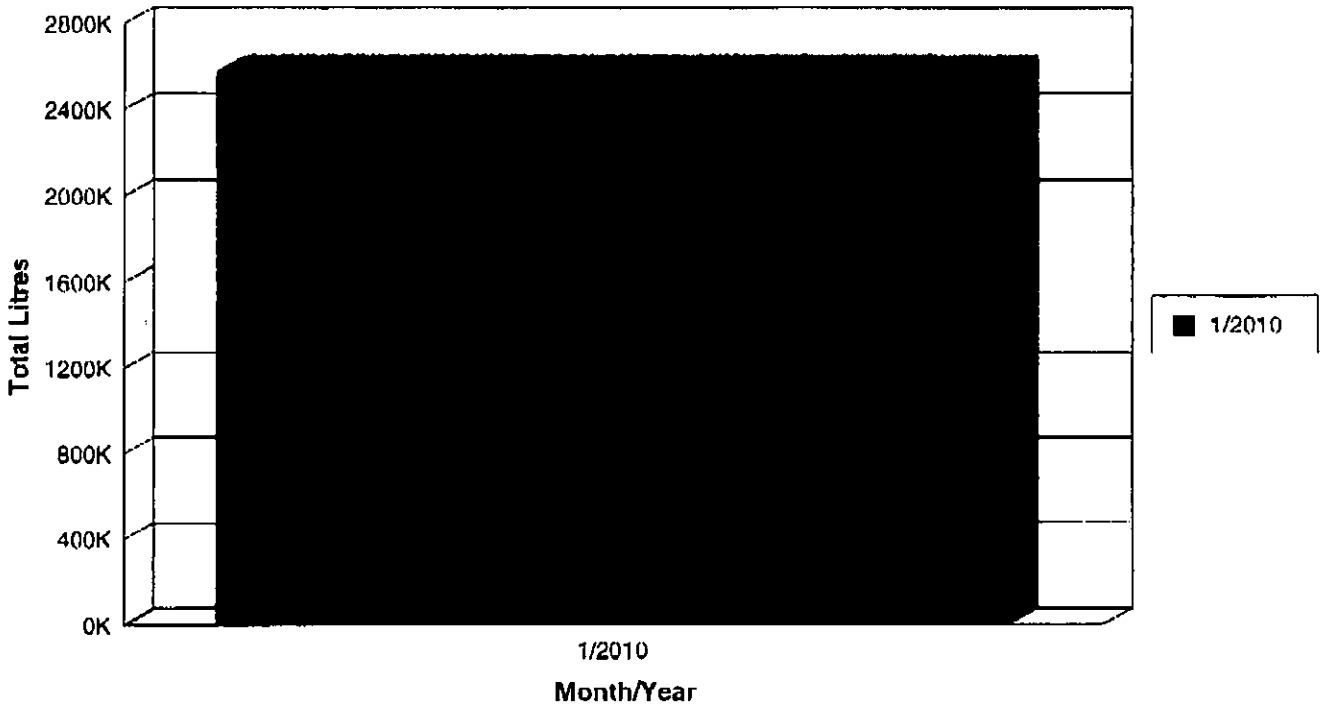
RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# Jars Used and Not Submitted	Laboratory Use Only
[signature] / Elise Csicsai	10/08/11	1:50 pm	[signature] Ashleigh Hopkinson	10/08/11	10:40		Custody Seal Intact on Cooler? ☐ Yes ☑ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
* ALL SAMPLES ARE HELD FOR 60 DAYS AFTER SAMPLE RECEIPT. FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER.

11,12,13 11,10,10 4,11,12
11,11,11 11,11,11 11,11,11
17,11,11 9,10,11

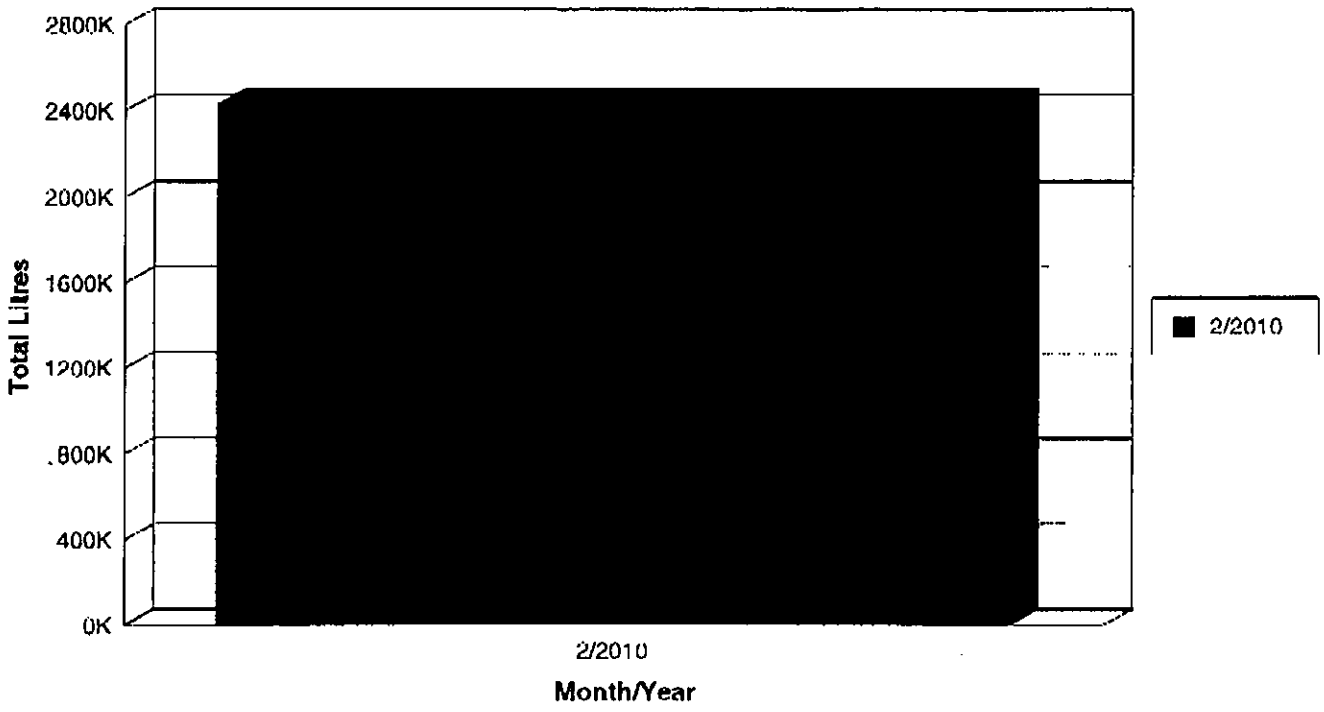
J.C.C. - Yes

Delivery Summary By Month and Year



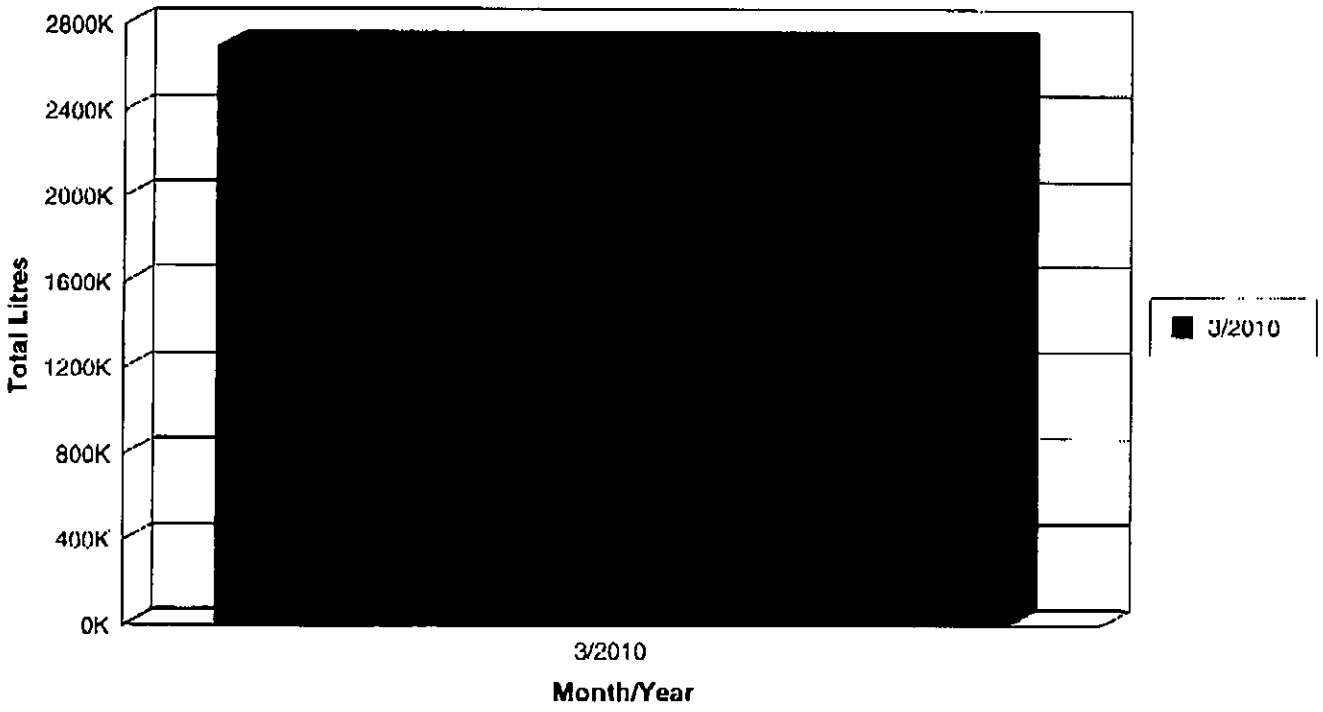
Month / Year	Litres Delivered
January 2010	2,578,322.40
Grand Total:	**2,578,322.40**

Delivery Summary By Month and Year



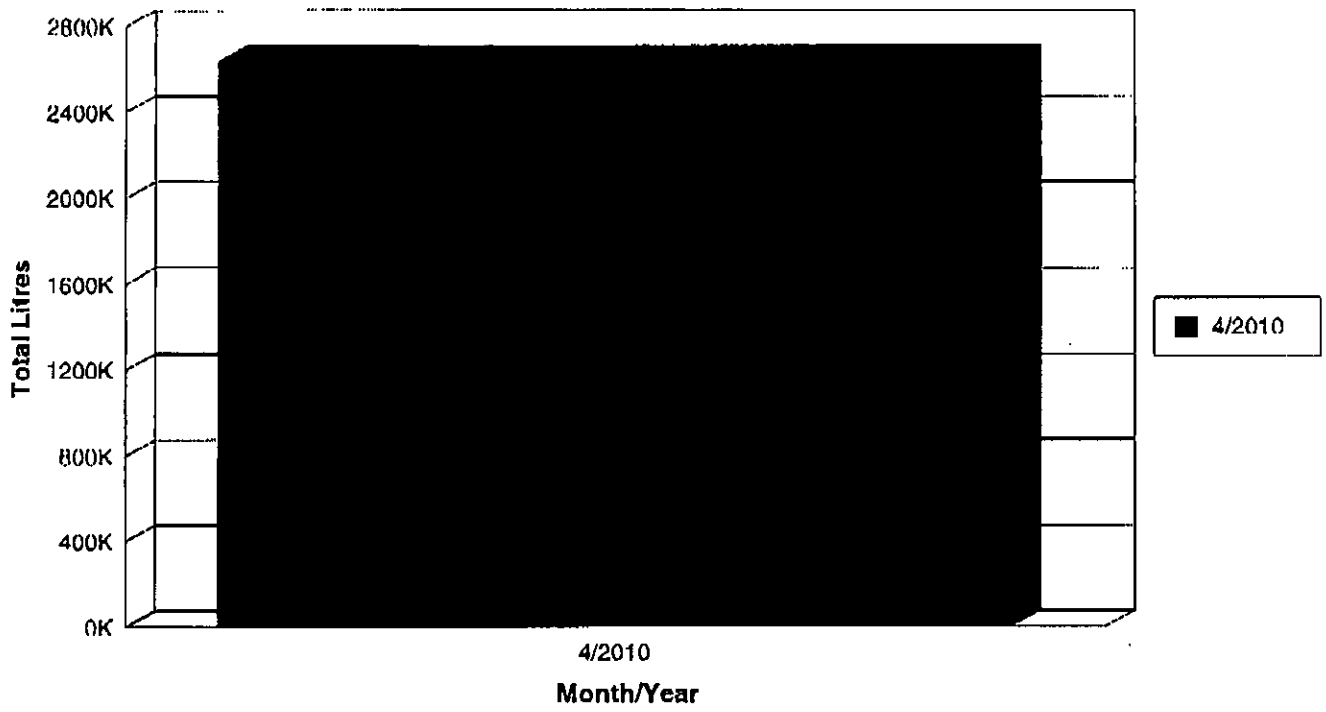
Month / Year	Litres Delivered
February 2010	2,430,279.75
Grand Total:	**2,430,279.75**

Delivery Summary By Month and Year



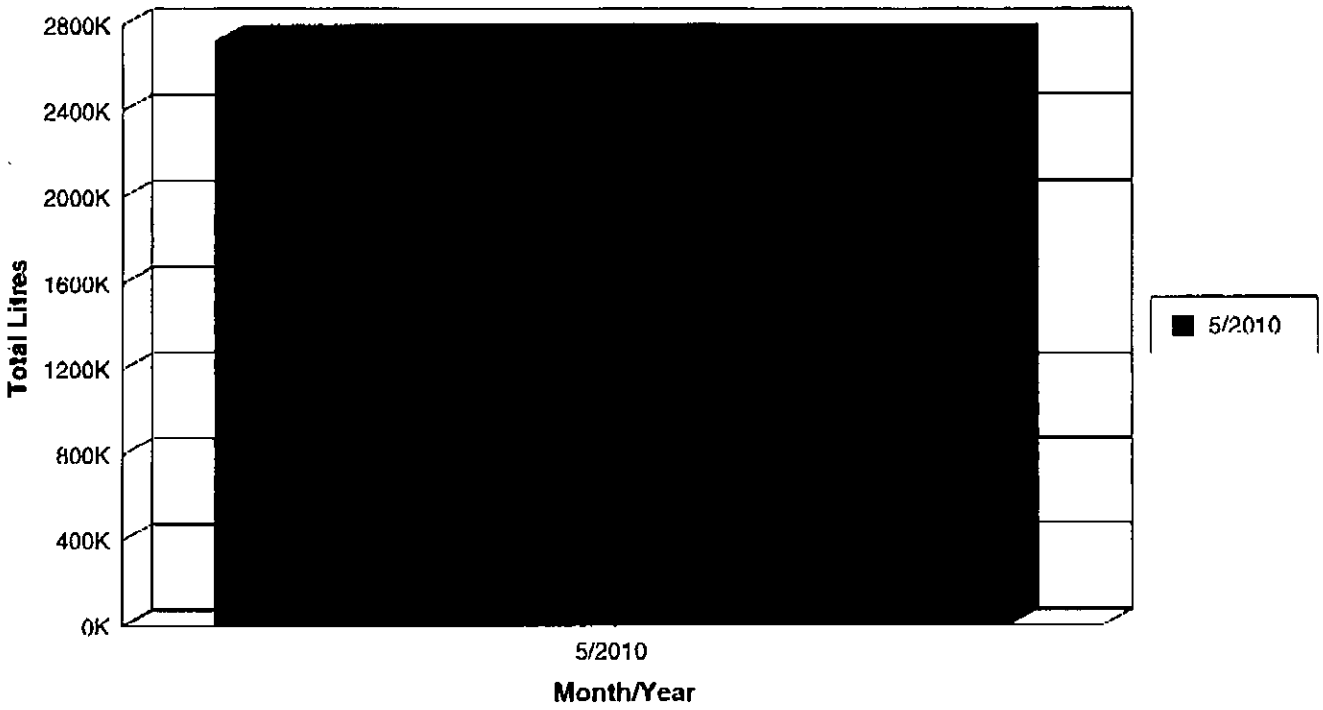
Month / Year	Litres Delivered
March 2010	2,700,654.40
Grand Total:	**2,700,654.40**

Delivery Summary By Month and Year



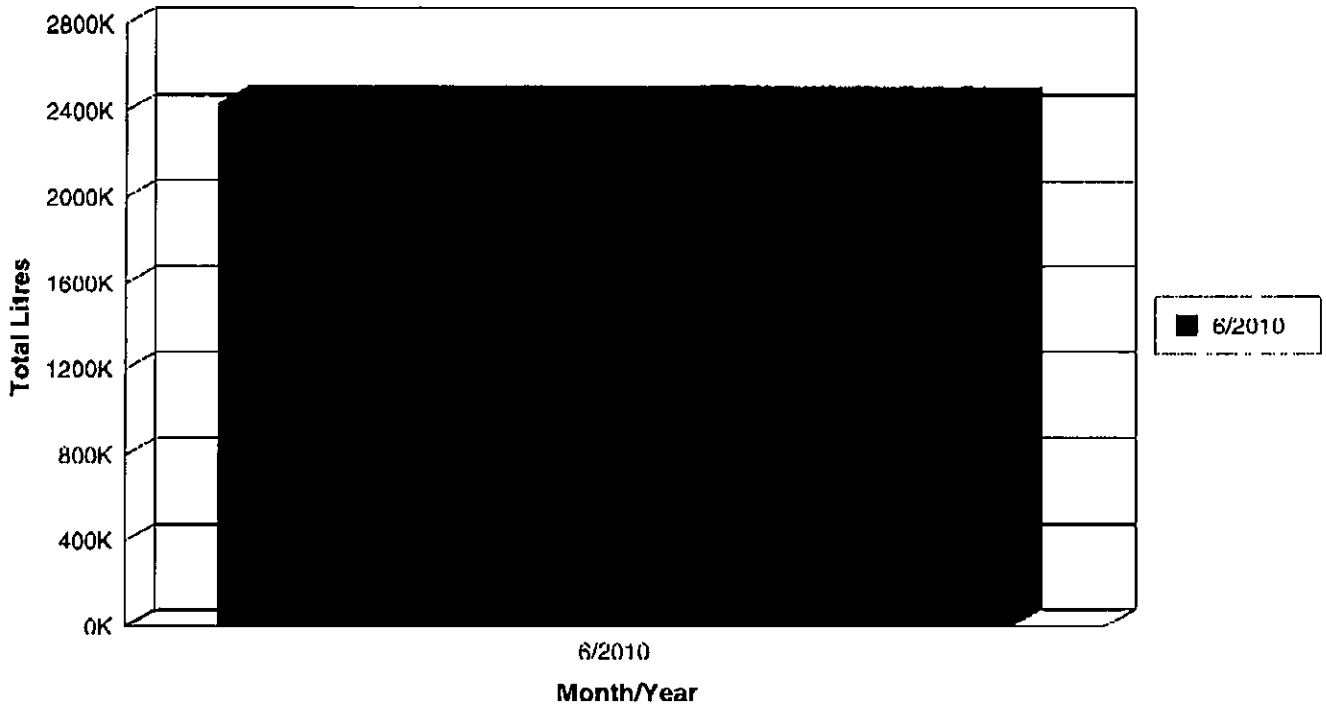
Month / Year	Litres Delivered
April 2010	2,639,421.30
Grand Total:	**2,639,421.30**

Delivery Summary By Month and Year



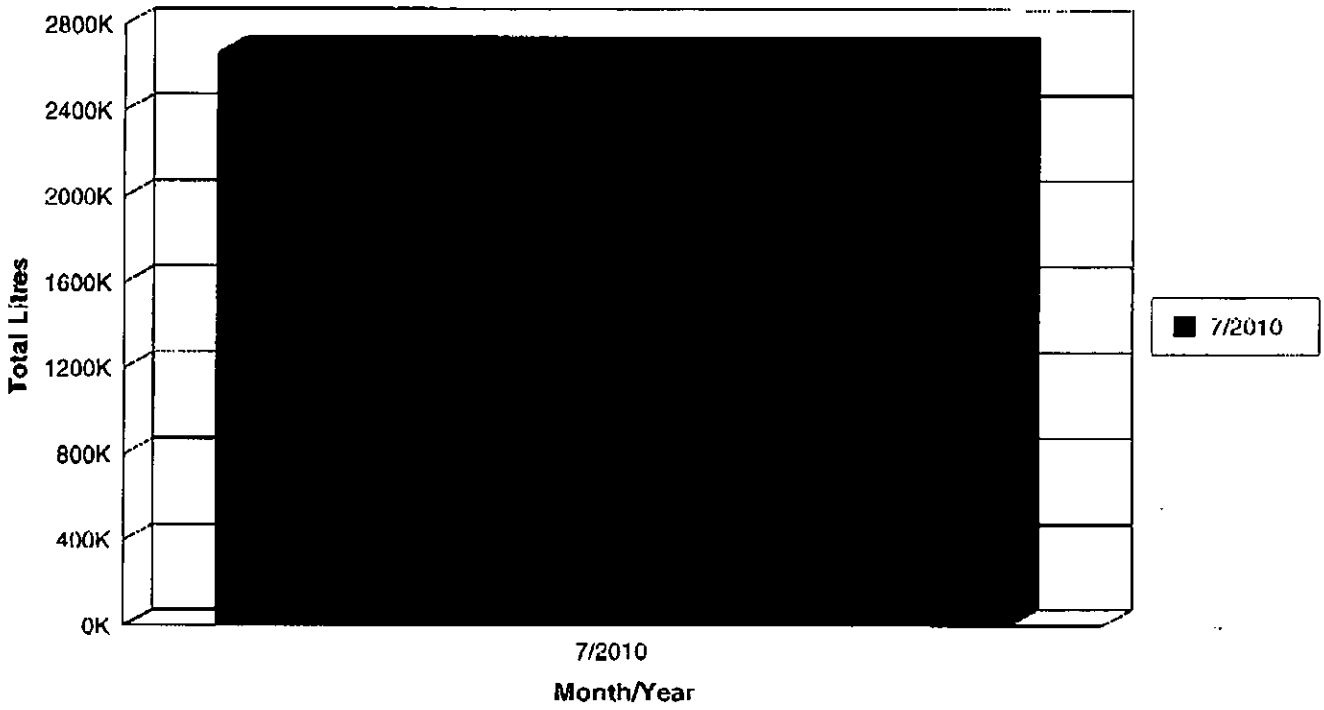
Month / Year	Litres Delivered
May 2010	2,726,523.00
Grand Total:	**2,726,523.00**

Delivery Summary By Month and Year



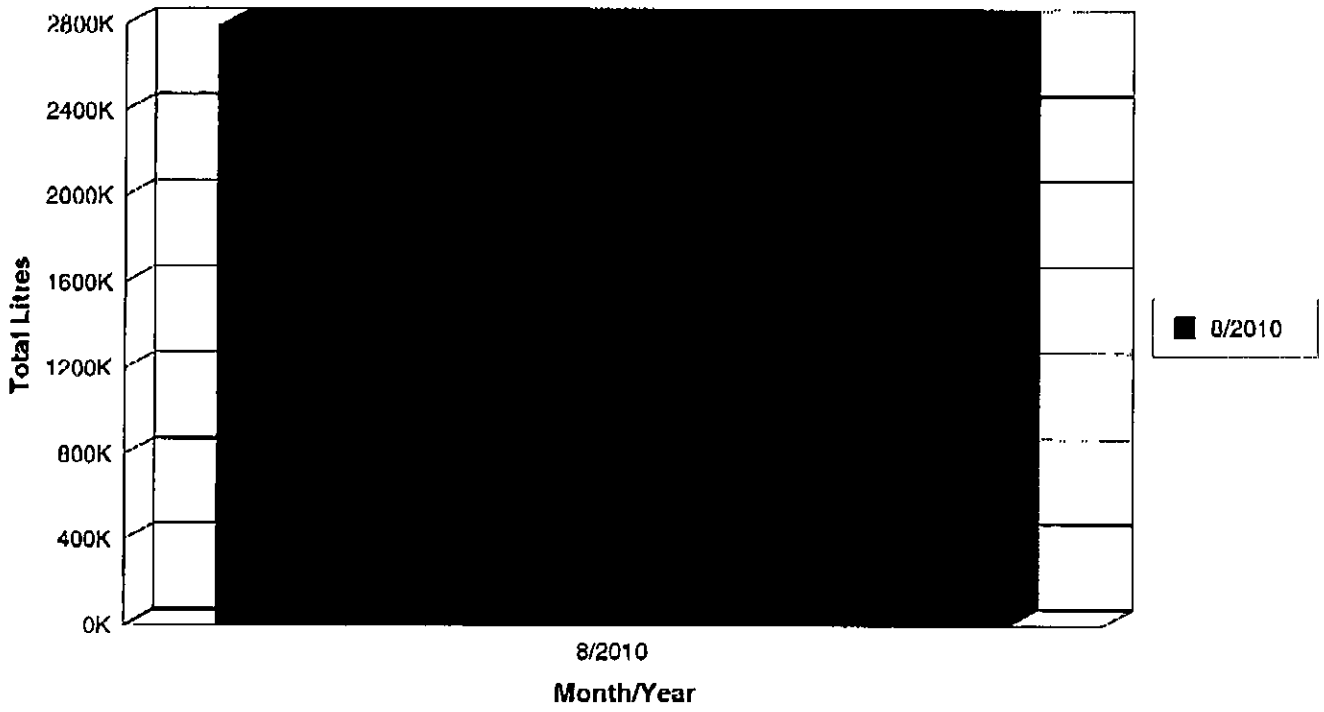
Month / Year	Litres Delivered
June 2010	2,435,095 50
Grand Total:	**2,435,095.50**

Delivery Summary By Month and Year



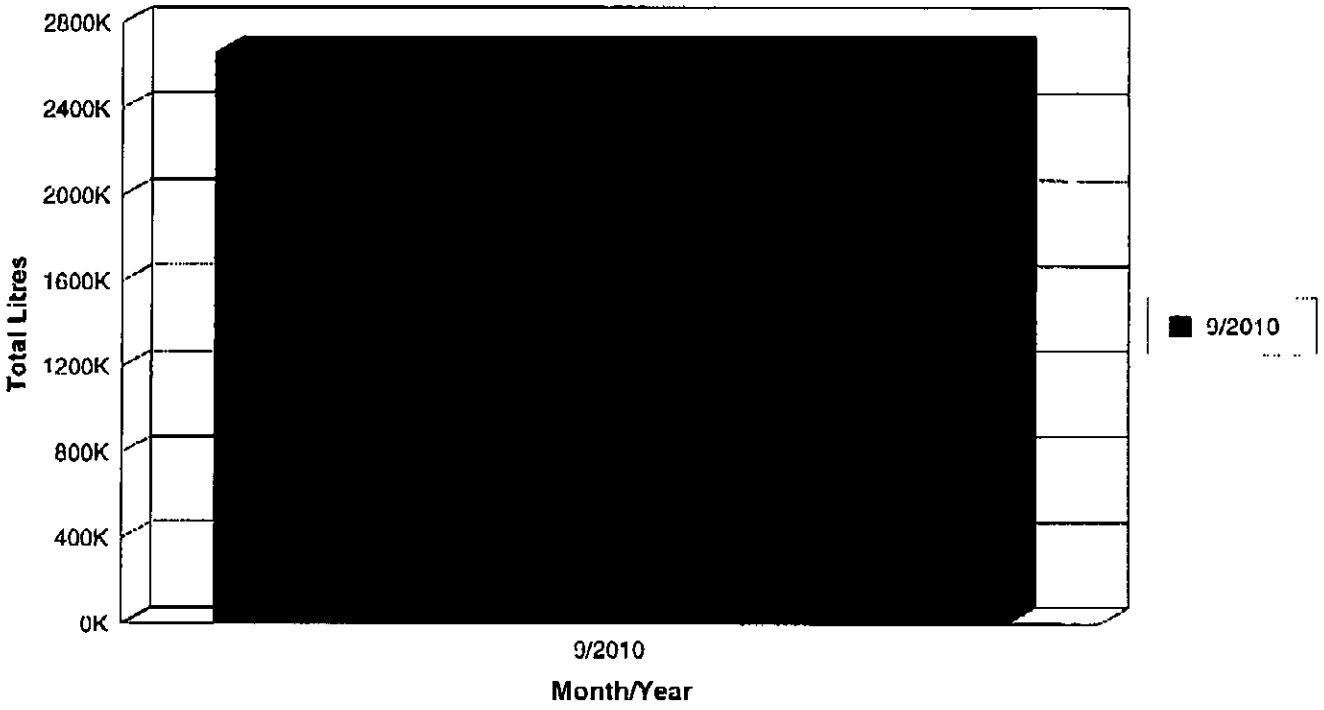
Month / Year	Litres Delivered
July 2010	2,672,774.80
Grand Total:	**2,672,774.80**

Delivery Summary By Month and Year



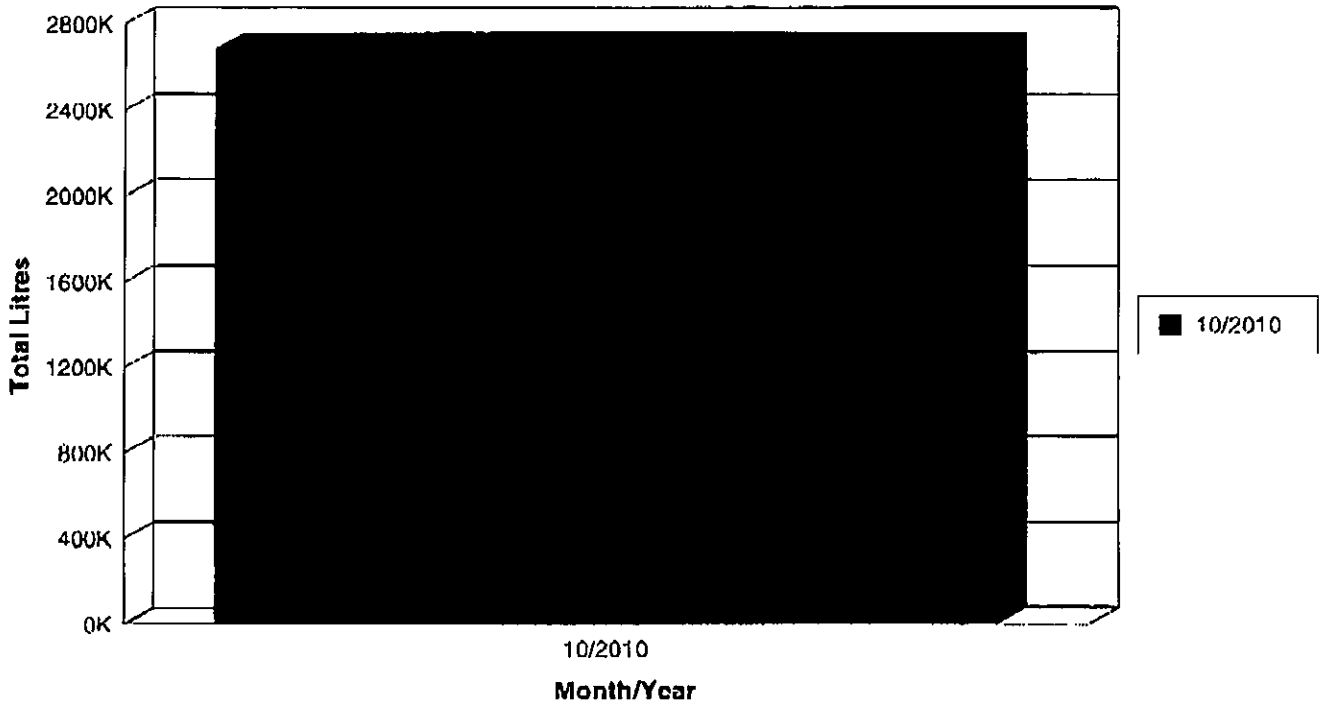
Month / Year	Litres Delivered
August 2010	2,791,146.80
Grand Total:	**2,791,146.80**

Delivery Summary By Month and Year



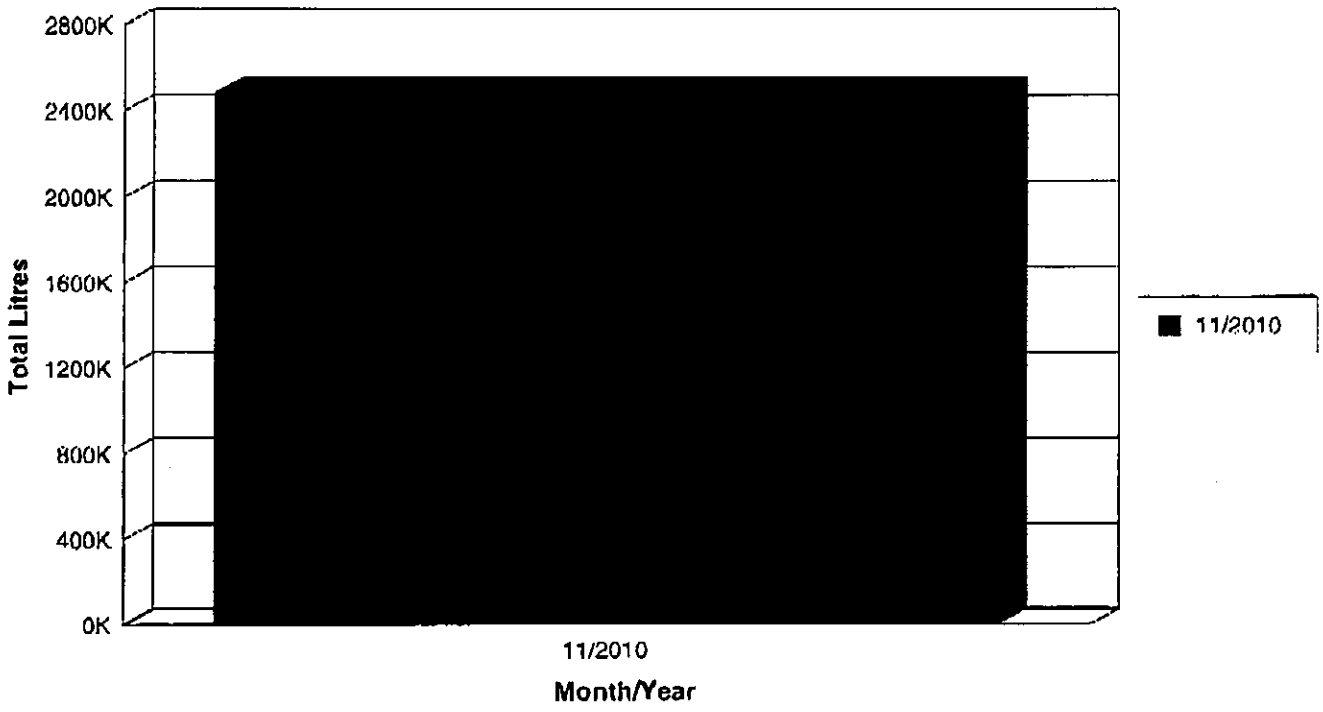
Month / Year	Litres Delivered
September 2010	2,664,207 60
Grand Total:	**2,664,207.60**

Delivery Summary By Month and Year



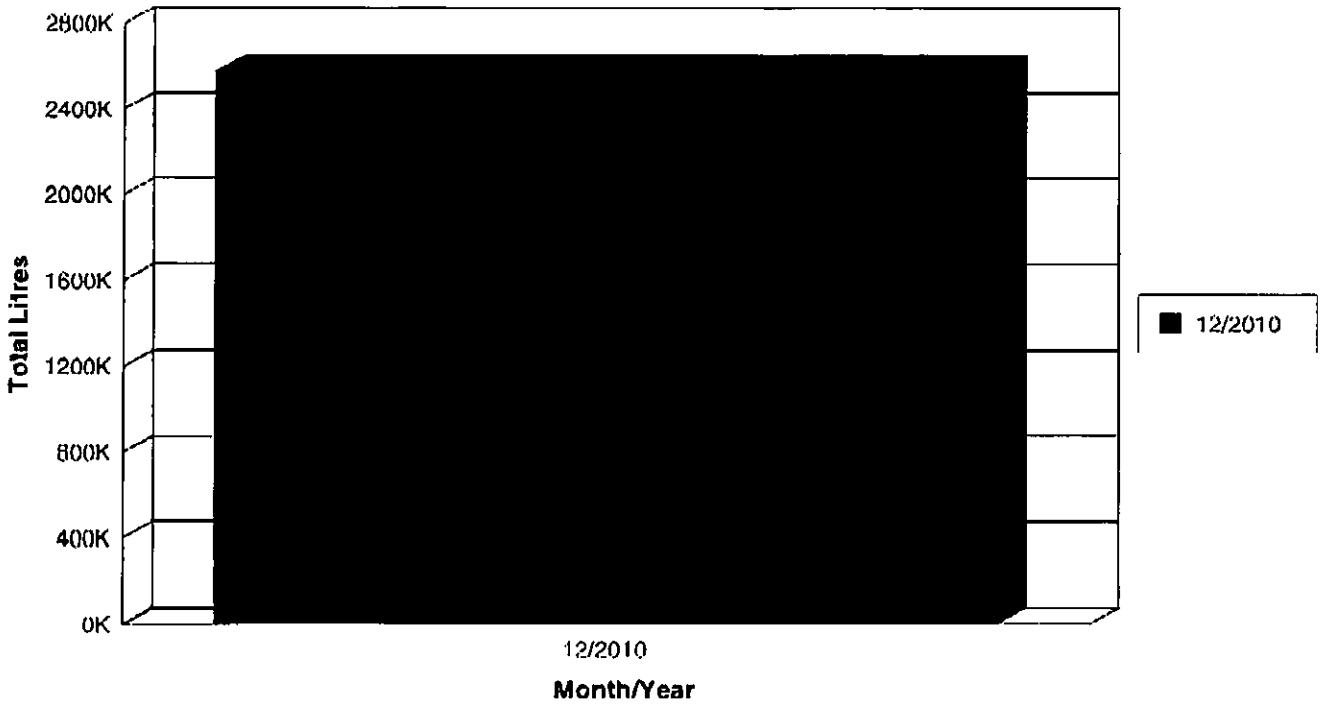
Month / Year	Litres Delivered
October 2010	2,685,804.60
Grand Total:	**2,685,804.60**

Delivery Summary By Month and Year



Month / Year	Litres Delivered
November 2010	2,486,634.30
Grand Total:	**2,486,634.30**

Delivery Summary By Month and Year



Month / Year	Litres Delivered
December 2010	2,577,599.20
Grand Total:	**2,577,599.20**