

RECEIVED

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

JAN 18 2011

HOBBSOCD

Release Notification and Corrective Action

OPERATOR

X Initial Report Final Report

Name of Company Chevron Midcontinent LP	Contact Larry Ridenour
Address HCR 60 Box 423 Lovington, N.M. 88260	Telephone No. 505-396-4414 X 102
Facility Name Lovington Paddock Unit #96	Facility Type flow line
Surface Owner City of Lovington	Mineral Owner State of NM
Lease No. B1505 30025 31084	

LOCATION OF RELEASE

Unit Letter N	Section 31	Township 16S	Range 37E	Feet from the 1070	South Line	Feet from the 1492	West Line	County Lea
------------------	---------------	-----------------	--------------	-----------------------	------------	-----------------------	-----------	---------------

Latitude N 32 deg 52 min 27.89 sec Longitude W 103 deg 17 min 40.09 sec
API #30-025-31084

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 5 BW	Volume Recovered 0 bbl
Source of Release flow line	Date and Hour of Occurrence 11/16/07 10:00 AM	Date and Hour of Discovery 11/16/07 10:30 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Pat Caperton	
By Whom? Larry Ridenour	Date and Hour 11/16/2007 3:10 PM.	
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.*

Leak location is approximately 200 ft west of the well. Polychylen flow line leak. Bad section removed and line was fused back together.
Chlorides 35,300

Describe Area Affected and Cleanup Action Taken.*

Affected area is approximately 30' diameter circle. Area marked with white flags for one call. Moist soil will be removed first. Testing will then be performed to determine what else needs to be removed. Testing results along with a remediation plan will be submitted to the OCD for approval.

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: <i>Larry Ridenour</i>	OIL CONSERVATION DIVISION <i>[Signature]</i>	
Printed Name: Larry Ridenour	Approved by District Supervisor ENVIRONMENTAL ENGINEER	
Title: Operations Representative	Approval Date: 11-27-07	Expiration Date: 12-31-07
E-mail Address LRidenour@chevron.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 11/19/2007 Phone: 396-4414 X 102	SUBMIT FINAL w/Documentation BY <i>[Signature]</i>	

* Attach Additional Sheets If Necessary

Approved for backfill
Jeffrey [Signature]
Env. Engr.
NMOCD - HOBBS
04/13/11

RP#1665

Table 1
CHEVRON USA
LPU #96
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
AH-1	7/15/2010	0-6"		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200
AH-2	7/15/2010	0-6"		X		<2.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<200

BEB Below Excavation Bottom

(--) Not Analyzed

☐ Excavated material

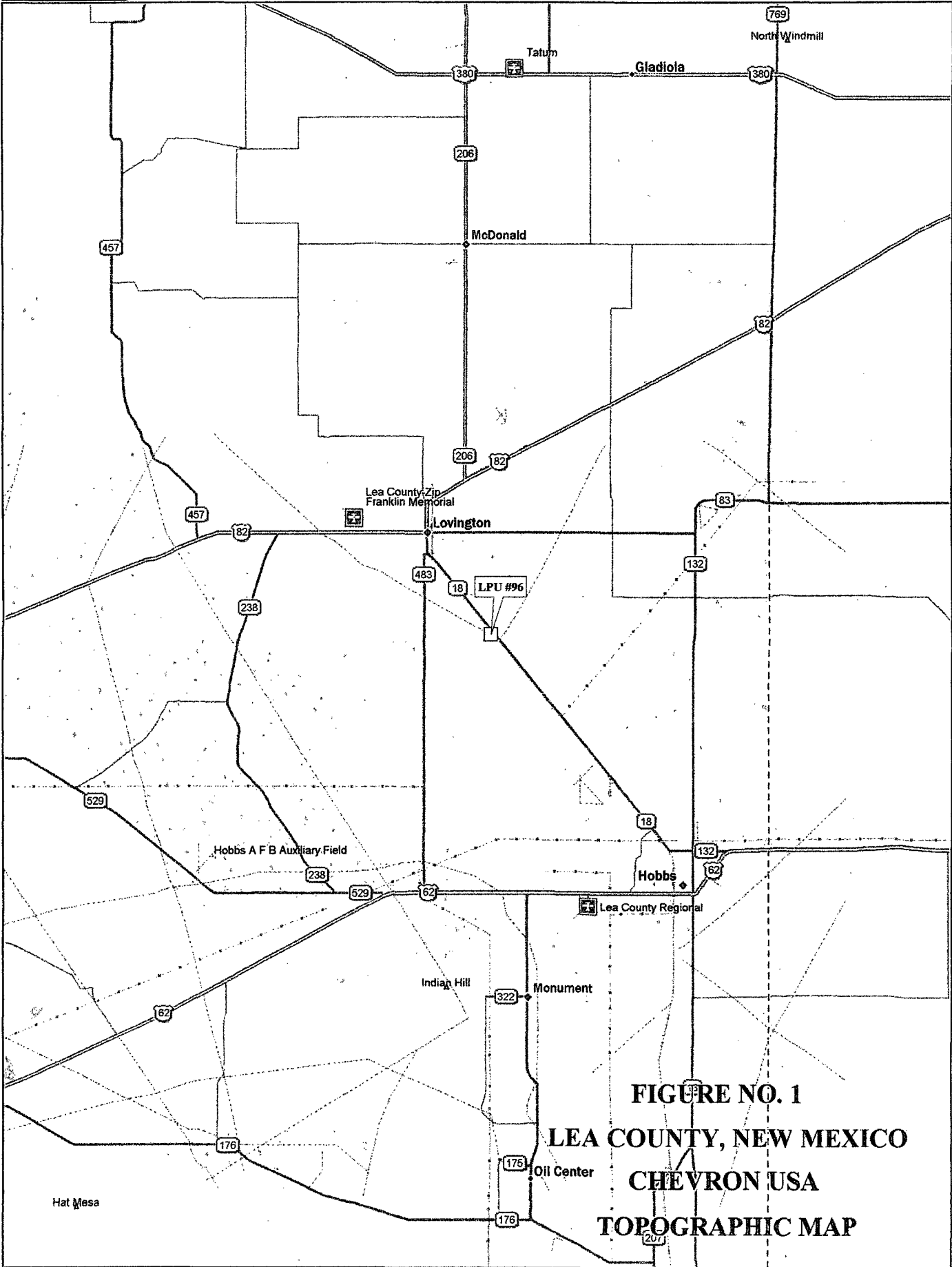
Table 2
CHEVRON USA
LPU #96
Lea County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Depth (BEB)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total					
T-1	8/18/2010	1.5-2'		X		-	-	-	-	-	-	-	<200
T-2	8/18/2010	1.5-2'		X		-	-	-	-	-	-	-	<200

BEB Below Excavation Bottom

(--) Not Analyzed

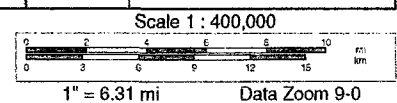
☐ Excavated material

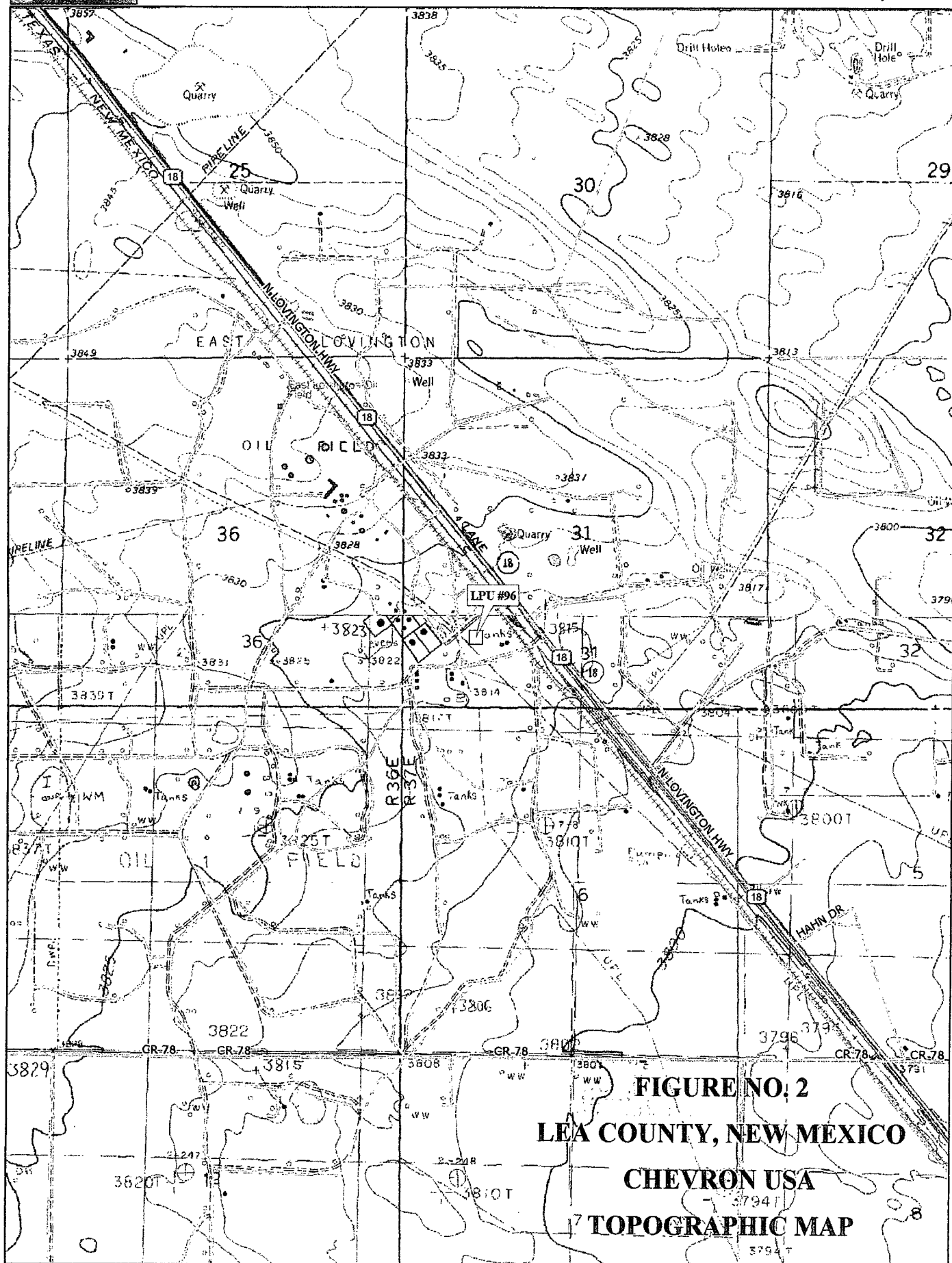


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www.delorme.com

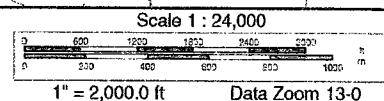




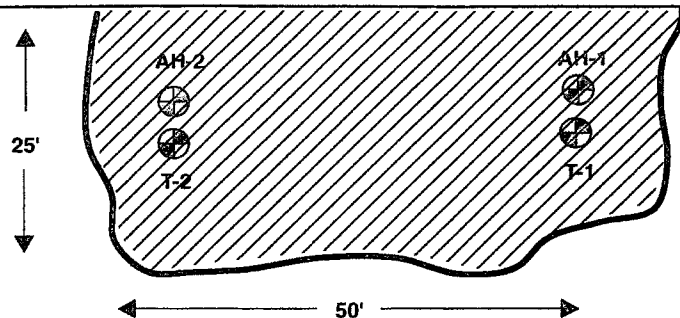
Data use subject to license.

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PIPELINE ROAD



Pump Jack

Lovington Highway

Explanation

-  Spill Area
-  Auger Hole Sample
-  Sample Trench

NOT TO SCALE



CHEVRON

Figure 3
LPU #96

Chevron Spill Assessment
Lea County, New Mexico

Project : 114-6400596

Date : 10-5-2010

File : H:\GIS\6400596DWG



Summary Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: August 30, 2010

Work Order: 10082311



Project Location: Lea County, NM
Project Name: Chevron/LPU #96
Project Number: 114-6400596

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
242129	T-1 1.5-2'	soil	2010-08-18	00:00	2010-08-20
242130	T-2 1.5-2'	soil	2010-08-18	00:00	2010-08-20

Sample: 242129 - T-1 1.5-2'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 242130 - T-2 1.5-2'

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACE ANALYSIS, INC.

6701 Aneerdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•685•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lah@traceanalysis.com

Certifications

WBENC: 237019

HUB: 1752439743100-86536
NCTRCA WFWB38444Y0909

DBE: VN 20657

NELAP Certifications

Lubbock: T104704219-08-TX
LELAP-02003
Kansas E-10317

El Paso: T104704221-08-TX
LELAP-02002

Midland: T104704392-08-TX

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: August 30, 2010

Work Order: 10082311



Project Location: Lea County, NM
Project Name: Chevron/LPU #96
Project Number: 114-6400596

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
242129	T-1 1.5-2'	soil	2010-08-18	00:00	2010-08-20
242130	T-2 1.5-2'	soil	2010-08-18	00:00	2010-08-20

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project Chevron/LPU #96 were received by TraceAnalysis, Inc. on 2010-08-20 and assigned to work order 10082311. Samples for work order 10082311 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (Titration)	SM 4500-Cl B	62587	2010-08-26 at 09:39	73010	2010-08-27 at 15:08

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10082311 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been *footnoted* on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: August 30, 2010
114-6400596

Work Order: 10082311
Chevron/LPU #96

Page Number: 4 of 5
Lea County, NM

Analytical Report

Sample: 242129 - T-1 1.5-2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-08-27	Analyzed By:	AR
QC Batch:	73010	Sample Preparation:	2010-08-26	Prepared By:	AR
Prep Batch:	62587				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 242130 - T-2 1.5-2'

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-08-27	Analyzed By:	AR
QC Batch:	73010	Sample Preparation:	2010-08-26	Prepared By:	AR
Prep Batch:	62587				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Method Blank (1) QC Batch: 73010

QC Batch:	73010	Date Analyzed:	2010-08-27	Analyzed By:	AR
Prep Batch:	62587	QC Preparation:	2010-08-26	Prepared By:	AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Laboratory Control Spike (LCS-1)

QC Batch:	73010	Date Analyzed:	2010-08-27	Analyzed By:	AR
Prep Batch:	62587	QC Preparation:	2010-08-26	Prepared By:	AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	97.6	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: August 30, 2010
114-6400596

Work Order: 10082311
Chevron/LPU #96

Page Number: 5 of 5
Lea County, NM

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	103	mg/Kg	1	100	<2.18	103	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 242145

QC Batch: 73010
Prep Batch: 62587

Date Analyzed: 2010-08-27
QC Preparation: 2010-08-26

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9620	mg/Kg	100	10000	<218	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	9950	mg/Kg	100	10000	<218	100	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1)

QC Batch: 73010

Date Analyzed: 2010-08-27

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	104	104	85 - 115	2010-08-27

Standard (CCV-1)

QC Batch: 73010

Date Analyzed: 2010-08-27

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.5	96	85 - 115	2010-08-27

100 # 10082311

Analysis Request of Chain of Custody Record



TETRA TECH

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 • Fax (432) 682-3946

PAGE: / OF: /

ANALYSIS REQUEST
(Circle or Specify Method No.)

CLIENT NAME:

Chevron

SITE MANAGER:

Ike Tavaraz

PROJECT NO.:

114-4400596

PROJECT NAME:

*Chevron / LPU # 96
Lea Co. NM*

LAB I.D.
NUMBER

DATE
2010

TIME

MATRIX
COMP
GRAB

SAMPLE IDENTIFICATION

NUMBER OF CONTAINERS

FILTERED (Y/N)

PRESERVATIVE
METHOD

HCL
HNO3
ICE
NONE

BTEX 8021B

TPH 8015 MOD. TX1005 (Ext. to C35)

PAH 8270

RCRA Metals Ag As Ba Cd Cr Pb Hg Se

TCLP Metals Ag As Ba Cd Vt Pd Hg Se

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8240/8280/824

GC/MS Semi. Vol. 8270/825

PCB's 8080/808

Pest. 809/808

Chloride

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

Major Anions/Cations, pH, TDS

RELINQUISHED BY: (Signature)

[Signature]

Date: *8/20/10*
Time: *1545*

RECEIVED BY: (Signature)

[Signature]

Date: *8/20/10*
Time: *1545*

SAMPLED BY: (Print & Initial)

IT

Date: *8/18/10*
Time: _____

RELINQUISHED BY: (Signature)

[Signature]

Date: _____
Time: _____

RECEIVED BY: (Signature)

[Signature]

Date: _____
Time: _____

SAMPLE SHIPPED BY: (Circle)

FEDEX

BUS

AIRBILL #:

HAND DELIVERED

UPS

OTHER:

RECEIVING LABORATORY:

Tetra

RECEIVED BY: (Signature)

ADDRESS:

CITY: *midland*

STATE: *TX*

ZIP:

CONTACT:

PHONE:

DATE:

TIME:

TETRA TECH CONTACT PERSON:

Ike Tavaraz

Results by:

RUSH Charges
Authorized:
Yes No

SAMPLE CONDITION WHEN RECEIVED:

4.0°C intact

REMARKS:

All tests - Midland

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: July 21, 2010

Work Order: 10071921



Project Location: Lea County, NM
Project Name: LPU #96
Project Number: 114-6400596

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
238026	AH-1 0-6in.	soil	2010-07-15	00:00	2010-07-19
238027	AH-2 0-6in.	soil	2010-07-15	00:00	2010-07-19

Sample - Field Code	BTEX				TPH DRO - NEW	TPH GRO
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)	DRO (mg/Kg)	GRO (mg/Kg)
238026 - AH-1 0-6in.	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
238027 - AH-2 0-6in.	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00

Sample: 238026 - AH-1 0-6in.

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

Sample: 238027 - AH-2 0-6in.

Param	Flag	Result	Units	RL
Chloride		<200	mg/Kg	4.00

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1296
200 East Sunset Road, Suite E El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
5002 Basin Street, Suite A1 Midland, Texas 79703 432•689•6301 FAX 432•689•6313
6015 Harris Parkway, Suite 110 Ft. Worth, Texas 76132 817•201•5260
E-Mail: lab@traceanalysis.com

Certifications

WBENC: 237019 HUB: 1752439743100-86536 DBE: VN 20657
NCTRCA WFVB38444Y0909

NELAP Certifications

Lubbock: T104704219-08-TX El Paso: T104704221-08-TX Midland: T104704392-08-TX
LELAP-02003 LELAP-02002
Kansas E-10317

Analytical and Quality Control Report

Ike Tavaréz
Tetra Tech
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: July 21, 2010

Work Order: 10071921



Project Location: Lea County, NM
Project Name: LPU #96
Project Number: 114-6400596

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
238026	AH-1 0-6in.	soil	2010-07-15	00:00	2010-07-19
238027	AH-2 0-6in.	soil	2010-07-15	00:00	2010-07-19

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 14 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael Abel

Dr. Blair Leftwich, Director
Dr. Michael Abel, Project Manager

Standard Flags

B - The sample contains less than ten times the concentration found in the method blank.

Case Narrative

Samples for project LPU #96 were received by TraceAnalysis, Inc. on 2010-07-19 and assigned to work order 10071921. Samples for work order 10071921 were received intact at a temperature of 3.3 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
BTEX	S 8021B	61608	2010-07-19 at 16:00	71924	2010-07-20 at 11:02
Chloride (Titration)	SM 4500-Cl B	61620	2010-07-20 at 08:52	71896	2010-07-20 at 11:56
TPH DRO - NEW	S 8015 D	61592	2010-07-19 at 14:30	71873	2010-07-19 at 14:30
TPH GRO	S 8015 D	61608	2010-07-19 at 16:00	71925	2010-07-20 at 11:29

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10071921 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

Report Date: July 21, 2010
114-6400596

Work Order: 10071921
LPU #96

Page Number: 4 of 14
Lea County, NM

Analytical Report

Sample: 238026 - AH-1 0-6in.

Laboratory: Midland
Analysis: BTEX
QC Batch: 71924
Prep Batch: 61608

Analytical Method: S 8021B
Date Analyzed: 2010-07-20
Sample Preparation: 2010-07-19

Prep Method: S 5035
Analyzed By: AG
Prepared By: AG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.18	mg/Kg	1	2.00	59	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.22	mg/Kg	1	2.00	61	38.4 - 157

Sample: 238026 - AH-1 0-6in.

Laboratory: Midland
Analysis: Chloride (Titration)
QC Batch: 71896
Prep Batch: 61620

Analytical Method: SM 4500-Cl B
Date Analyzed: 2010-07-20
Sample Preparation: 2010-07-20

Prep Method: N/A
Analyzed By: AR
Prepared By: AR

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 238026 - AH-1 0-6in.

Laboratory: Midland
Analysis: TPH DRO - NEW
QC Batch: 71873
Prep Batch: 61592

Analytical Method: S 8015 D
Date Analyzed: 2010-07-19
Sample Preparation: 2010-07-19

Prep Method: N/A
Analyzed By: kg
Prepared By: kg

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Report Date: July 21, 2010
114-6400596

Work Order: 10071921
LPU #96

Page Number: 5 of 14
Lea County, NM

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		126	mg/Kg	1	100	126	70 - 130

Sample: 238026 - AH-1 0-6in.

Laboratory: Midland	Analytical Method: S 8015 D	Prep Method: S 5035
Analysis: TPH GRO	Date Analyzed: 2010-07-20	Analyzed By: AG
QC Batch: 71925	Sample Preparation: 2010-07-19	Prepared By: AG
Prep Batch: 61608		

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.40	mg/Kg	1	2.00	70	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.36	mg/Kg	1	2.00	68	42 - 159

Sample: 238027 - AH-2 0-6in.

Laboratory: Midland	Analytical Method: S 8021B	Prep Method: S 5035
Analysis: BTEX	Date Analyzed: 2010-07-20	Analyzed By: AG
QC Batch: 71924	Sample Preparation: 2010-07-19	Prepared By: AG
Prep Batch: 61608		

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0200	mg/Kg	1	0.0200
Toluene		<0.0200	mg/Kg	1	0.0200
Ethylbenzene		<0.0200	mg/Kg	1	0.0200
Xylene		<0.0200	mg/Kg	1	0.0200

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.35	mg/Kg	1	2.00	68	52.8 - 137
4-Bromofluorobenzene (4-BFB)		1.35	mg/Kg	1	2.00	68	38.4 - 157

Report Date: July 21, 2010
114-6400596

Work Order: 10071921
LPU #96

Page Number: 6 of 14
Lea County, NM

Sample: 238027 - AH-2 0-6in.

Laboratory:	Midland	Analytical Method:	SM 4500-Cl B	Prep Method:	N/A
Analysis:	Chloride (Titration)	Date Analyzed:	2010-07-20	Analyzed By:	AR
QC Batch:	71896	Sample Preparation:	2010-07-20	Prepared By:	AR
Prep Batch:	61620				

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		<200	mg/Kg	50	4.00

Sample: 238027 - AH-2 0-6in.

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	N/A
Analysis:	TPH DRO - NEW	Date Analyzed:	2010-07-19	Analyzed By:	kg
QC Batch:	71873	Sample Preparation:	2010-07-19	Prepared By:	kg
Prep Batch:	61592				

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		113	mg/Kg	1	100	113	70 - 130

Sample: 238027 - AH-2 0-6in.

Laboratory:	Midland	Analytical Method:	S 8015 D	Prep Method:	S 5035
Analysis:	TPH GRO	Date Analyzed:	2010-07-20	Analyzed By:	AG
QC Batch:	71925	Sample Preparation:	2010-07-19	Prepared By:	AG
Prep Batch:	61608				

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<2.00	mg/Kg	1	2.00

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.58	mg/Kg	1	2.00	79	48.5 - 152
4-Bromofluorobenzene (4-BFB)		1.50	mg/Kg	1	2.00	75	42 - 159

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Method Blank (1) QC Batch: 71873

QC Batch: 71873 Date Analyzed: 2010-07-19 Analyzed By: kg
Prep Batch: 61592 QC Preparation: 2010-07-19 Prepared By: kg

Parameter	Flag	MDL Result	Units	RL
DRO		<14.5	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Tricosane		103	mg/Kg	1	100	103	70 - 130

Method Blank (1) QC Batch: 71896

QC Batch: 71896 Date Analyzed: 2010-07-20 Analyzed By: AR
Prep Batch: 61620 QC Preparation: 2010-07-20 Prepared By: AR

Parameter	Flag	MDL Result	Units	RL
Chloride		<2.18	mg/Kg	4

Method Blank (1) QC Batch: 71924

QC Batch: 71924 Date Analyzed: 2010-07-20 Analyzed By: AG
Prep Batch: 61608 QC Preparation: 2010-07-19 Prepared By: AG

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.0150	mg/Kg	0.02
Toluene		<0.00950	mg/Kg	0.02
Ethylbenzene		<0.0106	mg/Kg	0.02
Xylene		<0.00930	mg/Kg	0.02

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.19	mg/Kg	1	2.00	110	66.6 - 122
4-Bromofluorobenzene (4-BFB)		2.18	mg/Kg	1	2.00	109	55.4 - 132

Method Blank (1) QC Batch: 71925

QC Batch: 71925 Date Analyzed: 2010-07-20 Analyzed By: AG
Prep Batch: 61608 QC Preparation: 2010-07-19 Prepared By: AG

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Parameter	Flag	MDL Result	Units	RL
GRO		<1.65	mg/Kg	2

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		2.63	mg/Kg	1	2.00	132	67.6 - 150
4-Bromofluorobenzene (4-BFB)		2.41	mg/Kg	1	2.00	120	52.4 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 71873
Prep Batch: 61592

Date Analyzed: 2010-07-19
QC Preparation: 2010-07-19

Analyzed By: kg
Prepared By: kg

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	256	mg/Kg	1	250	<14.5	102	57.4 - 133.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	251	mg/Kg	1	250	<14.5	100	57.4 - 133.4	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Tricosane	111	114	mg/Kg	1	100	111	114	70 - 130

Laboratory Control Spike (LCS-1)

QC Batch: 71896
Prep Batch: 61620

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-20

Analyzed By: AR
Prepared By: AR

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	98.1	mg/Kg	1	100	<2.18	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	100	mg/Kg	1	100	<2.18	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Laboratory Control Spike (LCS-1)

QC Batch: 71924
Prep Batch: 61608

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.99	mg/Kg	1	2.00	<0.0150	100	81.9 - 108
Toluene	2.02	mg/Kg	1	2.00	<0.00950	101	81.9 - 107
Ethylbenzene	2.00	mg/Kg	1	2.00	<0.0106	100	78.4 - 107
Xylene	6.06	mg/Kg	1	6.00	<0.00930	101	79.1 - 107

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	2.03	mg/Kg	1	2.00	<0.0150	102	81.9 - 108	2	20
Toluene	2.07	mg/Kg	1	2.00	<0.00950	104	81.9 - 107	2	20
Ethylbenzene	2.04	mg/Kg	1	2.00	<0.0106	102	78.4 - 107	2	20
Xylene	6.21	mg/Kg	1	6.00	<0.00930	104	79.1 - 107	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.09	2.04	mg/Kg	1	2.00	104	102	70.2 - 114
4-Bromofluorobenzene (4-BFB)	2.15	2.09	mg/Kg	1	2.00	108	104	69.8 - 121

Laboratory Control Spike (LCS-1)

QC Batch: 71925
Prep Batch: 61608

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-19

Analyzed By: AG
Prepared By: AG

Param	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.7	mg/Kg	1	20.0	<1.65	78	69.9 - 95.4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO	16.6	mg/Kg	1	20.0	<1.65	83	69.9 - 95.4	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	2.68	2.68	mg/Kg	1	2.00	134	134	61.9 - 142
4-Bromofluorobenzene (4-BFB)	2.53	2.55	mg/Kg	1	2.00	126	128	68.2 - 132

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Matrix Spike (MS-1) Spiked Sample: 238025

QC Batch: 71873
Prep Batch: 61592

Date Analyzed: 2010-07-19
QC Preparation: 2010-07-19

Analyzed By: kg
Prepared By: kg

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
DRO	241	mg/Kg	1	250	<14.5	96	35.2 - 167.1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
DRO	242	mg/Kg	1	250	<14.5	97	35.2 - 167.1	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Tricosane	101	106	mg/Kg	1	100	101	106	70 - 130

Matrix Spike (MS-1) Spiked Sample: 238034

QC Batch: 71896
Prep Batch: 61620

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-20

Analyzed By: AR
Prepared By: AR

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride	9960	mg/Kg	100	10000	<218	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride	10100	mg/Kg	100	10000	<218	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 238026

QC Batch: 71924
Prep Batch: 61608

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Benzene	1.94	mg/Kg	1	2.00	<0.0150	97	80.5 - 112
Toluene	2.01	mg/Kg	1	2.00	<0.00950	100	82.4 - 113

continued ...

matrix spikes continued ...

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Ethylbenzene	2.06	mg/Kg	1	2.00	<0.0106	103	83.9 - 114
Xylene	6.25	mg/Kg	1	6.00	<0.00930	104	84 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Benzene	¹	2.31	mg/Kg	1	2.00	<0.0150	116	80.5 - 112	17	20
Toluene	²	2.37	mg/Kg	1	2.00	<0.00950	118	82.4 - 113	16	20
Ethylbenzene	³	2.45	mg/Kg	1	2.00	<0.0106	122	83.9 - 114	17	20
Xylene	⁴	7.38	mg/Kg	1	6.00	<0.00930	123	84 - 114	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.61	1.74	mg/Kg	1	2	80	87	41.3 - 117
4-Bromofluorobenzene (4-BFB)	1.67	1.82	mg/Kg	1	2	84	91	35.5 - 129

Matrix Spike (MS-1) Spiked Sample: 238037

QC Batch: 71925
Prep Batch: 61608

Date Analyzed: 2010-07-20
QC Preparation: 2010-07-19

Analyzed By: AG
Prepared By: AG

Param	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
GRO	15.2	mg/Kg	1	20.0	<1.65	76	61.8 - 114

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param		MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
GRO		16.2	mg/Kg	1	20.0	<1.65	81	61.8 - 114	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	1.55	2.31	mg/Kg	1	2	78	116	50 - 162
4-Bromofluorobenzene (4-BFB)	1.58	2.30	mg/Kg	1	2	79	115	50 - 162

¹MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

²MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

³MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

⁴MSD analyte out of range. MS/MSD has a RPD within limits. Therefore, MS shows extraction occurred properly.

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Standard (CCV-2)

QC Batch: 71873

Date Analyzed: 2010-07-19

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	268	107	80 - 120	2010-07-19

Standard (CCV-3)

QC Batch: 71873

Date Analyzed: 2010-07-19

Analyzed By: kg

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	265	106	80 - 120	2010-07-19

Standard (ICV-1)

QC Batch: 71896

Date Analyzed: 2010-07-20

Analyzed By: AR

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	96.9	97	85 - 115	2010-07-20

Standard (CCV-1)

QC Batch: 71896

Date Analyzed: 2010-07-20

Analyzed By: AR

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/Kg	100	103	103	85 - 115	2010-07-20

Standard (CCV-1)

QC Batch: 71924

Date Analyzed: 2010-07-20

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0959	96	80 - 120	2010-07-20
Toluene		mg/Kg	0.100	0.0981	98	80 - 120	2010-07-20

continued ...

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/Kg	0.100	0.0991	99	80 - 120	2010-07-20
Xylene		mg/Kg	0.300	0.300	100	80 - 120	2010-07-20

Standard (CCV-2)

QC Batch: 71924

Date Analyzed: 2010-07-20

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0995	100	80 - 120	2010-07-20
Toluene		mg/Kg	0.100	0.101	101	80 - 120	2010-07-20
Ethylbenzene		mg/Kg	0.100	0.0996	100	80 - 120	2010-07-20
Xylene		mg/Kg	0.300	0.302	101	80 - 120	2010-07-20

Standard (CCV-3)

QC Batch: 71924

Date Analyzed: 2010-07-20

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0972	97	80 - 120	2010-07-20
Toluene		mg/Kg	0.100	0.0979	98	80 - 120	2010-07-20
Ethylbenzene		mg/Kg	0.100	0.0954	95	80 - 120	2010-07-20
Xylene		mg/Kg	0.300	0.290	97	80 - 120	2010-07-20

Standard (CCV-1)

QC Batch: 71925

Date Analyzed: 2010-07-20

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	1.02	102	80 - 120	2010-07-20

Standard (CCV-2)

QC Batch: 71925

Date Analyzed: 2010-07-20

Analyzed By: AG

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.992	99	80 - 120	2010-07-20

Standard (CCV-3)

QC Batch: 71925

Date Analyzed: 2010-07-20

Analyzed By: AG

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1.00	0.978	98	80 - 120	2010-07-20

