District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

X Initial Report X Final Report

Name of Company Chevron Midcontinent LP	Contact Larry Ridenour
Address HCR 60 Box 423 Lovington, NM 88260	Telephone No. 505-396-4414 x128
Facility Name Lovington San Andres Unit #22	Facility Type oil well

Surface Owner City of Lovington	Mineral Owner State	Lease No. B7845

LOCATION OF RELEASE

API #30025053510000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	31	16S	37E	660	South	660	East	Lea

Latitude N 32 deg 52 min 23.6 sec **Longitude** W 103 deg 18 min 5.3 sec

NATURE OF RELEASE

Type of Release produced water and crude oil	Volume of Release 35 bbl water and ½ bbl oil	Volume Recovered 20 bbl fluid
Source of Release Well head	Date and Hour of Occurrence 06/04/07 10:00 AM	Date and Hour of Discovery 06/04/07 10:00 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton (left message on answering machine)	
By Whom? Larry Williams	Date and Hour 6/04/07 1:30 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse	

If a Watercourse was Impacted, Describe Fully.*

JUN 2007 Received Hobbs OCD

Describe Cause of Problem and Remedial Action Taken.*
Well was in the process of getting well ready for plugging rig. Tubing was out of the well and well secured for the weekend. Off side casing developed a leak in the nipple between wellhead and casing valve. The entire spill remained on location. Request to do clean up after the well is plugged and abandoned. We will have to do the final clean up of the location since the location is being abandoned.
Chlorides 35,302 ppm Crude oil gravity 38

Describe Area Affected and Cleanup Action Taken.*
Affected area approximately 100' x 40'.

Once the well is plugged and abandoned; we will go in and clean up the entire locations. Remove contaminated soil and take to land farm or fill.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Larry Williams	OIL CONSERVATION DIVISION
Printed Name: Larry Williams	Approved by District Supervisor: ENVIRONMENTAL ENGR
Title: HES Specialist	Approval Date: 6-29-07 Expiration Date: 9-10-07
E-mail Address: lcwl@Chevron.com	Conditions of Approval: SUBMIT FINAL C-141 & NOTIFY OCD WHEN CLEAN UP COMMENCES — Attached ☐
Date: 6/04/07 Phone: 505-396-4414 x128	

* Attach Additional Sheets If Necessary

RP#1477

SITE INFORMATION

Report Type: CLOSURE REQUEST **RP # 1477** **CRA Project # 073815**

General Site Information:

Site:	Lovington San Andres Unit #22
Company:	Chevron Environmental Management Company
Well Location:	Section 31, T-16-S, R-37-E
Unit Letter:	Unit N
API #:	30-025-05351
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 0.05 miles to north-south lease road. Turn left at lease road and travel approx 0.1 miles. Turn right (west) and travel approx. 300 feet to former well location.

Release Data:

Spill GPS:	
Date Released:	6/4/2007
Source of Contamination:	Release during well plugging activities
Fluid Released:	35 barrels of water
Fluids Recovered:	20 barrels of water

approved

Environmental Specialist

NMOCD-DIST I
7/26/14

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@craworld.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	20
Water Source >1,000 ft., Private >200 ft.	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:	30

HOBBS OCD

JUL 29 2011

RECEIVED

Acceptable Soil RRAL (mg/kg)			
Benzene	Total BTEX	TPH	Chlorides
10	50	100	250

CONESTOGA-ROVERS
& ASSOCIATES

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

July 26, 2011

Reference No. 073815 (2)

HOBBS OCD

JUL 29 2011

RECEIVED

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

Re: Closure Request Report
Lovington San Andres Unit #22 (Well Pad) – **API #30025053510000 (**RP #1477)
Unit N, Section 31, T16S, R37E
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, 2007, Chevron Midcontinent LP (Chevron) submitted a release notification and corrective action C-141 form (Appendix A) initial report to the New Mexico Oil Conservation Division (NMOCD) describing a produced water/crude oil release of an estimated 35 barrels (20 barrels recovered) from between the wellhead and casing valve that occurred during well plugging activities. The approximate affected area was estimated at 40' x 100'.

There are numerous water wells in the vicinity of the Site. According the Petroleum Recovery Research Center (PRRC) database and the New Mexico Office of the State Engineer (NMOSE), the average depth to groundwater in the immediate area of Lovington San Andres Unit (LSAU) #22 is approximately 70 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 B.

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 health, 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 is < 1,000 feet) and surface body of water was > 1,000 horizontal feet from the Site, the RRALs were determined to be 10 mg/kg for benzene, 50 mg/kg for BTEX, 100 mg/kg for TPH and 250 mg/kg for chlorides.

SITE ASSESSMENT ACTIVITIES

In 2010, Chevron re-initiated efforts to close the C-141 form. As a result, an environmental Site consultant (Tetra Tech) was contracted by Chevron to assess the soils prior to submittal of the final C-141 Site closure. In August 2010, soil samples were collected from three locations (T-1, T-2 & T-3) in the affected area of the release from 0-1 foot below ground surface (bgs) and from 2-2.5 feet bgs. 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 0-1 foot intervals, 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)-250 mg/kg. Results indicated concentrations above the RRALs in two (T-2 & T-3) the three samples for both intervals (0-1' & 2-2.5').

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 both the August 2010 and May 2011 assessments are provided in FIGURE 3. The May 2011 boring program demonstrated two consecutive sample intervals in all five borings below the RRAL for chlorides and defined the horizontal and vertical extent of the chloride impacts.

PROPOSED SITE CLOSURE ACTIVITIES

Based on soil data collected from the 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.

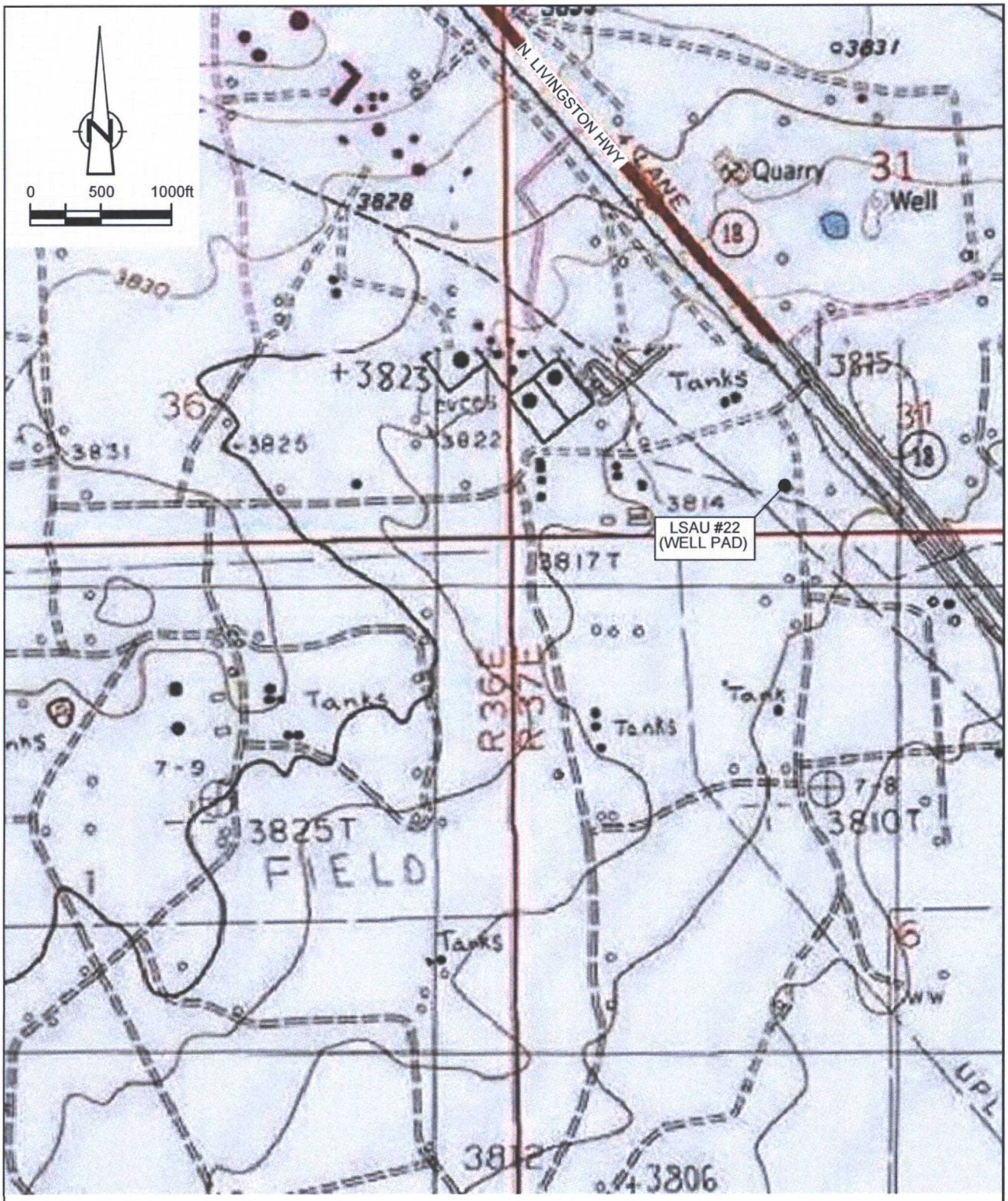
Sincerely,
CONESTOGA-ROVERS & ASSOCIATES, INC.

James Ornelas
Project Manager

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

Enclosures

Cc: Matt Hudson, CEMC
Allen Bennett, AECOM



SOURCE: USGS TOPOGRAPHIC MAP
32° 52' 20.2" N
103° 17' 34.6" W

figure 1

SITE VICINITY MAP
LSAU #22 (WELL PAD)
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

CRA

073815-01(000)GN-BR001 JUL 14/2011

SOURCE: USGS TOPOGRAPHIC MAP
32° 52' 20.2" N
103° 17' 34.6" W

figure 2

SITE LOCATION MAP
LSAU #22 (WELL PAD)
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

CRA

073815-01(000)GN-BR001 JUL 14/2011

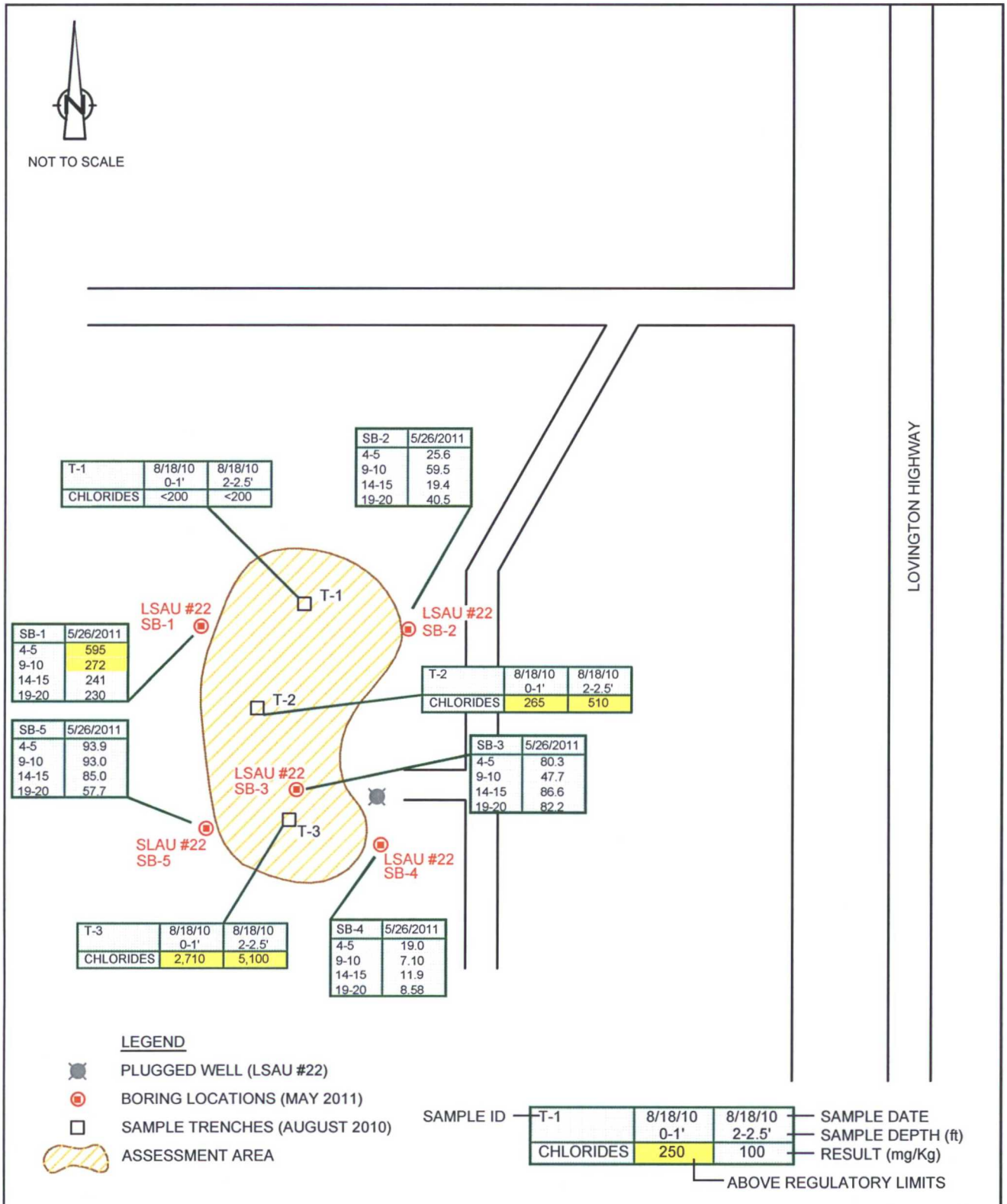


figure 3

SOIL CHLORIDE RESULTS MAP
LSAU #22 (WELL PAD)
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

073815-01(000)GN-BR003 JUL 18/2011

TABLE I
SOIL ANALYTICAL SUMMARY
AUGUST 2010
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON SAN ANDRES UNIT #22 (WELL PAD)
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 > 20)											
			10 mg/kg	--- mg/kg	--- mg/kg	--- mg/kg	50 mg/kg	--- mg/kg	--- mg/kg	100 mg/kg	250 mg/kg
T-1	0-1	8/18/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	<200
	2-2.5	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	<200
T-2	0-1	8/18/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	**265**
	2-2.5	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**510**
T-3	0-1	8/18/10	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00	<50.0	**2,710**
	2-2.5	8/18/10	NA	NA	NA	NA	NA	NA	NA	NA	**5,100**

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

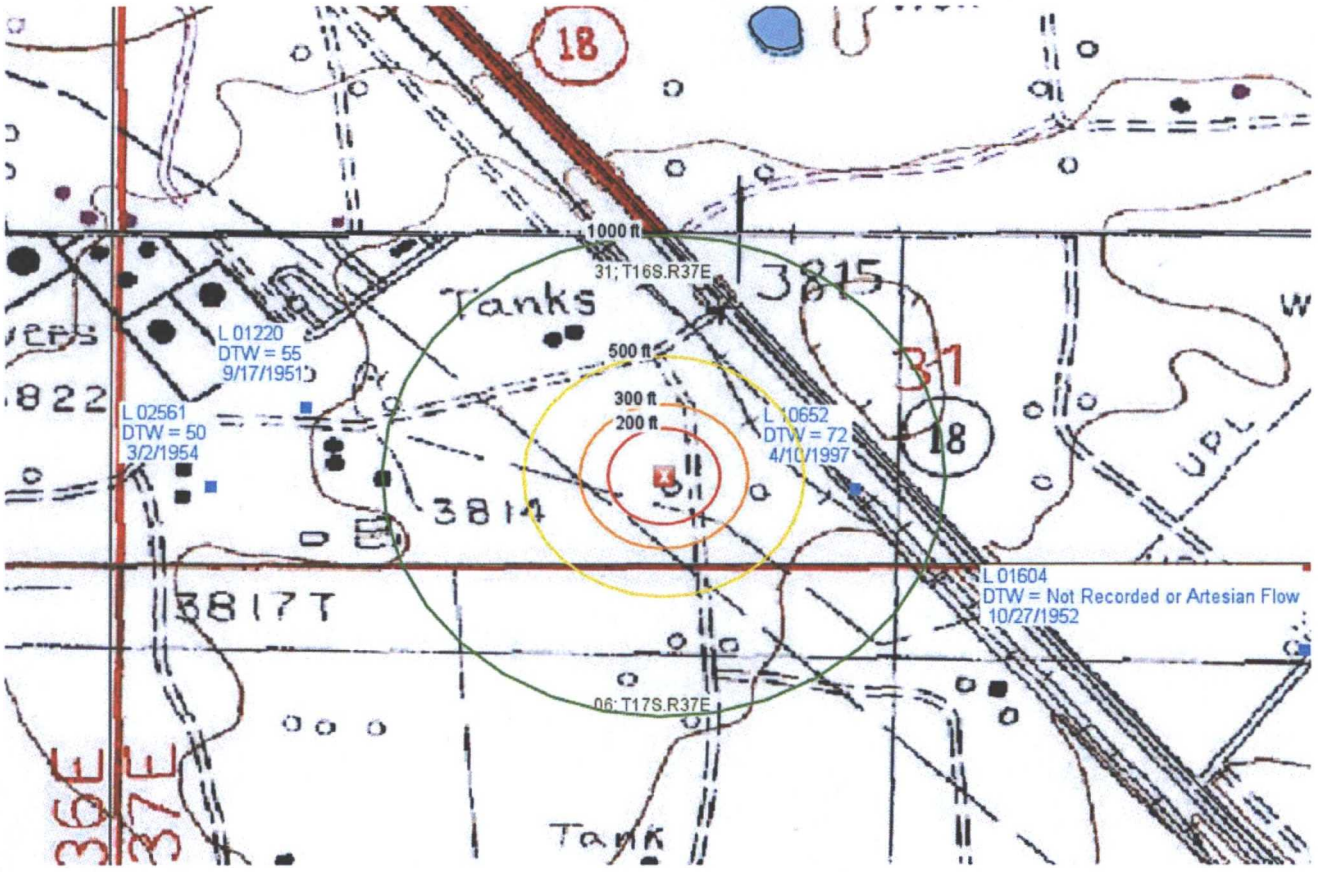
TABLE II
SOIL ANALYTICAL SUMMARY
MAY 2011
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LOVINGTON SAN ANDRES UNIT #22 (WELL PAD)
LEA COUNTY, NEW MEXICO
NMOCD Recommended Remediation Action Levels (Total Ranking Score > 20)

Sample ID	Depth (feet)	Sample Date	Chlorides (mg/kg)
NMOCD RRAL (Site Specific Ranking = 20)			250
SB-1	4-5	5/26/11	**595**
	9-10	5/26/11	**272**
	14-15	5/26/11	**241**
	19-20	5/26/11	**230**
SB-2	4-5	5/26/11	**25.6**
	9-10	5/26/11	**59.5**
	14-15	5/26/11	**19.4**
	19-20	5/26/11	**40.5**
SB-3	4-5	5/26/11	**80.3**
	9-10	5/26/11	**47.7**
	14-15	5/26/11	**86.6**
	19-20	5/26/11	**82.2**
SB-4	4-5	5/26/11	**19.0**
	9-10	5/26/11	**7.10**
	14-15	5/26/11	**11.9**
	19-20	5/26/11	**8.58**
SB-5	4-5	5/26/11	**93.9**
	9-10	5/26/11	**93.0**
	14-15	5/26/11	**85.0**
	19-20	5/26/11	**57.7**

Notes:

1. Chlorides analyzed by 300.0.
2. NA - Not Analyzed
3. Bold concentrations above lab reporting limits.
4. Highlighted cells indicated concentrations above regulatory limits

www.source3.com



Petroleum Recovery Research Center	LSAU #22	Figure:
	Chevron Environmental Managment Company	Jul 12, 2011

ALS Environmental

15-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 San Andes #22 Work Order: **1106008**

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 33.

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: 15-Jun-11

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: **1106008**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1106008-01	LSAU#22 SB-1 4'-5'	Soil		5/26/2011 11:20	6/1/2011 09:00	☐
1106008-02	LSAU#22 SB-1 9'-10'	Soil		5/26/2011 11:22	6/1/2011 09:00	☐
1106008-03	LSAU#22 SB-1 14'-15'	Soil		5/26/2011 11:24	6/1/2011 09:00	☐
1106008-04	LSAU#22 SB-1 19'-20'	Soil		5/26/2011 11:26	6/1/2011 09:00	☐
1106008-05	LSAU#22 SB-1 24'-25'	Soil		5/26/2011 11:28	6/1/2011 09:00	☐
1106008-06	LSAU#22 SB-1 29'-30'	Soil		5/26/2011 11:30	6/1/2011 09:00	☐
1106008-07	LSAU#22 SB-1 34'-35'	Soil		5/26/2011 11:32	6/1/2011 09:00	☐
1106008-08	LSAU#22 SB-1 39'-40'	Soil		5/26/2011 11:34	6/1/2011 09:00	☐
1106008-09	LSAU#22 SB-2 4'-5'	Soil		5/26/2011 10:42	6/1/2011 09:00	☐
1106008-10	LSAU#22 SB-2 9'-10'	Soil		5/26/2011 10:44	6/1/2011 09:00	☐
1106008-11	LSAU#22 SB-2 14'-15'	Soil		5/26/2011 10:46	6/1/2011 09:00	☐
1106008-12	LSAU#22 SB-2 19'-20'	Soil		5/26/2011 10:40	6/1/2011 09:00	☐
1106008-13	LSAU#22 SB-2 24'-25'	Soil		5/26/2011 10:50	6/1/2011 09:00	☐
1106008-14	LSAU#22 SB-2 29'-30'	Soil		5/26/2011 10:52	6/1/2011 09:00	☐
1106008-15	LSAU#22 SB-2 34'-35'	Soil		5/26/2011 10:54	6/1/2011 09:00	☐
1106008-16	LSAU#22 SB-2 39'-40'	Soil		5/26/2011 10:56	6/1/2011 09:00	☐
1106008-17	LSAU#22 SB-3 4'-5'	Soil		5/26/2011 11:50	6/1/2011 09:00	☐
1106008-18	LSAU#22 SB-3 9'-10'	Soil		5/26/2011 11:52	6/1/2011 09:00	☐
1106008-19	LSAU#22 SB-3 14'-15'	Soil		5/26/2011 11:54	6/1/2011 09:00	☐
1106008-20	LSAU#22 SB-3 19'-20'	Soil		5/26/2011 11:56	6/1/2011 09:00	☐
1106008-21	LSAU#22 SB-3 24'-25'	Soil		5/26/2011 11:50	6/1/2011 09:00	☐
1106008-22	LSAU#22 SB-3 29'-30'	Soil		5/26/2011 12:00	6/1/2011 09:00	☐
1106008-23	LSAU#22 SB-3 34'-35'	Soil		5/26/2011 12:02	6/1/2011 09:00	☐
1106008-24	LSAU#22 SB-3 39'-40'	Soil		5/26/2011 12:04	6/1/2011 09:00	☐
1106008-25	LSAU#22 SB-4 4'-5'	Soil		5/26/2011 12:30	6/1/2011 09:00	☐
1106008-26	LSAU#22 SB-4 9'-10'	Soil		5/26/2011 12:32	6/1/2011 09:00	☐
1106008-27	LSAU#22 SB-4 14'-15'	Soil		5/26/2011 12:34	6/1/2011 09:00	☐
1106008-28	LSAU#22 SB-4 19'-20'	Soil		5/26/2011 12:36	6/1/2011 09:00	☐
1106008-29	LSAU#22 SB-4 24'-25'	Soil		5/26/2011 12:38	6/1/2011 09:00	☐
1106008-30	LSAU#22 SB-4 29'-30'	Soil		5/26/2011 12:40	6/1/2011 09:00	☐
1106008-31	LSAU#22 SB-4 34'-35'	Soil		5/26/2011 12:42	6/1/2011 09:00	☐
1106008-32	LSAU#22 SB-4 39'-40'	Soil		5/26/2011 12:44	6/1/2011 09:00	☐
1106008-33	LSAU#22 SB-5 4'-5'	Soil		5/26/2011 13:05	6/1/2011 09:00	☐
1106008-34	LSAU#22 SB-5 9'-10'	Soil		5/26/2011 13:07	6/1/2011 09:00	☐
1106008-35	LSAU#22 SB-5 14'-15'	Soil		5/26/2011 13:09	6/1/2011 09:00	☐
1106008-36	LSAU#22 SB-5 19-:20	Soil		5/26/2011 13:11	6/1/2011 09:00	☐
1106008-37	LSAU#22 SB-5 24'-25'	Soil		5/26/2011 13:13	6/1/2011 09:00	☐
1106008-38	LSAU#22 SB-5 29'-30'	Soil		5/26/2011 13:15	6/1/2011 09:00	☐
1106008-39	LSAU#22 SB-5 34'-35'	Soil		5/26/2011 13:17	6/1/2011 09:00	☐

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: **1106008**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1106008-40	LSAU#22 SB-5 39'-40'	Soil		5/26/2011 13:19	6/1/2011 09:00	☐

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-1 4'-5'
Lab ID: 1106008-01
Collection Date: 5/26/2011 11:20 AM
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	**595**		**4.98**	**mg/Kg**	1	6/7/2011 08:43 PM
Surr: Selenate (surr)	*97.9*		*85-115*	*%REC*	1	6/7/2011 08:43 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.64**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-1 9'-10'
Lab ID: 1106008-02
Collection Date: 5/26/2011 11:22 AM
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	**272**		**4.92**	**mg/Kg**	1	6/7/2011 09:46 PM
Surr: Selenate (surr)	*95.4*		*85-115*	*%REC*	1	6/7/2011 09:46 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**9.41**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-1 14'-15'
Lab ID: 1106008-03
Collection Date: 5/26/2011 11:24 AM
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	**241**		**4.92**	**mg/Kg**	1	6/7/2011 10:07 PM
Surr: Selenate (surr)	*97.2*		*85-115*	*%REC*	1	6/7/2011 10:07 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.38**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Sample ID: LSAU#22 SB-1 19'-20'
Collection Date: 5/26/2011 11:26 AM

Work Order: 1106008
Lab ID: 1106008-04
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	**230**		**4.98**	**mg/Kg**	1	6/7/2011 10:28 PM
Surr: Selenate (surr)	*96.4*		*85-115*	*%REC*	1	6/7/2011 10:28 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**5.28**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington San Andes #22	**Work Order:**	1106008
Sample ID:	LSAU#22 SB-2 4'-5'	**Lab ID:**	1106008-09
Collection Date:	5/26/2011 10:42 AM	**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	**25.6**		**4.98**	**mg/Kg**	1	6/7/2011 10:49 PM
Surr: Selenate (surr)	*90.9*		*85-115*	*%REC*	1	6/7/2011 10:49 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**8.42**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-2 9'-10'
Lab ID: 1106008-10
Collection Date: 5/26/2011 10:44 AM
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	**59.5**		**4.96**	**mg/Kg**	1	6/7/2011 11:53 PM
Surr: Selenate (surr)	*87.9*		*85-115*	*%REC*	1	6/7/2011 11:53 PM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.73**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-2 14'-15'
Lab ID: 1106008-11
Collection Date: 5/26/2011 10:46 AM
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	**19.4**		**4.95**	**mg/Kg**	1	6/8/2011 12:14 AM
Surr: Selenate (surr)	*89.3*		*85-115*	*%REC*	1	6/8/2011 12:14 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.99**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-2 19'-20'
Lab ID: 1106008-12
Collection Date: 5/26/2011 10:40 AM
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	**40.5**		**4.93**	**mg/Kg**	1	6/8/2011 12:35 AM
Surr: Selenate (surr)	*88.6*		*85-115*	*%REC*	1	6/8/2011 12:35 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.32**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-3 4'-5'
Lab ID: 1106008-17
Collection Date: 5/26/2011 11:50 AM
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	**80.3**		**5.00**	**mg/Kg**	1	6/8/2011 12:56 AM
Surr: Selenate (surr)	*96.4*		*85-115*	*%REC*	1	6/8/2011 12:56 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**8.84**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Sample ID: LSAU#22 SB-3 9'-10'
Collection Date: 5/26/2011 11:52 AM

Work Order: 1106008
Lab ID: 1106008-18
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	**47.7**		**4.98**	**mg/Kg**	1	6/8/2011 01:17 AM
Surr: Selenate (surr)	*96.4*		*85-115*	*%REC*	1	6/8/2011 01:17 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.51**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-3 14'-15'
Lab ID: 1106008-19
Collection Date: 5/26/2011 11:54 AM
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	**86.6**		**5.00**	**mg/Kg**	1	6/8/2011 01:38 AM
Surr: Selenate (surr)	*93.8*		*85-115*	*%REC*	1	6/8/2011 01:38 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**7.29**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-3 19'-20'
Lab ID: 1106008-20
Collection Date: 5/26/2011 11:56 AM
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	**82.2**		**4.91**	**mg/Kg**	1	6/8/2011 01:59 AM
Surr: Selenate (surr)	*90.9*		*85-115*	*%REC*	1	6/8/2011 01:59 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.82**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-4 4'-5'
Lab ID: 1106008-25
Collection Date: 5/26/2011 12:30 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	**19.0**		**5.00**	**mg/Kg**	1	6/8/2011 02:20 AM
Surr: Selenate (surr)	*91.9*		*85-115*	*%REC*	1	6/8/2011 02:20 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.20**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-4 9'-10'
Lab ID: 1106008-26
Collection Date: 5/26/2011 12:32 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	**7.10**		**4.98**	**mg/Kg**	1	6/8/2011 02:41 AM
Surr: Selenate (surr)	*89.4*		*85-115*	*%REC*	1	6/8/2011 02:41 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**4.10**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-4 14'-15'
Lab ID: 1106008-27
Collection Date: 5/26/2011 12:34 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	**11.9**		**5.00**	**mg/Kg**	1	6/8/2011 03:03 AM
Surr: Selenate (surr)	*89.9*		*85-115*	*%REC*	1	6/8/2011 03:03 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**11.1**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Sample ID: LSAU#22 SB-4 19'-20'
Collection Date: 5/26/2011 12:36 PM

Work Order: 1106008
Lab ID: 1106008-28
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	**8.58**		**4.91**	**mg/Kg**	1	6/8/2011 04:06 AM
Surr: Selenate (surr)	*88.0*		*85-115*	*%REC*	1	6/8/2011 04:06 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.44**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client:	Conestoga-Rovers & Associates		
Project:	Lovington San Andes #22	**Work Order:**	1106008
Sample ID:	LSAU#22 SB-5 4'-5'	**Lab ID:**	1106008-33
Collection Date:	5/26/2011 01:05 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	**93.9**		**4.98**	**mg/Kg**	1	6/8/2011 04:27 AM
Surr: Selenate (surr)	*91.1*		*85-115*	*%REC*	1	6/8/2011 04:27 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**5.23**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-5 9'-10'
Lab ID: 1106008-34
Collection Date: 5/26/2011 01:07 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	**93.0**		**4.95**	**mg/Kg**	1	6/8/2011 04:48 AM
Surr: Selenate (surr)	*90.9*		*85-115*	*%REC*	1	6/8/2011 04:48 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**8.80**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-5 14'-15'
Lab ID: 1106008-35
Collection Date: 5/26/2011 01:09 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	**85.0**		**4.91**	**mg/Kg**	1	6/8/2011 05:09 AM
Surr: Selenate (surr)	*89.8*		*85-115*	*%REC*	1	6/8/2011 05:09 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**6.40**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: *15-Jun-11*

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
Work Order: 1106008
Sample ID: LSAU#22 SB-5 19-:20
Lab ID: 1106008-36
Collection Date: 5/26/2011 01:11 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	**57.7**		**4.93**	**mg/Kg**	1	6/8/2011 05:30 AM
Surr: Selenate (surr)	*91.7*		*85-115*	*%REC*	1	6/8/2011 05:30 AM
MOISTURE			**SW3550**			Analyst: **KAH**
Percent Moisture	**5.66**		**0.0100**	**wt%**	1	6/2/2011 11:00 AM

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

ALS Environmental

Date: 15-Jun-11

Client: Conestoga-Rovers & Associates

Work Order: 1106008

Project: Lovington San Andes #22

QC BATCH REPORT

Batch ID: **52989** Instrument ID **ICS3000** Method: **E300**

MBLK Sample ID: **WBLKS1-060711-52989** Units: **mg/Kg** Analysis Date: **6/7/2011 07:39 PM**

Client ID: Run ID: **ICS3000_110607B** SeqNo: **2416139** 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)	*45.82*	1.0	*50*	0	*91.6*	*85-115*	0			

LCS Sample ID: **WLCSS1-060711-52989** Units: **mg/Kg** Analysis Date: **6/7/2011 08:01 PM**

Client ID: Run ID: **ICS3000_110607B** SeqNo: **2416140** 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	208.1	5.0	200	0	104	90-110	0			
Surr: Selenate (surr)	*49.38*	1.0	*50*	0	*98.8*	*85-115*	0			

LCSD Sample ID: **WLCSDS1-060711-52989** Units: **mg/Kg** Analysis Date: **6/7/2011 08:22 PM**

Client ID: Run ID: **ICS3000_110607B** SeqNo: **2416141** 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	208.2	5.0	200	0	104	90-110	208.1	0.0673	20	
Surr: Selenate (surr)	*49.27*	1.0	*50*	0	*98.5*	*85-115*	49.38	*0.223*	*20*	

MS Sample ID: **1106008-01AMS** Units: **mg/Kg** Analysis Date: **6/7/2011 09:04 PM**

Client ID: **LSAU#22 SB-1 4'-5'** Run ID: **ICS3000_110607B** SeqNo: **2416143** 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	687.9	5.0	99.6	595.5	92.8	75-125	0			O
Surr: Selenate (surr)	*47.78*	1.0	*49.8*	0	*95.9*	*80-120*	0			

MS Sample ID: **1106008-36AMS** Units: **mg/Kg** Analysis Date: **6/8/2011 05:51 AM**

Client ID: **LSAU#22 SB-5 19-:20** Run ID: **ICS3000_110607B** SeqNo: **2416176** 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	142.7	4.9	98.62	57.67	86.2	75-125	0			
Surr: Selenate (surr)	*44.54*	0.99	*49.31*	0	*90.3*	*80-120*	0			

MSD Sample ID: **1106008-01AMSD** Units: **mg/Kg** Analysis Date: **6/7/2011 09:25 PM**

Client ID: **LSAU#22 SB-1 4'-5'** Run ID: **ICS3000_110607B** SeqNo: **2416144** 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	688.2	5.0	99.6	595.5	93.1	75-125	687.9	0.0463	20	O
Surr: Selenate (surr)	*47.73*	1.0	*49.8*	0	*95.8*	*80-120*	47.78	*0.104*	*20*	

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

Client: Conestoga-Rovers & Associates
Work Order: 1106008
Project: Lovington San Andes #22

QC BATCH REPORT

Batch ID: **52989** Instrument ID **ICS3000** Method: **E300**

MSD Sample ID: **1106008-36AMSD** Units: **mg/Kg** Analysis Date: **6/8/2011 06:12 AM**

Client ID: **LSAU#22 SB-5 19-:20** Run ID: **ICS3000_110607B** SeqNo: **2416177** 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	142.4	4.9	98.62	57.67	85.9	75-125	142.7	0.18	20	
Surr: Selenate (surr)	*44.68*	0.99	*49.31*	0	*90.6*	*80-120*	44.54	*0.332*	*20*	

The following samples were analyzed in this batch:

1106008-01A	1106008-02A	1106008-03A
1106008-04A	1106008-09A	1106008-10A
1106008-11A	1106008-12A	1106008-17A
1106008-18A	1106008-19A	1106008-20A
1106008-25A	1106008-26A	1106008-27A
1106008-28A	1106008-33A	1106008-34A
1106008-35A	1106008-36A	

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

Client: Conestoga-Rovers & Associates
Work Order: 1106008
Project: Lovington San Andes #22

QC BATCH REPORT

Batch ID: **R110808** Instrument ID **Balance1** Method: **SW3550**

DUP Sample ID: **1106008-36ADUP** Units: **wt%** Analysis Date: **6/2/2011 11:00 AM**

Client ID: **LSAU#22 SB-5 19-:20** Run ID: **BALANCE1_110602D** SeqNo: **2410700** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Percent Moisture	5.776	0.010	0	0	0	0-0	5.662	1.99	20	

The following samples were analyzed in this batch:

1106008-01A	1106008-02A	1106008-03A
1106008-04A	1106008-09A	1106008-10A
1106008-11A	1106008-12A	1106008-17A
1106008-18A	1106008-19A	1106008-20A
1106008-25A	1106008-26A	1106008-27A
1106008-28A	1106008-33A	1106008-34A
1106008-35A	1106008-36A	

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

ALS Environmental

Date: 15-Jun-11

Client: Conestoga-Rovers & Associates
Project: Lovington San Andes #22
WorkOrder: **1106008**

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%	

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

Chain of Custody Form

Page ____ of ____

COC ID: 33514

1106008

CRA-MID: Conestoga-Rovers & Associates

Project: Lovington San Andes #22

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	Lovington San Andes #22	A	Anions (300) Cl
Work Order		Project Number	073815	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) 264-6133	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	LSAU #22 SB-1 4'-5'	5/26/11	1120				X	X									
2	LSAU #22 SB-1 9'-10'	" "	1122				X	X									
3	LSAU #22 SB-1 14'-15'	" "	1124				X	X									
4	LSAU #22 SB-1 19'-20'	" "	1126				X	X									
5	LSAU #22 SB-1 24'-25'	" "	1128						HOLD								X
6	LSAU #22 SB-1 29'-30'	" "	1130						HOLD								X
7	LSAU #22 SB-1 34'-35'	" "	1132						HOLD								X
8	LSAU #22 SB-1 39'-40'	" "	1134						HOLD								X
9	LSAU #22 SB-2 4'-5'	" "	1042				X	X									
10	LSAU #22 SB-2 9'-10'	" "	1044				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: 5 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 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

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.

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

Chain of Custody Form

Page ____ of ____

COC ID: 33513

☐ **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 #:**

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Sar Andes #22	A	Anions (300) Cl
Work Order		Project Number	073615	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	LSAU#	SB-2	14'-15'	5/26/11	1046				X	X									
2	LSAU#	SB-2	19'-20'	" "	1048				X	X									
3	LSAU#	SB-2	24'-25'	" "	1050					HOLD									X
4	LSAU #	SB-2	29'-30'	" "	1052					HOLD									X
5	LSAU#22	SB-2	34'-35'	" "	1054					HOLD									X
6	LSAU#22	SB-2	39'-40'	" "	1056					HOLD									X
7	LSAU # 22	SB-3	4'-5'	" "	1150				X	X									
8	LSAU #22	SB-3	9'-10'	" "	1152				X	X									
9	LSAU #22	SB-3	14'-15'	" "	1154				X	X									
10	LSAU #22	SB-3	19'-20'	" "	1156				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: 5 Day TAT.
Relinquished by:	Date:	Time:	Received by (Laboratory): 6/1/11 0900	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

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

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.

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

Chain of Custody Form

Page ____ of ____

COC ID: 33512

☐ **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 #:**

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington San Andes #22	A	Anions (300) Cl
Work Order		Project Number	073815	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	LSAU #22 SB-3 24'-25'	5/26/11	1158					HOLD									X
2	LSAU #22 SB-3 29'-30'	" "	1200					HOLD									X
3	LSAU #22 SB-3 34'-35'	" "	1202					HOLD									X
4	LSAU #22 SB-3 39'-40'	" "	1204					HOLD									X
5	LSAU #22 SB-4 4'-5'	" "	1230				X	X									
6	LSAU #22 SB-4 9'-10'	" "	1232				X	X									
7	LSAU #22 SB-4 14'-15'	" "	1234				X	X									
8	LSAU #22 SB-4 19'-20'	" "	1236				X	X									
9	LSAU #22 SB-4 24'-25'	" "	1238					HOLD									X
10	LSAU #22 SB-4 29'-30'	" "	1240					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: 1610	Received by:	
Relinquished by:	Date:	Time:	Received by (Laboratory): 6/1/11 0900	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: 5 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

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.

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

Chain of Custody Form

Page ____ of ____

COC ID: 33511

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 #:

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Sar Andes #22	A	Anions (300) Cl
Work Order		Project Number	073815	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	LSAU # 22 SB-4 34'-35'	5/26/11	1242					HOLD									X
2	LSAU # 22 SB-4 39'-40'		1244					HOLD									X
3	LSAU # 22 SB-5 4'-5'		1305					X	X								
4	LSAU # 22 SB-5 9'-10'		1307					X	X								
5	LSAU # 22 SB-5 14'-15'		1309					X	X								
6	LSAU # 22 SB-5 19'-20'		1311					X	X								
7	LSAU # 22 SB-5 24'-25'		1313					HOLD									X
8	LSAU # 22 SB-5 29'-30'		1315					HOLD									X
9	LSAU # 22 SB-5 34'-35'		1317					HOLD									X
10	LSAU # SB-5 39'-40'		1319					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:	Notes: 5 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 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

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.

ALS Environmental

Sample Receipt Checklist

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

Work Order: **1106008** Received by: **RDH**

Checklist completed by Salvador A. Yanez (eSignature) 01-Jun-11 (Date) Reviewed by: (eSignature) (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):			
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: