



March 9, 2011

RECEIVED
APR 04 2011
NMOCD ARTESIA

AMARILLO
921 North Bivins
Amarillo, Texas 79107
Phone 806.467.0607
Fax 806.467.0622

Mr. Mike Bratcher
NMOCD District 2
1301 West Grand Avenue
Artesia, NM 88210

ARTESIA
408 West Texas Ave.
Artesia, New Mexico 88210
Phone 575.746.8768
Fax 575.746.8905

Subject: **Soil Assessment and Remediation Work Plan**
Devon Energy Corporation
Parkway No.21 release, Eddy County, New Mexico

AUSTIN
911 West Anderson Lane
Suite 202
Austin, Texas 78757
Phone 512.989.3428
Fax 512.989.3487

Dear Mr. Bratcher,

Devon Energy Corporation has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Parkway No.21 release. Talon's proposed work plan to perform soil assessment and remediation activities consists of the following:

HOBBS
318 East Taylor Street
Hobbs, New Mexico 88240
Phone 575.393.4261
Fax 575.393.4658

Incident Date

January 23, 2011

MIDLAND
2901 State Hwy 349
Midland, Texas 79706
Phone 432.522.2133
Fax 432.522.2180

Background Information

SAN ANTONIO
17170 Jordan Rd
Suite 102
Selma, Texas 78154
Phone 210.265.8025
Fax 210.568.2191

The Parkway No. 21 is located approximately thirty-one (31) miles southeast of Artesia, New Mexico. The legal location for the site is Section 28, Township 19 South and Range 29 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the release are 32.62534 North and -104.07259 West.

TULSA
525 South Main Street
Suite 535
Tulsa, Oklahoma 74103
Phone 918.742.0871
Fax 918.382.0232

This site lies on undulating plains and low hills consisting of wind worked sandy deposits. Drainage courses in this area are normally dry. The local surface and shallow geology includes silty soils underlain by sand stone and hard caliches, providing an impermeable barrier to the migration of fluids in the area of the release. The New Mexico State Engineer web site indicates the nearest ground water data to be in S34-T19S-R29E. The ground water in Section 34 is reported to be at an average depth of 60' below ground surface (bgs).

The ranking for this site is 10 based on the as following:

ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

Depth to ground water 50'-100'
Wellhead Protection Area >1000'
Distance to surface water body >1000'

Incident Description

On January 1, 2011 the valve located on the load line running from the stock tank froze and then ruptured. The valve was replaced. One hundred and fifty-two (152) barrels of hydrocarbon fluids were released. A vacuum truck was brought to the location and twenty-three (23) barrels of hydrocarbon were recovered. The affected area is on the location in front of the tank battery. The hydrocarbon impacted area is estimated to be one hundred feet (100') long by sixty feet (60') wide. The bermed area of the tank battery was lined and no further corrective actions are required.

Actions Taken

On February 9, 2011 Talon/LPE mobilized personnel were on the site to begin the site assessment and soil sampling for the construction of a work plan. Grab soil samples were collected utilizing a split spoon auger rig. A bore hole was drilled into the impacted area located in front of the tank battery. Grab soil samples were collected from the surface of the impacted area on the location to a depth of six feet (6') below ground surface.

The grab soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, stored on ice or refrigerated, and transported to Cardinal Lab in Hobbs, New Mexico for analysis. The samples were tested for volatile organics (BTEX) per EPA Method 8021B; total Petroleum Hydrocarbons (TPH) per EPA Method 8015M; and total chlorides via Method SM 4500Cl-B. All analytical testing was performed on a standard turn-around basis. The complete laboratory report is attached as Appendix II.

Analytical Results

Analytical results received from Cardinal Laboratories are summarized below:

<u>Sample, Depth</u>	<u>Chlorides</u>	<u>BTEX mg/kg</u>	<u>TPH (mg/kg)</u>
S-1, 0'	240 ppm	442.6	24850
S-1, 1'	144	<50	59.2
S-1, 2'	112	<50	<10
S-1, 3'	80	<50	137
S-1, 4'	32	<50	<10
S-1 6'	16		

Summary and Conclusions

- Groundwater in the project vicinity is greater than 50-feet below land surface per the New Mexico State Engineer Database.
- The chloride impacts have been documented to be 240 mg/kg at the surface of the impacted area, and declined to 16 mg/kg in the soil sample labeled S-1 at six feet (6') below ground surface.
- Based on the laboratory results, hydrocarbon impacted soil tested over the Recommended Remediation Action Level (RRAL) at less than 1-foot deep only.

Recommended Remedial Actions

- The hydrocarbon impacted soil on the location will be remediated in place by insitu soil treatment. High nitrogen fertilizer will be applied to the surface of the impacted area. The treated soil will then be aerated utilizing tiller-blade techniques.
- Confirmation soil samples will be collected from the treated area. The soil samples will be collected within ninety (90) days following the date of the first treatment. The soil samples will be submitted to laboratory for TPH analysis using Method 8015M, and BTEX analysis using Method 8021B.
- When analytical results from soil samples collected report the TPH to be less than the RRAL of 5000 mg/kg for TPH; BTEX <50 mg/kg; and Benzene <10 mg/kg, treatment of the affected area will be concluded.
- A final report and analytical results will be provided to the NMOCD Artesia Office utilizing Form C-141.

Should you have any questions or if further information is required, please do not hesitate to contact us at 575.746.8768.

Respectfully submitted,

TALON/LPE

Mike Stubblefield
Project Manager



David J. Adkins
District Manager

APPENDIX I
STATE GROUNDWATER DATA
FORM C-141



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Sub basin	Use	County	Q Q Q				Rng	X	Y	Distance	Depth		
				64	16	4	Sec					Tws	Well	Water
CP 00681	PRO	ED	1	1	3	34	19S	29E	587230	3609127*	1912			
CP 00741	PRO	ED	1	3	2	34	19S	29E	588030	3609533*	1997	230	60	170
CP 00830	STK	LE	2	1	04	20S	29E	586118	3608193*	2786	120			

Average Depth to Water: **60 feet**

Minimum Depth: **60 feet**

Maximum Depth: **60 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 586608

Northing (Y): 3610936

Radius: 3000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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

Initial Report Final Report

Name of Company Devon Energy	Contact Roy White, Foreman
Address 6488 Seven Rivers Hwy – P.O. Box 250	Telephone No. 575-748-513-1741
Facility Name Parkway #21	Facility Type

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Oil	Volume of Release 152 bbls	Volume Recovered 23 bbls
Source of Release Load line valve in front of tank broke in two.	Date and Hour of Occurrence 01/23/11 – 10:30 am	Date and Hour of Discovery 01/23/11 – 10:30am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Darroll Gray, OCD	
By Whom? Roy White, Foreman	Date and Hour 01/23/11 – 11:55am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

We are going to put fertilizer on the affected area and till it into location

Describe Area Affected and Cleanup Action Taken.*

Spill was in front of tanks, 60x100. We are cleaning tanks, recoat bottom and 18, and replace all valves. We removed dirt in affected area on 1-23, the day of spill.

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: Mykol Horner	OIL CONSERVATION DIVISION	
Printed Name: Mykol Horner	Approved by District Supervisor:	
Title: Field Tech 1	Approval Date:	Expiration Date:
E-mail Address: mykol.horner@dvn.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 01/23/11 Phone: 575-748-0160		

* Attach Additional Sheets If Necessary

APPENDIX II
LABORATORY REPORT

February 15, 2011

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: PARKWAY BS #21

Enclosed are the results of analyses for samples received by the laboratory on 02/11/11 16:38.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

TALON LPE
 MIKE STUBBLEFIELD
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 02/11/2011
 Reported: 02/15/2011
 Project Name: PARKWAY BS #21
 Project Number: 700794.006.01
 Project Location: SEC 28 - 19S-29E

Sampling Date: 02/09/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S - 1 0' (H100281-01)

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	12.1	5.00	02/15/2011	ND	2.13	106	2.00	1.96	
Toluene*	159	5.00	02/15/2011	ND	2.12	106	2.00	1.07	
Ethylbenzene*	59.5	5.00	02/15/2011	ND	2.15	107	2.00	1.25	
Total Xylenes*	212	15.0	02/15/2011	ND	6.41	107	6.00	0.261	

Surrogate: 4-Bromofluorobenzene (PIL) 54.8 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	02/13/2011	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: AB						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	9850	50.0	02/15/2011	ND	214	107	200	0.929		
DRO >C10-C28	15000	50.0	02/15/2011	ND	226	113	200	1.74		

Surrogate: 1-Chlorooctane 134 % 70-130

Surrogate: 1-Chlorooctadecane 102 % 70-130

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
MIKE STUBBLEFIELD
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 02/11/2011
Reported: 02/15/2011
Project Name: PARKWAY BS #21
Project Number: 700794.006.01
Project Location: SEC 28 - 19S-29E

Sampling Date: 02/09/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S - 1 1' (H100281-02)

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/14/2011	ND	2.13	106	2.00	1.96		
Toluene*	0.188	0.050	02/14/2011	ND	2.12	106	2.00	1.07		
Ethylbenzene*	0.094	0.050	02/14/2011	ND	2.15	107	2.00	1.25		
Total Xylenes*	0.381	0.150	02/14/2011	ND	6.41	107	6.00	0.261		

Surrogate: 4-Bromofluorobenzene (PII) 99.7 % 70-130

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	02/13/2011	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: AB							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<10.0	10.0	02/15/2011	ND	214	107	200	0.929			
DRO >C10-C28	59.2	10.0	02/15/2011	ND	226	113	200	1.74			

Surrogate: 1-Chlorooctane 117 % 70-130

Surrogate: 1-Chlorooctadecane 133 % 70-130

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
 MIKE STUBBLEFIELD
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 02/11/2011
 Reported: 02/15/2011
 Project Name: PARKWAY BS #21
 Project Number: 700794.006.01
 Project Location: SEC 28 - 19S-29E

Sampling Date: 02/09/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S - 1 2' (H100281-03)

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2011	ND	2.13	106	2.00	1.96	
Toluene*	0.066	0.050	02/14/2011	ND	2.12	106	2.00	1.07	
Ethylbenzene*	<0.050	0.050	02/14/2011	ND	2.15	107	2.00	1.25	
Total Xylenes*	<0.150	0.150	02/14/2011	ND	6.41	107	6.00	0.261	

Surrogate: 4-Bromofluorobenzene (PIL) 95.3 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/13/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/15/2011	ND	214	107	200	0.929	
DRO >C10-C28	<10.0	10.0	02/15/2011	ND	226	113	200	1.74	

Surrogate: 1-Chlorooctane 87.5 % 70-130

Surrogate: 1-Chlorooctadecane 95.9 % 70-130

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
 MIKE STUBBLEFIELD
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received: 02/11/2011
 Reported: 02/15/2011
 Project Name: PARKWAY BS #21
 Project Number: 700794.006.01
 Project Location: SEC 28 - 19S-29E

Sampling Date: 02/09/2011
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: S - 1 3' (H100281-04)

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2011	ND	2.13	106	2.00	1.96	
Toluene*	<0.050	0.050	02/14/2011	ND	2.12	106	2.00	1.07	
Ethylbenzene*	<0.050	0.050	02/14/2011	ND	2.15	107	2.00	1.25	
Total Xylenes*	<0.150	0.150	02/14/2011	ND	6.41	107	6.00	0.261	

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	02/13/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/15/2011	ND	214	107	200	0.929	
DRO >C10-C28	137	10.0	02/15/2011	ND	226	113	200	1.74	

Surrogate: 1-Chlorooctane 90.6 % 70-130

Surrogate: 1-Chlorooctadecane 90.4 % 70-130

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

TALON LPE
MIKE STUBBLEFIELD
408 W. TEXAS AVE.
ARTESIA NM, 88210
Fax To: (575) 745-8905

Received: 02/11/2011
Reported: 02/15/2011
Project Name: PARKWAY BS #21
Project Number: 700794.006.01
Project Location: SEC 28 - 19S-29E

Sampling Date: 02/09/2011
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S - 1 4' (H100281-05)

BTEX 8021B		mg/kg		Analyzed By: CMS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/14/2011	ND	2.13	106	2.00	1.96	
Toluene*	<0.050	0.050	02/14/2011	ND	2.12	106	2.00	1.07	
Ethylbenzene*	<0.050	0.050	02/14/2011	ND	2.15	107	2.00	1.25	
Total Xylenes*	<0.150	0.150	02/14/2011	ND	6.41	107	6.00	0.261	

Surrogate: 4-Bromofluorobenzene (PIL) 95.9 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/13/2011	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	02/15/2011	ND	214	107	200	0.929	
DRO >C10-C28	<10.0	10.0	02/15/2011	ND	226	113	200	1.74	

Surrogate: 1-Chlorooctane 87.3 % 70-130

Surrogate: 1-Chlorooctadecane 91.7 % 70-130

Sample ID: S - 1 6' (H100281-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	02/13/2011	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-LOW Low surrogate recovery confirmed as a matrix effect by a second analysis.
- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

