SITE INFORMATION

Report Type: CLOSURE REQUEST RP # 2- 915 **CRA Project # 073819**

General Site Information:	
Site:	Lovington Paddock Unit #59
Company:	Chevron Environmental Management Company
Well Location:	Section 1, T-17-S, R-36-E
Unit Letter:	Unit G
API #:	30-025-03826
Lease Number:	--
County:	Lea County
Surface Owner:	City of Lovington
Mineral Owner:	State of New Mexico
Directions:	From Lovington, travel southeast along Highway 18 approx. 6 miles to Lovington Paddock Chevron Lease road entrance. Turn right (southwest) onto lease road and travel approx 0.8 miles to lease road intersection. Turn left (south) and travel appox. 0.45 miles. Turn right (west) and travel approx. 100 feet to former well location.

Release Data:	
Spill GPS:	
Date Released:	6/4/2006
Source of Contamination:	Release during well plugging activities
Fluid Released:	40 barrels of produced water
Fluids Recovered:	10 barrels of produced water

Official Communication:	Contact #1	Contact #2
Name:	Matt Hudson	Tom Larson
Company:	CEMC - Upstream Business Unit	CRA
Address:	1400 Smith Street Room 07062	2135 S Loop 250 West
P.O. Box:		
City:	Houston Texas 77002	Midland Texas 79703
Phone Number:	713-372-9207	432-686-0086
Fax Number:		432-686-0186
Email:	mhudson@chevron.com	tlarson@craworld.com

Ranking Criteria:		
Depth to Groundwater:	**Ranking Score:**	**Site Data:**
<50 ft.	20	
50-99 ft.	10	**10**
>100 ft.	0	
Wellhead Protection:	**Ranking Score:**	**Site Data:**
Water Source <1,000 ft., Private <200 ft.	20	
Water Source >1,000 ft., Private >200 ft.	0	**0**
Surface Body of Water:	**Ranking Score:**	**Site Data:**
<200 ft.	20	
200 ft. - 1,000 ft.	10	
>1,000 ft.	0	**0**
Total Ranking Score:	**10**	

Acceptable Soil RRAL (mg/kg)			
Benzene	**Total BTEX**	**TPH**	**Chlorides**
10	50	1,000	500

1RP-915

pPAC0616540542

CONESTOGA-ROVERS
& ASSOCIATES

2135 S. Loop 250 West
Midland, Texas 79703
Telephone: (432) 686-0086 Fax: (432) 686-0186
http://www.craworld.com

August 16, 2011

Reference No. 073819 (2)

Mr. Geoffrey R. Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 N French Drive
Hobbs, New Mexico 88240

HOBBS OCD
AUG 17 2011
RECEIVED

Re: Closure Request Report
Lovington Paddock #59 – **API #3002503826**
Unit G, Section 1, T17S, R36E
Lea County, New Mexico

Dear Mr. Leking:

Conestoga-Rovers & Associates, Inc. (CRA), on behalf of Chevron Environmental Management Company (CEMC), is pleased to submit this closure request report for the subject Site.

PROJECT INFORMATION

The subject location is located approximately fifteen miles northwest of Hobbs, New Mexico (FIGURES 1 & 2). On June 4, 2006, an estimated 40 barrels of produced water (10 barrels recovered) was released from a pipe in a valve box. The approximate affected area was estimated at 200' x 200'.

There are numerous water wells in the vicinity of the Site. According to the Petroleum Recovery Research Center (PRRC) database and the New Mexico Office of the State Engineer (NMOSE), the average depth to groundwater from water wells in the immediate area of Lovington Paddock Unit (LPU) #59 depict an average of approximately 64 feet below ground surface (bgs). A FIGURE depicting the average depths to groundwater, distance to surface water bodies and any wellheads is provided in APPENDIX A.

A risk-based evaluation was performed in accordance to the New Mexico Oil Conservation Division's (NMOCD's) guidance document *Guidelines for Remediation of Leaks, Spills and Releases,* dated August 13, 1993. Section III of the guidance document provides three general characteristics (Depth to groundwater, Wellhead Protection Area, Distance to Nearest Surface Water Body) to "evaluate a Sites potential risk, the need for remedial action and if necessary, the level of cleanup required at the Site." Section IV provides ranking criteria for each Site-specific characteristic to determine their relative threat to public threat, fresh waters and the environment. The sum of each individual characteristic equals the total ranking score. The total ranking score determines the recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) in soil.

Based on average depth to groundwater (50 feet-100 feet below ground surface), Wellhead Protection (water source >1,000 feet & >200 feet private) and surface body of water was >1,000 feet from the Site, the RRALs were determined to be 10 mg/kg for benzene, 50 mg/kg for BTEX, 1,000 mg/kg for TPH and 500 mg/kg for chlorides.

SITE ASSESSMENT ACTIVITIES

In 2010, Chevron re-initiated remedial efforts at the Site. As a result, an environmental Site consultant (Tetra Tech) was contracted by Chevron to assess the soils prior to submittal of a closure plan. On two separate events (July 16 & August 18, 2010), a total of twelve soil samples were collected at different intervals (0-6" & 6"-1' bgs respectively) from the affected area. Sample analyses included Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and Chlorides. TPH and BTEX concentrations were below laboratory detection limits in all three sample locations at the 0-6" interval, thus were not analyzed at the deeper interval; Chlorides were analyzed in both intervals and results were compared to the Site-specific recommended remedial action levels (RRALs)-500 mg/kg. Results indicated concentrations above the RRALs in two of the six sample locations at 0-6" interval (AH-2 & AH-4) and in five of the six locations at the 6"-1' interval (T-2, T-3, T-4, T-5 & T-6).

In May 2011, five soil borings in the affected area were installed to a depth of 40 feet bgs; Soil samples at five foot intervals were collected and sent to ALS Laboratories of Houston, Texas for chloride analyses using EPA Method 300. The top 4 soil samples (5 to 20 foot) from each boring were analyzed while the bottom four were placed on hold pending analyses. The soil borings were plugged with bentonite. The soil data from July 2010, August 2010 and May 2011 assessments are provided in FIGURE 3. The May 2011 boring program demonstrated chloride concentrations in four of the five borings (LPU #59 SB-1, SB-3, SB-4, SB-5) below the RRAL from all twenty samples collected between 5 and 20 feet bgs. Chloride concentrations from the fifth soil boring (SB-2) demonstrated elevated chloride concentrations (702 – 1,140 mg/kg) between the 15 feet to 35 feet intervals and chloride concentration (622 mg/kg) slightly above the RRAL at the deepest interval analyzed (39-40 foot interval).

PROPOSED SITE CLOSURE ACTIVITIES

Based on soil data collected from the July and August 2010 & May 2011 assessment activities, the following restoration tasks are proposed for this former well location:

- Over-excavate well pad area to a total depth of 3 feet below ground surface (bgs) as determined by assessment activities. Excavation activities will be performed without compromising existing surface structures (i.e. oilwell, pumpjack, existing flowlines, electrical lines, etc); and
- Transport and dispose of excavated soils at Sundance facility as non-hazardous oilfield (exempt) waste.
- Backfill excavation with clean backfill material from 3 feet to 1 foot;
- Lay a 20 mil poly liner in excavated area, cover and compact area with heavy equipment and clean backfill and topsoil material;

- Rip and seed 'constructed affected' locations and plant seed with approved mixture and using procedures as designated by property owner; and
- Submit a final C-141 to the NMOCD detailing completion of work activities.

CRA will provide the New Mexico Oil Conservation Division (NMOCD) a 48 hour notification prior to commencing field activities. If you have any questions or comments with regards to this closure request, please do not hesitate to contact our Midland office at (432) 686-0086.

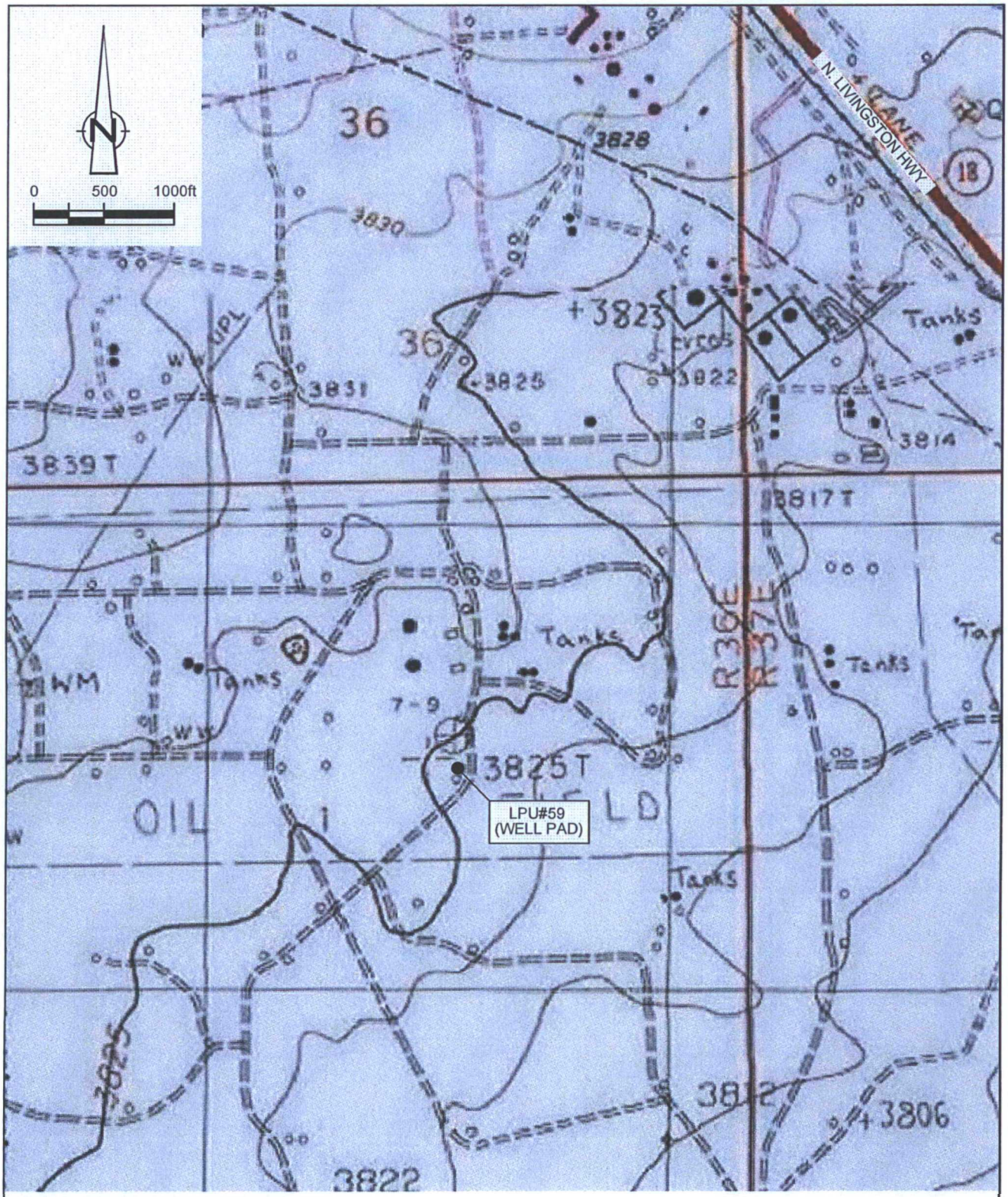
Sincerely,
CONESTOGA-ROVERS & ASSOCIATES, INC.

James Ornelas
Project Manager

Thomas C. Larson, P.G.
Sr. Geologist/Operations Manager

Enclosures

Cc: Matt Hudson, CEMC
Allen Bennett, AECOM

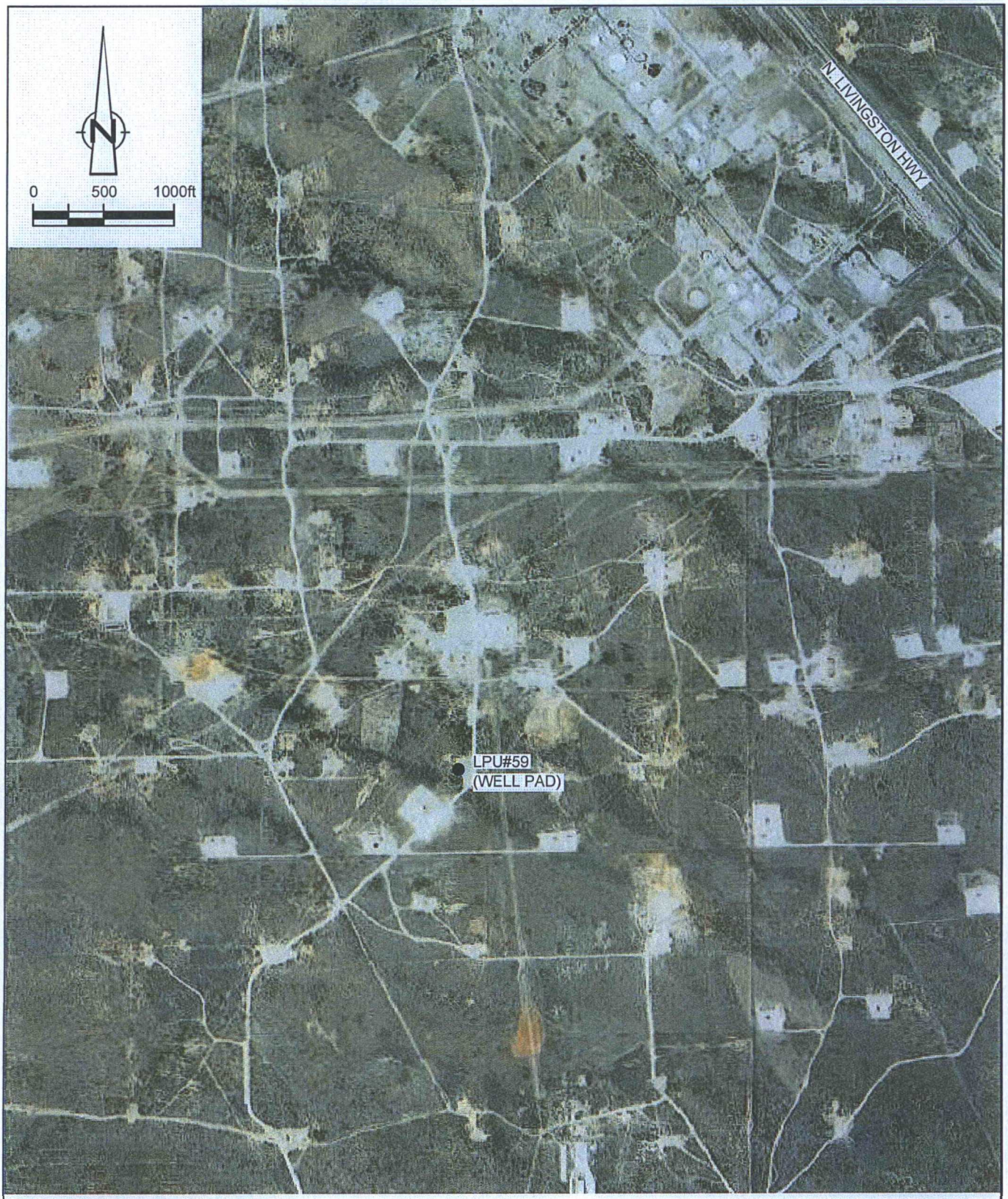


SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP
32° 51' 56.8" N
103° 18' 21.8" W

figure 1

SITE VICINITY MAP
LPU #59 PIT LOCATION
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

073819-01(000)GN-BR001 JUL 19/2011



SOURCE: ESRI 1999 AERIAL PHOTOGRAPH
32° 51' 56.8" N
103° 18' 21.8" W

figure 2

SITE LOCATION MAP
LPU #59 PIT LOCATION
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

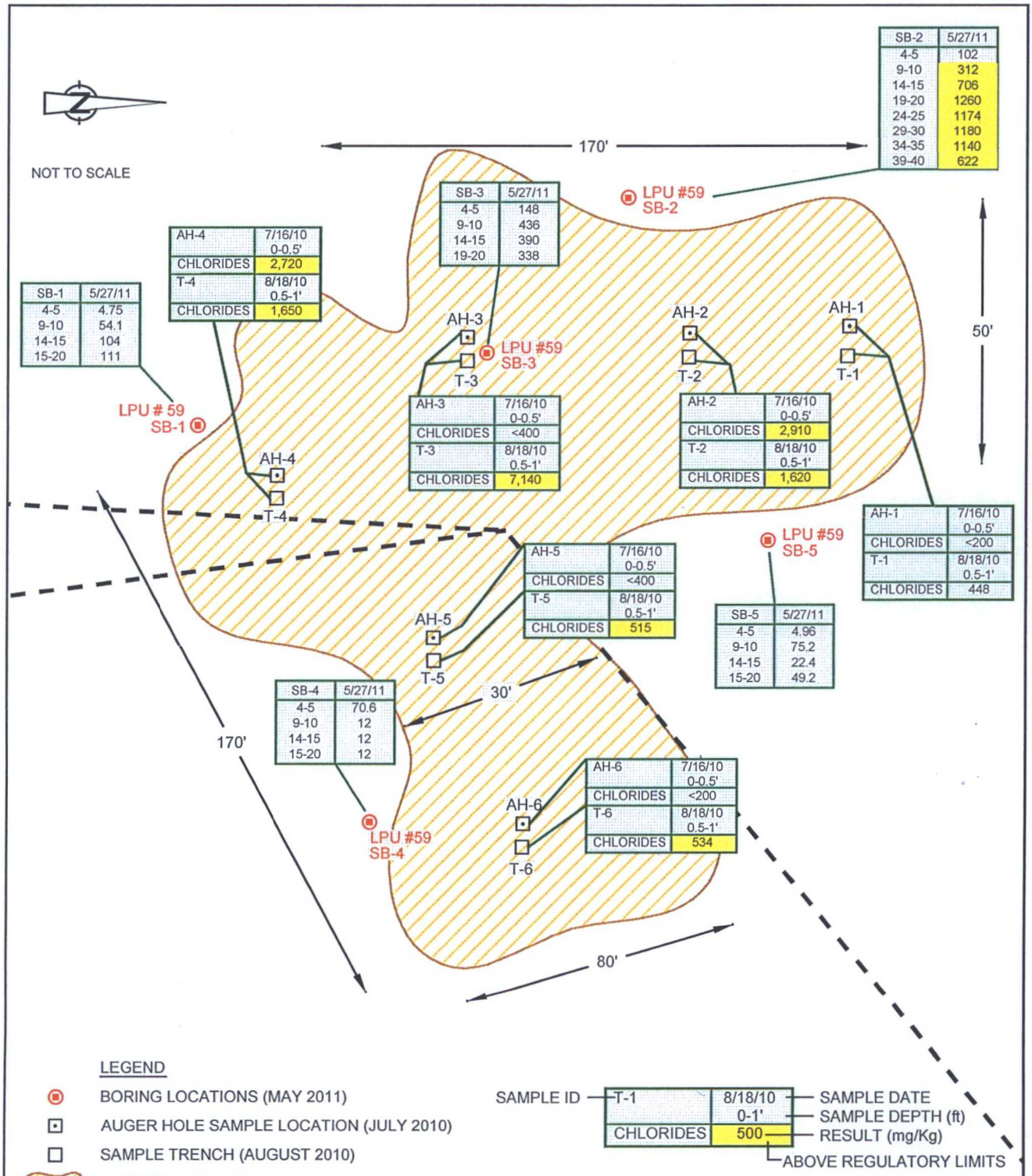


figure 3

SOIL CHLORIDE RESULTS MAP
LPU #59
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

073819-01(000)GN-BR003 JUL 14/2011

TABLE I
SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
JULY AUGUST 2010
LOVINGTON PADDOCK UNIT#59
LEA COUNTY, NEW MEXICO

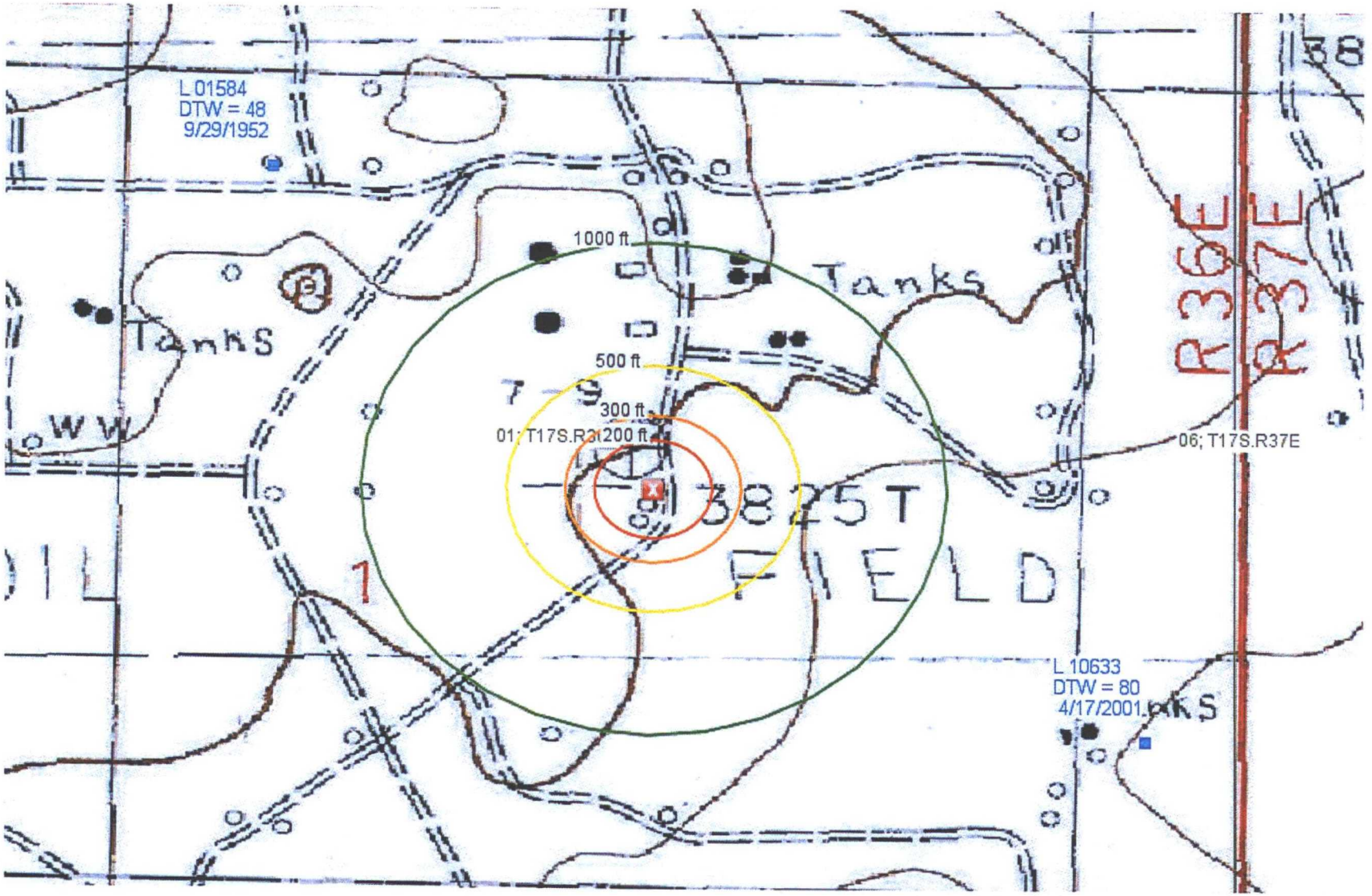
Sample ID	Depth (feet)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (8015B Modified)			Chlorides (mg/kg)
								DRO (mg/kg)	GRO (mg/kg)	(GRO/DRO (mg/kg)	
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)											
			10 mg/kg	--- mg/kg	--- mg/kg	--- mg/kg	50 mg/kg	--- mg/kg	--- mg/kg	1000 mg/kg	500 mg/kg
AH-1	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	<200
T-1	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	448
AH-2	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	**2,910**
T-2	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**1,620**
AH-3	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	<400
T-3	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**7,140**
AH-4	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	**2,720**
T-4	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**1,650**
AH-5	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	<400
T-5	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**515**
AH-6	0-0.5'	7/16/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	<200
T-6	0.5'-1'	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**534**

Notes:

1. BTEX analyses by EPA Method 8021B.
2. TPH analyzed by EPA Method 8015B Mod.
3. Chlorides analyzed by SM 4500-Cl B
4. NA - Not Analyzed
5. Bold concentrations above lab reporting limits.
6. Highlighted cells indicated concentrations above regulatory limits

TABLE II
SOIL ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON PADDOCK UNIT#59
LEA COUNTY, NEW MEXICO
NMOCD Recommended Remediation Action Levels (Total Ranking Score = 10)

Sample ID	Depth (feet)	Sample Date	Chlorides (mg/kg)
NMOCD RRAL SCORE =10			500 mg/kg
SB-1	4-5	5/26/11	4.75
	9-10	5/26/11	54.1
	14-15	5/26/11	104
	19-20	5/26/11	111
SB-2	4-5	5/26/11	102
	9-10	5/26/11	312
	14-15	5/26/11	**706**
	19-20	5/26/11	**1,260**
	24-25	5/26/11	**1,174**
	29-30	5/26/11	**1,180**
	34-35	5/26/11	**1,140**
	39-40	5/26/11	**622**
SB-3	4-5	5/26/11	148
	9-10	5/26/11	436
	14-15	5/26/11	390
	19-20	5/26/11	338
SB-4	4-5	5/26/11	70.6
	9-10	5/26/11	12.0
	14-15	5/26/11	12.0
	19-20	5/26/11	12.0
SB-5	4-5	5/26/11	4.96
	9-10	5/26/11	75.2
	14-15	5/26/11	22.4
	19-20	5/26/11	49.2



Petroleum Recovery Research Center	LPU #59	Figure:
	Chevron Environmental Managment Company	Jul 12, 2011

ALS Environmental

20-Jun-2011

James Ornelas
Conestoga-Rovers & Associates
2135 S Loop 250 West
Midland, TX 79703

Tel: (412) 686-0086
Fax: (432) 686-0186

Re: Lovington Paddock #59 Work Order: **1106023**

Dear James,

ALS Environmental received 40 samples on 01-Jun-2011 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 41.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Patricia L. Lynch

Electronically approved by: Makenzie L. Henderson

Patricia L. Lynch
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac
Certificate No: T104704231-09A-TX

ALS Environmental

Date: 20-Jun-11

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Work Order: 1106023

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1106023-01	LPU#59 SB-1 4'-5'	Soil		5/26/2011 15:10	6/1/2011 09:00	☐
1106023-02	LBU#59 SB-1 9'-10'	Soil		5/26/2011 15:12	6/1/2011 09:00	☐
1106023-03	LPU#59 SB-1 14'-15'	Soil		5/26/2011 15:14	6/1/2011 09:00	☐
1106023-04	LPU#59 SB-1 19'-20'	Soil		5/26/2011 15:16	6/1/2011 09:00	☐
1106023-05	LPU#59 SB-1 24'-25'	Soil		5/26/2011 15:18	6/1/2011 09:00	☐
1106023-06	LPU#59 SB-1 29'-30'	Soil		5/26/2011 15:20	6/1/2011 09:00	☐
1106023-07	LPU#59 SB-1 34'-35'	Soil		5/26/2011 15:22	6/1/2011 09:00	☐
1106023-08	LPU#59 SB-1 39'-40'	Soil		5/26/2011 15:24	6/1/2011 09:00	☐
1106023-09	LPU#59 SB-2 4'-5'	Soil		5/26/2011 15:34	6/1/2011 09:00	☐
1106023-10	LPU#59 SB-2 9'-10'	Soil		5/26/2011 15:36	6/1/2011 09:00	☐
1106023-11	LPU#59 SB-2 14'-15'	Soil		5/26/2011 15:38	6/1/2011 09:00	☐
1106023-12	LPU#59 SB-2 19'-20'	Soil		5/26/2011 15:40	6/1/2011 09:00	☐
1106023-13	LPU#59 SB-2 24'-25'	Soil		5/26/2011 15:42	6/1/2011 09:00	☐
1106023-14	LPU#59 SB-2 29'-30'	Soil		5/26/2011 15:44	6/1/2011 09:00	☐
1106023-15	LPU#59 SB-2 34'-35'	Soil		5/26/2011 15:46	6/1/2011 09:00	☐
1106023-16	LPU#59 SB-2 39'-40'	Soil		5/26/2011 15:48	6/1/2011 09:00	☐
1106023-17	LPU#59 SB-3 4'-5'	Soil		5/26/2011 16:00	6/1/2011 09:00	☐
1106023-18	LPU#59 SB-3 9'-10'	Soil		5/26/2011 16:02	6/1/2011 09:00	☐
1106023-19	LPU#59 SB-3 14'-15'	Soil		5/26/2011 16:04	6/1/2011 09:00	☐
1106023-20	LPU#59 SB-3 19'-20'	Soil		5/26/2011 16:06	6/1/2011 09:00	☐
1106023-21	LPU#59 SB-3 24'-25'	Soil		5/26/2011 16:08	6/1/2011 09:00	☐
1106023-22	LPU#59 SB-3 29'-30'	Soil		5/26/2011 16:10	6/1/2011 09:00	☐
1106023-23	LPU#59 SB-3 34'-35'	Soil		5/26/2011 16:12	6/1/2011 09:00	☐
1106023-24	LPU#59 SB-3 39'-40'	Soil		5/26/2011 16:14	6/1/2011 09:00	☐
1106023-25	LPU#59 SB-4 4'-5'	Soil		5/26/2011 16:50	6/1/2011 09:00	☐
1106023-26	LPU#59 SB-4 9'-10'	Soil		5/26/2011 16:52	6/1/2011 09:00	☐
1106023-27	LPU#59 SB-4 14'-15'	Soil		5/26/2011 16:54	6/1/2011 09:00	☐
1106023-28	LPU#59 SB-4 19'-20'	Soil		5/26/2011 16:56	6/1/2011 09:00	☐
1106023-29	LPU#59 SB-4 24'-25'	Soil		5/26/2011 16:58	6/1/2011 09:00	☐
1106023-30	LPU#59 SB-4 29'-30'	Soil		5/26/2011 17:00	6/1/2011 09:00	☐
1106023-31	LPU#59 SB-4 34'-35'	Soil		5/26/2011 17:02	6/1/2011 09:00	☐
1106023-32	LPU#59 SB-4 39'-40'	Soil		5/26/2011 17:04	6/1/2011 09:00	☐
1106023-33	LPU#59 SB-5 4'-5'	Soil		5/26/2011 17:20	6/1/2011 09:00	☐
1106023-34	LPU#59 SB-5 9'-10'	Soil		5/26/2011 17:22	6/1/2011 09:00	☐
1106023-35	LPU#59 SB-5 14'-15'	Soil		5/26/2011 17:24	6/1/2011 09:00	☐
1106023-36	LPU#59 SB-5 19'-20'	Soil		5/26/2011 17:26	6/1/2011 09:00	☐
1106023-37	LPU#59 SB-5 24'-25'	Soil		5/26/2011 17:28	6/1/2011 09:00	☐
1106023-38	LPU#59 SB-5 29'-30'	Soil		5/26/2011 17:30	6/1/2011 09:00	☐
1106023-39	LPU#59 SB-5 34'-35'	Soil		5/26/2011 17:32	6/1/2011 09:00	☐

Client:	Conestoga-Rovers & Associates
Project:	Lovington Paddock #59
Work Order:	1106023

Case Narrative

Batch 53269 Chloride: MS/MSD is for an unrelated sample.

All samples on hold for SB-2 were assigned per James Ornelas of CRA.

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Work Order: **1106023**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1106023-40	LPU#59 SB-5 39'-40'	Soil		5/26/2011 17:34	6/1/2011 09:00	☐

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-1 4'-5'
Collection Date: 5/26/2011 03:10 PM

Work Order: 1106023
Lab ID: 1106023-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**4.75**	J	**4.92**	**mg/Kg**	1	6/7/2011 10:54 PM
Surr: Selenate (surr)	*90.4*		*85-115*	*%REC*	1	6/7/2011 10:54 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**5.64**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LBU#59 SB-1 9'-10'
Collection Date: 5/26/2011 03:12 PM

Work Order: 1106023
Lab ID: 1106023-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**54.1**		**5.00**	**mg/Kg**	1	6/8/2011 11:12 AM
Surr: Selenate (surr)	*91.9*		*85-115*	*%REC*	1	6/8/2011 11:12 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.75**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-1 14'-15'
Collection Date: 5/26/2011 03:14 PM

Work Order: 1106023
Lab ID: 1106023-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**104**		**4.94**	**mg/Kg**	1	6/7/2011 11:52 PM
Surr: Selenate (surr)	*92.8*		*85-115*	*%REC*	1	6/7/2011 11:52 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.53**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-1 19'-20'	**Lab ID:**	1106023-04
Collection Date:	5/26/2011 03:16 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**111**		**4.99**	**mg/Kg**	1	6/8/2011 12:07 AM
Surr: Selenate (surr)	*88.9*		*85-115*	*%REC*	1	6/8/2011 12:07 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.28**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 4'-5'
Collection Date: 5/26/2011 03:34 PM

Work Order: 1106023
Lab ID: 1106023-09
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**102**		**4.95**	**mg/Kg**	1	6/8/2011 12:21 AM
Surr: Selenate (surr)	*91.6*		*85-115*	*%REC*	1	6/8/2011 12:21 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.06**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 9'-10'
Collection Date: 5/26/2011 03:36 PM

Work Order: 1106023
Lab ID: 1106023-10
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**312**		**4.97**	**mg/Kg**	1	6/8/2011 01:05 AM
Surr: Selenate (surr)	*89.5*		*85-115*	*%REC*	1	6/8/2011 01:05 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.22**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 14'-15'
Collection Date: 5/26/2011 03:38 PM

Work Order: 1106023
Lab ID: 1106023-11
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**706**		**4.96**	**mg/Kg**	1	6/8/2011 01:20 AM
Surr: Selenate (surr)	*92.1*		*85-115*	*%REC*	1	6/8/2011 01:20 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.86**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 19'-20'
Collection Date: 5/26/2011 03:40 PM

Work Order: 1106023
Lab ID: 1106023-12
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**1,260**		**24.9**	**mg/Kg**	5	6/8/2011 12:14 PM
Surr: Selenate (surr)	*97.3*		*85-115*	*%REC*	5	6/8/2011 12:14 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.92**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 24'-25'
Collection Date: 5/26/2011 03:42 PM

Work Order: 1106023
Lab ID: 1106023-13
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/16/2011**	Analyst: **TDW**
Chloride	**1,170**		**24.7**	**mg/Kg**	5	6/17/2011 11:28 AM
Surr: Selenate (surr)	*102*		*85-115*	*%REC*	5	6/17/2011 11:28 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.05**		**0.0100**	**wt%**	1	6/16/2011 10:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 29'-30'
Collection Date: 5/26/2011 03:44 PM

Work Order: 1106023
Lab ID: 1106023-14
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/16/2011**	Analyst: **TDW**
Chloride	**1,180**		**24.9**	**mg/Kg**	5	6/17/2011 11:50 AM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	5	6/17/2011 11:50 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.04**		**0.0100**	**wt%**	1	6/16/2011 10:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-2 34'-35'	**Lab ID:**	1106023-15
Collection Date:	5/26/2011 03:46 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/16/2011**	Analyst: **TDW**
Chloride	**1,140**		**24.8**	**mg/Kg**	5	6/17/2011 12:11 PM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	5	6/17/2011 12:11 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.74**		**0.0100**	**wt%**	1	6/16/2011 10:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-2 39'-40'
Collection Date: 5/26/2011 03:48 PM

Work Order: 1106023
Lab ID: 1106023-16
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/16/2011**	Analyst: **TDW**
Chloride	**622**		**4.98**	**mg/Kg**	1	6/16/2011 07:55 PM
Surr: Selenate (surr)	*104*		*85-115*	*%REC*	1	6/16/2011 07:55 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**3.92**		**0.0100**	**wt%**	1	6/16/2011 10:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-3 4'-5'
Collection Date: 5/26/2011 04:00 PM

Work Order: 1106023
Lab ID: 1106023-17
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**148**		**4.94**	**mg/Kg**	1	6/8/2011 01:49 AM
Surr: Selenate (surr)	*93.1*		*85-115*	*%REC*	1	6/8/2011 01:49 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**2.52**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-3 9'-10'
Collection Date: 5/26/2011 04:02 PM

Work Order: 1106023
Lab ID: 1106023-18
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**436**		**4.98**	**mg/Kg**	1	6/8/2011 02:03 AM
Surr: Selenate (surr)	*91.7*		*85-115*	*%REC*	1	6/8/2011 02:03 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.73**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-3 14'-15'	**Lab ID:**	1106023-19
Collection Date:	5/26/2011 04:04 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**390**		**4.95**	**mg/Kg**	1	6/8/2011 11:45 AM
Surr: Selenate (surr)	*89.8*		*85-115*	*%REC*	1	6/8/2011 11:45 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.11**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-3 19'-20'
Collection Date: 5/26/2011 04:06 PM

Work Order: 1106023
Lab ID: 1106023-20
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**338**		**4.99**	**mg/Kg**	1	6/8/2011 02:32 AM
Surr: Selenate (surr)	*94.0*		*85-115*	*%REC*	1	6/8/2011 02:32 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.86**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-4 4'-5'
Collection Date: 5/26/2011 04:50 PM

Work Order: 1106023
Lab ID: 1106023-25
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**70.6**		**4.90**	**mg/Kg**	1	6/8/2011 02:47 AM
Surr: Selenate (surr)	*93.8*		*85-115*	*%REC*	1	6/8/2011 02:47 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.85**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-4 9'-10'	**Lab ID:**	1106023-26
Collection Date:	5/26/2011 04:52 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**12.0**		**4.99**	**mg/Kg**	1	6/8/2011 03:02 AM
Surr: Selenate (surr)	*92.6*		*85-115*	*%REC*	1	6/8/2011 03:02 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.07**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-4 14'-15'
Collection Date: 5/26/2011 04:54 PM

Work Order: 1106023
Lab ID: 1106023-27
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**12.0**		**4.93**	**mg/Kg**	1	6/8/2011 03:16 AM
Surr: Selenate (surr)	*90.6*		*85-115*	*%REC*	1	6/8/2011 03:16 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.88**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-4 19'-20'	**Lab ID:**	1106023-28
Collection Date:	5/26/2011 04:56 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**12.0**		**4.94**	**mg/Kg**	1	6/8/2011 04:00 AM
Surr: Selenate (surr)	*90.7*		*85-115*	*%REC*	1	6/8/2011 04:00 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.98**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-5 4'-5'
Collection Date: 5/26/2011 05:20 PM

Work Order: 1106023
Lab ID: 1106023-33
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**4.96**		**4.91**	**mg/Kg**	1	6/8/2011 04:14 AM
Surr: Selenate (surr)	*87.8*		*85-115*	*%REC*	1	6/8/2011 04:14 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**3.05**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington Paddock #59	**Work Order:**	1106023
Sample ID:	LPU#59 SB-5 9'-10'	**Lab ID:**	1106023-34
Collection Date:	5/26/2011 05:22 PM	**Matrix:**	SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**75.2**		**4.98**	**mg/Kg**	1	6/8/2011 04:29 AM
Surr: Selenate (surr)	*89.6*		*85-115*	*%REC*	1	6/8/2011 04:29 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.33**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-5 14'-15'
Collection Date: 5/26/2011 05:24 PM

Work Order: 1106023
Lab ID: 1106023-35
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**22.4**		**4.99**	**mg/Kg**	1	6/8/2011 04:43 AM
Surr: Selenate (surr)	*92.9*		*85-115*	*%REC*	1	6/8/2011 04:43 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.93**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *20-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
Sample ID: LPU#59 SB-5 19'-20'
Collection Date: 5/26/2011 05:26 PM

Work Order: 1106023
Lab ID: 1106023-36
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ANIONS - EPA 300.0 (1993)			**E300**		Prep Date: **6/7/2011**	Analyst: **TDW**
Chloride	**49.2**		**4.99**	**mg/Kg**	1	6/8/2011 04:58 AM
Surr: Selenate (surr)	*92.3*		*85-115*	*%REC*	1	6/8/2011 04:58 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.65**		**0.0100**	**wt%**	1	6/2/2011 11:30 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: 20-Jun-11

Client: Conestoga-Rovers & Associates

Work Order: 1106023

Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **52990** Instrument ID **ICS2100** Method: **E300**

MBLK Sample ID: **WBLKS3-060711-52990** Units: **mg/Kg** Analysis Date: **6/7/2011 10:11 PM**

Client ID: Run ID: **ICS2100_110607B** SeqNo: **2416269** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	5.0								
Surr: Selenate (surr)	*49.01*	1.0	*50*	0	*98*	*85-115*	0			

LCS Sample ID: **WLCSS3-060711-52990** Units: **mg/Kg** Analysis Date: **6/7/2011 10:25 PM**

Client ID: Run ID: **ICS2100_110607B** SeqNo: **2416270** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	200.1	5.0	200	0	100	90-110	0			
Surr: Selenate (surr)	*48.79*	1.0	*50*	0	*97.6*	*85-115*	0			

LCSD Sample ID: **WLCSDS3-060711-52990** Units: **mg/Kg** Analysis Date: **6/7/2011 10:40 PM**

Client ID: Run ID: **ICS2100_110607B** SeqNo: **2416271** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	207.7	5.0	200	0	104	90-110	200.1	3.72	20	
Surr: Selenate (surr)	*46.98*	1.0	*50*	0	*94*	*85-115*	48.79	*3.78*	*20*	

MS Sample ID: **1106023-01AMS** Units: **mg/Kg** Analysis Date: **6/7/2011 11:09 PM**

Client ID: **LPU#59 SB-1 4'-5'** Run ID: **ICS2100_110607B** SeqNo: **2416273** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	94.91	4.9	98.43	4.754	91.6	75-125	0			
Surr: Selenate (surr)	*43.06*	0.98	*49.21*	0	*87.5*	*80-120*	0			

MS Sample ID: **1106023-36AMS** Units: **mg/Kg** Analysis Date: **6/8/2011 05:12 AM**

Client ID: **LPU#59 SB-5 19'-20'** Run ID: **ICS2100_110607B** SeqNo: **2416298** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	142.3	5.0	99.8	49.22	93.2	75-125	0			
Surr: Selenate (surr)	*43.22*	1.0	*49.9*	0	*86.6*	*80-120*	0			

MSD Sample ID: **1106023-01AMSD** Units: **mg/Kg** Analysis Date: **6/7/2011 11:23 PM**

Client ID: **LPU#59 SB-1 4'-5'** Run ID: **ICS2100_110607B** SeqNo: **2416274** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	107.6	4.9	98.43	4.754	104	75-125	94.91	12.5	20	
Surr: Selenate (surr)	*41.95*	0.98	*49.21*	0	*85.2*	*80-120*	43.06	*2.62*	*20*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1106023
Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **52990** Instrument ID **ICS2100** Method: **E300**

MSD Sample ID: **1106023-36AMSD** Units: **mg/Kg** Analysis Date: **6/8/2011 05:27 AM**

Client ID: **LPU#59 SB-5 19'-20'** Run ID: **ICS2100_110607B** SeqNo: **2416299** Prep Date: **6/7/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	165.5	5.0	99.8	49.22	116	75-125	142.3	15.1	20	
Surr: Selenate (surr)	*43.57*	1.0	*49.9*	0	*87.3*	*80-120*	43.22	*0.805*	*20*	

The following samples were analyzed in this batch:

1106023-01A	1106023-02A	1106023-03A
1106023-04A	1106023-09A	1106023-10A
1106023-11A	1106023-12A	1106023-17A
1106023-18A	1106023-19A	1106023-20A
1106023-25A	1106023-26A	1106023-27A
1106023-28A	1106023-33A	1106023-34A
1106023-35A	1106023-36A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1106023
Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **53269** Instrument ID **ICS3K2** Method: **E300**

MBLK Sample ID: **WBLKS2-061611-53269** Units: **mg/Kg** Analysis Date: **6/16/2011 05:01 PM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427284** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	5.0								
Surr: Selenate (surr)	*49.87*	1.0	*50*	0	*99.7*	*85-115*	0			

LCS Sample ID: **WLCSS2-061611-53269** Units: **mg/Kg** Analysis Date: **6/16/2011 05:23 PM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427285** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	208.8	5.0	200	0	104	90-110	0			
Surr: Selenate (surr)	*56.64*	1.0	*50*	0	*113*	*85-115*	0			

LCSD Sample ID: **WLCSDS2-061611-53269** Units: **mg/Kg** Analysis Date: **6/16/2011 05:45 PM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427288** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	208.8	5.0	200	0	104	90-110	208.8	0.0287	20	
Surr: Selenate (surr)	*57.01*	1.0	*50*	0	*114*	*85-115*	56.64	*0.651*	*20*	

MS Sample ID: **1106026-39AMS** Units: **mg/Kg** Analysis Date: **6/16/2011 11:32 PM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427328** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1888	5.0	99.21	1819	69.5	75-125	0			SEO
Surr: Selenate (surr)	*55.38*	0.99	*49.6*	0	*112*	*80-120*	0			

MS Sample ID: **1106026-40AMS** Units: **mg/Kg** Analysis Date: **6/17/2011 12:37 AM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427332** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1572	4.9	98.23	1500	73.8	75-125	0			SEO
Surr: Selenate (surr)	*53.13*	0.98	*49.12*	0	*108*	*80-120*	0			

MSD Sample ID: **1106026-39AMSD** Units: **mg/Kg** Analysis Date: **6/16/2011 11:54 PM**
Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427329** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1887	5.0	99.21	1819	68.4	75-125	1888	0.0615	20	SEO
Surr: Selenate (surr)	*55.12*	0.99	*49.6*	0	*111*	*80-120*	55.38	*0.467*	*20*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1106023
Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **53269** Instrument ID **ICS3K2** Method: **E300**

MSD Sample ID: **1106026-40AMSD** Units: **mg/Kg** Analysis Date: **6/17/2011 01:42 AM**

Client ID: Run ID: **ICS3K2_110616A** SeqNo: **2427336** Prep Date: **6/16/2011** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1572	4.9	98.23	1500	73.9	75-125	1572	0.00562	20	SEO
Surr: Selenate (surr)	*53.21*	0.98	*49.12*	0	*108*	*80-120*	53.13	*0.148*	*20*	

The following samples were analyzed in this batch: 1106023-13A 1106023-14A 1106023-15A 1106023-16A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1106023
Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **R110811** Instrument ID **Balance1** Method: **SW3550**

DUP Sample ID: **1106023-36ADUP** Units: **wt%** Analysis Date: **6/2/2011 11:30 AM**

Client ID: **LPU#59 SB-5 19'-20'** Run ID: **BALANCE1_110602E** SeqNo: **2410894** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	4.753	0.010	0	0	0	0-0	4.649	2.2	20	

The following samples were analyzed in this batch:

1106023-01A	1106023-02A	1106023-03A
1106023-04A	1106023-09A	1106023-10A
1106023-11A	1106023-12A	1106023-17A
1106023-18A	1106023-19A	1106023-20A
1106023-25A	1106023-26A	1106023-27A
1106023-28A	1106023-33A	1106023-34A
1106023-35A	1106023-36A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1106023
Project: Lovington Paddock #59

QC BATCH REPORT

Batch ID: **R111505** Instrument ID **Balance1** Method: **SW3550**

DUP Sample ID: **1106473-07ADUP** Units: **wt%** Analysis Date: **6/16/2011 10:30 AM**

Client ID: Run ID: **BALANCE1_110616B** SeqNo: **2426049** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	18.7	0.010	0	0	0	0-0	19.22	2.73	20	

The following samples were analyzed in this batch: 1106023-13A 1106023-14A 1106023-15A 1106023-16A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 20-Jun-11

Client: Conestoga-Rovers & Associates
Project: Lovington Paddock #59
WorkOrder: 1106023

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/Kg	Milligrams per Kilogram
wt%	

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COC ID: 33508

1106023

CRA-MID: Conestoga-Rovers & Associates

Project: Lovington Paddock #59

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	Lovington Paddock #59	A	Anions (300) Cl
Work Order		Project Number	073817	B	Moisture
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga-Rovers & Associates	C	
Send Report To	James Ornelas	Invoice Attn	James Ornelas	D	
Address	6320 Rothway Ste. 100	Address	6320 Rothway, Suite 100	E	
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Houston, TX 77040	G	
Phone	(713) 734-3090	Phone	(713) 734-3090	H	
Fax	(713) 264-6130	Fax	(713) 734-3391	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description			Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LPU#59	SB-1	4'-5'	5/26/11	1510				X	X									
2	LPU#59	SB-1	9'-10'	" "	1512				X	X									
3	LPU#59	SB-1	14'-15'	" "	1514				X	X									
4	LPU#59	SB-1	19'-20'	" "	1516				X	X									
5	LPU#59	SB-1	24'-25'	" "	1518						HOLD								X
6	LPU#59	SB-1	29'-30'	" "	1520						HOLD								X
7	LPU#59	SB-1	34'-35'	" "	1522						HOLD								X
8	LPU#59	SB-1	39'-40'	" "	1524						HOLD								X
9	LPU#59	SB-2	4'-5'	" "	1534				X	X									
10	LPU#59	SB-2	9'-10'	" "	1536				X	X									

Sampler(s) Please Print & Sign

Shipment Method

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other ____

Results Due Date:

Relinquished by:	Date: 5/31/11	Time: 1600	Received by:	Notes: 10 Day TAT.	
Relinquished by:	Date:	Time:	Received by (Laboratory): 6/1/11 0900	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

QC Package: (Check One Box Below)
☑ Level I Std QC ☐ TRRP CheckList
☐ Level II Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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COC ID: 33507

☐ ALS Environmental
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1106023

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Paddock #59	A	Anions (300) Cl
Work Order		Project Number	073817	B	Moisture
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga-Rovers & Associates	C	
Send Report To	James Ornelas	Invoice Attn	James Ornelas	D	
Address	3320 Rothway Ste. 100	Address	6320 Rothway, Suite 100	E	
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Houston, TX 77040	G	
Phone	(713) 734-3090	Phone	(713) 734-3090	H	
Fax	(713) 264-6138	Fax	(713) 734-3391	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description		Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LPU #59	SB-2 14'-15'	5/20/11	1538				X	X									
2	LPU # 59	SB-2 19'-20'	" "	1546				X	X									
3	LPU #59	SB-2 24'-25'	" "	1542					Please HOLD									X
4	LPU #59	SB-2 29'-30'	" "	1544						HOLD								X
5	LPU #59	SB-2 34'-35'	" "	1546						HOLD								X
6	LPU #59	SB-2 39'-40'	" "	1548						HOLD								X
7	LPU #59	SB-3 4'-5'	" "	1600				X	X									
8	LPU # 59	SB-3 9'-10'	" "	1602				X	X									
9	LPU # 59	SB-3 14'-15'	" "	1604				X	X									
10	LPU #59	SB-3 19'-20'	" "	1606				X	X									

Sampler(s) Please Print & Sign | Shipment Method | Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour | Results Due Date:

Relinquished by:	Date: 5/21/11	Time: 1600	Received by:	Notes: 10 Day TAT.	
Relinquished by:	Date:	Time:	Received by (Laboratory): 5/21/11 1600	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

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COC ID: 33506

☐ ALS Environmental
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1106523

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Paddock #59	A	Anions (300) Cl
Work Order		Project Number	073617	B	Moisture
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga-Rovers & Associates	C	
Send Report To	James Ornelas	Invoice Attn	James Ornelas	D	
Address	6320 Rothway Ste. 100	Address	6320 Rothway, Suite 100	E	
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Houston, TX 77040	G	
Phone	(713) 734-3090	Phone	(713) 734-3090	H	
Fax	(713) 264-6138	Fax	(713) 734-3391	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description			Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LPU#59	SB-3	24'-25'	5/26/11	1605					HOLD									X
2	LPU#59	SB-3	29'-30'	" "	1610					HOLD									X
3	LPU#59	SB-3	34'-35'	" "	1612					HOLD									X
4	LPU#59	SB-3	39'-40'	" "	1614					HOLD									X
5	LPU #59	SB-4	4'-5'	" "	1650				X	X									
6	LPU #59	SB-4	9'-10'	" "	1652				X	X									
7	LPU#59	SB-4	14'-15'	" "	1654				X	X									
8	LPU #59	SB-4	19'-20'	" "	1656				X	X									
9	LPU #59	SB-4	24'-25'	" "	1658					HOLD									X
10	LPU #59	SB-4	29-30'	" "	1700					HOLD									X

Sampler(s) Please Print & Sign | Shipment Method | Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other ____ | Results Due Date:

Relinquished by:	Date: 5/31/11	Time: 1661	Received by:	Notes: 10 Day TAT.	
Relinquished by:	Date:	Time:	Received by (Laboratory): 6-2-11 0800	Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

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COC ID: 33505

☐ ALS Environmental
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1106553

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Paddock #59	A	Anions (300) Cl
Work Order		Project Number	073817	B	Moisture
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga-Rovers & Associates	C	
Send Report To	James Ornelas	Invoice Attn	James Ornelas	D	
Address	6320 Rothway Ste. 100	Address	6320 Rothway, Suite 100	E	
				F	
City/State/Zip	Houston, TX 77040	City/State/Zip	Houston, TX 77040	G	
Phone	(713) 734-3090	Phone	(713) 734-3090	H	
Fax	(713) 264-6138	Fax	(713) 734-3391	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description			Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	LPU #59	SB-4	34'-35'	5/26/11	1102				X	X	HOLD								X
2	LPU #59	SB-4	39'-40'	5/26/11	1104				X	X	HOLD								X
3	LPU #59	SB-5	4'-5'	" "	1120				X	X									
4	LPU #59	SB-5	9'-10'	" "	1122				X	X									
5	LPU #59	SB-5	14'-15'	" "	1124				X	X									
6	LPU #59	SB-5	19'-20'	" "	1126				X	X									
7	LPU #59	SB-5	24'-25'	" "	1128					HOLD									X
8	LPU #59	SB-5	29'-30'	" "	1130					HOLD									X
9	LPU #59	SB-5	34'-35'	" "	1132					HOLD									X
10	LPU #59	SB-5	39'-40'	" "	1134					HOLD									X

Sampler(s) Please Print & Sign

Shipment Method

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ____ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date: 5/31/11	Time: 1600	Received by:
Relinquished by:	Date:	Time:	Received by (Laboratory): 6/1/11 0900
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT.

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

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Sample Receipt Checklist

Client Name: **CRA-MID** Date/Time Received: **01-Jun-11 09:00**

Work Order: **1106023** Received by: **RDH**

Checklist completed by Raymond N Gamboa (eSignature) 01-Jun-11 (Date) Reviewed by: Patricia L. Lynch (eSignature) 02-Jun-11 (Date)

Matrices: Soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.6c, 3.1c	002	
Cooler(s)/Kit(s):	3414, 7074		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

This portion can be removed for Recipient's records.

Date 5/31/11 FedEx Tracking Number 874196691552

1106023

Sender's Name James D... Phone

Company CRA

Address 2135 S Loop 250 West Dept/Floor/Suite/Room

Midland State TX ZIP 79703

Your Internal Billing Reference

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Date:
Name:
Company:

CUSTODY SEAL 3414
Time:
JO

Seal Broken By: [handwritten initials]
Date: 6/1/11

PRIORITY OVERNIGHT WED
Emp# 790085 00:44 01JUN11
Deliver By: 01JUN11
TRK# 7955 3855 7709 FORM 0681
IAH
77099 -TX-US 43 SGRA

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL 3474
Date:
Time:
Name:
Company: JC

Seal Broken By: [handwritten initials]
Date: 6/1/11