

**Bratcher, Mike, EMNRD**

---

**From:** Cindy Crain [cindy.crain@gmail.com]  
**Sent:** Tuesday, April 13, 2010 8:39 AM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Moss, Shannon  
**Subject:** Devon Energy, Joell 6 #2 Battery Remediation - Request for Backfill Approval  
**Attachments:** Field Drawing.doc; 4-5-10 Analyticals.pdf; 4-7-10 Analyticals.pdf; 4-9-10 Analyticals.pdf

Mike,

With regard to the Devon Energy, Joell 6 #2 Battery that we spoke about earlier today, the following information is attached for your review:

Field Drawing showing sample point locations

4/5/10 Analyticals - TPH and Cl concentrations from excavation

4/7/10 Analyticals - Background Cl concentrations

4/9/10 Analyticals - Deepest Cl concentrations

The site is located in Unit Letter G, Sec. 6, T23S, R27E, Eddy County, New Mexico.  
Depth to groundwater is approximately 120 feet bgs.

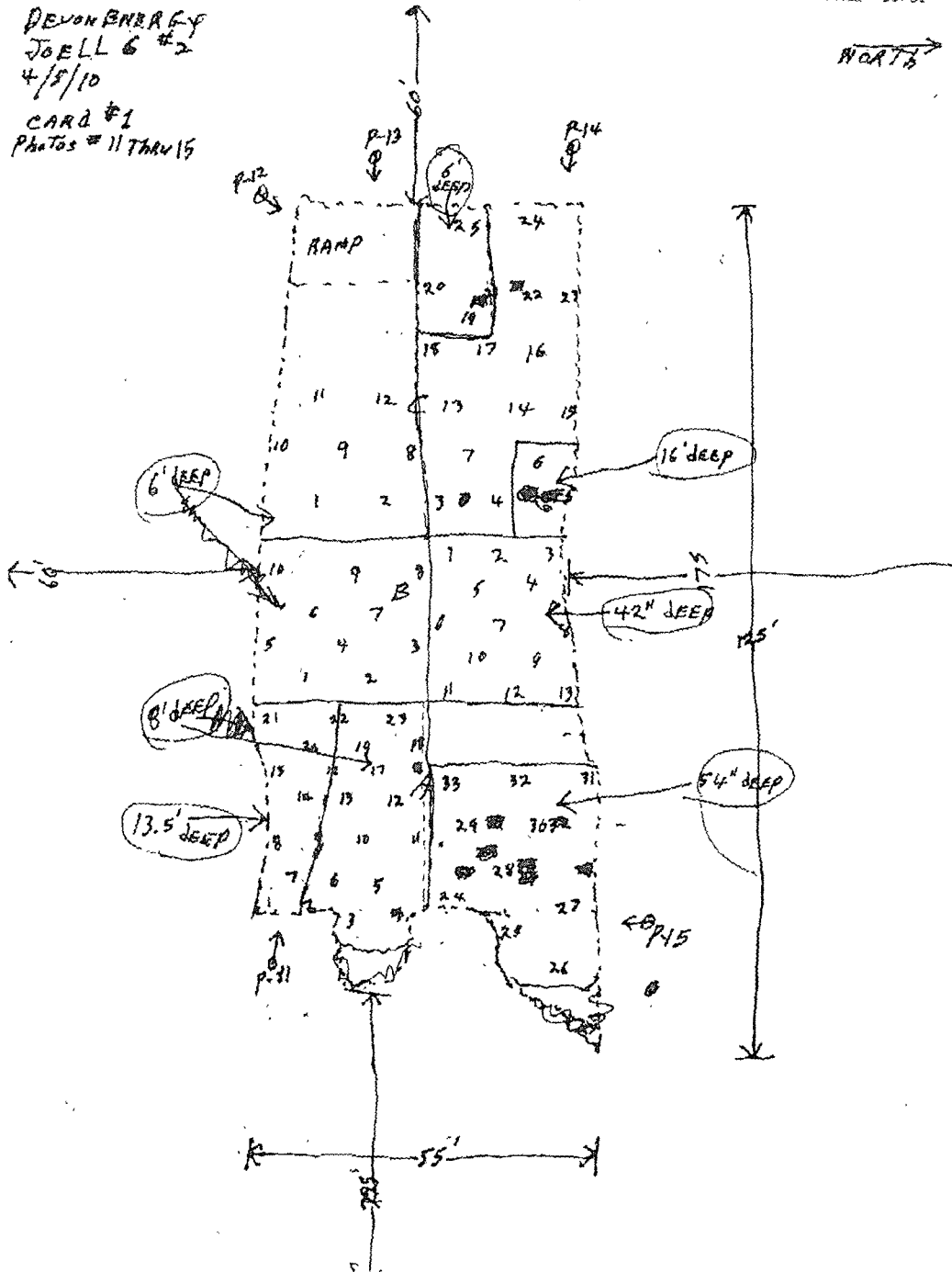
Ocotillo Environmental has equipment on site and is ready to begin backfilling of the excavation upon your approval to do so.

If you have any questions or need additional information, please let me know.

Thank you,  
Cindy Crain

DEVON ENERGY  
JOELL 6 #2  
4/5/10  
CARD #1  
Photos # 11 Thru 15

NORTH →





April 7, 2010

Cindy Crain  
Ocotillo Environmental, LLC  
P.O. Box 1816  
Hobbs, NM 88241

Re: Joell 6 #2

Enclosed are the results of analyses for sample number H19599, received by the laboratory on 04/05/10 at 3:10 pm.

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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

Celey D. Keene  
Laboratory Director



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
OCOTILLO ENVIRONMENTAL  
ATTN: CINDY CRAIN  
P.O. BOX 1816  
HOBBS, NM 88241  
FAX TO: (432) 272-0304

Receiving Date: 04/05/10  
Reporting Date: 04/06/10  
Project Owner: NOT GIVEN  
Project Name: JOELL 6 #2  
Project Location: 3.2 MILES S. OF CARLSBAD, NM

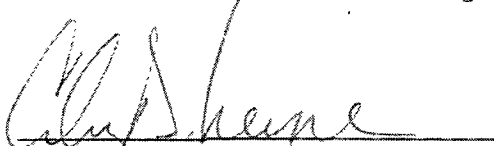
Sampling Date: 04/05/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 5°C  
Sample Received By: JH  
Analyzed By: AB/HM


LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	*Cl <sup>-</sup> (mg/kg)
		04/05/10	04/05/10	04/06/10
H19599-1	A-1-COMP.	<10.0	<10.0	496
H19599-2**	A-NW	<10.0	<10.0	448
H19599-3**	A-SW	<10.0	<10.0	672
H19599-4	B-1-COMP.	<10.0	<10.0	880
H19599-5**	B-NW	<10.0	<10.0	976
H19599-6	B-SW	<10.0	<10.0	656
H19599-7	C-1-COMP.	<10.0	<10.0	592
H19599-8	C-NW	<10.0	<10.0	448
H19599-9	C-SW	<10.0	<10.0	1,010
H19599-10	A-EW	<10.0	<10.0	416
H19599-11	C-WW	<10.0	<10.0	816
Quality Control		571	575	500
True Value QC		500	500	500
% Recovery		114	115	100
Relative Percent Difference		0.5	7.5	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl<sup>-</sup>: Std. Methods 4500-Cl<sup>-</sup>B

\*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

\*\*One or more of the TPH surrogates outside historical limits due to matrix interference.

  
Chemist

  
Date

H19599 TCL OCO

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 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.



# **CARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page 1 of 1

<b>Company Name:</b> <u>DEVON ENERGY</u> <b>Project Manager:</b> <u>CINDY CRAIN</u> <b>Address:</b> <u>2125 FRENCH DRIVE P.O. Box 1816</u> <b>City:</b> <u>Hobbs</u> <b>State:</b> <u>NM</u> <b>Zip:</b> <u>88240</u> <b>Phone #:</b> <u>575-441-7244</u> <b>Fax #:</b> _____ <b>Project #:</b> _____ <b>Project Owner:</b> _____ <b>Project Name:</b> <u>JOELL 6 #2</u> <b>Project Location:</b> <u>3.2 MILES SOUTH OF CARLSBAD, NM.</u> <b>Sampler Name:</b> <u>DON GREEN</u>				<b>BILL TO</b> <b>P.O. #:</b> _____ <b>Company:</b> <u>OCOTILLO</u> <b>Attn:</b> _____ <b>Address:</b> _____ <b>City:</b> _____ <b>State:</b> _____ <b>Zip:</b> _____ <b>Phone #:</b> _____ <b>Fax #:</b> _____		<b>ANALYSIS REQUEST</b>																
FOR LAB USE ONLY		MATRIX		PRESERV		SAMPLING																
Lab I.D.	Sample I.D.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME										
H19599-1	A-1 - comp.	C1									4/5/10	13:00	TPX 8015 CL									
-2	A-NW	C1									"	"										
-3	A-SW	C1									"	"										
-4	B-1 - comp.	C1									"	"										
5	B-NW	C1									"	"										
6	B-SW	C1									"	"										
7	C-1 - comp.	C1									"	"										
8	C-NW	C1									"	"										
9	C-SW	C1									"	"										
10	A-EW	C1									"	"										

PLEASE NOTE: Cardinal Laboratories and its employees shall not be liable for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

<b>Sampler Relinquished:</b> <u>Don Green</u> <b>Relinquished By:</b>	<b>Date:</b> <u>4/5/10</u> <b>Time:</b> <u>15:10</u>	<b>Received By:</b> <u>Jodi Hanson</u> <b>Received By:</b>	<b>Date:</b> <u>4/5/10</u> <b>Time:</b> <u>3:10</u>	<b>Temp.</b> <u>50°</u> <b>Sample Condition</b> Cool/Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>CHECKED BY:</b> <u>JA</u> (Initials)
---	---	--	--	--	---

**Delivered By: (Circle One)** ☐ UPS ☐ Bus ☐ Other

**Phone Result:** ☐ No **Add'l Phone #:** \_\_\_\_\_  
**Fax Result:** ☐ No **Add'l Fax #:** \_\_\_\_\_  
**REMARKS:**

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

#26



# CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 9, 2010

Cindy Crain  
Devon Energy  
P.O. Box 1816  
Hobbs, NM 88241

Re: Joell 6 #2

Enclosed are the results of analyses for sample number H19614, received by the laboratory on 04/07/10 at 4:11 pm.

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 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,

  
Celey D. Keene  
Laboratory Director



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

DEVON ENERGY  
ATTN: CINDY CRAIN  
P.O. BOX 1816  
HOBBS, NM 88241  
FAX TO: (432) 272-03

Project Location: 3.2 MILES SOUTH OF CARLSBAD, NM

Analysis Date: 04/08/10  
Sampling Date: 04/07/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 3°C  
Sample Received By: JH  
Analyzed By: HM

METHOD: Standard Methods 4500-CIB

Note: Analyses performed on 1:4 w/v aqueous extracts.

Date \_\_\_\_\_

H19614 Devon Energy

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 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.



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

**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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>Don Green</u> Date: <u>4/7/10</u> Time: <u>16:11</u>		Received By: _____ Date: _____ Time: _____		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #: _____ REMARKS: _____	
Relinquished By: _____ Date: <u>4/7/10</u> Time: <u>7:11</u>		Received By: <u>Jodi Benson</u> Date: _____ Time: _____		CHECKED BY: <u>JB</u> (Initials)	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____		Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> 30 <input type="checkbox"/> Yes <input type="checkbox"/> Yes 30 <input type="checkbox"/> No <input type="checkbox"/> No			

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26





# ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 12, 2010

Cindy Crain  
Devon Energy  
P.O. Box 1816  
Hobbs, NM 88241

Re: Joell6 #2

Enclosed are the results of analyses for sample number H19624, received by the laboratory on 04/09/10 at 1:25 pm.

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.

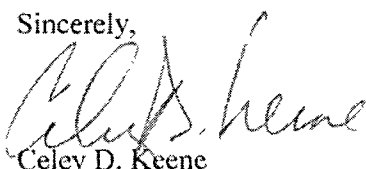
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 3 (includes Chain of Custody)

Sincerely,



Celey D. Keene  
Laboratory Director

---

This report conforms with NELAP requirements.



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
OCOTILLO ENVIRONMENTAL, LLC  
ATTN: CINDY CRAIN  
P.O. BOX 1816  
HOBBS, NM 88241  
FAX TO: (432) 272-0304

Receiving Date: 04/09/10  
Reporting Date: 04/12/10  
Project Number: NOT GIVEN  
Project Name: JOEL 6 #2  
Project Location: 3.2 MILES SOUTH OF CARLSBAD, NM


Analysis Date: 04/09/10  
Sampling Date: 04/09/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 5°C  
Sample Received By: JH  
Analyzed By: SJ

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/kg)
H19624-1	NW CORNER @ 16'	16
H19624-2	SE CORNER @ 12'	272
Quality Control		480
True Value QC		500
% Recovery		96.0
Relative Percent Difference		4.1

**METHOD:** Standard Methods

4500-CFB

Note: Analysis performed on a 1:4 w.v aqueous extract.

  
Chemist

**Date**

H19624 Ocotillo

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 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.



# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603  
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>DEVON ENERGY</b>				<b>BILL TO</b>												<b>ANALYSIS REQUEST</b>											
Project Manager: <b>CINDY CRAIN</b>				P.O. #:																							
Address: <b>2125 FRENCH DRIVE, PO BOX 1816</b>				Company: <b>OCOTILLO</b>																							
City: <b>HOBBS</b> State: <b>NM</b> Zip: <b>88240</b>				Attn:																							
Phone #: <b>432-441-7244</b> Fax #:				Address:																							
Project #: Project Owner:				City:																							
Project Name: <b>JOEL 6 #2</b>				State: Zip:																							
Project Location: <b>3.2 MILES SOUTH OF CARLSBAD, NM</b>				Phone #:																							
Sampler Name: <b>Don Green</b>				Fax #:																							
FOR LAB USE ONLY						MATRIX		PRESERV.		SAMPLING																	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER													DATE	TIME		
H19624-1	NW CORNER @ 16'	G	1			✓				✓		4/9/10	11:00														
	SE CORNER @ 12'	G	1			✓				✓		"	"														

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 the client for the 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 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 services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <b>Don Green</b>	Date: <b>4/9/10</b> Time: <b>13:25</b>	Received By: <b>Jodi Henson</b>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Delivered By: (Circle One)	Time:	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:		Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>JA</b>
			REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26