

NM1 - 34

# MONITORING REPORT

YEAR(S):

2013-2014

**Jones, Brad A., EMNRD**

---

**From:** Jones, Brad A., EMNRD  
**Sent:** Thursday, July 02, 2015 2:09 PM  
**To:** 'Rena Seay'  
**Subject:** RE: Landfarm Rule Modification

Eddy,

Each letter provided instructions if approval of a modification could not be demonstrated. Below is the paragraph from each letter with the instructions underlined.

**C&C Landfarm:**

"OCD has reviewed the administrative files for the facility and determined that the vadose zone monitoring frequency changed from the permit condition "The soil samples will be analyzed using approved EPA methods for TPH and BTEX quarterly, and for major cations/anions and heavy metals annually," to semi-annual in 2008. OCD has been unable to locate C&C's modification request for the change in sampling frequency or OCD's approval for such a modification request. Please provide OCD a copy of C&C's modification request and OCD approval in order to continue the semi-annual sampling frequency. If C&C is unable to demonstrate the approval, C&C shall revert back permitted vadose zone monitoring frequency. Please note that the transitional provisions of 19.15.36.20 NMAC must be considered. Please review OCD's letter dated June 30, 2011 and titled "*Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms*" for expectation of compliance."

**DD Landfarm:**

"OCD has reviewed the administrative files for the facility and determined that the vadose zone monitoring frequency changed from the permit condition "The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually" to semi-annual in 2009. OCD has been unable to locate DD's modification request for the change in sampling frequency or OCD's approval for such a modification request. Please provide OCD a copy of DD's modification request and OCD approval in order to continue the semi-annual sampling frequency. If DD is unable to demonstrate the approval, DD shall revert back permitted vadose zone monitoring frequency. Please note that the transitional provisions of 19.15.36.20 NMAC must be considered. Please review OCD's letter dated June 30, 2011 and titled "*Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms*" for expectation of compliance."

If you have any questions regarding this matter, please contact me.

Brad

**Brad A. Jones**  
Environmental Engineer  
EMNRD Oil Conservation Division  
1220 S. Saint Francis Drive

*Santa Fe, New Mexico 87505*  
*E-mail: [brad.a.jones@state.nm.us](mailto:brad.a.jones@state.nm.us)*  
*Office: (505) 476-3487*  
*Fax: (505) 476-3462*

**From:** Rena Seay [mailto:[seay04@leaco.net](mailto:seay04@leaco.net)]

**Sent:** Thursday, July 02, 2015 8:31 AM

**To:** Jones, Brad A., EMNRD

**Subject:** Landfarm Rule Modification

Hello Brad,

I have finished going thru the files of C & C Landfarm and DD Landfarm, and all correspondence pertaining to the same.

I have been unable to find a letter pertaining to the modification request to operate under rule 36. DD and C & C are committed to getting in compliance with OCD, and has been trying to comply with rule 36.

Please let me know what we can do to continue operations.

Your advice would be appreciated. Have a good 4th of July.

Thanks,

Eddie W. Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, Nm 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

**Jones, Brad A., EMNRD**

---

**From:** Rena Seay <seay04@leaco.net>  
**Sent:** Thursday, July 02, 2015 8:31 AM  
**To:** Jones, Brad A., EMNRD  
**Subject:** Landfarm Rule Modification

Hello Brad,

I have finished going thru the files of C & C Landfarm and DD Landfarm, and all correspondence pertaining to the same.

I have been unable to find a letter pertaining to the modification request to operate under rule 36. DD and C & C are committed to getting in compliance with OCD, and has been trying to comply with rule 36.

Please let me know what we can do to continue operations.

Your advice would be appreciated. Have a good 4th of July.

Thanks,

Eddie W. Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

**DD LANDFARM  
(NM-01-0034)**

**SEMI-ANNUAL  
TEST**

**November 2014**

RECEIVED NOD

December 3, 2014

2014 DEC -5 P B:4

NMOCD Environmental  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RE: DD Landfarm  
NM-01-0034  
Semi-Annual Test

Dear Sir:

Find attached the semi-annual testing of the treatment zone and vadose zone at DD Landfarm, all tests and sampling procedures were followed according to OCD guidelines.

The tests were compared to the background and PQL, and all were within limits.

Should you have any questions, please call.

Thanks,



Eddie W. Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

cc: DD Landfarm



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

November 14, 2014

Eddie Seay

Eddie Seay Consulting

601 W. Illinois

Hobbs, NM 88242

RE: D D LANDFARM

Enclosed are the results of analyses for samples received by the laboratory on 11/12/14 10:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 (V1, 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,

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	11/12/2014	Sampling Date:	11/11/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	W. EUNICE SECT31-T21-R39		

**Sample ID: CELL 1 T (H403474-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>48.0</b>	16.0	11/12/2014	ND	400	100	400	3.92		
<b>TPH 8015M</b>										
mg/kg										
Analyte		Result		Reporting Limit		Analyzed		Method Blank		Qualifer
GRO C6-C10	<10.0	10.0	11/12/2014	ND	188	93.9	200	0.555		
DRO >C10-C28	80.6	10.0	11/12/2014	ND	196	98.2	200	2.55		
EXT DRO >C28-C35	43.9	10.0	11/12/2014	ND						
Surrogate: 1-Chlorooctane		110 %	47.2-157							
Surrogate: 1-Chlorooctadecane		130 %	52.1-176							

**Sample ID: CELL 2 T (H403474-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>&lt;16.0</b>	16.0	11/13/2014	ND	400	100	400	3.92		
<b>TPH 8015M</b>										
mg/kg				Analyzed By: ms						
Analyte		Result		Reporting Limit		Analyzed		Method Blank		Qualifer
GRO C6-C10	<50.0	50.0	11/12/2014	ND	188	93.9	200	0.555		
DRO >C10-C28	<50.0	50.0	11/12/2014	ND	196	98.2	200	2.55		
EXT DRO >C28-C35	<50.0	50.0	11/12/2014	ND						
Surrogate: 1-Chlorooctane		114 %	47.2-157							
Surrogate: 1-Chlorooctadecane		131 %	52.1-176							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	11/12/2014	Sampling Date:	11/11/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	W. EUNICE SECT31-T21-R39		

**Sample ID: CELL 3 T (H403474-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/13/2014	ND	400	100	400	3.92		
TPH 8015M										
mg/kg										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/12/2014	ND	190	95.2	200	1.52		
DRO >C10-C28	76.2	10.0	11/12/2014	ND	198	99.1	200	1.60		
EXT DRO >C28-C35	31.6	10.0	11/12/2014	ND						

Surrogate: 1-Chlorooctane      110 %      47.2-157  
Surrogate: 1-Chlorooctadecane      132 %      52.1-176

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	11/12/2014	Sampling Date:	11/11/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	W. EUNICE SECT31-T21-R39		

**Sample ID: CELL 1-V (H403474-04)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/13/2014	ND	1.74	87.0	2.00	10.0		
Toluene*	<0.050	0.050	11/13/2014	ND	1.65	82.6	2.00	10.2		
Ethylbenzene*	<0.050	0.050	11/13/2014	ND	1.61	80.5	2.00	10.3		
Total Xylenes*	<0.150	0.150	11/13/2014	ND	4.82	80.4	6.00	10.9		
Total BTEX	<0.300	0.300	11/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/13/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/12/2014	ND	190	95.2	200	1.52		
DRO >C10-C28	<10.0	10.0	11/12/2014	ND	198	99.1	200	1.60		
EXT DRO >C28-C35	<10.0	10.0	11/12/2014	ND						

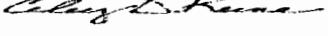
Surrogate: 1-Chlorooctane 112 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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 rendered 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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	11/12/2014	Sampling Date:	11/11/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	W. EUNICE SECT31-T21-R39		

**Sample ID: CELL 2-V (H403474-05)**

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/13/2014	ND	1.74	87.0	2.00	10.0		
Toluene*	<0.050	0.050	11/13/2014	ND	1.65	82.6	2.00	10.2		
Ethylbenzene*	<0.050	0.050	11/13/2014	ND	1.61	80.5	2.00	10.3		
Total Xylenes*	<0.150	0.150	11/13/2014	ND	4.82	80.4	6.00	10.9		
Total BTEX	<0.300	0.300	11/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/13/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/13/2014	ND	190	95.2	200	1.52		
DRO >C10-C28	<10.0	10.0	11/13/2014	ND	198	99.1	200	1.60		
EXT DRO >C28-C35	<10.0	10.0	11/13/2014	ND						

Surrogate: 1-Chlorooctane 110 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

---

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	11/12/2014	Sampling Date:	11/11/2014
Reported:	11/14/2014	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	W. EUNICE SECT31-T21-R39		

**Sample ID: CELL 3-V (H403474-06)**

BTEX 801B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/13/2014	ND	1.74	87.0	2.00	10.0		
Toluene*	<0.050	0.050	11/13/2014	ND	1.65	82.6	2.00	10.2		
Ethylbenzene*	<0.050	0.050	11/13/2014	ND	1.61	80.5	2.00	10.3		
Total Xylenes*	<0.150	0.150	11/13/2014	ND	4.82	80.4	6.00	10.9		
Total BTEX	<0.300	0.300	11/13/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/13/2014	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	11/13/2014	ND	190	95.2	200	1.52		
DRO >C10-C28	<10.0	10.0	11/13/2014	ND	198	99.1	200	1.60		
EXT DRO >C28-C35	<10.0	10.0	11/13/2014	ND						

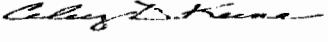
Surrogate: 1-Chlorooctane 117 % 47.2-157

Surrogate: 1-Chlorooctadecane 130 % 52.1-176

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 rendered 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.

  
Caley D. Keene

Caley D. Keene, Lab Director/Quality Manager



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

### Notes and Definitions

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.

*Caley D. Keene*

---

Caley D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**101 East Maryland, Hobbs, NM 88240  
(675) 393-2326 FAX (675) 393-2476**

Project Manager: Eddie Gandy Consulting		P.O. #:	<b>BILL TO</b>	
Address: 1601 W. 11th Street City: Hialeah		State: FL Zip: 33242	Company:	
Phone #: 305-223-34		Fax #:	Attn:	
Project #: DD LF		Project Owner: J. Gandy	Address:	
Project Name: DD Landfarm L (N.W. 01 - 853-34)		City:		
Project Location: C. Eunice St. 31-21-38		State:		
Sampler Name: Eddie Gandy		Zip:		
Phone #:				
Fax #:				
80151m 8exten				

PLEASE NOTE: DASHING AND DANGEROUS CLOTHING, RACISM AND DISRESPECTFUL BEHAVIOR BY ANY GUESTS, ALONG WITH UNREASONABLE OR OVERLY DRUNKEN BEHAVIOR ON THE PART OF THE GUESTS OR THEIR COMPANION(S) WILL NOT BE TOLERATED. WE RESERVE THE RIGHT TO REMOVE ANY GUEST WHO IS UNREASONABLY DRUNK OR WHO DISPLAYS UNRESPECTFUL BEHAVIOR FROM THE BANQUET HALL OR FROM THE PROPERTY OF THE BANQUET HALL. WE RESERVE THE RIGHT TO REFUSE SERVICE TO ANY GUEST WHO IS UNREASONABLY DRUNK OR WHO DISPLAYS UNRESPECTFUL BEHAVIOR.

RECEIVED OR RECORDED AND ONE OF THE PARTIES TO THE PERFORMANCE OF WHICH IS IDENTIFIED BY CERTAIN INDICATIONS OF ANOTHER, SUCH ACTION IS DIRECTED UPON ANY OF THE ABOVE STATED PARTIES OR OTHERWISE

Time:	10:00	Time:	10:00
Date:	10/05/05	Date:	10/05/05
Received By:	<i>John Henderson</i>	Received By:	<i>John Henderson</i>
T. Tricell 3000		T. Tricell 3000	
10/05/05		10/05/05	
REMARKS:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add	

**Delivered By:** (Circle One)

**Sampler - UPS - Bus - Other:**

**† Cardinal cannot accept verbal changes. Please fax written changes to (575) 396-2326.**

**DD LANDFARM**

**(NM-01-0034)**

**CELL 3**

**JULY 2014**

July 2014

RECEIVED NMOCD

JUL 16 2014 P 3:07

NMOCD Environmental  
ATTN: Brad Jones  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

RE: DD Landfarm  
01-0034  
Cell 3

Mr. Jones:

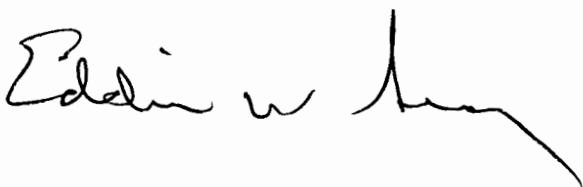
Find additional sampling for cell 3 as required. In comparing the analytical to the background and the lab PQL, the analytical was below the limits.

I can't explain why the TPH was elevated, but will monitor in future sampling.

No additional work should be required at this time.

If you have any questions or need additional information, please call.

Thanks,



Eddie Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

cc: DD Landfarm (Jimmy Cooper)





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

June 27, 2014

Eddie Seay

Eddie Seay Consulting

601 W. Illinois

Hobbs, NM 88242

RE: D D LANDFARM

Enclosed are the results of analyses for samples received by the laboratory on 05/30/14 9:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DD - 3A	H401661-01	Soil	29-May-14 07:20	30-May-14 09:00
DD - 3B	H401661-02	Soil	29-May-14 08:00	30-May-14 09:00
DD - 3C	H401661-03	Soil	29-May-14 08:40	30-May-14 09:00
DD - 3D	H401661-04	Soil	29-May-14 09:20	30-May-14 09:00

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.

A handwritten signature of Celey D. Keene is shown over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3A****H401661-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	236	20.0	mg/kg	4	4061909	AP	12-Jun-14	310.1	
Alkalinity, Carbonate	ND	1.00	mg/kg	1	4061909	AP	12-Jun-14	310.1	
Chloride	ND	16.0	mg/kg	4	4060207	AP	02-Jun-14	4500-Cl-B	
Conductivity*	108	1.00	µS/cm	1	4060911	AP	09-Jun-14	120.1	
pH*	7.51	0.100	pH Units	1	4053011	AP	02-Jun-14	9045	
Sulfate	ND	40.0	mg/kg	4	4060909	AP	09-Jun-14	375.4	
Alkalinity, Total*	192	16.0	mg/kg	4	4061909	AP	26-Jun-14	310.1	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	20.0	mg/kg	1	4060401	MS	05-Jun-14	8015B	
DRO >C10-C28	ND	20.0	mg/kg	1	4060401	MS	05-Jun-14	8015B	
Surrogate: 1-Chlorooctane		121 %	65.2-140		4060401	MS	05-Jun-14	8015B	
Surrogate: 1-Chlorooctadecane		115 %	63.6-154		4060401	MS	05-Jun-14	8015B	

**Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Methylene chloride*	ND	1.00	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Chloroform*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Benzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Trichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Toluene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
Tetrachloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260	

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3A****H401661-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
m-p Xylenes*	ND	0.100	mg/kg	50	4060908	ms	10-Jun-14	8260
o-Xylene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Total Xylenes*	ND	0.150	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Naphthalene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Surrogate: Dibromofluoromethane		97.6 %		70-130	4060908	ms	10-Jun-14	8260
Surrogate: Toluene-d8		103 %		70-130	4060908	ms	10-Jun-14	8260
Surrogate: 4-Bromofluorobenzene		92.8 %		70-130	4060908	ms	10-Jun-14	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluorene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Phenanthrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Carbazole	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Chrysene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C

**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.

Caley D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18**DD - 3A****H401661-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Surrogate: Nitrobenzene-d5		76.0 %	16.1-91.8		4061304	MS	13-Jun-14	8270C
Surrogate: 2-Fluorobiphenyl		97.5 %	27.2-92.9		4061304	MS	13-Jun-14	8270C
Surrogate: Terphenyl-d4		156 %	21.3-96.1		4061304	MS	13-Jun-14	8270C

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	99.0	%	1	B406052	LLG	04-Jun-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Calcium	479	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Iron	2030	5.00	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Magnesium	268	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Potassium	408	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Sodium	ND	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B

**Total Metals by ICPMS**

Arsenic	0.842	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Barium	10.4	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Cadmium	0.177	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Chromium	1.22	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Copper	0.698	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Lead	1.84	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Manganese	22.9	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Zinc	3.69	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3A**

**H401661-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Mercury by CVAA**

Mercury ND 0.100 mg/kg dry 495 B406051 JGS 05-Jun-14 EPA7471

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*

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3B****H401661-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	408	20.0	mg/kg	4	4061909	AP	12-Jun-14	310.1
Alkalinity, Carbonate	ND	1.00	mg/kg	1	4061909	AP	12-Jun-14	310.1
Chloride	ND	16.0	mg/kg	4	4060207	AP	02-Jun-14	4500-Cl-B
Conductivity*	137	1.00	uS/cm	1	4060911	AP	09-Jun-14	120.1
pH*	7.76	0.100	pH Units	1	4053011	AP	02-Jun-14	9045
Sulfate	ND	40.0	mg/kg	4	4060909	AP	09-Jun-14	375.4
Alkalinity, Total*	336	16.0	mg/kg	4	4061909	AP	26-Jun-14	310.1

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4060401	MS	05-Jun-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4060401	MS	05-Jun-14	8015B
Surrogate: 1-Chlorooctane		93.8 %		65.2-140	4060401	MS	05-Jun-14	8015B
Surrogate: 1-Chlorooctadecane		87.6 %		63.6-154	4060401	MS	05-Jun-14	8015B

**Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Methylene chloride*	ND	1.00	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Chloroform*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Benzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Trichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Toluene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3B****H401661-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Surrogate: Nitrobenzene-d5	79.6 %	16.1-91.8	4061304	MS	13-Jun-14	8270C
Surrogate: 2-Fluorobiphenyl	84.0 %	27.2-92.9	4061304	MS	13-Jun-14	8270C
Surrogate: Terphenyl-d14	130 %	21.3-96.1	4061304	MS	13-Jun-14	8270C

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	98.8	%	1	B406052	LLG	06-Jun-14	EPA160.3	H2
--------------	------	---	---	---------	-----	-----------	----------	----

**Total Metals by ICP**

Calcium	1290	100	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B
Iron	2360	5.00	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B
Magnesium	402	100	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B
Potassium	563	100	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B
Sodium	ND	100	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B
Zinc	6.32	5.00	mg/kg dry	100	B406164	JGS	19-Jun-14	EPA6010 B

**Total Metals by ICPMS**

Arsenic	0.841	0.500	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Barium	17.0	0.500	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Chromium	2.29	1.00	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Copper	0.848	0.100	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Lead	2.42	0.500	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Manganese	27.1	0.500	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B406165	JGS	19-Jun-14	6020 A

V1

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3B****H401661-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

m-p Xylenes*	ND	0.100	mg/kg	50	4060908	ms	10-Jun-14	8260
o-Xylene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Total Xylenes*	ND	0.150	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Naphthalene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Surrogate: Dibromofluoromethane		95.9 %	70-130		4060908	ms	10-Jun-14	8260
Surrogate: Toluene-d8		96.0 %	70-130		4060908	ms	10-Jun-14	8260
Surrogate: 4-Bromofluorobenzene		102 %	70-130		4060908	ms	10-Jun-14	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluorene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Phenanthrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Carbazole	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Chrysene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3B**

**H401661-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Mercury by CVAA**

Mercury	ND	0.100	mg/kg dry	495	B406125	JGS	13-Jun-14	EPA7471
---------	----	-------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3C****H401661-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	137	20.0	mg/kg	4	4061909	AP	12-Jun-14	310.1
Alkalinity, Carbonate	ND	1.00	mg/kg	1	4061909	AP	12-Jun-14	310.1
Chloride	ND	16.0	mg/kg	4	4060207	AP	02-Jun-14	4500-Cl-B
Conductivity*	81.2	1.00	µS/cm	1	4060911	AP	09-Jun-14	120.1
pH*	7.68	0.100	pH Units	1	4053012	AP	02-Jun-14	9045
Sulfate	ND	40.0	mg/kg	4	4060909	AP	09-Jun-14	375.4
Alkalinity, Total*	112	16.0	mg/kg	4	4061909	AP	26-Jun-14	310.1

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4060401	MS	04-Jun-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4060401	MS	04-Jun-14	8015B
Surrogate: 1-Chlorooctane		92.6 %		65.2-140	4060401	MS	04-Jun-14	8015B
Surrogate: 1-Chlorooctadecane		87.2 %		63.6-154	4060401	MS	04-Jun-14	8015B

**Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Methylene chloride*	ND	1.00	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Chloroform*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Benzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Trichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Toluene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3C****H401661-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

m-p Xylenes*	ND	0.100	mg/kg	50	4060908	ms	10-Jun-14	8260
o-Xylene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Total Xylenes*	ND	0.150	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Naphthalene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Surrogate: Dibromoiodomethane		99.2 %		70-130	4060908	ms	10-Jun-14	8260
Surrogate: Toluene-d8		89.6 %		70-130	4060908	ms	10-Jun-14	8260
Surrogate: 4-Bromofluorobenzene		95.8 %		70-130	4060908	ms	10-Jun-14	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluorene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Phenanthrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Carbazole	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Chrysene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3C****H401661-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Surrogate: Nitrobenzene-d5	60.7 %	16.1-91.8	4061304	MS	13-Jun-14	8270C
Surrogate: 2-Fluorobiphenyl	82.5 %	27.2-92.9	4061304	MS	13-Jun-14	8270C
Surrogate: Terphenyl-d4	139 %	21.3-96.1	4061304	MS	13-Jun-14	8270C

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	99.3	%	1	B406052	LLG	04-Jun-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Calcium	392	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Iron	1850	5.00	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Magnesium	229	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Potassium	421	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Sodium	ND	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B

**Total Metals by ICPMS**

Arsenic	0.589	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Barium	9.56	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Chromium	1.12	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Copper	0.433	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Lead	1.39	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Manganese	14.0	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Zinc	3.52	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3C**

**H401661-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Mercury by CVAA**

Mercury ND 0.0987 mg/kg dry 490 B406051 JGS 05-Jun-14 EPA7471

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*

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3D****H401661-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	156	20.0	mg/kg	4	4061909	AP	12-Jun-14	310.1
Alkalinity, Carbonate	ND	1.00	mg/kg	1	4061909	AP	12-Jun-14	310.1
Chloride	ND	16.0	mg/kg	4	4060207	AP	02-Jun-14	4500-Cl-B
Conductivity*	92.9	1.00	µS/cm	1	4060911	AP	09-Jun-14	120.1
pH*	7.47	0.100	pH Units	1	4053012	AP	02-Jun-14	9045
Sulfate	ND	40.0	mg/kg	4	4060909	AP	09-Jun-14	375.4
Alkalinity, Total*	128	16.0	mg/kg	4	4061909	AP	26-Jun-14	310.1

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4060401	MS	04-Jun-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4060401	MS	04-Jun-14	8015B
Surrogate: 1-Chlorooctane		109 %	65.2-140		4060401	MS	04-Jun-14	8015B
Surrogate: 1-Chlorooctadecane		107 %	63.6-154		4060401	MS	04-Jun-14	8015B

**Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Methylene chloride*	ND	1.00	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Chloroform*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Benzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Trichloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Toluene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260

**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 interruption, 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3D****H401661-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

m-p Xylenes*	ND	0.100	mg/kg	50	4060908	ms	10-Jun-14	8260
o-Xylene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Total Xylenes*	ND	0.150	mg/kg	50	4060908	ms	10-Jun-14	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Naphthalene*	ND	0.0500	mg/kg	50	4060908	ms	10-Jun-14	8260
Surrogate: Dibromoformmethane		104 %	70-130		4060908	ms	10-Jun-14	8260
Surrogate: Toluene-d8		103 %	70-130		4060908	ms	10-Jun-14	8260
Surrogate: 4-Bromofluorobenzene		99.5 %	70-130		4060908	ms	10-Jun-14	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Acenaphthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluorene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Phenanthrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Carbazole	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Chrysene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[b]fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[k]fluoranthene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	4061304	MS	13-Jun-14	8270C

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3D****H401661-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Surrogate: Nitrobenzene-d5	77.3 %	16.1-91.8	4061304	MS	13-Jun-14	8270C
Surrogate: 2-Fluorobiphenyl	80.3 %	27.2-92.9	4061304	MS	13-Jun-14	8270C
Surrogate: Terphenyl-d4	123 %	21.3-96.1	4061304	MS	13-Jun-14	8270C

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	99.3	%	1	B406052	LLG	04-Jun-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Calcium	520	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Iron	2150	5.00	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Magnesium	310	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Potassium	430	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B
Sodium	ND	100	mg/kg dry	100	B406033	JGS	05-Jun-14	EPA6010 B

**Total Metals by ICPMS**

Arsenic	0.783	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Barium	12.9	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Chromium	1.23	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Copper	0.732	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Lead	61.8	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Manganese	23.2	0.500	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A
Zinc	4.24	1.00	mg/kg dry	1000	B406037	JGS	04-Jun-14	6020 A

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**DD - 3D**

H401661-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Mercury by CVAA**

Mercury ND 0.0997 mg/kg dry 495 B406051 JGS 05-Jun-14 EPA7471

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4053011 - NO PREP**

LCS (4053011-BS1)					Prepared: 30-May-14 Analyzed: 02-Jun-14					
pH	7.09		pH Units	7.00		101	90-110			
Duplicate (4053011-DUP1)		Source: H401628-01			Prepared: 30-May-14 Analyzed: 02-Jun-14					
pH	7.03	0.100	pH Units		7.04			0.142	20	

**Batch 4053012 - NO PREP**

LCS (4053012-BS1)					Prepared: 30-May-14 Analyzed: 02-Jun-14					
pH	7.10		pH Units	7.00		101	90-110			
Duplicate (4053012-DUP1)		Source: H401661-03			Prepared: 30-May-14 Analyzed: 02-Jun-14					
pH	7.71	0.100	pH Units		7.68			0.390	20	

**Batch 4060207 - 1:4 DI Water**

Blank (4060207-BLK1)					Prepared & Analyzed: 02-Jun-14					
Chloride	ND	16.0	mg/kg							
LCS (4060207-BS1)					Prepared & Analyzed: 02-Jun-14					
Chloride	464	16.0	mg/kg	400		116	80-120			
LCS Dup (4060207-BSD1)					Prepared & Analyzed: 02-Jun-14					
Chloride	416	16.0	mg/kg	400		104	80-120	10.9	20	

**Batch 4060909 - General Prep - Wet Chem**

Blank (4060909-BLK1)					Prepared & Analyzed: 09-Jun-14					
Sulfate	ND	10.0	mg/kg							

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 interruption, 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4060909 - General Prep - Wet Chem**

LCS (4060909-BS1)						Prepared & Analyzed: 09-Jun-14				
Sulfate	21.2	10.0	mg/kg	20.0		106	80-120			
LCS Dup (4060909-BSD1)						Prepared & Analyzed: 09-Jun-14				
Sulfate	20.8	10.0	mg/kg	20.0		104	80-120	2.00	20	

**Batch 4060911 - General Prep - Wet Chem**

LCS (4060911-BS1)						Prepared & Analyzed: 09-Jun-14				
Conductivity	491		uS/cm	500		98.2	80-120			
Duplicate (4060911-DUP1)						Source: H401643-01 Prepared & Analyzed: 09-Jun-14				
Conductivity	362000	1.00	uS/cm		360000			0.554	20	

**Batch 4061909 - General Prep - Wet Chem**

Blank (4061909-BLK1)						Prepared & Analyzed: 19-Jun-14				
Alkalinity, Carbonate	ND	0.00	mg/kg							
Alkalinity, Bicarbonate	9.00	5.00	mg/kg							
Alkalinity, Total	8.00	4.00	mg/kg							
LCS (4061909-BS1)						Prepared & Analyzed: 19-Jun-14				
Alkalinity, Carbonate	ND	0.00	mg/kg				80-120			
Alkalinity, Bicarbonate	132	5.00	mg/kg				80-120			
Alkalinity, Total	108	4.00	mg/kg	100		108	80-120			
LCS Dup (4061909-BSD1)						Prepared & Analyzed: 19-Jun-14				
Alkalinity, Carbonate	ND	0.00	mg/kg				80-120	20		
Alkalinity, Bicarbonate	132	5.00	mg/kg				80-120	0.00	20	
Alkalinity, Total	108	4.00	mg/kg	100		108	80-120	0.00	20	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------

**Batch 4060401 - General Prep - Organics**

Blank (4060401-BLK1)							Prepared & Analyzed: 04-Jun-14		
GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C35	ND	10.0	mg/kg						
Total TPH C6-C28	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	44.4		mg/kg	50.0		88.7	65.2-140		
Surrogate: 1-Chlorooctadecane	42.2		mg/kg	50.0		84.5	63.6-154		
LCS (4060401-BS1)							Prepared & Analyzed: 04-Jun-14		
GRO C6-C10	174	10.0	mg/kg	200		87.2	66.4-124		
DRO >C10-C28	178	10.0	mg/kg	200		89.0	61.6-132		
Total TPH C6-C28	352	10.0	mg/kg	400		88.1	69.7-122		
Surrogate: 1-Chlorooctane	43.3		mg/kg	50.0		86.7	65.2-140		
Surrogate: 1-Chlorooctadecane	40.9		mg/kg	50.0		81.8	63.6-154		
LCS Dup (4060401-BSD1)							Prepared & Analyzed: 04-Jun-14		
GRO C6-C10	180	10.0	mg/kg	200		90.0	66.4-124	3.21	23.4
DRO >C10-C28	192	10.0	mg/kg	200		95.9	61.6-132	7.42	23.1
Total TPH C6-C28	372	10.0	mg/kg	400		93.0	69.7-122	5.36	20.6
Surrogate: 1-Chlorooctane	43.8		mg/kg	50.0		87.5	65.2-140		
Surrogate: 1-Chlorooctadecane	42.9		mg/kg	50.0		85.8	63.6-154		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 4060908 - Volatiles**

Blank (4060908-BLK1)	Prepared & Analyzed: 09-Jun-14								
Vinyl chloride	ND	0.0500	mg/kg						
1,1-Dichloroethene	ND	0.0500	mg/kg						
Methylene chloride	ND	0.0500	mg/kg						
1,1-Dichloroethane	ND	0.0500	mg/kg						
Chloroform	ND	0.0500	mg/kg						
Carbon tetrachloride	ND	0.0500	mg/kg						
1,1,1-Trichloroethane	ND	0.0500	mg/kg						
Benzene	ND	0.0500	mg/kg						
1,2-Dichloroethane	ND	0.0500	mg/kg						
Trichloroethene	ND	0.0500	mg/kg						
Toluene	ND	0.0500	mg/kg						
Tetrachloroethene	ND	0.0500	mg/kg						
1,1,2-Trichloroethane	ND	0.0500	mg/kg						
1,2-Dibromoethane	ND	0.0500	mg/kg						
Ethylbenzene	ND	0.0500	mg/kg						
m-p Xylenes	ND	0.100	mg/kg						
o-Xylene	ND	0.0500	mg/kg						
Total Xylenes	ND	0.150	mg/kg						
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg						
Naphthalene	ND	0.0500	mg/kg						
Surrogate: Dibromofluoromethane	0.344		mg/kg	0.500	109	70-130			
Surrogate: Toluene-d8	0.494		mg/kg	0.500	98.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.478		mg/kg	0.500	95.7	70-130			

LCS (4060908-BS1)	Prepared & Analyzed: 09-Jun-14						
Vinyl chloride	0.504	0.0500	mg/kg	0.400	126	70-130	
1,1-Dichloroethene	0.773	0.0500	mg/kg	0.400	193	70-130	BS1
Methylene chloride	0.618	0.0500	mg/kg	0.400	154	70-130	BS1
1,1-Dichloroethane	0.550	0.0500	mg/kg	0.400	137	70-130	BS1
Chloroform	0.453	0.0500	mg/kg	0.400	113	70-130	
Carbon tetrachloride	0.561	0.0500	mg/kg	0.400	140	70-130	BS1
1,1,1-Trichloroethane	0.499	0.0500	mg/kg	0.400	125	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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4060908 - Volatiles**

LCS (4060908-BS1)	Prepared & Analyzed: 09-Jun-14						
Benzene	0.461	0.0500	mg/kg	0.400	115	70-130	
1,2-Dichloroethane	0.413	0.0500	mg/kg	0.400	103	70-130	
Trichloroethene	0.419	0.0500	mg/kg	0.400	105	70-130	
Toluene	0.392	0.0500	mg/kg	0.400	97.9	70-130	
Tetrachloroethene	0.442	0.0500	mg/kg	0.400	111	70-130	
1,1,2-Trichloroethane	0.387	0.0500	mg/kg	0.400	96.8	70-130	
1,2-Dibromoethane	0.394	0.0500	mg/kg	0.400	98.6	70-130	
Ethylbenzene	0.418	0.0500	mg/kg	0.400	104	70-130	
m-p Xylenes	0.817	0.100	mg/kg			70-130	
o-Xylene	0.400	0.0500	mg/kg	0.400	100	70-130	
Total Xylenes	1.22	0.150	mg/kg	1.20	101	70-130	
1,1,2,2-Tetrachloroethane	0.332	0.0500	mg/kg	0.400	83.0	70-130	
Naphthalene	0.296	0.0500	mg/kg	0.400	73.9	70-130	
<i>Surrogate: Dibromofluoromethane</i>	0.495		mg/kg	0.500	98.9	70-130	
<i>Surrogate: Toluene-d8</i>	0.489		mg/kg	0.500	97.8	70-130	
<i>Surrogate: 4-Bromofluorobenzene</i>	0.525		mg/kg	0.500	105	70-130	

LCS Dup (4060908-BSD1)	Prepared & Analyzed: 09-Jun-14						
Vinyl chloride	0.457	0.0500	mg/kg	0.400	114	70-130	9.82
1,1-Dichloroethene	0.665	0.0500	mg/kg	0.400	166	70-130	15.0
Methylene chloride	0.665	0.0500	mg/kg	0.400	166	70-130	7.37
1,1-Dichloroethane	0.502	0.0500	mg/kg	0.400	126	70-130	8.97
Chloroform	0.449	0.0500	mg/kg	0.400	112	70-130	0.939
Carbon tetrachloride	0.491	0.0500	mg/kg	0.400	123	70-130	13.2
1,1,1-Trichloroethane	0.493	0.0500	mg/kg	0.400	123	70-130	1.23
Benzene	0.437	0.0500	mg/kg	0.400	109	70-130	5.25
1,2-Dichloroethane	0.403	0.0500	mg/kg	0.400	101	70-130	2.42
Trichloroethene	0.413	0.0500	mg/kg	0.400	103	70-130	1.63
Toluene	0.406	0.0500	mg/kg	0.400	101	70-130	3.62
Tetrachloroethene	0.435	0.0500	mg/kg	0.400	109	70-130	1.65
1,1,2-Trichloroethane	0.384	0.0500	mg/kg	0.400	95.9	70-130	0.949
1,2-Dibromoethane	0.389	0.0500	mg/kg	0.400	97.3	70-130	1.29

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 4060908 - Volatiles</b>										
<b>LCS Dup (4060908-BSD1)</b>										
Prepared & Analyzed: 09-Jun-14										
Ethylbenzene 0.404 0.0500 mg/kg 0.400 101 70-130 3.26 20										
m-p Xylenes 0.813 0.100 mg/kg 0.400 94.6 70-130 0.548 20										
o-Xylene 0.378 0.0500 mg/kg 0.400 99.3 70-130 5.53 20										
Total Xylenes 1.19 0.150 mg/kg 1.20 88.2 70-130 2.16 20										
1,1,2,2-Tetrachloroethane 0.353 0.0500 mg/kg 0.400 79.5 70-130 6.06 20										
Naphthalene 0.318 0.0500 mg/kg 0.400 70-130 7.32 20										
<i>Surrogate: Dibromofluoromethane</i> 0.499 mg/kg 0.500 99.7 70-130										
<i>Surrogate: Toluene-d8</i> 0.503 mg/kg 0.500 101 70-130										
<i>Surrogate: 4-Bromofluorobenzene</i> 0.497 mg/kg 0.500 99.5 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Semivolatile Organic Compounds by GCMS - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4061304 - SW846-3510**

Blank (4061304-BLK1)						Prepared: 13-Jun-14 Analyzed: 20-Jun-14
Naphthalene	ND	0.040	mg/kg			
2-Methylnaphthalene	ND	0.040	mg/kg			
1-Methylnaphthalene	ND	0.040	mg/kg			
Acenaphthylene	ND	0.040	mg/kg			
Acenaphthene	ND	0.040	mg/kg			
Fluorene	ND	0.040	mg/kg			
Phenanthrene	ND	0.040	mg/kg			
Anthracene	ND	0.040	mg/kg			
Carbazole	ND	0.040	mg/kg			
Fluoranthene	ND	0.040	mg/kg			
Pyrene	ND	0.040	mg/kg			
Benz[a]anthracene	ND	0.040	mg/kg			
Chrysene	ND	0.040	mg/kg			
Benz[b]flouranthene	ND	0.040	mg/kg			
Benz[k]flouranthene	ND	0.040	mg/kg			
Benz[a]pyrene	ND	0.040	mg/kg			
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg			
Dibenz[a,h]anthracene	ND	0.040	mg/kg			
Benz[g,h,i]perylene	ND	0.040	mg/kg			
<i>Surrogate: Nitrobenzene-d5</i>	1.50		mg/kg	2.00	75.0	16.1-91.8
<i>Surrogate: 2-Fluorobiphenyl</i>	2.02		mg/kg	2.00	101	27.2-92.9
<i>Surrogate: Terphenyl-d4</i>	3.14		mg/kg	2.00	157	21.3-96.1

LCS (4061304-BS1)						Prepared: 13-Jun-14 Analyzed: 19-Jun-14
Naphthalene	0.421	0.040	mg/kg	0.400	105	5.46-157
2-Methylnaphthalene	0.439	0.040	mg/kg	0.400	110	16.1-146
Acenaphthylene	0.436	0.040	mg/kg	0.400	109	21.6-144
Acenaphthene	0.434	0.040	mg/kg	0.400	108	27-143
Fluorene	0.451	0.040	mg/kg	0.400	113	30.9-138
Phenanthrene	0.469	0.040	mg/kg	0.400	117	38.6-149
Anthracene	0.433	0.040	mg/kg	0.400	108	36.1-149
Carbazole	0.443	0.040	mg/kg	0.400	111	29.8-144

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Semivolatile Organic Compounds by GCMS - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4061304 - SW846-3510**

LCS (4061304-BS1)					Prepared: 13-Jun-14	Analyzed: 19-Jun-14	
Fluoranthene	0.480	0.040	mg/kg	0.400	120	34.6-148	
Pyrene	0.480	0.040	mg/kg	0.400	120	24.8-154	
Benz[a]anthracene	0.456	0.040	mg/kg	0.400	114	0-179	
Chrysene	0.477	0.040	mg/kg	0.400	119	35.1-150	
Benz[b]flouranthene	0.494	0.040	mg/kg	0.400	123	17.6-158	
Benz[k]flouranthene	0.502	0.040	mg/kg	0.400	126	10.6-169	
Benz[a]pyrene	0.427	0.040	mg/kg	0.400	107	2.25-166	
Indeno[1,2,3-cd]pyrene	0.342	0.040	mg/kg	0.400	85.4	0-181	
Dibenz[a,h]anthracene	0.341	0.040	mg/kg	0.400	85.2	2.49-177	
Benzo[g,h,i]perylene	0.301	0.040	mg/kg	0.400	75.3	0-173	
<i>Surrogate: Nitrobenzene-d5</i>	1.89		mg/kg	2.00	94.6	16.1-91.8	
<i>Surrogate: 2-Fluorobiphenyl</i>	2.19		mg/kg	2.00	110	27.2-92.9	
<i>Surrogate: Terphenyl-d4</i>	2.99		mg/kg	2.00	150	21.3-96.1	

LCS Dup (4061304-BSD1)					Prepared: 13-Jun-14	Analyzed: 20-Jun-14		
Naphthalene	0.403	0.040	mg/kg	0.400	101	5.46-157	4.28	6.7
2-Methylnaphthalene	0.420	0.040	mg/kg	0.400	105	16.1-146	4.42	8.99
Acenaphthylene	0.431	0.040	mg/kg	0.400	108	21.6-144	1.11	14.6
Acenaphthene	0.439	0.040	mg/kg	0.400	110	27-143	1.17	6.99
Fluorene	0.457	0.040	mg/kg	0.400	114	30.9-138	1.32	13.9
Phenanthrene	0.437	0.040	mg/kg	0.400	109	38.6-149	6.89	14.6
Anthracene	0.463	0.040	mg/kg	0.400	116	36.1-149	6.63	18.5
Carbazole	0.443	0.040	mg/kg	0.400	111	29.8-144	0.0723	23.4
Fluoranthene	0.479	0.040	mg/kg	0.400	120	34.6-148	0.111	19.7
Pyrene	0.468	0.040	mg/kg	0.400	117	24.8-154	2.50	23
Benzo[a]anthracene	0.461	0.040	mg/kg	0.400	115	0-179	0.955	32.5
Chrysene	0.482	0.040	mg/kg	0.400	120	35.1-150	1.13	19.4
Benz[b]flouranthene	0.436	0.040	mg/kg	0.400	109	17.6-158	12.5	31.4
Benzo[k]flouranthene	0.470	0.040	mg/kg	0.400	117	10.6-169	6.72	44.6
Benzo[a]pyrene	0.430	0.040	mg/kg	0.400	107	2.25-166	0.612	60.5
Indeno[1,2,3-cd]pyrene	0.345	0.040	mg/kg	0.400	86.4	0-181	1.10	77
Dibenz[a,h]anthracene	0.343	0.040	mg/kg	0.400	85.7	2.49-177	0.629	63.3

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Semivolatile Organic Compounds by GCMS - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4061304 - SW846-3510**

LCS Dup (4061304-BSD1)									
Prepared: 13-Jun-14 Analyzed: 20-Jun-14									
Benzo[g,h,i]perylene	0.301	0.040	mg/kg	0.400		75.3	0-173	0.0498	77.4
Surrogate: Nitrobenzene-d5	1.81		mg/kg	2.00		90.4	16.1-91.8		
Surrogate: 2-Fluorobiphenyl	2.18		mg/kg	2.00		109	27.2-92.9		
Surrogate: Terphenyl-d4	2.86		mg/kg	2.00		143	21.3-96.1		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Metals by ICP - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B406033 - EPA 3050****Blank (B406033-BLK1)**

Sodium	ND	1.00	mg/kg dry							
Magnesium	ND	1.00	mg/kg dry							
Iron	ND	0.050	mg/kg dry							
Calcium	ND	1.00	mg/kg dry							
Potassium	ND	1.00	mg/kg dry							

Prepared: 04-Jun-14 Analyzed: 05-Jun-14

**LCS (B406033-BS1)**

Calcium	3.87	1.00	mg/kg dry	4.00	96.7	85-115				
Iron	3.75	0.050	mg/kg dry	4.00	93.8	85-115				
Potassium	8.21	1.00	mg/kg dry	8.00	103	85-115				
Magnesium	19.7	1.00	mg/kg dry	20.0	98.7	85-115				
Sodium	6.39	1.00	mg/kg dry	6.48	98.5	85-115				

Prepared: 04-Jun-14 Analyzed: 05-Jun-14

**LCS Dup (B406033-BSD1)**

Magnesium	19.7	1.00	mg/kg dry	20.0	98.5	85-115	0.264	20		
Sodium	6.26	1.00	mg/kg dry	6.48	96.6	85-115	2.00	20		
Iron	3.93	0.050	mg/kg dry	4.00	98.1	85-115	4.47	20		
Calcium	3.81	1.00	mg/kg dry	4.00	95.3	85-115	1.42	20		
Potassium	8.17	1.00	mg/kg dry	8.00	102	85-115	0.504	20		

Prepared: 04-Jun-14 Analyzed: 05-Jun-14

**Batch B406164 - EPA 3050****Blank (B406164-BLK1)**

Magnesium	ND	1.00	mg/kg dry							
Sodium	ND	1.00	mg/kg dry							
Zinc	ND	0.050	mg/kg dry							
Iron	ND	0.050	mg/kg dry							
Calcium	ND	1.00	mg/kg dry							
Potassium	ND	1.00	mg/kg dry							

Prepared: 18-Jun-14 Analyzed: 19-Jun-14

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Metals by ICP - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B406164 - EPA 3050**

LCS (B406164-BS1)						
Prepared: 18-Jun-14 Analyzed: 19-Jun-14						
Calcium	3.76	1.00	mg/kg dry	4.00	93.9	85-115
Sodium	5.99	1.00	mg/kg dry	6.48	92.5	85-115
Potassium	7.59	1.00	mg/kg dry	8.00	94.9	85-115
Zinc	1.78	0.050	mg/kg dry	2.00	88.8	85-115
Magnesium	19.3	1.00	mg/kg dry	20.0	96.5	85-115
Iron	3.83	0.050	mg/kg dry	4.00	95.7	85-115

LCS Dup (B406164-BSD1)						
Prepared: 18-Jun-14 Analyzed: 19-Jun-14						
Sodium	5.83	1.00	mg/kg dry	6.48	89.9	85-115
Calcium	3.66	1.00	mg/kg dry	4.00	91.5	85-115
Magnesium	18.8	1.00	mg/kg dry	20.0	94.1	85-115
Potassium	7.55	1.00	mg/kg dry	8.00	94.3	85-115
Iron	3.74	0.050	mg/kg dry	4.00	93.5	85-115
Zinc	1.74	0.050	mg/kg dry	2.00	86.8	85-115
					2.29	20
					0.613	20
					2.46	20
					2.79	20
					2.23	20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B406037 - EPA 3050M**

Blank (B406037-BLK1)	Prepared & Analyzed: 04-Jun-14						
Arsenic	ND	0.0005	mg/kg dry				
Chromium	ND	0.0010	mg/kg dry				
Zinc	0.0037	0.0010	mg/kg dry				
Selenium	ND	0.0010	mg/kg dry				
Manganese	ND	0.0005	mg/kg dry				
Copper	0.0008	0.0001	mg/kg dry				
Lead	ND	0.0005	mg/kg dry				
Barium	ND	0.0005	mg/kg dry				
Silver	ND	0.0001	mg/kg dry				
Cadmium	ND	0.0001	mg/kg dry				

LCS (B406037-BS1)	Prepared & Analyzed: 04-Jun-14						
Manganese	0.0493	0.0005	mg/kg dry	0.0500	98.6	85-115	
Barium	0.0497	0.0005	mg/kg dry	0.0500	99.4	85-115	
Arsenic	0.0497	0.0005	mg/kg dry	0.0500	99.3	85-115	
Chromium	0.0475	0.0010	mg/kg dry	0.0500	95.1	85-115	
Copper	0.0520	0.0001	mg/kg dry	0.0500	104	85-115	
Selenium	0.266	0.0010	mg/kg dry	0.250	107	85-115	
Silver	0.0471	0.0001	mg/kg dry	0.0500	94.3	85-115	
Zinc	0.0532	0.0010	mg/kg dry	0.0500	106	80-120	
Cadmium	0.0501	0.0001	mg/kg dry	0.0500	100	85-115	
Lead	0.0501	0.0005	mg/kg dry	0.0500	100	85-115	

LCS Dup (B406037-BSD1)	Prepared & Analyzed: 04-Jun-14						
Copper	0.0510	0.0001	mg/kg dry	0.0500	102	85-115	1.94
Selenium	0.270	0.0010	mg/kg dry	0.250	108	85-115	1.29
Chromium	0.0466	0.0010	mg/kg dry	0.0500	93.1	85-115	2.07
Zinc	0.0546	0.0010	mg/kg dry	0.0500	109	80-120	2.57
Arsenic	0.0512	0.0005	mg/kg dry	0.0500	102	85-115	3.08
Cadmium	0.0506	0.0001	mg/kg dry	0.0500	101	85-115	0.983
Barium	0.0490	0.0005	mg/kg dry	0.0500	98.0	85-115	1.49
Silver	0.0472	0.0001	mg/kg dry	0.0500	94.5	85-115	0.177
Manganese	0.0482	0.0005	mg/kg dry	0.0500	96.5	85-115	2.16

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B406037 - EPA 3050M**

LCS Dup (B406037-BSD1)	Prepared & Analyzed: 04-Jun-14								
Lead	0.0485	0.0005	mg/kg dry	0.0500	96.9	85-115	3.24	20	

**Batch B406165 - EPA 3050M**

Blank (B406165-BLK1)	Prepared: 18-Jun-14 Analyzed: 19-Jun-14							
Arsenic	ND	0.0005	mg/kg dry					
Manganese	ND	0.0005	mg/kg dry					
Chromium	ND	0.0010	mg/kg dry					
Lead	ND	0.0005	mg/kg dry					
Copper	0.0012	0.0001	mg/kg dry					
Barium	ND	0.0005	mg/kg dry					
Silver	ND	0.0001	mg/kg dry					
Cadmium	ND	0.0001	mg/kg dry					
Selenium	ND	0.0010	mg/kg dry					

LCS (B406165-BS1)	Prepared: 18-Jun-14 Analyzed: 19-Jun-14							
Selenium	0.280	0.0010	mg/kg dry	0.250	112	85-115		
Manganese	0.0496	0.0005	mg/kg dry	0.0500	99.2	85-115		
Silver	0.0759	0.0001	mg/kg dry	0.0500	152	85-115		
Chromium	0.0530	0.0010	mg/kg dry	0.0500	106	85-115		
Lead	0.0524	0.0005	mg/kg dry	0.0500	105	85-115		
Arsenic	0.0548	0.0005	mg/kg dry	0.0500	110	85-115		
Barium	0.0542	0.0005	mg/kg dry	0.0500	108	85-115		
Copper	0.0537	0.0001	mg/kg dry	0.0500	107	85-115		
Cadmium	0.0545	0.0001	mg/kg dry	0.0500	109	85-115		

LCS Dup (B406165-BSD1)	Prepared: 18-Jun-14 Analyzed: 19-Jun-14							
Barium	0.0529	0.0005	mg/kg dry	0.0500	106	85-115	2.45	20
Silver	0.0749	0.0001	mg/kg dry	0.0500	150	85-115	1.29	20
Manganese	0.0504	0.0005	mg/kg dry	0.0500	101	85-115	1.48	20
Arsenic	0.0573	0.0005	mg/kg dry	0.0500	115	85-115	4.38	20
Copper	0.0535	0.0001	mg/kg dry	0.0500	107	85-115	0.378	20
Chromium	0.0531	0.0010	mg/kg dry	0.0500	106	85-115	0.283	20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B406165 - EPA 3050M**

LCS Dup (B406165-BSD1)	Prepared: 18-Jun-14 Analyzed: 19-Jun-14								
Lead	0.0518	0.0005	mg/kg dry	0.0500		104	85-115	1.22	20
Selenium	0.283	0.0010	mg/kg dry	0.250		113	85-115	0.979	20
Cadmium	0.0550	0.0001	mg/kg dry	0.0500		110	85-115	0.832	20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: D D LANDFARM  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Jun-14 12:18

**Total Mercury by CVAA - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B406051 - EPA 7471**

Blank (B406051-BLK1)		Prepared & Analyzed: 05-Jun-14						
Mercury	ND	0.0002	mg/kg wet					
LCS (B406051-BS1)		Prepared & Analyzed: 05-Jun-14						
Mercury	0.0020	0.0002	mg/kg wet	0.00200	99.0	85-115		
LCS Dup (B406051-BSD1)		Prepared & Analyzed: 05-Jun-14						
Mercury	0.0020	0.0002	mg/kg wet	0.00200	101	85-115	1.90	20

**Batch B406125 - EPA 7471**

Blank (B406125-BLK1)		Prepared & Analyzed: 13-Jun-14						
Mercury	ND	0.0002	mg/kg wet					
LCS (B406125-BS1)		Prepared & Analyzed: 13-Jun-14						
Mercury	0.0020	0.0002	mg/kg wet	0.00200	102	85-115		
LCS Dup (B406125-BSD1)		Prepared & Analyzed: 13-Jun-14						
Mercury	0.0020	0.0002	mg/kg wet	0.00200	101	85-115	0.345	20

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



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

### Notes and Definitions

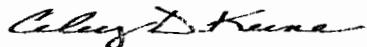
V1	Continuing calibration verification recovery was above method acceptance limits. This target analyte was not detected in the sample.
H2	Sample analysis performed past hold time specified by the method.
BS1a	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high. Will re-analyze per client request.
BS1	Blank spike recovery above laboratory acceptance criteria. Results for analyte potentially biased high.
B1	Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.
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



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Maryland, Hobbs, NM 88240  
 (575) 393-2326 FAX (575) 393-2476

Company Name: <u>Edible Soil Solutions</u>		<b>BILL TO</b>		ANALYSIS REQUEST	
Project Manager: <u>Edible Soil Solutions</u>	P.O. #:	Company:			
Address: <u>101 W. 3rd, N.M.</u>	State: <u>NM</u>	Attn:			
City: <u>Hobbs</u>	Zip: <u>88242</u>				
Phone #: <u>2. 223 16</u>	Fax #: <u>2. 6949</u>				
Project #: <u>DD</u>	Project Owner: <u>J. Cooper</u>				
Project Name: <u>DD Landfill</u>	State: <u></u>				
Project Location: <u>West El Paso 31-21-30</u>	City: <u>Dame</u>				
Sampler Name: <u>Edible Soil</u>	Zip: <u></u>				
FOR LAB USE ONLY					
Lab I.D.	Sample I.D.	(GRABOR C)OMP. # CONTAINERS	MATRIX	PRESERV.	SAMPLING
H401dd	1 DD - 3A 2 DD - 3B 3 DD - 3C 4 DD - 3D	15 15 15 15	DATE	TIME	
			5/29	7:20	<u>BTEx (8021B or 82603)</u>
			5/29	8:00	<u>TPH (8015)</u>
			5/29	8:45	<u>Chloride (3001)</u>
			5/29	9:20	<u>Cations</u>
					<u>Anions</u>
					<u>Wacc Metals</u>
					<u>EDC</u>
					<u>DCE</u>
					<u>PCE</u>
					<u>TCE</u>
					<u>Methylene chloride</u>
					<u>Vinyl chloride</u>

PLEASE NOTE: liability and damages, regardless of theory, and clients exclusive remedy for any claim arising whether based on contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and all other causes whatsoever shall be governed under law made in writing and reviewed by Cardinal within 30 days of the completion of the applicable services. No claim shall be liable for incidental or consequential damages, including without limitation business interruptions, loss of use of tools or property, incurred by Client. No sub-contractors shall be liable for any claim arising out of or related to the performance of services performed by Cardinal, regardless of whether such claim is based upon any of the above stated theories of liability or otherwise.

Relinquished By: R. D. Johnson  
 Received By: Kelli Henderson  
 Date: 5/30 Time: Received By:  
 Received By: 5/30 Time: 5/30

Sample Condition:  Cool  Insect Free  
 Yes  No  
 No  Yes  
 REMARKS:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Yes  No Add'l Fax #: \_\_\_\_\_

Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

1.60

Cool  
 Insect Free  
 Yes  
 No



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2328 FAX (575) 393-2476

Company Name:		Project Manager:		City:		Phone #:		Project #:		Project Name:		Project Location:		Sampler Name:		For Lab Use Only		BILL TO		ANALYSIS REQUEST							
																		FEDERAL SOIL CONSULTANTS		JILL VAN SICKLEN		601 W JK LINE		2. 22316		DD	
<i>RETRIEVED BY:</i>  		<i>RECEIVED BY:</i>  		<i>DATE:</i> 5/30		<i>TIME:</i> 9:30 AM		<i>RETRIEVED BY:</i>  		<i>DATE:</i> 5/30		<i>TIME:</i> 9:30 AM		<i>RETRIEVED BY:</i>  		<i>DATE:</i> 5/30		<i>TIME:</i> 9:30 AM									
<i>DELIVERED BY:</i>  		<i>SAMPLE CONDITION:</i> 1.60°C		<i>CHECKED BY:</i> 																							
<i>REMARKS:</i>		<i>PHONE RESULT:</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Auto Phone # <i>FAX RESULT:</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Auto Fax #																									

PLEASE NOTE: Liability and Damage: Customer liability and damage resulting from 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 must be filed within fifteen days of receipt of bill and received by Cardinal within 30 days after completion of the analytical services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, loss of use, or loss of profits incurred by client. No substitution, alterations or cancellation, except oral or related to the performance of services, heretofore by Cardinal, constitutes acceptance of samples such claim is based upon any of the above listed reasons or otherwise.

*Carbon Tetrachloride  
Polyaromatic Hydrocarbons*

202

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

**DD LANDFARM**

**(NM-01-0034)**

**MAY 2014**

May 26, 2014

RECEIVED: NMOCD

2014 JUN -6 P 2:54

NMOCD Environmental  
ATTN: Brad Jones  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

RE: DD Landfarm  
(NM-01-0034)  
Vadose Sampling

Mr. Jones:

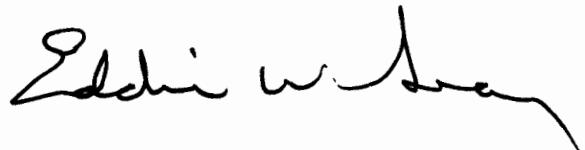
Please find the analytical for the three cells at DD Landfarm.

The Vadose samples were conducted as requested. As I told you in an earlier letter, I am doing the additional sampling for cell 3 because when compared to the background, cell 3 showed elevated TPH. I will forward results when received.

Find enclosed Vadose analytical, background test, map and copies of all the five years monitoring.

Should you have any questions or need anything further, please let me know.

Thanks for your help.



Eddie W. Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

cc: DD Landfarm ( J. Cooper)



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

May 21, 2014

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: DD LANDFARM (01-0034) VADOSE ZONE

Enclosed are the results of analyses for samples received by the laboratory on 04/17/14 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

***Analytical Results For:***

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL - V1	H401159-01	Soil	16-Apr-14 13:40	17-Apr-14 10:40
CELL - V2	H401159-02	Soil	16-Apr-14 14:25	17-Apr-14 10:40
CELL - V3	H401159-03	Soil	16-Apr-14 15:50	17-Apr-14 10:40

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25**CELL - V1****H401159-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	97.6	5.00	mg/kg	1	4040109	AP	07-May-14	310.1
Alkalinity, Carbonate	ND	0.00	mg/kg	1	4040109	AP	07-May-14	310.1
Chloride	ND	16.0	mg/kg	4	4042104	AP	21-Apr-14	4500-Cl-B
Conductivity*	222	1.00	µS/cm	1	4050703	AP	07-May-14	120.1
pH*	6.94	0.100	pH Units	1	4050607	AP	07-May-14	9045
Sulfate	ND	100	mg/kg	10	4050506	AP	07-May-14	375.4
Alkalinity, Total*	80.0	4.00	mg/kg	1	4040109	AP	07-May-14	310.1

**Organic Compounds**

TPH 418.1	ND	100	mg/kg	10	4050602	CK	07-May-14	418.1
-----------	----	-----	-------	----	---------	----	-----------	-------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Toluene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Ethylbenzene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total Xylenes*	ND	0.150	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total BTEX	ND	0.300	mg/kg	50	4042103	CK	21-Apr-14	8021B

Surrogate: 4-Bromofluorobenzene (PID)	124 %	89.4-126		4042103	CK	21-Apr-14	8021B
---------------------------------------	-------	----------	--	---------	----	-----------	-------

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	99.3	%	1	B404212	LLG	25-Apr-14	EPA160.3	H2
--------------	------	---	---	---------	-----	-----------	----------	----

**Total Metals by ICP**

Calcium	340	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Iron	2120	5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Magnesium	253	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Potassium	350	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**CELL - V1  
H401159-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
<b>Green Analytical Laboratories</b>										
<b>Total Metals by ICP</b>										
Sodium	ND		100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B	
Zinc	4.69	0.254	5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B	J
<b>Total Metals by ICPMS</b>										
Arsenic	0.619		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Barium	9.34		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Cadmium	ND		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Chromium	1.75		1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Copper	ND		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Lead	1.40		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Manganese	14.9		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Selenium	ND		1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
Silver	ND		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A	
<b>Total Mercury by CVAA</b>										
Mercury	ND		0.0977	mg/kg dry	485	B404245	JGS	30-Apr-14	EPA7471	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**CELL - V2**  
**H401159-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	117	5.00	mg/kg	1	4040109	AP	07-May-14	310.1
Alkalinity, Carbonate	ND	0.00	mg/kg	1	4040109	AP	07-May-14	310.1
Chloride	ND	16.0	mg/kg	4	4042104	AP	21-Apr-14	4500-Cl-B
Conductivity*	226	1.00	µS/cm	1	4050703	AP	07-May-14	120.1
pH*	7.20	0.100	pH Units	1	4050607	AP	07-May-14	9045
Sulfate	ND	100	mg/kg	10	4050506	AP	07-May-14	375.4
Alkalinity, Total*	96.0	4.00	mg/kg	1	4040109	AP	07-May-14	310.1

**Organic Compounds**

TPH 418.1	ND	100	mg/kg	10	4050602	CK	07-May-14	418.1
-----------	----	-----	-------	----	---------	----	-----------	-------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Toluene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Ethylbenzene*	ND	0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total Xylenes*	ND	0.150	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total BTEX	ND	0.300	mg/kg	50	4042103	CK	21-Apr-14	8021B

Surrogate: 4-Bromofluorobenzene (PID)	121 %	89.4-126	4042103	CK	21-Apr-14	8021B
---------------------------------------	-------	----------	---------	----	-----------	-------

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	98.8	%	1	B404212	LLG	25-Apr-14	EPA160.3	H2
--------------	------	---	---	---------	-----	-----------	----------	----

**Total Metals by ICP**

Calcium	378	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Iron	1980	5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Magnesium	246	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Potassium	348	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Sodium	ND	100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**CELL - V2**  
**H401159-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Metals by ICP**

Zinc	4.60	0.254	5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B	J
------	------	-------	------	-----------	-----	---------	-----	-----------	-----------	---

**Total Metals by ICPMS**

Arsenic	0.620	0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Barium	9.23	0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Chromium	1.58	1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Copper	ND	0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Lead	1.44	0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Manganese	15.2	0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0972	mg/kg dry	480	B404245	JGS	30-Apr-14	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**CELL - V3****H401159-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Alkalinity, Bicarbonate	410		5.00	mg/kg	1	4040109	AP	07-May-14	310.1
Alkalinity, Carbonate	ND		0.00	mg/kg	1	4040109	AP	07-May-14	310.1
Chloride	ND		16.0	mg/kg	4	4042104	AP	21-Apr-14	4500-Cl-B
Conductivity*	622		1.00	uS/cm	1	4050703	AP	07-May-14	120.1
pH*	7.51		0.100	pH Units	1	4050607	AP	07-May-14	9045
Sulfate	ND		40.0	mg/kg	4	4050506	AP	07-May-14	375.4
Alkalinity, Total*	336		4.00	mg/kg	1	4040109	AP	07-May-14	310.1

**Organic Compounds**

TPH 418.1	3.02		100	mg/kg	10	4050602	CK	20-May-14	418.1
-----------	------	--	-----	-------	----	---------	----	-----------	-------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND		0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Toluene*	ND		0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Ethylbenzene*	ND		0.050	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total Xylenes*	ND		0.150	mg/kg	50	4042103	CK	21-Apr-14	8021B
Total BTEX	ND		0.300	mg/kg	50	4042103	CK	21-Apr-14	8021B

Surrogate: 4-Bromofluorobenzene (PID)		121 %	89.4-126		4042103	CK	21-Apr-14	8021B
---------------------------------------	--	-------	----------	--	---------	----	-----------	-------

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	99.1		%	1	B404212	LLG	25-Apr-14	EPA160.3	H2
--------------	------	--	---	---	---------	-----	-----------	----------	----

**Total Metals by ICP**

Calcium	2540		100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Iron	2360		5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Magnesium	545		100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Potassium	509		100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
Sodium	ND		100	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**CELL - V3**

H401159-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Metals by ICP**

Zinc	7.10	0.254	5.00	mg/kg dry	100	B405009	JGS	01-May-14	EPA6010 B
------	------	-------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.770		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Barium	17.3		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Cadmium	ND		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Chromium	1.90		1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Copper	0.326		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Lead	2.21		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Manganese	24.7		0.500	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Selenium	ND		1.00	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A
Silver	ND		0.100	mg/kg dry	1000	B404222	JGS	25-Apr-14	6020 A

**Total Mercury by CVAA**

Mercury	ND		0.0959	mg/kg dry	475	B404245	JGS	30-Apr-14	EPA7471
---------	----	--	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyste	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
----------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4040109 - General Prep - Wet Chem**

<b>Blank (4040109-BLK1)</b>										
Alkalinity, Carbonate	ND	0.00	mg/kg							
Alkalinity, Bicarbonate	ND	5.00	mg/kg							
Alkalinity, Total	ND	4.00	mg/kg							

<b>LCS (4040109-BS1)</b>										
Alkalinity, Carbonate	ND	0.00	mg/kg							
Alkalinity, Bicarbonate	117	5.00	mg/kg							
Alkalinity, Total	96.0	4.00	mg/kg	100		96.0	80-120			

<b>LCS Dup (4040109-BSD1)</b>										
Alkalinity, Carbonate	ND	0.00	mg/kg							
Alkalinity, Bicarbonate	122	5.00	mg/kg							
Alkalinity, Total	100	4.00	mg/kg	100		100	80-120	4.08	20	

**Batch 4042104 - 1:4 DI Water**

<b>Blank (4042104-BLK1)</b>										
Chloride	ND	16.0	mg/kg							

<b>LCS (4042104-BS1)</b>										
Chloride	416	16.0	mg/kg	400		104	80-120			

<b>LCS Dup (4042104-BSD1)</b>										
Chloride	416	16.0	mg/kg	400		104	80-120	0.00	20	

**Batch 4050506 - General Prep - Wet Chem**

<b>Blank (4050506-BLK1)</b>										
Sulfate	ND	10.0	mg/kg							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Inorganic Compounds - Quality Control**  
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4050506 - General Prep - Wet Chem**

LCS (4050506-BS1)						Prepared: 05-May-14 Analyzed: 07-May-14				
Sulfate	20.1	10.0	mg/kg	20.0		101	80-120			
LCS Dup (4050506-BSD1)						Prepared: 05-May-14 Analyzed: 07-May-14				
Sulfate	19.1	10.0	mg/kg	20.0		95.7	80-120	5.04	20	

**Batch 4050607 - NO PREP**

LCS (4050607-BS1)						Prepared & Analyzed: 06-May-14				
pH	7.14		pH Units	7.00		102	90-110			
Duplicate (4050607-DUP1)						Source: H401190-01 Prepared & Analyzed: 06-May-14				
pH	8.70	0.100	pH Units		8.64			0.692	20	

**Batch 4050703 - General Prep - Wet Chem**

LCS (4050703-BS1)						Prepared & Analyzed: 07-May-14				
Conductivity	508		uS/cm	500		102	80-120			
Duplicate (4050703-DUP1)						Source: H401159-01 Prepared & Analyzed: 07-May-14				
Conductivity	220	1.00	uS/cm		222			1.27	20	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Organic Compounds - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	--------	---------	-------------

**Batch 4050602 - Solvent Extraction**

Blank (4050602-BLK1)					Prepared & Analyzed: 07-May-14				
TPH 418.1	ND	100	mg/kg						
LCS (4050602-BS1)					Prepared & Analyzed: 07-May-14				
TPH 418.1	5820	100	mg/kg	5000		116	80-120	0.603	20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

**Batch 4042103 - Volatiles****Blank (4042103-BLK1)**

Prepared &amp; Analyzed: 21-Apr-14

Benzene	ND	0.050	mg/kg						
Toluene	ND	0.050	mg/kg						
Ethylbenzene	ND	0.050	mg/kg						
Total Xylenes	ND	0.150	mg/kg						
Total BTEX	ND	0.300	mg/kg						

**Surrogate: 4-Bromo fluorobenzene (PID)**

0.0602 mg/kg 0.0500 120 89.4-126

**LCS (4042103-BS1)**

Prepared &amp; Analyzed: 21-Apr-14

Benzene	2.23	0.050	mg/kg	2.00	111	76.4-135			
Toluene	2.09	0.050	mg/kg	2.00	104	80.2-135			
Ethylbenzene	2.08	0.050	mg/kg	2.00	104	78.5-133			
Total Xylenes	6.00	0.150	mg/kg	6.00	99.9	80.1-135			

**Surrogate: 4-Bromo fluorobenzene (PID)**

0.0604 mg/kg 0.0500 121 89.4-126

**LCS Dup (4042103-BSD1)**

Prepared &amp; Analyzed: 21-Apr-14

Benzene	2.44	0.050	mg/kg	2.00	122	76.4-135	9.14	16.4	
Toluene	2.29	0.050	mg/kg	2.00	114	80.2-135	9.06	16.6	
Ethylbenzene	2.27	0.050	mg/kg	2.00	114	78.5-133	8.91	16.1	
Total Xylenes	6.54	0.150	mg/kg	6.00	109	80.1-135	8.68	15.8	

**Surrogate: 4-Bromo fluorobenzene (PID)**

0.0591 mg/kg 0.0500 118 89.4-126

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Total Metals by ICP - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

**Batch B405009 - EPA 3050**

Blank (B405009-BLK1)		Prepared & Analyzed: 01-May-14					
Sodium	ND	1.00	mg/kg dry				
Zinc	0.009	0.050	mg/kg dry				
Potassium	ND	1.00	mg/kg dry				
Magnesium	ND	1.00	mg/kg dry				
Calcium	ND	1.00	mg/kg dry				
Iron	ND	0.050	mg/kg dry				
LCS (B405009-BS1)		Prepared & Analyzed: 01-May-14					
Potassium	7.60	1.00	mg/kg dry	8.00	95.0	85-115	
Iron	3.93	0.050	mg/kg dry	4.00	98.2	85-115	J
Calcium	3.81	1.00	mg/kg dry	4.00	95.2	85-115	
Magnesium	19.9	1.00	mg/kg dry	20.0	99.5	85-115	
Sodium	6.30	1.00	mg/kg dry	6.48	97.2	85-115	
Zinc	1.82	0.050	mg/kg dry	2.00	91.2	85-115	
LCS Dup (B405009-BSD1)		Prepared & Analyzed: 01-May-14					
Magnesium	20.4	1.00	mg/kg dry	20.0	102	85-115	2.66
Zinc	1.88	0.050	mg/kg dry	2.00	93.8	85-115	2.84
Potassium	7.98	1.00	mg/kg dry	8.00	99.8	85-115	4.93
Calcium	3.91	1.00	mg/kg dry	4.00	97.8	85-115	2.77
Sodium	6.39	1.00	mg/kg dry	6.48	98.7	85-115	1.47
Iron	4.05	0.050	mg/kg dry	4.00	101	85-115	2.93

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

**Batch B404222 - EPA 3050M**

Blank (B404222-BLK1)		Prepared & Analyzed: 25-Apr-14					
Selenium	ND	0.0010	mg/kg dry				
Manganese	ND	0.0005	mg/kg dry				
Barium	ND	0.0005	mg/kg dry				
Lead	ND	0.0005	mg/kg dry				
Arsenic	ND	0.0005	mg/kg dry				
Copper	ND	0.0001	mg/kg dry				
Chromium	ND	0.0010	mg/kg dry				
Silver	ND	0.0001	mg/kg dry				
Cadmium	ND	0.0001	mg/kg dry				

**LCS (B404222-BS1)**

LCS (B404222-BS1)		Prepared & Analyzed: 25-Apr-14					
Barium	0.0504	0.0005	mg/kg dry	0.0500	101	85-115	
Cadmium	0.0492	0.0001	mg/kg dry	0.0500	98.4	85-115	
Selenium	0.247	0.0010	mg/kg dry	0.250	99.0	85-115	
Copper	0.0489	0.0001	mg/kg dry	0.0500	97.9	85-115	
Lead	0.0502	0.0005	mg/kg dry	0.0500	100	85-115	
Manganese	0.0461	0.0005	mg/kg dry	0.0500	92.2	85-115	
Arsenic	0.0469	0.0005	mg/kg dry	0.0500	93.7	85-115	
Silver	0.0455	0.0001	mg/kg dry	0.0500	90.9	85-115	
Chromium	0.0464	0.0010	mg/kg dry	0.0500	92.8	85-115	

**LCS Dup (B404222-BSD1)**

LCS Dup (B404222-BSD1)		Prepared & Analyzed: 25-Apr-14					
Barium	0.0501	0.0005	mg/kg dry	0.0500	100	85-115	0.596
Arsenic	0.0490	0.0005	mg/kg dry	0.0500	98.1	85-115	4.50
Cadmium	0.0514	0.0001	mg/kg dry	0.0500	103	85-115	4.36
Chromium	0.0489	0.0010	mg/kg dry	0.0500	97.8	85-115	5.26
Selenium	0.259	0.0010	mg/kg dry	0.250	103	85-115	4.39
Copper	0.0528	0.0001	mg/kg dry	0.0500	106	85-115	7.54
Lead	0.0505	0.0005	mg/kg dry	0.0500	101	85-115	0.544
Manganese	0.0499	0.0005	mg/kg dry	0.0500	99.8	85-115	7.96
Silver	0.0479	0.0001	mg/kg dry	0.0500	95.8	85-115	5.28

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) VADOSE  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
21-May-14 15:25

**Total Mercury by CVAA - Quality Control**

**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch B404245 - EPA 7471</b>										
<b>Blank (B404245-BLK1)</b>										
Mercury	ND	0.0002	mg/kg wet		Prepared & Analyzed: 30-Apr-14					
<b>LCS (B404245-BS1)</b>										
Mercury	0.0020	0.0002	mg/kg wet	0.00200		101	85-115			
<b>LCS Dup (B404245-BSD1)</b>										
Mercury	0.0021	0.0002	mg/kg wet	0.00200		104	85-115	2.98	20	

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



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

### Notes and Definitions

- J Estimated concentration. Analyte concentration between MDL and RL.
- H2 Sample analysis performed past hold time specified by the method.
- 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.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Eddie's Sewer Consulting		<b>BILL TO</b>		ANALYSIS REQUEST		
		P.O. #:	Address:	City: Hobbs	State: NM Zip: 88242	
Project Manager: Eddie Sauer		Attn: Eddie Sauer	Phone #: 2.2234	Fax #: 2.6944	Project Owner: J. Cooper	
Address: 1601 W 21st		Address: 1601 W 21st	Project #: DD	Project Name: Laramie River (NM - 1 - 034)	Project Location: W. Germany W2. W2 31-21-39	
Sampler Name: Eddie Sauer		City: Hobbs	State: NM Zip: 88242	Fax #: 2.6944	Phone #: 2.6944	
FOR LAB USE ONLY						
Lab I.D.	Sample I.D.	MATRIX	PRESERV.	SAMPLING		
H401154	Cell - V <sup>1</sup> Cell - V <sup>2</sup> Cell - V <sup>3</sup>	(G)RAB OR (C)GMP CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER	ACID/BASE ICE / COOL OTHER	DATE 4/16 TIME 1:40 4/16 2:25 4/16 3:50	TDS (418.1) BTEX 80218\82603 Cations Anions Chloride (300.1) Wacc Metals
						Additional Notes
<p>PLEASE NOTE: Liability and Damages. Cardinal Laboratories and clients exclusively remedy for any claim arising whether brought in contract or tort, shall be limited to the amount paid by the client for the service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, loss of use, or loss of profits, incurred by client as a result of the above stated services. Payment of invoices or collection expenses, if any, will be determined by the terms and conditions of the contract between the parties.</p>						
<p>Relinquished By: <u>Eddie Sauer</u> Received By: <u>John Henderson</u> Date: 4/17 Time: 10:40 Date: Received By: <u>John Henderson</u></p>						
<p>Delivered By: (Circle One) Sample Condition: CHECKED BY: <u>John Henderson</u></p> <p>Sample - UPS - Bus - Other: <u>3.60</u></p> <p>Cool Yes <input type="checkbox"/> No <input type="checkbox"/> Infect Yes <input type="checkbox"/> No <input type="checkbox"/></p>						
<p>Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Addl Phone #: _____ Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Addl Fax #: _____ REMARKS: _____</p>						

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

# **BACKGROUND AND PQL**

# CHAIN-OF-CUSTODY RECORD

Client: Eddie Seay Consulting

Address: 601 W Illinois

Hobbs, N.M.

Project Name:

DD Landfarm

Project #: DD soil samples

Project Manager: Eddie Seay / R. Bradshaw

Sampler: Eddie Seay

Samples Collected:  Yes  No

## ANALYSIS REQUEST

Number/Volume	Preservative		HEAL No.	
	HgCl <sub>2</sub>	HCl		
11/27 2:30	Background #1	3	001129-18	✓ BTEX + MTBE + TMB's (8021)
				✓ BTEX + MTBE + TPH (Gasoline Only)
				✓ TPH Method 8015B MOD (Gas/Diesel)
				✓ TPH (Method 418.1)
				8310 (PNA or PAH)
				RCRA 8 Metals
				✓ Cations (Na, K, Ca, Mg)
				✓ Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )
				8081 Pesticides / PCB's (8082)
				✓ TCLP Metals

Remarks:

Date: 11/28	Time: 7:30 AM	Requisitioned By: (Signature) <u>Eddie Seay</u>	Received By: (Signature) <u>John W. Seay</u>
-------------	---------------	---	--

**ECD Environmental, Inc.**

**Client:** Eddie Seay Consulting  
**Project:** DD Quarterly  
**Project Manager:** Eddie Seay  
**Project Number:**

**Date Collected:** 11/27/00  
**Date Received:** 11/28/00  
**Sample Matrix:** Soil  
**Extraction Date:** 11/29/00

**EPA Method 8021 BTEX**

Heal ID	Client ID	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)
001129-18	Background #1	ND	ND	ND	ND
MRL		0.05	0.05	0.05	0.05

**ECD Environmental, Inc.**

**Client:** Eddie Seay Consulting  
**Project:** DD Quarterly  
**Project Manager:** Eddie Seay  
**Project Number:**

**Date Collected:** 11/26/00  
**Date Received:** 11/28/00  
**Sample Matrix:** Soil  
**Extraction Date:** 11/29/00

**EPA Method 8015 DRO**

Heal ID	Client ID	Dilution	TPH (DRO) (mg/kg)	Analysis Date
001129-18	Background #1	1	ND	11/29/00
Extraction Blank		1	ND	11/29/00

**QC/QA**

<u>Sample ID</u>	<u>Sample Amount</u>	<u>Spike</u>	<u>Recovery</u>	<u>%Recovery</u>
001129-18 MS	ND	100 ppm	95 ppm	95%
001129-18 MSD	100		100	

# Hall Environmental Analysis Laboratory

Date: 28-Dec-00

CLIENT:	ECD Environmental	Client Sample ID:	Background 2' #1
Lab Order:	0012027	Tag Number:	
Project:	Land Farm	Collection Date:	12/4/00
Lab ID:	0012027-18B	Matrix:	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ANIONS BY 300.0</b>						
	<b>E300</b>					Analyst: <b>SDU</b>
Bromide	ND	1.5		mg/Kg	5	12/20/00
Chloride	2.0	1.5		mg/Kg	5	12/20/00
Fluoride	ND	1.5		mg/Kg	5	12/20/00
Nitrogen, Nitrate (As N)	4.2	1.5		mg/Kg	5	12/20/00
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	12/20/00
Phosphorus, Dissolved Orthophosphate (As P)	ND	7.5		mg/Kg	5	12/20/00
Sulfate	ND	7.5		mg/Kg	5	12/20/00

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	*	- Value exceeds Maximum Contaminant Level

# Hall Environmental Analysis Laboratory

Date: 28-Dec-00

CLIENT: ECD Environmental  
Work Order: 0012027  
Project: Land Farm

## QC SUMMARY REPORT

Method Blank

Sample ID: blk	Batch ID: R347	Test Code: E300	Units: mg/Kg	Analysis Date: 12/20/00	Prep Date:						
Client ID:		Run ID:	WC_001220A	SeqNo:	6714						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromide	ND	0.30									
Chloride	ND	0.30									
Fluoride	ND	0.30									
Nitrate (As N)+Nitrite (As N)	ND	0									
Nitrogen, Nitrite (As N)	ND	0.30									
Phosphorus, Dissolved Orthophosphate	ND	1.5									
Sulfate	ND	1.5									

Qualifiers:

ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

# Hall Environmental Analysis Laboratory

Date: 28-Dec-00

## QC SUMMARY REPORT

Sample Duplicate

Project:	Land Farm											
Sample ID:	0012027-18B	Batch ID:	R347	Test Code:	E300	Units:	mg/Kg	Analysis Date: 12/20/00			Prep Date:	12/20/00
Client ID:	Background 2#1	Run ID:	WC_001220A	SeqNo:	7044							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Bromide	ND	1.5	0	0	0	0	0	0	0	0	15	
Chloride	2.1	1.5	0	0	0	0	0	2	4.83	15		
Fluoride	ND	1.5	0	0	0	0	0	0	0	0	15	
Nitrogen, Nitrite (As N)	ND	1.5	0	0	0	0	0	0	0	0	15	
Phosphorus, Dissolved Orthophosphate	ND	7.5	0	0	0	0	0	0	0	0	15	
Sulfate	ND	7.5	0	0	0	0	0	0	0	0	15	

Qualifiers:  
 ND - Not Detected at the Reporting Limit  
 S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 J - Analyte detected below quantitation limits

# Hall Environmental Analysis Laboratory

Date: 28-Dec-00

**CLIENT:** ECD Environmental  
**Work Order:** 0012027  
**Project:** Land Farm

## QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: lcs	Batch ID: R347	Test Code: E300	Units: mg/Kg	Analysis Date: 12/20/00						Prep Date:		
Client ID:		Run ID: WC_001220A		SeqNo:	6717	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte		Result	PQL	SPK value	SPK Ref Val							
Bromide		2.88	0.30	3	0	96.0	85	115	0	0		
Chloride		5.404	0.30	6	0	90.1	85	115	0	0		
Fluoride		0.56	0.30	0.6	0	93.3	85	115	0	0		
Nitrogen, Nitrite (As N)		1.122	0.30	1.2	0	93.5	85	115	0	0		
Phosphorus, Dissolved Orthophosphate		5.59	1.5	6	0	93.2	85	115	0	0		
Sulfate		11.09	1.5	12	0	92.4	85	115	0	0		
<b>Sample ID: lcsd</b>		<b>Batch ID: R347</b>	<b>Test Code: E300</b>	<b>Units: mg/Kg</b>	Analysis Date: 12/20/00							
Client ID:			Run ID: WC_001220A		SeqNo:	6718						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromide		2.813	0.30	3	0	93.8	85	115	2.88	2.35	15	
Chloride		5.33	0.30	6	0	88.8	85	115	5.404	1.38	15	
Fluoride		0.549	0.30	0.6	0	91.5	85	115	0.56	1.98	15	
Nitrogen, Nitrite (As N)		1.111	0.30	1.2	0	92.6	85	115	1.122	0.985	15	
Phosphorus, Dissolved Orthophosphate		5.515	1.5	6	0	91.9	85	115	5.59	1.35	15	
Sulfate		10.97	1.5	12	0	91.4	85	115	11.09	1.09	15	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

SVL ANALYTICAL INC - REPORT OF ANALYTICAL RESULTS  
 One Government Gulch ■ P.O. Box 929 ■ Kellogg, Idaho 83837-0929 ■ Phone: (208)784-1258 ■ Fax: (208)

Page

CLIENT : HALL ENVIRONMENTAL

sample Receipt : 12/12/00 Date of Report : 12/18/00

SVL JOB NO

SVL ID	CLIENT SAMPLE ID	Test Method	Ag	As	Ba	Cd	Cr	Pb	Se
			'00	'00	'00	'00	'00	'00	'00
W251363	0912027-1B6	12/04/00	<0.01mg/L	<0.02mg/L	1.55mg/L	<0.004mg/L	<0.012mg/L	<0.01mg/L	<0.02mg/L <0.

Reviewed By: Bratton Johnson Date: 12/18/00



# New Mexico Limits

Rule 53 G. 6.

(e) The concentration of the constituents listed in Subsections A and B of 20.6.2.3103 NMAC, as determined by EPA SW-846 Methods 6010B or 6020, or other methods approved by the division, shall not exceed the background soil concentration or the applicable closure concentration specified below, or an acceptable Practical Quantitation Limit, whichever is greater:

Landfarm Soil Closure Standards		Concentration (mg/kg) (Except where noted)
	Constituent	
(i)	Arsenic (As)	0.0146
(ii)	Barium (Ba)	106
(iii)	Cadmium (Cd)	1.37
(iv)	Chromium (Cr)	2.10
(v)	Cyanide (CN)	7.35
(vi)	Fluoride (F)	329
(vii)	Lead (Pb)	400
(viii)	Total Mercury (Hg)	334
(ix)	Nitrate (NO <sub>3</sub> as N)	17.1
(x)	Selenium (Se)	0.953
(xi)	Silver (Ag)	1.57
(xii)	Uranium (U)	16
(xiii)	Radioactivity: Combined Radium-226 and Radium-228	30 pCi/g
(xiv)	Polychlorinated biphenyls (PCBs)	0.0224
(xv)	Toluene	0.347
(xvi)	Carbon Tetrachloride	0.000988
(xvii)	1,2-dichloroethane (EDC)	0.000248
(xviii)	1,1-dichloroethylene (1,1-DCE)	0.133
(xix)	1,1,2,2-tetrachloroethylene (PCE)	0.00215
(xx)	1,1,2-trichloroethylene (TCE)	0.000131
(xxi)	ethylbenzene	1.01
(xxii)	total xylenes	0.167
(xxiii)	methylene chloride	0.00853
(xxiv)	chloroform	0.000414
(xxv)	1,1-dichloroethane	0.201
(xxvi)	ethylene dibromide (EDB)	0.000013
(xxvii)	1,1,1-trichloroethane	1.34

(xxviii)	1,1,2-trichloroethane	0.000498
(xxix)	1,1,2,2-tetrachloroethane	0.000172
(xxx)	vinyl chloride	0.000143
(xxxi)	PAHs: total naphthalene plus monomethylnaphthalenes	0.0197
(xxxii)	benzo-a-pyrene	0.6210
(xxxiii)	Chloride (Cl)	1000
(xxxiv)	Copper (Cu)	51.5
(xxxv)	Iron (Fe)	277
(xxxvi)	Manganese (Mn)	334
(xxxvii)	Phenols	2.37
(xxxviii)	Sulfate (SO <sub>4</sub> )	background
(xxxix)	Zinc (Zn)	682

# **5 YEAR TEST**



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

April 12, 2013

Eddie Seay

Eddie Seay Consulting

601 W. Illinois

Hobbs, NM 88242

RE: DD LANDFARM (01-0034) 5 YR MONITORING

Enclosed are the results of analyses for samples received by the laboratory on 03/14/13 9:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/](http://www.tceq.texas.gov/field/)

Cardinal Laboratories is ac

Health and Environment for:

Method EPA 552.2

Method EPA 524.2

Method EPA 524.4

Accreditation applies to pi

This report meets NELAP  
chain-of-custody. If you i

s, and a copy of the original  
contact me.

Sincerely,

A handwritten signature in black ink that appears to read "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

***Analytical Results For:***

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 - 1	H300636-01	Soil	13-Mar-13 13:45	14-Mar-13 09:20
CELL 1 - 2	H300636-02	Soil	13-Mar-13 14:35	14-Mar-13 09:20
CELL 1 - 3	H300636-03	Soil	13-Mar-13 15:15	14-Mar-13 09:20
CELL 1 - 4	H300636-04	Soil	13-Mar-13 16:10	14-Mar-13 09:20

---

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**

H300636-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	7.91	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		71.3 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		93.0 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		54.9 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides**

Radium-226	ND	0.70	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1****H300636-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Methylene chloride*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Toluene*	<b>0.0962</b>	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Surrogate: Dibromoiodomethane	95.8 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: Toluene-d8	95.3 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: 4-Bromofluorobenzene	98.8 %	70-130		3032207	ms	22-Mar-13	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**

H300636-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5		106 %	16.1-91.8		3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl		106 %	27.2-92.9		3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d4		108 %	21.3-96.1		3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.6		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	ND	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	1.61	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	1.01	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**

H300636-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Metals by ICP**

Iron	1890	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.593	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	10.3	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.104	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.54	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.689	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	1.65	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	19.4	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0100	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0562	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	3.74	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0962	mg/kg dry	481	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	8.10	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		80.4 %		65.2-140	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		99.5 %		63.6-154	3031801	MS	18-Mar-13	8015M

**Organic Compounds****SUB-SS**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		46.4 %		35-140	3041211	CK	21-Mar-13	8082

**Radionuclides****SUB-RS**

Radium-226	ND	0.50	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2**

H300636-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Methylene chloride*	0.649	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	B
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Toluene*	0.104	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Surrogate: Dibromofluoromethane		92.8 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: Toluene-d8		93.7 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: 4-Bromofluorobenzene		96.3 %	70-130		3032207	ms	22-Mar-13	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2**

H300636-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5		103 %	16.1-91.8		3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl		100 %	27.2-92.9		3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d14		102 %	21.3-96.1		3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.1		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	1.04	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	2.93	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	0.746	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2040	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.683	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	13.1	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.121	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.80	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.781	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	2.03	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	23.7	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0101	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0614	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	4.95	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0962	mg/kg dry	481	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3**

H300636-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B	
pH*	8.11	0.100	pH Units	1	3031501	DW	15-Mar-13	9045	
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065	GAL
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4	

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M	
Surrogate: 1-Chlorooctane		88.3 %		65.2-140	3031801	MS	18-Mar-13	8015M	
Surrogate: 1-Chlorooctadecane		103 %		63.6-154	3031801	MS	18-Mar-13	8015M	

**Organic Compounds**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	SUB-SS
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082	
Surrogate: Tetrachloro-meta-xylene		47.7 %		35-140	3041211	CK	21-Mar-13	8082	

**Radionuclides**

Radium-226	ND	0.50	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904	SUB-RS
Radium-228	ND	0.90	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904	
Total Radium	ND	0.90	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3**

H300636-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Methylene chloride*	<b>0.240</b>	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	B
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Toluene*	<b>0.109</b>	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Surrogate: Dibromoiodomethane	95.1 %	70-130		3032207	ms	22-Mar-13	8260		
Surrogate: Toluene-d8	94.2 %	70-130		3032207	ms	22-Mar-13	8260		
Surrogate: 4-Bromofluorobenzene	97.4 %	70-130		3032207	ms	22-Mar-13	8260		

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

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 analysis. 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3**  
**H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5	120 %	16.1-91.8		3032103	ms	22-Mar-13	8270C	
Surrogate: 2-Fluorobiphenyl	109 %	27.2-92.9		3032103	ms	22-Mar-13	8270C	
Surrogate: Terphenyl-d4	113 %	21.3-96.1		3032103	ms	22-Mar-13	8270C	

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	98.3		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	1.75	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	6.03	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	0.284	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03**CELL 1 - 3****H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2110	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.827	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	20.1	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.134	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.86	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.819	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	2.39	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	22.9	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0102	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0911	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	6.38	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0970	mg/kg dry	485	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	7.83	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		85.0 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		104 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		47.7 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides**

Radium-226	ND	0.60	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (01-0034) 5 YR MO Project Number: DD LANDFARM Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 12-Apr-13 16:03
---	--	------------------------------

**CELL 1 - 4**

H300636-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Methylene chloride*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Toluene*	0.107	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Surrogate: Dibromofluoromethane	96.6 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: Toluene-d8	94.8 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: 4-Bromofluorobenzene	98.1 %	70-130		3032207	ms	22-Mar-13	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

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 interruption, 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5		120 %	16.1-91.8		3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl		115 %	27.2-92.9		3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d14		114 %	21.3-96.1		3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	4.41	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.7		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	0.813	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	3.16	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	1.42	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 4**

H300636-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2110	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.689	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	11.3	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.119	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.72	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.708	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	1.74	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	18.0	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	ND	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0682	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	4.58	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.100	mg/kg dry	500	B303135	JGS	20-Mar-13	EPA7471
---------	----	-------	-----------	-----	---------	-----	-----------	---------

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



**CARDINAL**  
Laboratories

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Marland; Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

ANALYSIS REQUEST															
Company Name: Ecolab Environmental Consulting															
Project Manager: Edna W. Smith		P.O. #:													
Address: 1601 W. Tufts		Company:													
City: Holden		Attn:													
Phone #: 2-2236		Fax #: 2-6949													
Project #: DD LF		Project Owner: J. Cooper													
Project Name: DD Landfarm (DL-0034)		State: MA													
Project Location: Ellington, MA 01021 R. 38		City: Holden													
Sampler Name: Edna W. Smith (54. Montague, MA)		State: MA													
FOR LAB USE ONLY		ZIP:													
Lab I.D.	Sample I.D.	MATERIAL		PRESERV.	SAMPLING	TESTS									
		# CONTAINERS	GRAVITY (C)OMP.			DATE	TIME	TPH (8015)	Chlorides	As	Ba	Cd	Cu	Hg	Si
H300037	Cell 1 - 1	5	3/13	1:45											
	Cell 1 - 2	5	3/13	2:35											
	Cell 1 - 3	5	3/13	3:16											
	Cell 1 - 4	5	3/13	4:10											
REMARKS:		REMARKS:													
Delivered By: (Circle One)		Sample Condition		CHECKED BY:											
Reinquished By: <i>Edna W. Smith</i>		Cold intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Initial <input checked="" type="checkbox"/>											
Date: 3/14	Time: 9:20	Received By: <i>J. Cooper</i>		Initial <input checked="" type="checkbox"/>											
Fax Request: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Audit Fax #:													

PLEASE NOTE: Liability and Damages. Customer's liability and client's liability remedy for any claim arising from or related to any sample held by the analyst shall be limited to the amount paid by the client for the analysis. All claims, including losses for any other reason whatsoever, shall be deemed waived unless made in writing and received by Chemline within 30 days after completion of the applicable services. It is agreed that Chemline is liable for incidental or consequential damages, including special damages, business interruption, loss of time, or loss of profits incurred by client, in connection with the provision of services hereunder by Chemline, regardless of whether such claim is based upon any of the above stated remedies or elsewhere.

**† Cardinal cannot accept verbal changes. Please fax written changes to (571) 393-2224.**

۱۹۳



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2328 FAX (575) 393-2476

**Company Name:** Eddie Sean Consulting

**P.O. #:** \_\_\_\_\_  
**Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_  
**Phone #:** \_\_\_\_\_ **Fax #:** \_\_\_\_\_  
**Attn:** \_\_\_\_\_  
**Project #:** DD 1F **Project Owner:** J. Goss **Address:** \_\_\_\_\_  
**Project Name:** DD Landfill (303H) **City:** \_\_\_\_\_  
**Project Location:** El Paso, TX **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_  
**Phone #:** \_\_\_\_\_

**Sampler Name:** \_\_\_\_\_  
**FOR LAB USE ONLY**

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING
CDD 1-1		GROUNDWATER	3/13	5% Nitric Acid	1	1
CDD 1-2		WASTEWATER	3/13	5% Nitric Acid	1	1
CDD 1-3		SOIL	3/13	5% Nitric Acid	1	1
CDD 1-4		OIL	3/13	5% Nitric Acid	1	1
		SLUDGE				
		OTHER:				
		ACID/BASE:				
		ICE / COOL				
		OTHER:				
			DATE	TIME		

**ANALYSIS REQUEST**

*Benzene-a-pyrene  
Copper  
Iron  
Manganese  
Sulfate  
Zinc  
Ra 226 & Ra 228  
Uranium  
F, NO<sub>3</sub>  
Phenols  
P, H  
Cobalt Tetraethionate*

**PLEASE NOTE:** Liability and damages resulting from any error or omission in this document will be limited to the amount paid by the client for the analysis. All other liability, losses, damages and any other costs whatsoever shall be limited without limitation to nothing and included by Cardinal within 30 days after completion of the applicable services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of time, or loss of profits incurred by client, its subsidiaries, affiliates or subcontractors arising out of or related to the performance or non-performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

**Relinquished By:**  
*Eddie Sean*

**Received By:**  
*John K. Coss*

**Relinquished By:**

Delivered By: (Circle One)	Sample Condition
Samplers - UPS	Cool: <input type="checkbox"/> intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Samplers - Bus	Check: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Samplers - Other	Initials (initials)

Time:

Date:

**Received By:**

Time:

Date:

**Phone Result:**  Yes  No **Attn/Phone #:** \_\_\_\_\_  
**Fax Result:**  Yes  No **Attn/Fax #:** \_\_\_\_\_  
**REMARKS:** \_\_\_\_\_



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST.

3 of 3

101 East Marland; Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Ed & Sany Contractors

Project Manager:

Address:

City:

Phone #:

Project #: DD LF

Project Owner: J. Goya

Project Name: DD Land Farm (8034)

Project Location: Edgewood, NM

Sampler Name: Sue Mendenhall

FOR LAB USE ONLY

Sample I.D.

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

MATRIX

PRESERV.

SAMPLING

Fax #:

Phone #:

Address:

City:

State:

Zip:

ANALYSIS REQUEST.

EDC

DCE

PCE

TCE

Methylene Chloride

Chloroform

EDB

Trichloroethane

Tetrachloroethane

Vinyl Chloride

Polyvinylidene Difluoride

PLEASE NOTE: Liability and damages: Cardinal's liability and clients' liability to remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the samples. All claim relating from negligence and any other cause whatsoever shall be limited unless otherwise made in writing and received by Cardinal within 30 days after completion of the analytical services. In event that Cardinal is liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client in connection with such damages, the maximum liability shall be limited to one of the above stated amounts or otherwise.

Relinquished By: Ed & Sany Received By: Sue Mendenhall  
Date: 3/14 Time: 9:20  
REMARKS:

Phone Result:  Yes  No Auto Phone #: \_\_\_\_\_  
Fax Result:  Yes  No Auto Fax #: \_\_\_\_\_

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Relinquished By:	Cool	
Date:	Intact	(Initials)
Time:	Yes	
	No	

Delivered By: (Circle One)  
Relinquished By:  
Sampler - UPS - Bus - Other:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326





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

May 19, 2011

Eddie Seay

Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: DD LANDFARM (01-0034) VADOSE ZONE

Enclosed are the results of analyses for s

Cardinal Laboratories is accredited throu

Method SW-846 8021 Benzene, Tolu

Method SW-846 8260 Benzene, Tolu

Method TX 1005 Total Petroleu

Certificate number T104704398-08-TX.  
water matrices.

*Celey D. Keene*

otable

vironment for:

Cardinal Laboratories is accreditated thrc

Method EPA 552.2 Haloacetic Aci

Method EPA 524.2 Total Trihalon

Method EPA 524.4 Regulated VO

Accreditation applies to public drinking w

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*

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 1 (H100793-01)**

Arsenic 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Arsenic	0.604	0.050	05/03/2011	ND	0.050	100	0.0500	2.75	GAL	
<hr/>										
Barium, 6010B		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Barium	15.3	2.00	04/27/2011	ND	2.00	100	2.00	4.40	GAL	
<hr/>		Cadmium 200.8		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Cadmium	0.0216	0.0050	05/03/2011	ND	0.0484	96.8	0.0500	2.85	GAL	
<hr/>		Chloride, SM4500Cl-B		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	04/20/2011	ND	416	104	400	3.77		
<hr/>		Chromium, 6010B		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chromium	3.51	1.00	04/27/2011	ND	2.07	104	2.00	4.26	GAL	
<hr/>		Copper 200.8		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Copper	0.699	0.0100	05/03/2011	ND	0.0471	94.2	0.0500	4.77	GAL	
<hr/>		Cyanide 335.4		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Cyanide (total)	<0.0400	0.0400	05/02/2011	ND	0.0222	88.8	0.0250	1.36	GAL	
<hr/>		Fluoride, 4500F C		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 1 (H100793-01)**

Fluoride, 4500F C		mg/kg		Analyzed By: CK						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Fluoride</b>		<b>0.265</b>	0.200	04/29/2011	ND	0.950	95.0	1.00	0.00	GAL
<b>Iron 200.7</b>										
mg/kg dry wt.										
		mg/kg dry wt.		Analyzed By: CK						
Iron		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Iron</b>		<b>2900</b>	5.0	04/27/2011	ND	4.0	101	4.00	4.37	GAL
<b>Lead 200.8</b>										
mg/kg dry wt.										
		mg/kg dry wt.		Analyzed By: CK						
Lead		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Lead</b>		<b>1.67</b>	0.05	05/03/2011	ND	0.05	99.8	0.0500	0.402	GAL
<b>Manganese 200.7</b>										
mg/kg dry wt.										
		mg/kg dry wt.		Analyzed By: CK						
Manganese		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Manganese</b>		<b>32.9</b>	0.5	04/27/2011	ND	2.0	99.5	2.00	10.5	GAL
<b>Mercury, 7471A</b>										
mg/kg dry wt.										
		mg/kg dry wt.		Analyzed By: CK						
Mercury		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Mercury</b>		<0.050	0.050	05/03/2011	ND	0.002	105	0.00200	0.00	GAL
<b>Nitrate + Nitrite as N, 353.2</b>										
mg/kg										
		mg/kg		Analyzed By: CK						
Nitrate/Nitrite as N		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Nitrate/Nitrite as N</b>		<b>0.744</b>	0.040	05/05/2011	ND	0.101	101	0.100	5.77	GAL
<b>Nitrite as N 353.2</b>										
mg/kg										
		mg/kg		Analyzed By: CK						
Nitrite as N		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Nitrite as N</b>		<b>0.208</b>	0.040	04/29/2011	ND	0.107	107	0.100	0.00	GAL
<b>PAH 8270C</b>										
mg/kg										
		mg/kg		Analyzed By: CK						
Analyte		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 1 (H100793-01)**

PAH 8270C	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Naphthalene	<0.040	0.040	05/14/2011	ND	0.010	99.7	0.0100	2.08	
2-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
1-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
Acenaphthylene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	0.195	
Acenaphthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	1.47	
Fluorene	<0.040	0.040	05/14/2011	ND	0.010	105	0.0100	4.66	
Phenanthrene	<0.040	0.040	05/14/2011	ND	0.010	98.1	0.0100	1.52	
Anthracene	<0.040	0.040	05/14/2011	ND	0.010	97.8	0.0100	1.92	
Carbazole	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	1.29	
Fluoranthene	<0.040	0.040	05/14/2011	ND	0.010	97.4	0.0100	1.33	
Pyrene	<0.040	0.040	05/14/2011	ND	0.010	96.8	0.0100	1.23	
Benzo[a]anthracene	<0.040	0.040	05/14/2011	ND	0.009	89.8	0.0100	3.39	
Chrysene	<0.040	0.040	05/14/2011	ND	0.009	93.1	0.0100	1.07	
Benzo[b]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	2.80	
Benzo[k]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	4.08	
Benzo[a]pyrene	<0.040	0.040	05/14/2011	ND	0.011	109	0.0100	3.45	
Indeno[1,2,3-cd]pyrene	<0.040	0.040	05/14/2011	ND	0.010	104	0.0100	7.61	
Dibenz[a,h]anthracene	<0.040	0.040	05/14/2011	ND	0.010	99.1	0.0100	0.302	
Benzo[g,h,i]perylene	<0.040	0.040	05/14/2011	ND	0.010	95.1	0.0100	6.40	
Surrogate: Nitrobenzene-d5	91.4 %	35-114							
Surrogate: 2-Fluorobiphenyl	128 %	43-116							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 1 (H100793-01)**

PAH 8270C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Surrogate: Terphenyl-dl4		33.2 %	33-141							
PCB 8082										
PCB 8082		ug/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
PCB 1016	<10.0	10.0	04/28/2011	ND	10.5	105	10.0	73.1	SUB-SS	
PCB 1221	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1232	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1242	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1248	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1254	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1260	<10.0	10.0	04/28/2011	ND	7.00	70.0	10.0	41.2	SUB-SS	
Surrogate: Tetrachloro-meta-xylene		71.7 %	35-140							
pH	pH Units		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
pH	8.47	0.100	04/29/2011		7.08	101	7.00	0.706		
Phenols, 420.1										
Phenols, 420.1		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Phenols	<0.5	0.5	05/04/2011	ND	0.4	92.0	0.400	1.88	GAL	
Selenium 200.8										
Selenium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Selenium	<0.100	0.100	05/03/2011	ND	0.258	103	0.250	1.54	GAL	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 1 (H100793-01)**

Silver 200.8		mg/kg dry wt.		Analyzed By: CK						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Silver</b>		<b>0.0197</b>	0.0050	05/03/2011	ND	0.0494	98.8	0.0500	2.99	GAL
<b>Sulfate 375.4</b>										
mg/kg										
Analyzed By: HM										
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate		<40.0	40.0	04/27/2011	ND	41.5	104	40.0	4.53	
<b>TPH 8015M</b>		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	04/21/2011	ND	214	107	200	0.816	
DRO >C10-C28		<10.0	10.0	04/21/2011	ND	220	110	200	0.774	
<i>Surrogate: 1-Chlorooctane</i>		94.4 %	70-130							
<i>Surrogate: 1-Chlorooctadecane</i>		95.1 %	70-130							
<b>Uranium 200.8</b>		mg/kg dry wt.		Analyzed By: CK						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Uranium</b>		<b>0.0753</b>	0.0500	05/03/2011	ND	0.0498	99.6	0.0500	0.00	GAL
<b>WQCC Volatiles 8260</b>		mg/kg		Analyzed By: CMS						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Vinyl chloride		<0.0500	0.0500	04/27/2011	ND	0.973	97.3	1.00	5.96	
1,1-Dichloroethene		<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.06	
Methylene chloride		<0.0500	0.0500	04/27/2011	ND	0.810	81.0	1.00	9.11	
1,1-Dichloroethane		<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	6.87	
Chloroform		<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	6.04	
Carbon tetrachloride		<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	6.28	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 1 (H100793-01)****WQCC Volatiles 8260****mg/kg****Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
1,1,1-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.11	111	1.00	4.24	
Benzene	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	7.62	
1,2-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.87	
Trichloroethene	<0.0500	0.0500	04/27/2011	ND	1.12	112	1.00	6.93	
Toluene	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	7.34	
Tetrachloroethene	<0.0500	0.0500	04/27/2011	ND	1.15	115	1.00	7.84	
1,1,2-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.08	108	1.00	6.75	
1,2-Dibromoethane	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	8.00	
Ethylbenzene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	6.54	
Total Xylenes	<0.150	0.150	04/27/2011	ND	3.23	108	3.00	7.99	
1,1,2,2-Tetrachloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	5.35	
Naphthalene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	7.75	

Surrogate: Dibromoformmethane 93.3 % 80-120

Surrogate: Toluene-d8 111 % 80-120

Surrogate: 4-Bromofluorobenzene 103 % 80-120

**Zinc 200.7 mg/kg dry wt.****Analyzed By: CK**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Zinc	6.2	5.0	04/27/2011	ND	2.1	105	2.00	0.00	GAL

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 2 (H100793-02)**

Arsenic 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Arsenic</b>	<b>0.586</b>	0.050	05/03/2011	ND	0.050	100	0.0500	2.75	GAL	
<hr/>										
Barium, 6010B		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Barium</b>	<b>14.7</b>	2.00	04/27/2011	ND	2.00	100	2.00	4.40	GAL	
<hr/>										
Cadmium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Cadmium</b>	<b>0.0249</b>	0.0050	05/03/2011	ND	0.0484	96.8	0.0500	2.85	GAL	
<hr/>										
Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<16.0	16.0	04/20/2011	ND	416	104	400	3.77		
<hr/>										
Chromium, 6010B		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chromium</b>	<b>2.97</b>	1.00	04/27/2011	ND	2.07	104	2.00	4.26	GAL	
<hr/>										
Copper 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Copper</b>	<b>0.697</b>	0.0100	05/03/2011	ND	0.0471	94.2	0.0500	4.77	GAL	
<hr/>										
Cyanide 335.4		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Cyanide (total)</b>	<0.0200	0.0200	05/02/2011	ND	0.0222	88.8	0.0250	1.36	GAL	
<hr/>										
Fluoride, 4500F C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 2 (H100793-02)**

Fluoride, 4500F C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Fluoride	0.412	0.200	04/29/2011	ND	0.950	95.0	1.00	0.00	GAL	
<b>Iron 200.7</b>										
Iron 200.7		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Iron	2290	5.0	04/27/2011	ND	4.0	101	4.00	4.37	GAL	
<b>Lead 200.8</b>										
Lead 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Lead	1.75	0.05	05/03/2011	ND	0.05	99.8	0.0500	0.402	GAL	
<b>Manganese 200.7</b>										
Manganese 200.7		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Manganese	28.9	0.5	04/27/2011	ND	2.0	99.5	2.00	10.5	GAL	
<b>Mercury, 7471A</b>										
Mercury, 7471A		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Mercury	<0.050	0.050	05/03/2011	ND	0.002	105	0.00200	0.00	GAL	
<b>Nitrate + Nitrite as N, 353.2</b>										
Nitrate + Nitrite as N, 353.2		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Nitrate/Nitrite as N	0.515	0.040	05/05/2011	ND	0.101	101	0.100	5.77	GAL	
<b>Nitrite as N 353.2</b>										
Nitrite as N 353.2		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Nitrite as N	0.147	0.040	04/29/2011	ND	0.107	107	0.100	0.00	GAL	
<b>PAH 8270C</b>										
PAH 8270C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 2 (H100793-02)**

PAH 8270C	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Naphthalene	<0.040	0.040	05/14/2011	ND	0.010	99.7	0.0100	2.08	
2-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
1-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
Acenaphthylene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	0.195	
Acenaphthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	1.47	
Fluorene	<0.040	0.040	05/14/2011	ND	0.010	105	0.0100	4.66	
Phenanthrene	<0.040	0.040	05/14/2011	ND	0.010	98.1	0.0100	1.52	
Anthracene	<0.040	0.040	05/14/2011	ND	0.010	97.8	0.0100	1.92	
Carbazole	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	1.29	
Fluoranthene	<0.040	0.040	05/14/2011	ND	0.010	97.4	0.0100	1.33	
Pyrene	<0.040	0.040	05/14/2011	ND	0.010	96.8	0.0100	1.23	
Benzo[a]anthracene	<0.040	0.040	05/14/2011	ND	0.009	89.8	0.0100	3.39	
Chrysene	<0.040	0.040	05/14/2011	ND	0.009	93.1	0.0100	1.07	
Benzo[b]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	2.80	
Benzo[k]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	4.08	
Benzo[a]pyrene	<0.040	0.040	05/14/2011	ND	0.011	109	0.0100	3.45	
Indeno[1,2,3-cd]pyrene	<0.040	0.040	05/14/2011	ND	0.010	104	0.0100	7.61	
Dibenz[a,h]anthracene	<0.040	0.040	05/14/2011	ND	0.010	99.1	0.0100	0.302	
Benzo[g,h,i]perylene	<0.040	0.040	05/14/2011	ND	0.010	95.1	0.0100	6.40	
Surrogate: Nitrobenzene-d5	94.8 %	35-114							
Surrogate: 2-Fluorobiphenyl	137 %	43-116							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 2 (H100793-02)**

PAH 8270C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<i>Surrogate: Terphenyl-dl4</i>		41.0 %	33-141							
<b>PCB 8082</b>										
PCB 8082		ug/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
PCB 1016	<10.0	10.0	04/28/2011	ND	10.5	105	10.0	73.1	SUB-SS	
PCB 1221	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1232	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1242	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1248	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1254	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1260	<10.0	10.0	04/28/2011	ND	7.00	70.0	10.0	41.2	SUB-SS	
<i>Surrogate: Tetrachloro-meta-xylene</i>		87.4 %	35-140							
pH	pH Units		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
pH	8.66	0.100	04/29/2011		7.08	101	7.00	0.706		
<b>Phenols, 420.1</b>										
Phenols, 420.1		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Phenols	<0.5	0.5	05/04/2011	ND	0.4	92.0	0.400	1.88	GAL	
<b>Selenium 200.8</b>										
Selenium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Selenium	<0.100	0.100	05/03/2011	ND	0.258	103	0.250	1.54	GAL	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 2 (H100793-02)**

<b>Silver 200.8</b>		<b>mg/kg dry wt.</b>		<b>Analyzed By: CK</b>						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Silver</b>		<b>0.0171</b>	0.0050	05/03/2011	ND	0.0494	98.8	0.0500	2.99	GAL
<b>Sulfate 375.4</b>										
<b>mg/kg</b>										
<b>Analyzed By: HM</b>										
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate		<40.0	40.0	04/27/2011	ND	41.5	104	40.0	4.53	
<b>TPH 8015M</b>										
<b>mg/kg</b>										
<b>Analyzed By: AB</b>										
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10		<10.0	10.0	04/21/2011	ND	214	107	200	0.816	
DRO >C10-C28		<10.0	10.0	04/21/2011	ND	220	110	200	0.774	
<i>Surrogate: 1-Chlorooctane</i>										
97.3 % 70-130										
<i>Surrogate: 1-Chlorooctadecane</i>										
99.2 % 70-130										
<b>Uranium 200.8</b>	<b>mg/kg dry wt.</b>	<b>Analyzed By: CK</b>								
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Uranium</b>		<b>0.0849</b>	0.0500	05/03/2011	ND	0.0498	99.6	0.0500	0.00	GAL
<b>WQCC Volatiles 8260</b>										
<b>mg/kg</b>										
<b>Analyzed By: CMS</b>										
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Vinyl chloride		<0.0500	0.0500	04/27/2011	ND	0.973	97.3	1.00	5.96	
1,1-Dichloroethene		<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.06	
Methylene chloride		<0.0500	0.0500	04/27/2011	ND	0.810	81.0	1.00	9.11	
1,1-Dichloroethane		<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	6.87	
Chloroform		<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	6.04	
Carbon tetrachloride		<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	6.28	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 2 (H100793-02)**

WQCC Volatiles 8260		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
1,1,1-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.11	111	1.00	4.24		
Benzene	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	7.62		
1,2-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.87		
Trichloroethylene	<0.0500	0.0500	04/27/2011	ND	1.12	112	1.00	6.93		
Toluene	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	7.34		
Tetrachloroethene	<0.0500	0.0500	04/27/2011	ND	1.15	115	1.00	7.84		
1,1,2-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.08	108	1.00	6.75		
1,2-Dibromoethane	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	8.00		
Ethylbenzene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	6.54		
Total Xylenes	<0.150	0.150	04/27/2011	ND	3.23	108	3.00	7.99		
1,1,2,2-Tetrachloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	5.35		
Naphthalene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	7.75		

Surrogate: Dibromoformmethane 87.3 % 80-120

Surrogate: Toluene-d8 105 % 80-120

Surrogate: 4-Bromofluorobenzene 95.8 % 80-120

Zinc 200.7 mg/kg dry wt. Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Zinc	5.0	5.0	04/27/2011	ND	2.1	105	2.00	0.00	GAL

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 profit 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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 3 (H100793-03)**

Arsenic 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Arsenic</b>	<b>0.663</b>	0.050	05/03/2011	ND	0.050	100	0.0500	2.75	GAL	
<b>Barium, 6010B</b> mg/kg dry wt. Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Barium</b>	<b>18.4</b>	2.00	04/27/2011	ND	2.00	100	2.00	4.40	GAL	
<b>Cadmium 200.8</b> mg/kg dry wt. Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Cadmium</b>	<b>0.0414</b>	0.0050	05/03/2011	ND	0.0484	96.8	0.0500	2.85	GAL	
<b>Chloride, SM4500Cl-B</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	04/20/2011	ND	416	104	400	3.77		
<b>Chromium, 6010B</b> mg/kg dry wt. Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chromium</b>	<b>2.49</b>	1.00	04/27/2011	ND	2.07	104	2.00	4.26	GAL	
<b>Copper 200.8</b> mg/kg dry wt. Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Copper</b>	<b>0.958</b>	0.0100	05/03/2011	ND	0.0471	94.2	0.0500	4.77	GAL	
<b>Cyanide 335.4</b> mg/kg Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Cyanide (total)	<0.0200	0.0200	05/02/2011	ND	0.0222	88.8	0.0250	1.36	GAL	
<b>Fluoride, 4500F C</b> mg/kg Analyzed By: CK										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 3 (H100793-03)**

Fluoride, 4500F C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Fluoride</b>	<b>0.412</b>	0.200	04/29/2011	ND	0.950	95.0	1.00	0.00	GAL	
<b>Iron 200.7</b>		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Iron</b>	<b>2630</b>	5.0	04/27/2011	ND	4.0	101	4.00	4.37	GAL	
<b>Lead 200.8</b>		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Lead</b>	<b>2.77</b>	0.05	05/03/2011	ND	0.05	99.8	0.0500	0.402	GAL	
<b>Manganese 200.7</b>		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Manganese</b>	<b>38.9</b>	0.5	04/27/2011	ND	2.0	99.5	2.00	10.5	GAL	
<b>Mercury, 7471A</b>		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Mercury</b>	<b>&lt;0.050</b>	0.050	05/03/2011	ND	0.002	105	0.00200	0.00	GAL	
<b>Nitrate + Nitrite as N, 353.2</b>		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Nitrate/Nitrite as N</b>	<b>4.86</b>	0.040	05/05/2011	ND	0.101	101	0.100	5.77	GAL	
<b>Nitrite as N 353.2</b>		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Nitrite as N</b>	<b>0.177</b>	0.040	04/29/2011	ND	0.107	107	0.100	0.00	GAL	
<b>PAH 8270C</b>		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 3 (H100793-03)**

PAH 8270C	mg/kg	Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Naphthalene	<0.040	0.040	05/14/2011	ND	0.010	99.7	0.0100	2.08	
2-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
1-Methylnaphthalene	<0.040	0.040	05/14/2011	ND					
Acenaphthylene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	0.195	
Acenaphthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	1.47	
Fluorene	<0.040	0.040	05/14/2011	ND	0.010	105	0.0100	4.66	
Phenanthrene	<0.040	0.040	05/14/2011	ND	0.010	98.1	0.0100	1.52	
Anthracene	<0.040	0.040	05/14/2011	ND	0.010	97.8	0.0100	1.92	
Carbazole	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	1.29	
Fluoranthene	<0.040	0.040	05/14/2011	ND	0.010	97.4	0.0100	1.33	
Pyrene	<0.040	0.040	05/14/2011	ND	0.010	96.8	0.0100	1.23	
Benzo[a]anthracene	<0.040	0.040	05/14/2011	ND	0.009	89.8	0.0100	3.39	
Chrysene	<0.040	0.040	05/14/2011	ND	0.009	93.1	0.0100	1.07	
Benzo[b]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	102	0.0100	2.80	
Benzo[k]flouranthene	<0.040	0.040	05/14/2011	ND	0.010	100	0.0100	4.08	
Benzo[a]pyrene	<0.040	0.040	05/14/2011	ND	0.011	109	0.0100	3.45	
Indeno[1,2,3-cd]pyrene	<0.040	0.040	05/14/2011	ND	0.010	104	0.0100	7.61	
Dibenz[a,h]anthracene	<0.040	0.040	05/14/2011	ND	0.010	99.1	0.0100	0.302	
Benzo[g,h,i]perylene	<0.040	0.040	05/14/2011	ND	0.010	95.1	0.0100	6.40	
Surrogate: Nitrobenzene-d5	105 %	35-114							
Surrogate: 2-Fluorobiphenyl	144 %	43-116							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 3 (H100793-03)**

PAH 8270C	mg/kg		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<i>Surrogate: Terphenyl-dl4</i>		29.5 %	33-141							
PCB 8082	ug/kg		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
PCB 1016	<10.0	10.0	04/28/2011	ND	10.5	105	10.0	73.1	SUB-SS	
PCB 1221	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1232	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1242	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1248	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1254	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1260	<10.0	10.0	04/28/2011	ND	7.00	70.0	10.0	41.2	SUB-SS	
<i>Surrogate: Tetrachloro-meta-xylene</i>		113 %	35-140							
pH	pH Units		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
pH	8.55	0.100	04/29/2011		7.08	101	7.00	0.706		
Phenols, 420.1	mg/kg dry wt.		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Phenols	<0.5	0.5	05/04/2011	ND	0.4	92.0	0.400	1.88	GAL	
Selenium 200.8	mg/kg dry wt.		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Selenium	<0.100	0.100	05/03/2011	ND	0.258	103	0.250	1.54	GAL	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 3 (H100793-03)**

Silver 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Silver	0.0176	0.0050	05/03/2011	ND	0.0494	98.8	0.0500	2.99	GAL	
Sulfate 375.4		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate	<40.0	40.0	04/27/2011	ND	41.5	104	40.0	4.53		
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	04/21/2011	ND	214	107	200	0.816		
DRO >C10-C28	<10.0	10.0	04/21/2011	ND	220	110	200	0.774		
Surrogate: I-Chlorooctane	83.3 %	70-130								
Surrogate: I-Chlorooctadecane	80.2 %	70-130								
Uranium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Uranium	0.109	0.0500	05/03/2011	ND	0.0498	99.6	0.0500	0.00	GAL	
WQCC Volatiles 8260		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Vinyl chloride	<0.0500	0.0500	04/27/2011	ND	0.973	97.3	1.00	5.96		
1,1-Dichloroethene	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.06		
Methylene chloride	<0.0500	0.0500	04/27/2011	ND	0.810	81.0	1.00	9.11		
1,1-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	6.87		
Chloroform	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	6.04		
Carbon tetrachloride	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	6.28		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 3 (H100793-03)**

WQCC Volatiles 8260		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
1,1,1-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.11	111	1.00	4.24		
Benzene	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	7.62		
1,2-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.87		
Trichloroethene	<0.0500	0.0500	04/27/2011	ND	1.12	112	1.00	6.93		
Toluene	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	7.34		
Tetrachloroethene	<0.0500	0.0500	04/27/2011	ND	1.15	115	1.00	7.84		
1,1,2-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.08	108	1.00	6.75		
1,2-Dibromoethane	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	8.00		
Ethylbenzene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	6.54		
Total Xylenes	<0.150	0.150	04/27/2011	ND	3.23	108	3.00	7.99		
1,1,2,2-Tetrachloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	5.35		
Naphthalene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	7.75		

Surrogate: Dibromofluoromethane 90.1 % 80-J20

Surrogate: Toluene-d8 109 % 80-J20

Surrogate: 4-Bromofluorobenzene 99.2 % 80-J20

Zinc 200.7 mg/kg dry wt. Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Zinc	7.0	5.0	04/27/2011	ND	2.1	105	2.00	0.00	GAL

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 4 (H100793-04)**

Arsenic 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Arsenic</b>	<b>0.690</b>	0.050	05/03/2011	ND	0.050	100	0.0500	2.75	GAL	
Barium, 6010B		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Barium</b>	<b>14.2</b>	2.00	04/27/2011	ND	2.00	100	2.00	4.40	GAL	
Cadmium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Cadmium</b>	<b>0.0321</b>	0.0050	05/03/2011	ND	0.0484	96.8	0.0500	2.85	GAL	
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	04/20/2011	ND	416	104	400	3.77		
Chromium, 6010B		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chromium</b>	<b>3.36</b>	1.00	04/27/2011	ND	2.07	104	2.00	4.26	GAL	
Copper 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Copper</b>	<b>0.750</b>	0.0100	05/03/2011	ND	0.0471	94.2	0.0500	4.77	GAL	
Cyanide 335.4		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Cyanide (total)	<0.0200	0.0200	05/02/2011	ND	0.0222	88.8	0.0250	1.36	GAL	
Fluoride, 4500F C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 4 (H100793-04)**

Fluoride, 4500F C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Fluoride	0.641	0.200	04/29/2011	ND	0.950	95.0	1.00	0.00	GAL	
Iron 200.7	mg/kg dry wt.		Analyzed By: CK							
Iron	2570	5.0	04/27/2011	ND	4.0	101	4.00	4.37	GAL	
Lead 200.8	mg/kg dry wt.		Analyzed By: CK							
Lead	2.40	0.05	05/03/2011	ND	0.05	99.8	0.0500	0.402	GAL	
Manganese 200.7	mg/kg dry wt.		Analyzed By: CK							
Manganese	30.9	0.5	04/27/2011	ND	2.0	99.5	2.00	10.5	GAL	
Mercury, 7471A	mg/kg dry wt.		Analyzed By: CK							
Mercury	<0.050	0.050	05/03/2011	ND	0.002	105	0.00200	0.00	GAL	
Nitrate + Nitrite as N, 353.2	mg/kg		Analyzed By: CK							
Nitrate/Nitrite as N	1.21	0.040	05/05/2011	ND	0.101	101	0.100	5.77	GAL	
Nitrite as N 353.2	mg/kg		Analyzed By: CK							
Nitrite as N	0.213	0.040	04/29/2011	ND	0.107	107	0.100	0.00	GAL	
PAH 8270C	mg/kg		Analyzed By: CK							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 04/19/2011 Sampling Date: 04/19/2011  
Reported: 05/19/2011 Sampling Type: Soil  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE Sampling Condition: Cool & Intact  
Project Number: DD LANDFARM Sample Received By: Jodi Henson  
Project Location: E. EUNICE HWY 176

**Sample ID: CELL 2 - 4 (H100793-04)**

PAH 8270C	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Naphthalene	<0.040	0.040	05/16/2011	ND	0.010	99.7	0.0100	2.08	
2-Methylnaphthalene	<0.040	0.040	05/16/2011	ND					
1-Methylnaphthalene	<0.040	0.040	05/16/2011	ND					
Acenaphthylene	<0.040	0.040	05/16/2011	ND	0.010	102	0.0100	0.195	
Acenaphthene	<0.040	0.040	05/16/2011	ND	0.010	102	0.0100	1.47	
Fluorene	<0.040	0.040	05/16/2011	ND	0.010	105	0.0100	4.66	
Phenantrhene	<0.040	0.040	05/16/2011	ND	0.010	98.1	0.0100	1.52	
Anthracene	<0.040	0.040	05/16/2011	ND	0.010	97.8	0.0100	1.92	
Carbazole	<0.040	0.040	05/16/2011	ND	0.010	100	0.0100	1.29	
Fluoranthene	<0.040	0.040	05/16/2011	ND	0.010	97.4	0.0100	1.33	
Pyrene	<0.040	0.040	05/16/2011	ND	0.010	96.8	0.0100	1.23	
Benzo[a]anthracene	<0.040	0.040	05/16/2011	ND	0.009	89.8	0.0100	3.39	
Chrysene	<0.040	0.040	05/16/2011	ND	0.009	93.1	0.0100	1.07	
Benzo[b]flouranthene	<0.040	0.040	05/16/2011	ND	0.010	102	0.0100	2.80	
Benzo[k]flouranthene	<0.040	0.040	05/16/2011	ND	0.010	100	0.0100	4.08	
Benzo[a]pyrene	<0.040	0.040	05/16/2011	ND	0.011	109	0.0100	3.45	
Indeno[1,2,3-cd]pyrene	<0.040	0.040	05/16/2011	ND	0.010	104	0.0100	7.61	
Dibenz[a,h]anthracene	<0.040	0.040	05/16/2011	ND	0.010	99.1	0.0100	0.302	
Benzo[g,h,i]perylene	<0.040	0.040	05/16/2011	ND	0.010	95.1	0.0100	6.40	
Surrogate: Nitrobenzene-d5	88.5 %	35-114							
Surrogate: 2-Fluorobiphenyl	115 %	43-116							

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 4 (H100793-04)**

PAH 8270C		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<i>Surrogate: Terphenyl-dl4</i>		27.5 %	33-141							
<b>PCB 8082</b>										
PCB 8082		ug/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
PCB 1016	<10.0	10.0	04/28/2011	ND	10.5	105	10.0	73.1	SUB-SS	
PCB 1221	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1232	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1242	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1248	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1254	<10.0	10.0	04/28/2011	ND					SUB-SS	
PCB 1260	<10.0	10.0	04/28/2011	ND	7.00	70.0	10.0	41.2	SUB-SS	
<i>Surrogate: Tetrachloro-meta-xylene</i>		96.1 %	35-140							
pH	pH Units		Analyzed By: HM							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
pH	8.30	0.100	04/29/2011		7.08	101	7.00	0.706		
<b>Phenols, 420.1</b>										
Phenols, 420.1		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Phenols	<0.5	0.5	05/04/2011	ND	0.4	92.0	0.400	1.88	GAL	
<b>Selenium 200.8</b>										
Selenium 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Selenium	<0.100	0.100	05/03/2011	ND	0.258	103	0.250	1.54	GAL	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 4 (H100793-04)**

Silver 200.8		mg/kg dry wt.		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Silver	0.0175	0.0050	05/03/2011	ND	0.0494	98.8	0.0500	2.99	GAL	
Sulfate 375.4		mg/kg		Analyzed By: HM						
Sulfate	<40.0	40.0	04/27/2011	ND	41.5	104	40.0	4.53		
TPH 8015M		mg/kg		Analyzed By: AB						
GRO C6-C10	<10.0	10.0	04/21/2011	ND	214	107	200	0.816		
DRO >C10-C28	<10.0	10.0	04/21/2011	ND	220	110	200	0.774		
Surrogate: 1-Chlorooctane		101 %		70-130						
Surrogate: 1-Chlorooctadecane		103 %		70-130						
Uranium 200.8		mg/kg dry wt.		Analyzed By: CK						
Uranium	0.0822	0.0500	05/03/2011	ND	0.0498	99.6	0.0500	0.00	GAL	
WQCC Volatiles 8260		mg/kg		Analyzed By: CMS						
Vinyl chloride	<0.0500	0.0500	04/27/2011	ND	0.973	97.3	1.00	5.96		
1,1-Dichloroethene	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.06		
Methylene chloride	<0.0500	0.0500	04/27/2011	ND	0.810	81.0	1.00	9.11		
1,1-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	6.87		
Chloroform	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	6.04		
Carbon tetrachloride	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	6.28		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	04/19/2011	Sampling Date:	04/19/2011
Reported:	05/19/2011	Sampling Type:	Soil
Project Name:	DD LANDFARM (01-0034) VADOSE ZONE	Sampling Condition:	Cool & Intact
Project Number:	DD LANDFARM	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE HWY 176		

**Sample ID: CELL 2 - 4 (H100793-04)****WQCC Volatiles 8260****mg/kg****Analyzed By: CMS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
1,1,1-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.11	111	1.00	4.24	
Benzene	<0.0500	0.0500	04/27/2011	ND	1.13	113	1.00	7.62	
1,2-Dichloroethane	<0.0500	0.0500	04/27/2011	ND	1.04	104	1.00	5.87	
Trichloroethene	<0.0500	0.0500	04/27/2011	ND	1.12	112	1.00	6.93	
Toluene	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	7.34	
Tetrachloroethene	<0.0500	0.0500	04/27/2011	ND	1.15	115	1.00	7.84	
1,1,2-Trichloroethane	<0.0500	0.0500	04/27/2011	ND	1.08	108	1.00	6.75	
1,2-Dibromoethane	<0.0500	0.0500	04/27/2011	ND	1.14	114	1.00	8.00	
Ethylbenzene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	6.54	
Total Xylenes	<0.150	0.150	04/27/2011	ND	3.23	108	3.00	7.99	
1,1,2,2-Tetrachloroethane	<0.0500	0.0500	04/27/2011	ND	1.10	110	1.00	5.35	
Naphthalene	<0.0500	0.0500	04/27/2011	ND	1.07	107	1.00	7.75	

Surrogate: Dibromofluoromethane 86.7 % 80-120

Surrogate: Toluene-d8 104 % 80-120

Surrogate: 4-Bromofluorobenzene 91.6 % 80-120

**Zinc 200.7** mg/kg dry wt. Analyzed By: CK

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Zinc	6.1	5.0	04/27/2011	ND	2.1	105	2.00	0.00	GAL

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



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

### Notes and Definitions

SUB-SS	Analysis subcontracted to SunStar Laboratories, Inc.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
GAL	Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
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



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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88240

Receiving Date: 04/19/11

Reporting Date: 05/10/11

Project Number: DD LANDFARM

Project Name: DD LANDFARM (01-0034) VADOSE ZONE

Project Location: E. EUNICE HWY 176

Laboratory Number: H100793-01

Sample ID: CELL 2-1

Sampling Date: 04/19/11

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3°C

Sample Received By: JH

Analyzed By: BB

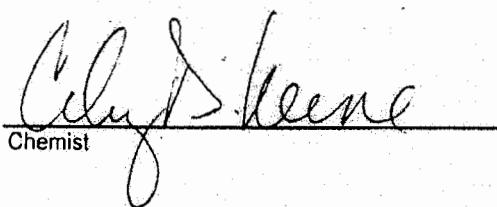
Analysis Date: 04/26/11

Analysis Time: 09:06

Analysis Description	Analysis Results pCi/gm	Analysis Error (+/- 2s)	Analysis Results Bq/gm	Analysis Error (+/- 2s)	Analysis Test Method
Ra - 226	<0.96	N/A	<0.04	N/A	EPA 901.1M
Ra - 228	<0.37	N/A	<0.01	N/A	EPA 901.1M

Notes:

Analyses subcontracted to Xenco Laboratories.



A handwritten signature in black ink, appearing to read "Cindy Seay". Below the signature, the word "Chemist" is printed in a smaller, sans-serif font.

H100793NORM EDDIE

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.



PHONE: (675) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88240

Receiving Date: 04/19/11

Reporting Date: 05/10/11

Project Number: DD LANDFARM

Project Name: DD LANDFARM (01-0034) VADOSE ZONE

Project Location: E. EUNICE HWY 176

Laboratory Number: H100793-02

Sample ID: CELL 2-2

Sampling Date: 04/19/11

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3°C

Sample Received By: JH

Analyzed By: BB

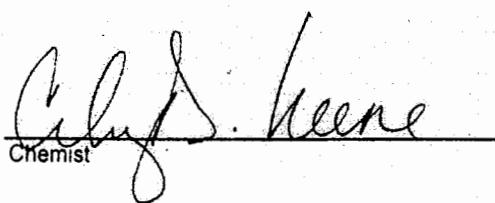
Analysis Date: 04/26/11

Analysis Time: 09:36

Analysis Description	Analysis Results pCi/gm	Analysis Error (+/- 2s)	Analysis Results Bq/gm	Analysis Error (+/- 2s)	Analysis Test Method
Ra - 226	<0.66	N/A	<0.02	N/A	EPA 901.1M
Ra - 228	<0.25	N/A	<0.01	N/A	EPA 901.1M

Notes:

Analyses subcontracted to Xenco Laboratories.



Alay J. Keene  
Chemist

H100793NORM EDDIE

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.



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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88240

Receiving Date: 04/19/11  
Reporting Date: 05/10/11  
Project Number: DD LANDFARM  
Project Name: DD LANDFARM (01-0034) VADOSE ZONE  
Project Location: E. EUNICE HWY 176  
Laboratory Number: H100793-03  
Sample ID: CELL 2-3

Sampling Date: 04/19/11  
Sample Type: SOIL  
Sample Condition: COOL & INTACT @ 3°C  
Sample Received By: JH  
Analyzed By: BB  
Analysis Date: 04/26/11  
Analysis Time: 09:58

Analysis Description	Analysis Results pCi/gm	Analysis Error (+/- 2s)	Analysis Results Bq/gm	Analysis Error (+/- 2s)	Analysis Test Method
Ra - 226	<0.94	N/A	<0.03	N/A	EPA 901.1M
Ra - 228	<0.45	N/A	<0.02	N/A	EPA 901.1M

Notes:

Analyses subcontracted to Xenco Laboratories.

Cindy D. Keene  
Chemist

H100793NORM EDDIE

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.



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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88240

Receiving Date: 04/19/11

Reporting Date: 05/10/11

Project Number: DD LANDFARM

Project Name: DD LANDFARM (01-0034) VADOSE ZONE

Project Location: E. EUNICE HWY 176

Laboratory Number: H100793-04

Sample ID: CELL 2-4

Sampling Date: 04/19/11

Sample Type: SOIL

Sample Condition: COOL & INTACT @ 3°C

Sample Received By: JH

Analyzed By: BB

Analysis Date: 04/26/11

Analysis Time: 10:23

Analysis Description	Analysis Results pCi/gm	Analysis Error (+/- 2s)	Analysis Results Bq/gm	Analysis Error (+/- 2s)	Analysis Test Method
Ra - 226	<0.71	N/A	<0.03	N/A	EPA 901.1M
Ra - 228	<0.35	N/A	<0.01	N/A	EPA 901.1M

Notes:

Analyses subcontracted to Xenco Laboratories.

Clifford L. Keene  
Chemist

H100793NORM EDDIE

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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

101 East Maryland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

**PLEASE NOTE:** Liability and Damages. CareFirst liability and other claims, exclusive remedy for my claim against Whistler made in writing, in writing, and received by CareFirst within 30 days after timely notice of the applicability of this provision, shall be limited to the amount of the premium paid for the applicable service, or no more than actual damage to my personal or consequential damages, arising from without insurance, business interruption losses, or loss of profits incurred by reason of such damages, as determined by agent or adjuster retained by CareFirst within 30 days after timely notice of the applicability of this provision.

Delivered By: (Circle One)	Sample Condition	Check
Carrier - UPS - Bus - Other:	Cool	<input checked="" type="checkbox"/>
	Hot	<input type="checkbox"/>
	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>

# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

BILL TO		ANALYSIS REQUEST	
Company Name:		P.O. #:	
Project Manager:		Company:	
Address:		Attn:	
City:	State:	Address:	
Phone #:	Fax #:	City:	
Project #:	Project Owner:	State:	
Project Name:	TD - VASOS Zone Tintapata	Zip:	
Project Location:		Phone #:	
Sampler Name:		Fax #:	

FOR LAB USE ONLY

Lab I.D.

Sample ID..

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

MATRIX

PRESERV

SAMPLING

Carbon Tetrachloride

EDC

DCE

PCE

TCE

Methylene Chloride

Chloroform

EDB

Trichlorethane

Tetrachlorethane

Vinyl chloride

Polyaromatic Hydrocarbons

PLEASE NOTE: Liability and Damages: Cardinal's liability and debts 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, whatever state be deemed valid, unless made in writing and received by Cardinal within 10 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 time, or loss of profits incurred by Client. No substitutions, affiliates or successors arising out of or related to the performance of services he furnishes to Client, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

RElinquished BY: John W. Hender Received By: \_\_\_\_\_ Date: 4/19 Time: 3:25 Received By: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

3 <sup>rd</sup>	Sample Condition	CHECKED BY:
<input checked="" type="checkbox"/>	Cool	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/>	Latent	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/> Addl Phone #: _____
<input checked="" type="checkbox"/>	No	<input checked="" type="checkbox"/> Addl Fax #: _____

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

# CARDINAL Laboratories

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Maryland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name:		BILL TO		ANALYSIS REQUEST	
Project Manager:	Address:	P.O. #:	Company:	Attn:	
City: _____	State: _____	Zip: _____	City: _____	Address: <i>ABQ</i>	
Phone #: _____	Fax #: _____		City: _____	State: _____	
Project #: DD	Project Owner: <i>Lankford</i>		Phone #: _____		
Project Name: DD - Vadose Zone Analysis	Project Location: <i>Abq</i>				
Sampler Name: _____					

FOR LAB USE ONLY	Lab I.D.	Sample I.D.	MATRIX	PRESERV.	SAMPLING	
	CONT'D		(G)RAB OR (C)OMP.			
			# CONTAINERS			
			GROUNDWATER			
			WASTEWATER			
			SOIL			
			OIL			
			SLUDGE			
			OTHER			
			ACID/BASE			
			ICE / COOL			
			OTHER			
			DATE	TIME		
			4/19	V V V V V V	Benzene - a - pyrene	
			4/19	V V V V V V	Copper	
			4/19	V V V V V V	Iron	
			4/19	V V V V V V	Manganese	
			4/19	V V V V V V	Sulfate	
			4/19	V V V V V V	Zinc	
			4/19	V V V V V V	Ra 226 + Ra 228	
			4/19	V V V V V V	Uranium	
			4/19	V V V V V V	F, NO <sub>3</sub>	
			4/19	V V V V V V	phenols	
			4/19	V V V V V V	pH	

PLEASE NOTE: Liability and damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based on 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 services. 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 in connection with such damages, or for expenses incurred by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>Spinkler</i>	Date: 4/19	Received By: <i>Jeff Nelson</i>
Time: 3:25	Received By: _____	
Delivered By: (Circle One)	Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Inact	CHECKED BY: <i>J. Nelson</i>
Sampler - UPS - Bus - Other: <i>3/25</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'Phone #: _____
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'Fax #: _____
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	REMARKS: _____

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





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

September 27, 2012

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: DD LANDFARM (01-0034) 5 YR MONITORING

Enclosed are the results of analyses for samples received by the laboratory on 08/21/12 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list on accredited matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_cert](http://www.tceq.texas.gov/field/qa/lab_accred_cert)

Cardinal Laboratories is accredited thru

Health and Environment for:

Method EPA 552.2      Haloacetic Ac  
Method EPA 524.2      Total Trihal  
Method EPA 524.4      Regulated

Accreditation applies to public drink

This report meets NELAP requiren  
chain-of-custody. If you have a

y of the original

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 3 - 1	H201972-01	Soil	20-Aug-12 14:15	21-Aug-12 11:30
CELL 3 - 2	H201972-02	Soil	20-Aug-12 14:50	21-Aug-12 11:30
CELL 3 - 3	H201972-03	Soil	20-Aug-12 15:40	21-Aug-12 11:30
CELL 3 - 4	H201972-04	Soil	20-Aug-12 16:30	21-Aug-12 11:30

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 1**

H201972-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Total Metals**

Arsenic	0.702	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Barium	24.2	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Cadmium	0.160	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Chromium	3.03	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Copper	1.50	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Iron	3110	5.0 mg/kg dry wt.	100	2092612	CK	31-Aug-12	6010	GAL
Lead	2.08	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Manganese	49.2	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Mercury	ND	0.098 mg/kg dry wt.	490	2092614	CK	04-Sep-12	7471A	GAL
Selenium	ND	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Silver	ND	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Uranium	0.125	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Zinc	6.42	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL

**Inorganic Compounds**

% Solids	99.2	%	1	2092607	CK	29-Aug-12	D2216	GAL
Chloride	ND	16.0 mg/kg	4	2082307	HM	23-Aug-12	4500-Cl-B	
Cyanide (total)	ND	0.250 mg/kg dry wt.	50	2092608	CK	29-Aug-12	335.4	GAL
Fluoride	6.64	0.800 mg/kg dry wt.	4	2092610	CK	27-Aug-12	4500F C	GAL
Nitrate/Nitrite as N	3.90	0.080 mg/kg dry wt.	4	2092611	CK	31-Aug-12	353.2	GAL
Nitrite as N	0.088	0.080 mg/kg dry wt.	4	2092611	CK	30-Aug-12	353.2	GAL
pH*	7.90	0.100 pH Units	1	2082706	HM	24-Aug-12	9045	
Phenols	ND	0.5 mg/kg dry wt.	1	2092619	CK	12-Sep-12	EPA9065	GAL
Sulfate	ND	40.0 mg/kg	4	2082806	AP	29-Aug-12	375.4	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damage. 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, purchase 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 rendered 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 1**

H201972-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M
Surrogate: 1-Chlorooctane		89.3 %		65.2-140	2082302	MS	24-Aug-12	8015M
Surrogate: 1-Chlorooctadecane		105 %		63.6-154	2082302	MS	24-Aug-12	8015M

**Organic Compounds**

SUB-SS

PCB 1016	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1221	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1232	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1242	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1248	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1254	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1260	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
Surrogate: Tetrachloro-meta-xylene		76.2 %		35-140	2092621	CK	29-Aug-12	8082

**Radionuclides**

Radium-226	ND	0.60	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Radium-228	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Total Radium	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS

**Volatile Organic Compounds by GCMS**

Vinyl chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Methylene chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Chloroform*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Benzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 1**

H201972-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by GCMS**

Trichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Toluene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
m-p Xylenes*	ND	0.100	mg/kg	50	2083011	ms	30-Aug-12	8260
o-Xylene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Total Xylenes*	ND	0.150	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Naphthalene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Surrogate: Dibromofluoromethane	97.7 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: Toluene-d8	106 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: 4-Bromofluorobenzene	83.6 %	70-130		2083011	ms	30-Aug-12	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluorene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Phenanthrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Carbazole	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluoranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Chrysene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C

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 rendered 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 1**

H201972-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Benzo[b]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Nitrobenzene-d5</i>		38.1 %		16.1-91.8	2082202	ms	31-Aug-12	8270C
<i>Surrogate: 2-Fluorobiphenyl</i>		43.1 %		27.2-92.9	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Terphenyl-d14</i>		46.7 %		21.3-96.1	2082202	ms	31-Aug-12	8270C

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 2**

H201972-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Total Metals**

Arsenic	0.862	0.500	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Barium	14.5	0.50	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Cadmium	0.119	0.100	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Chromium	2.59	1.00	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Copper	0.905	0.100	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Iron	2660	5.0	mg/kg dry wt.	100	2092612	CK	31-Aug-12	6010	GAL
Lead	1.77	0.50	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Manganese	25.8	0.500	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Mercury	ND	0.095	mg/kg dry wt.	476	2092614	CK	04-Sep-12	7471A	GAL
Selenium	ND	1.00	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Silver	ND	0.100	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Uranium	ND	0.100	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Zinc	3.19	1.00	mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL

**Inorganic Compounds**

% Solids	99.7	%	1	2092607	CK	29-Aug-12	D2216	GAL	
Chloride	ND	16.0	mg/kg	4	2082307	HM	23-Aug-12	4500-Cl-B	
Cyanide (total)	ND	0.250	mg/kg dry wt.	50	2092608	CK	29-Aug-12	335.4	GAL
Fluoride	1.49	0.800	mg/kg dry wt.	4	2092610	CK	27-Aug-12	4500F C	GAL
Nitrate/Nitrite as N	1.00	0.080	mg/kg dry wt.	4	2092611	CK	31-Aug-12	353.2	GAL
Nitrite as N	0.118	0.080	mg/kg dry wt.	4	2092611	CK	30-Aug-12	353.2	GAL
pH*	7.40	0.100	pH Units	1	2082706	HM	24-Aug-12	9045	
Phenols	ND	0.5	mg/kg dry wt.	1	2092619	CK	12-Sep-12	EPA9065	GAL
Sulfate	ND	40.0	mg/kg	4	2082806	AP	29-Aug-12	375.4	

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, customer 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 2**

H201972-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
<b>Cardinal Laboratories</b>									
<b>Organic Compounds</b>									
GRO C6-C10	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M	
Surrogate: 1-Chlorooctane		89.6 %		65.2-140	2082302	MS	24-Aug-12	8015M	
Surrogate: 1-Chlorooctadecane		102 %		63.6-154	2082302	MS	24-Aug-12	8015M	
<b>Organic Compounds</b>									
PCB 1016	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1221	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1232	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1242	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1248	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1254	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1260	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
Surrogate: Tetrachloro-meta-xylene		81.0 %		35-140	2092621	CK	29-Aug-12	8082	
<b>Radionuclides</b>									
Radium-226	ND	0.60	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Radium-228	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Total Radium	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
<b>Volatile Organic Compounds by GCMS</b>									
Vinyl chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Methylene chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Chloroform*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Benzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16**CELL 3 - 2**

H201972-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by GCMS**

Trichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Toluene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
m-p Xylenes*	ND	0.100	mg/kg	50	2083011	ms	30-Aug-12	8260
o-Xylene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Total Xylenes*	ND	0.150	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Naphthalene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Surrogate: Dibromofluoromethane	99.0 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: Toluene-d8	103 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: 4-Bromofluorobenzene	82.3 %	70-130		2083011	ms	30-Aug-12	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluorene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Phenanthrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Carbazole	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluoranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benz[a]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Chrysene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C

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, purchase 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 2**

H201972-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Benzo[b]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Nitrobenzene-d5</i>		31.5 %		16.1-91.8	2082202	ms	31-Aug-12	8270C
<i>Surrogate: 2-Fluorobiphenyl</i>		33.4 %		27.2-92.9	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Terphenyl-d14</i>		43.0 %		21.3-96.1	2082202	ms	31-Aug-12	8270C

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3-3**

H201972-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Total Metals**

Arsenic	<b>0.525</b>	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Barium	<b>14.6</b>	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Cadmium	<b>ND</b>	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Chromium	<b>2.11</b>	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Copper	<b>1.06</b>	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Iron	<b>2620</b>	5.0 mg/kg dry wt.	100	2092612	CK	31-Aug-12	6010	GAL
Lead	<b>2.03</b>	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Manganese	<b>31.0</b>	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Mercury	<b>ND</b>	0.095 mg/kg dry wt.	476	2092614	CK	04-Sep-12	7471A	GAL
Selenium	<b>ND</b>	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Silver	<b>ND</b>	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Uranium	<b>ND</b>	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Zinc	<b>4.61</b>	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL

**Inorganic Compounds**

% Solids	<b>99.0</b>	%	1	2092607	CK	29-Aug-12	D2216	GAL
Chloride	<b>ND</b>	16.0 mg/kg	4	2082307	HM	23-Aug-12	4500-Cl-B	
Cyanide (total)	<b>ND</b>	0.250 mg/kg dry wt.	50	2092608	CK	29-Aug-12	335.4	GAL
Fluoride	<b>2.36</b>	0.800 mg/kg dry wt.	4	2092610	CK	27-Aug-12	4500F C	GAL
Nitrate/Nitrite as N	<b>3.25</b>	0.080 mg/kg dry wt.	4	2092611	CK	31-Aug-12	353.2	GAL
Nitrite as N	<b>0.299</b>	0.080 mg/kg dry wt.	4	2092611	CK	30-Aug-12	353.2	GAL
pH*	<b>7.87</b>	0.100 pH Units	1	2082706	HM	24-Aug-12	9045	
Phenols	<b>ND</b>	0.5 mg/kg dry wt.	1	2092619	CK	12-Sep-12	EPA9065	GAL
Sulfate	<b>142</b>	40.0 mg/kg	4	2082806	AP	29-Aug-12	375.4	

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, attorney's 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 3**

H201972-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M
Surrogate: 1-Chlorooctane	79.1 %	65.2-140			2082302	MS	24-Aug-12	8015M
Surrogate: 1-Chlorooctadecane	93.5 %	63.6-154			2082302	MS	24-Aug-12	8015M

**Organic Compounds**

SUB-SS

PCB 1016	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1221	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1232	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1242	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1248	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1254	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
PCB 1260	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082
Surrogate: Tetrachloro-meta-xylene	96.3 %	35-140			2092621	CK	29-Aug-12	8082

**Radionuclides**

Radium-226	ND	0.40	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Radium-228	ND	0.60	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Total Radium	ND	0.60	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS

**Volatile Organic Compounds by GCMS**

Vinyl chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Methylene chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Chloroform*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Benzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 3**

H201972-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by GCMS**

Trichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Toluene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
m-p Xylenes*	ND	0.100	mg/kg	50	2083011	ms	30-Aug-12	8260
o-Xylene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Total Xylenes*	ND	0.150	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Naphthalene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Surrogate: Dibromofluoromethane	101 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: Toluene-d8	105 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: 4-Bromofluorobenzene	82.9 %	70-130		2083011	ms	30-Aug-12	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluorene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Phenanthrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Carbazole	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluoranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benz[a]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Chrysene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C

**Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damage. 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 that be deemed valid, 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3-3**

H201972-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Semivolatile Organic Compounds by GCMS**

Benzo[b]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Nitrobenzene-d5</i>	31.1 %	16.1-91.8		2082202	ms	31-Aug-12	8270C	
<i>Surrogate: 2-Fluorobiphenyl</i>	38.1 %	27.2-92.9		2082202	ms	31-Aug-12	8270C	
<i>Surrogate: Terphenyl-d14</i>	48.3 %	21.3-96.1		2082202	ms	31-Aug-12	8270C	

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, customer 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16**CELL 3 - 4**

H201972-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Total Metals**

Arsenic	0.702	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Barium	12.9	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Cadmium	ND	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Chromium	1.76	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Copper	0.673	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Iron	2660	5.0 mg/kg dry wt.	100	2092612	CK	31-Aug-12	6010	GAL
Lead	1.90	0.50 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Manganese	19.6	0.500 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Mercury	ND	0.098 mg/kg dry wt.	490	2092614	CK	04-Sep-12	7471A	GAL
Selenium	ND	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Silver	ND	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Uranium	ND	0.100 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL
Zinc	1.65	1.00 mg/kg dry wt.	1000	2092613	CK	17-Sep-12	6020	GAL

**Inorganic Compounds**

% Solids	99.7	%	1	2092607	CK	29-Aug-12	D2216	GAL
Chloride	ND	16.0 mg/kg	4	2082307	HM	23-Aug-12	4500-Cl-B	
Cyanide (total)	ND	0.250 mg/kg dry wt.	50	2092608	CK	29-Aug-12	335.4	GAL
Fluoride	2.16	0.800 mg/kg dry wt.	4	2092610	CK	27-Aug-12	4500F C	GAL
Nitrate/Nitrite as N	1.65	0.080 mg/kg dry wt.	4	2092611	CK	31-Aug-12	353.2	GAL
Nitrite as N	0.117	0.080 mg/kg dry wt.	4	2092611	CK	30-Aug-12	353.2	GAL
pH*	7.25	0.100 pH Units	1	2082706	HM	24-Aug-12	9045	
Phenols	ND	0.5 mg/kg dry wt.	1	2092619	CK	12-Sep-12	EPA9065	
Sulfate	ND	40.0 mg/kg	4	2082806	AP	29-Aug-12	375.4	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16**CELL 3 - 4**

H201972-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
<b>Cardinal Laboratories</b>									
<b>Organic Compounds</b>									
GRO C6-C10	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M	
DRO >C10-C28	ND	10.0	mg/kg	1	2082302	MS	24-Aug-12	8015M	
<i>Surrogate: 1-Chlorooctane</i>		95.4 %		65.2-140	2082302	MS	24-Aug-12	8015M	
<i>Surrogate: 1-Chlorooctadecane</i>		101 %		63.6-154	2082302	MS	24-Aug-12	8015M	
<b>Organic Compounds</b>									
PCB 1016	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1221	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1232	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1242	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1248	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1254	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
PCB 1260	ND	10.0	ug/kg	10	2092621	CK	29-Aug-12	8082	
<i>Surrogate: Tetrachloro-meta-xylene</i>		74.4 %		35-140	2092621	CK	29-Aug-12	8082	
<b>Radionuclides</b>									
Radium-226	ND	0.50	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Radium-228	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
Total Radium	ND	0.70	pCi/gram	1	2092620	CK	06-Sep-12	903.1/904	SUB-RS
<b>Volatile Organic Compounds by GCMS</b>									
Vinyl chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Methylene chloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Chloroform*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
Benzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 4**

H201972-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by GCMS**

Trichloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Toluene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
m-p Xylenes*	ND	0.100	mg/kg	50	2083011	ms	30-Aug-12	8260
o-Xylene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Total Xylenes*	ND	0.150	mg/kg	50	2083011	ms	30-Aug-12	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Naphthalene*	ND	0.0500	mg/kg	50	2083011	ms	30-Aug-12	8260
Surrogate: Dibromoformmethane	98.3 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: Toluene-d8	106 %	70-130		2083011	ms	30-Aug-12	8260	
Surrogate: 4-Bromofluorobenzene	82.7 %	70-130		2083011	ms	30-Aug-12	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Acenaphthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluorene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Phenanthrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Carbazole	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Fluoranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Chrysene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C

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, such as 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



PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
27-Sep-12 10:16

**CELL 3 - 4**

H201972-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Benzo[b]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Nitrobenzene-d5</i>		32.5 %		16.1-91.8	2082202	ms	31-Aug-12	8270C
<i>Surrogate: 2-Fluorobiphenyl</i>		37.6 %		27.2-92.9	2082202	ms	31-Aug-12	8270C
<i>Surrogate: Terphenyl-d14</i>		43.6 %		21.3-96.1	2082202	ms	31-Aug-12	8270C

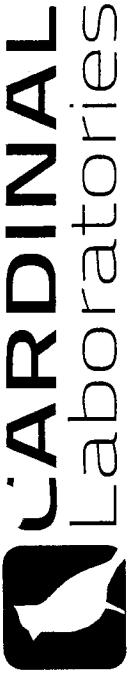
S\*

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 analysis. 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



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Eddie Sean Consulting		BILL TO:		ANALYSIS REQUEST					
Project Manager: Eddie Sean	P.O. #:	Company: <i>Silane</i>	Attn: <i>Silane</i>						
Address: 1501 W. Trinity		State: NM zip: 88242	Address: <i>Silane</i>						
City: Hobbs		Phone #: 2-6949	<i>Silane</i>						
Phone #: 2-7234		Project Owner: J. Cooper	<i>Silane</i>						
Project #: DD LF		Project Name: DD LF (NM - 0034)	<i>Silane</i>						
Project Location: Sub 31 T.21 R.38 (E. El Paso)		State: Zip:	<i>Silane</i>						
Sampler Name: Eddie Sean (S. Monitoring)		Phone #:	<i>TPH 48015</i>						
FOR LAB USE ONLY		Fax #:	X#19						
Lab I.D.	Sample I.D.	# CONTAINERS		MATRIX	PRESERV.	SAMPLING		TIME	DATE
		GROUNDWATER	SLUDGE			OTHER:	ACID/BASE:		
1 H201972	C00 3 - 1	✓ 4	✓	✓	✓	✓	✓	8/20 2:15	8/20 2:15
2	C00 3 - 2	✓ 4	✓	✓	✓	✓	✓	8/20 2:50	8/20 2:50
3	C00 3 - 3	✓ 4	✓	✓	✓	✓	✓	8/20 3:40	8/20 3:40
4	C00 3 - 4	✓ 4	✓	✓	✓	✓	✓	8/20 4:30	8/20 4:30

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 affidavits or successor claims 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.

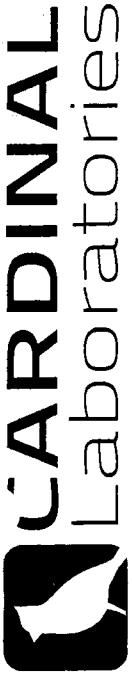
Relinquished By: <i>Eddie Sean</i>	Date: 8/21	Received By: <i>Jodi Henderson</i>	Date: 8/21
Relinquished By: <i>Eddie Sean</i>	Time: 8:30	Received By:	Time:
Delivered By: (Circle One)	Sample Condition	Checked By:	
Sampler - UPS - Bus - Other:	Cool Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Initials	<i>JH</i>
Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #: _____			
Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #: _____			
REMARKS: <i>all 20.6.2.3103 A/B</i>			



CARDINAL  
Laboratories

## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476**



## **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476**

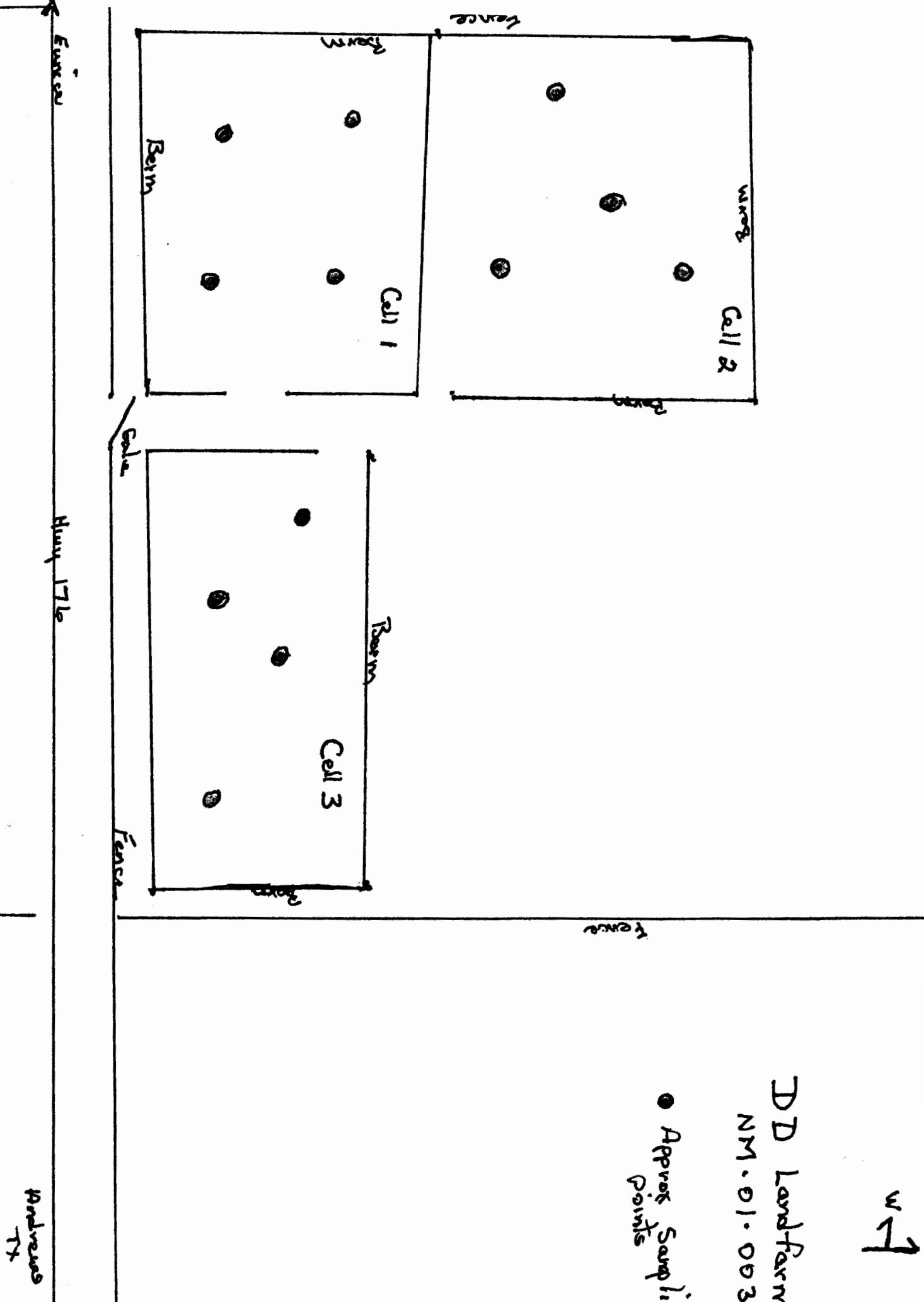
ANALYSIS REQUEST										BILL TO	
Company Name: Ed. & Son Consulting					P.O. #: 100						
Project Manager: Ed in Sono		Address: 1201 W. 5th St.			Company: Sono		Attn: Sono				
City: Waco		State: TX Zip: 76724			Address: Sono		City: Sono				
Phone #: 2-2234		Fax #: 5-6949			Project Owner: J. Sono		State: Zip:				
Project #: DD-LF											
Project Name: DD Lagoon		(0334)									
Project Location: Sono		E. Funie									
Sampler Name: Ed in Sono		54 Montezuma									
Sampling Matrix											
Sample I.D.											
Lab I.D. A2D1972											
1 Call 3 - 1											
2 Cee 3 - 2											
3 Cee 3 - 3											
4 Cee 3 - 4											
FOR LAB USE ONLY											
# CONTAINERS (GRABOR (C)OMP)											
WASTEWATER GROUNDWATER OIL SOIL SLUDGE OTHER: ACID/BASE ICE / COOL OTHER: ICE / COOL PRESERV SAMPLING											
REMARKS: <i>Initials</i>											
PLEASE NOTE: Liability and clients exclusive remedy for any claim arising whether based on contract or fact, 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.											
Retired By: <i>Ed in Sono</i>		Received By: <i>Ed in Sono</i>		Date: 8/21		Time: 1:30		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #: _____	
Retired By: <i>Ed in Sono</i>		Received By: <i>Ed in Sono</i>		Date: 8/21		Time: 1:30		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #: _____	
Delivered By: (Circle One)		Sample Condition		CHECKED BY: <i>Initials</i>							
Sampler - UPS - Bus - Other:		Cool Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

**MAP**

w-1

DD Landfarm  
NM.01.003

● Approx Sampling  
Points



State of New Mexico  
Energy, Minerals and Natural Resources Department

---

Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

Jami Bailey, Division Director  
Oil Conservation Division



April 10, 2014

Mr. Jimmy Cooper  
DD Landfarm  
P.O. Box 36  
Monument, New Mexico 88265

**RE: 2013 Bi-Annual Sampling and Five Year Monitoring Reports Review**  
**DD Landfarm**  
**Permit NM1-034**  
**Location: W/2 W/2 of Section 31, Township 21 South, Range 39 East, NMPM,**  
**Lea County, New Mexico**

Dear Mr. Cooper:

The Oil Conservation Division (OCD) has completed the review of DD Landfarm's 2013 Bi-Annual Sampling and Five Year Monitoring Report, dated April 15, 2013, 2013 Bi-Annual Sampling Monitoring Report, dated September 30, 2013, and 2014 Bi-Annual Sampling Monitoring Report, dated April 2014. The vadose zone results were not compared to the background results in order to determine if a release had occurred and if additional follow-up actions are required to be completed. The annual sampling events did not include performing laboratory analysis for "major cations/anions" as specified in the permit. The five year vadose sampling event was not implemented on all of the active landfarm cells and additional laboratory analysis was performed that was not required by regulation. Also, the incorrect test method for TPH was utilized and demonstrated in regards to vadose zone monitoring.

The April 2013 Bi-Annual Sampling and Five Year Monitoring Report and 2014 Bi-Annual Sampling Monitoring Report annual sampling events did not include performing laboratory analysis for "major cations/anions" as specified in the permit. DD Landfarm's November 16, 2000 surface waste management facility permit (NM1-034) states "The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually." The cover letter did not identify cations/anions as constituent tested and cations/anions were not requested on the chain of custody record. Please perform the required analysis for all future annual sampling events to remain in compliance with the permit.

In accordance with Paragraph (1) of 19.15.36.15.E NMAC, "The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell." Pursuant to Paragraph (3) of

19.15.36.15.E NMAC, “The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.” The five year sampling was only performed on the following landfarm cell(s): Cell 1 sampled March 13, 2013. Also, the laboratory results submitted in the monitoring report demonstrated that analysis was performed for all the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. As underlined in the above reference of Paragraph (1) of 19.15.36.15.E NMAC, the “methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC” are those identified in Subsection F of 19.15.36.15 NMAC: such as “determined by EPA SW-846 methods 6010B or 6020 or other EPA method approved by the division...”. Please perform the five year monitoring program on the remaining active landfarm cells in order to complete the five year monitoring and to demonstrate compliance of Paragraphs (1) and (3) of 19.15.36.15.E NMAC.

In regards to utilizing the proper TPH test method for vadose zone monitoring, in accordance with Paragraph (2) of 19.15.36.15.E NMAC the operator shall analyze the samples from the vadose zone “using the methods specified below for TPH, BTEX and chlorides and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.” The “methods specified below for TPH, BTEX and chlorides” are those identified in Subsection F of 19.15.36.15 NMAC: such as “TPH, as determined by EPA method 418.1 or other EPA method approved by the division...”. Pursuant to the Transitional Provisions of Subsection A of 19.15.36.20.NMAC, “Existing surface waste management facilities shall comply with the operational, waste acceptance and closure requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility.” The most common vadose zone monitoring (commonly referred to, but incorrectly as “Treatment Zone Monitoring” within existing landfarm permits) condition in an existing landfarm permit is as follows: “The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually.” The permit condition only identified the constituent and does not specify the test method. Part 36 specifies EPA Method 418.1 as the required vadose zone analyses for TPH. Please submit all future vadose zone sampling results demonstrating TPH by EPA Method 418.1.

The 2013 Bi-Annual Sampling and Five Year Monitoring Report only included the laboratory results from the sampling event. The requirements of Subsection E of 19.15.36.15 NMAC are clear that the operator “shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.” The rest of the vadose zone assessment was not completed to determine if a release has occurred and/or if the required additional testing and a response action plan of Paragraph (5) of 19.15.36.15.E NMAC are required. Please complete the required assessment.

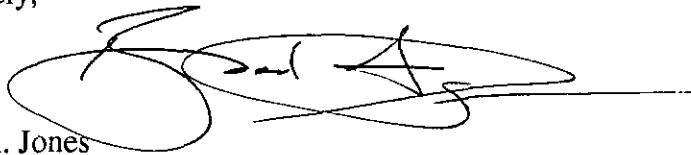
Please note that the submittal of treatment zone monitoring results alone does not constitute a request for a successive/additional lift. The permit condition specifies “Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of remediated

Mr. Cooper  
DD Landfarm  
Permit NM1-034  
April 10, 2014  
Page 3 of 3

soils." OCD requires such request to be made under a separate cover from other reporting and include the supporting analytical results and an updated facility map that illustrates and identifies the individual landfarm cells within the facility boundary and indicate the approximate location within the landfarm cells in which the samples were obtained.

Please complete the required actions of 19.15.36.15.E NMAC and provide OCD with the sampling results compared to background or PQL within 45 days of receipt of this letter. Please perform the five year monitoring program on all of the active landfarm cells. Please submit future vadose zone sampling results demonstrating TPH by EPA Method 418.1 and compliance to Paragraph (3) of 19.15.36.15.E NMAC by EPA SW-846 methods 6010B or 6020. As required in the permit, please perform laboratory analysis and submit the results for the "major cations/anions and Water Quality Control Commission (WQCC) metals annually" for all future vadose zone sampling events. Also, please provide an updated facility map that identifies the individual landfarm cells within the facility boundary and indicate the approximate location within the landfarm cells in which the samples were obtained. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,



Brad A. Jones  
Environmental Engineer

BAJ/baj

cc:     OCD District I Office, Hobbs  
          Eddie Seay, Eddie Seay Consulting, Hobbs, NM 88242

April, 2014

RECEIVED OCD

2014 APR -1 P 2: 0<sup>y</sup>

NMOCD Environmental  
ATTN: Brad Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: DD Landfarm (Permit #01-0034)  
Semi-Annual Sampling

Mr. Jones:

Find within the semi-annual sampling for both the treatment zone and vadose zone as required.

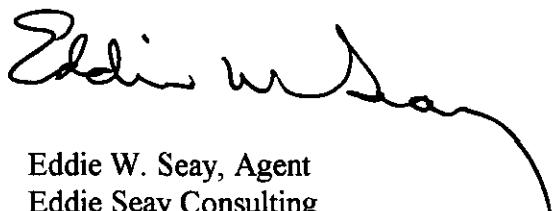
The treatment zone samples were taken at two to four inches of surface making one composite from four discrete samples for each cell, testing for TPH and Chloride.

The vadose zone samples were taken at approximately three feet below the natural surface level. There were four samples from each cell, composited and tested for BTEX, TPH, Chloride and WQCC Metals.

We will continue to operate and maintain the facility as our permit and rule 36 requires and will continue with closing as approved.

If you have any questions or need anything further, please call.

Sincerely,



Eddie W. Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
seay04@leaco.net

cc: DD Landfarm

March 31, 2014

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: DD LANDFARM (NM-01-0034) BI-ANNUAL MONITORING

Enclosed are the results of analyses for samples received by the laboratory on 03/19/14 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



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

**Analytical Results For:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 - V	H400836-01	Soil	18-Mar-14 08:20	19-Mar-14 14:05
CELL 2 - V	H400836-02	Soil	18-Mar-14 08:50	19-Mar-14 14:05
CELL 3 - V	H400836-03	Soil	18-Mar-14 09:30	19-Mar-14 14:05
CELL 1 T	H400836-04	Soil	18-Mar-14 10:15	19-Mar-14 14:05
CELL 2 T	H400836-05	Soil	18-Mar-14 10:40	19-Mar-14 14:05
CELL 3 T	H400836-06	Soil	18-Mar-14 11:05	19-Mar-14 14:05

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*

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**CELL 1 - V****H400836-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	----	------	-------	---	---------	----	-----------	-----------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Toluene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Ethylbenzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total Xylenes*	ND	0.150	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total BTEX	ND	0.300	mg/kg	50	4032401	MS	24-Mar-14	8021B

*Surrogate: 4-Hromo fluorebenzene (PID)*      108 %      89.4-126      4032401      MS      24-Mar-14      8021B**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctane		95.8 %	65.2-140		4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctadecane		94.9 %	63.6-154		4032103	ms	24-Mar-14	8015B

**Green Analytical Laboratories****General Chemistry**

% Dry Solids	98.6	%	1	B403199	LLG	21-Mar-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Iron	2350	5.00	mg/kg dry	100	B403198	JGS	21-Mar-14	HPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.572	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Barium	22.5	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Chromium	1.65	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Copper	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A

**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 sample. 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



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

***Analytical Results For:***

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**CELL 1 - V****H400836-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICPMS**

Lead	2.50	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Manganese	26.7	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Zinc	8.27	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0994	mg/kg dry	490	B403235	JGS	27-Mar-14	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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 interruption, 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:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**CELL 2 - V**
**H400836-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**
**Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	----	------	-------	---	---------	----	-----------	-----------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Toluene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Ethylbenzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total Xylenes*	ND	0.150	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total BTX	ND	0.300	mg/kg	50	4032401	MS	24-Mar-14	8021B

Surrogate: 4-Bromofluorobenzene (PID)	107 %	89.4-126	4032401	MS	24-Mar-14	8021B
---------------------------------------	-------	----------	---------	----	-----------	-------

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctane		81.8 %		65.2-140	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctadecane		84.6 %		63.6-154	4032103	ms	24-Mar-14	8015B

**Green Analytical Laboratories**
**General Chemistry**

% Dry Solids	97.9	%	1	B403199	LLG	21-Mar-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Iron	3080	5.00	mg/kg dry	100	B403198	JGS	21-Mar-14	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

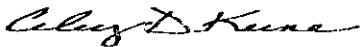
**Total Metals by ICPMS**

Arsenic	0.531	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Barium	34.0	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Cadmium	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Chromium	1.84	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Copper	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A

**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 interruption, 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**CELL 2 - V**  
**H400836-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories**

**Total Metals by ICPMS**

Lead	2.72	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Manganese	30.9	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Selenium	ND	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Silver	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Zinc	7.23	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0970	mg/kg dry	475	B403235	JGS	27-Mar-14	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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 one 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:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**CELL 3 - V**  
**H400836-03 (Soil)**

Analytic	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
----------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**
**Inorganic Compounds**

Chloride	32.0	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	------	------	-------	---	---------	----	-----------	-----------

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Toluene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Ethylbenzene*	ND	0.050	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total Xylenes*	ND	0.150	mg/kg	50	4032401	MS	24-Mar-14	8021B
Total BTEX	ND	0.300	mg/kg	50	4032401	MS	24-Mar-14	8021B

*Surrogate: 4-Bromoiodobenzene (PID)*

107 % 89.4-126 4032401 MS 24-Mar-14 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
<i>Surrogate: 1-Chlorooctane</i>		75.1 %		65.2-140	4032103	ms	24-Mar-14	8015B
<i>Surrogate: 1-Chlorooctadecane</i>		82.3 %		63.6-154	4032103	ms	24-Mar-14	8015B

**Green Analytical Laboratories**
**General Chemistry**

% Dry Solids	88.4	%	1	B403199	LLG	21-Mar-14	EPA160.3
--------------	------	---	---	---------	-----	-----------	----------

**Total Metals by ICP**

Iron	5280	5.00	mg/kg dry	100	B403198	JGS	21-Mar-14	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	4.13	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Barium	224	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Cadmium	0.210	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Chromium	4.04	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A
Copper	0.351	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020 A

**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 one 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**CELL 3 - V****H400836-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICPMS**

Lead	2.47	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020A
Manganese	42.0	0.500	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020A
Selenium	ND	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020A
Silver	ND	0.100	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020A
Zinc	11.0	1.00	mg/kg dry	1000	B403197	JGS	21-Mar-14	6020A

**Total Mercury by CVAA**

Mercury	ND	0.110	mg/kg dry	485	B403235	JGS	27-Mar-14	EPA7471
---------	----	-------	-----------	-----	---------	-----	-----------	---------

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 one of the above stated theories 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:*

Eddie Seay Consulting  
 601 W. Illinois  
 Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
 Project Number: DD LF  
 Project Manager: Eddie Seay  
 Fax To: (505) 392-6949

Reported:  
 31-Mar-14 14:56

**CELL 1 T**

H400836-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

## Cardinal Laboratories

Inorganic Compounds

Chloride	ND	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	----	------	-------	---	---------	----	-----------	-----------

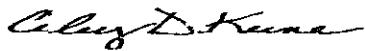
Petroleum Hydrocarbons by GC FID

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	110	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctane		84.5 %		65.2-140	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctadecane		103 %		63.6-154	4032103	ms	24-Mar-14	8015B

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 whatever 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 interruption, 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



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

***Analytical Results For:***

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**CELL 2 T**

H400836-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	----	------	-------	---	---------	----	-----------	-----------

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	135	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctane		85.2 %	65.2-140		4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctadecane		115 %	63.6-154		4032103	ms	24-Mar-14	8015B

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**CELL 3 T**

H400836-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

Chloride	80.0	16.0	mg/kg	4	4032505	AP	25-Mar-14	4500-Cl-B
----------	------	------	-------	---	---------	----	-----------	-----------

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10	ND	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
DRO >C10-C28	27.5	10.0	mg/kg	1	4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctane		78.6 %	65.2-140		4032103	ms	24-Mar-14	8015B
Surrogate: 1-Chlorooctadecane		87.3 %	63.6-154		4032103	ms	24-Mar-14	8015B

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4032505 - 1:4 DI Water**

Blank (4032505-BLK1)					Prepared & Analyzed: 25-Mar-14					
Chloride	ND	16.0	mg/kg							
LCS (4032505-BS1)					Prepared & Analyzed: 25-Mar-14					
Chloride	432	16.0	mg/kg	400		108	80-120			

LCS Dup (4032505-BSD1)					Prepared & Analyzed: 25-Mar-14					
Chloride	416	16.0	mg/kg	400		104	80-120	3.77	20	

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 analysis. 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 4032401 - Volatiles**

Blank (4032401-BLK1)		Prepared & Analyzed: 24-Mar-14						
Benzene	ND	0.050	mg/kg					
Toluene	ND	0.050	mg/kg					
Ethylbenzene	ND	0.050	mg/kg					
Total Xylenes	ND	0.150	mg/kg					
Total BTEX	ND	0.300	mg/kg					
Surrogate: 4-Bromofluorobenzene (PID)	0.0532		mg/kg	0.0500		106	89.4-126	
LCS (4032401-BS1)		Prepared & Analyzed: 24-Mar-14						
Benzene	2.50	0.050	mg/kg	2.00		125	76.4-135	
Toluene	2.38	0.050	mg/kg	2.00		119	80.2-135	
Ethylbenzene	2.34	0.050	mg/kg	2.00		117	78.5-133	
Total Xylenes	6.83	0.150	mg/kg	6.00		114	80.1-135	
Surrogate: 4-Bromofluorobenzene (PID)	0.0538		mg/kg	0.0500		108	89.4-126	
LCS Dup (4032401-BSD1)		Prepared & Analyzed: 24-Mar-14						
Benzene	2.60	0.050	mg/kg	2.00		130	76.4-135	4.14
Toluene	2.47	0.050	mg/kg	2.00		123	80.2-135	3.54
Ethylbenzene	2.42	0.050	mg/kg	2.00		121	78.5-133	3.58
Total Xylenes	7.03	0.150	mg/kg	6.00		117	80.1-135	15.8
Surrogate: 4-Bromofluorobenzene (PID)	0.0530		mg/kg	0.0500		106	89.4-126	

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



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

**Analytical Results For:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 4032103 - General Prep - Organics</b>										
<b>Blank (4032103-BLK1)</b>										
Prepared: 21-Mar-14 Analyzed: 24-Mar-14										
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	44.1		mg/kg	50.0		88.2	65.2-140			
Surrogate: 1-Chlorooctadecane	50.6		mg/kg	50.0		101	63.6-154			
<b>LCS (4032103-BS1)</b>										
Prepared: 21-Mar-14 Analyzed: 24-Mar-14										
GRO C6-C10	216	10.0	mg/kg	200		108	66.4-124			
DRO >C10-C28	212	10.0	mg/kg	200		106	61.6-132			
Total TPH C6-C28	428	10.0	mg/kg	400		107	69.7-122			
Surrogate: 1-Chlorooctane	51.4		mg/kg	50.0		103	65.2-140			
Surrogate: 1-Chlorooctadecane	54.8		mg/kg	50.0		110	63.6-154			
<b>LCS Dup (4032103-BSD1)</b>										
Prepared: 21-Mar-14 Analyzed: 24-Mar-14										
GRO C6-C10	221	10.0	mg/kg	200		110	66.4-124	2.18	23.4	
DRO >C10-C28	207	10.0	mg/kg	200		104	61.6-132	2.35	23.1	
Total TPH C6-C28	428	10.0	mg/kg	400		107	69.7-122	0.0358	20.6	
Surrogate: 1-Chlorooctane	51.3		mg/kg	50.0		103	65.2-140			
Surrogate: 1-Chlorooctadecane	53.3		mg/kg	50.0		107	63.6-154			

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 whatever 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**Total Metals by ICP - Quality Control****Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B403198 - EPA 3050**

Blank (B403198-BLK1)										Prepared & Analyzed: 21-Mar-14
Iron	ND	0.050	mg/kg dry							
LCS (B403198-BS1)										Prepared & Analyzed: 21-Mar-14
Iron	3.86	0.050	mg/kg dry	4.00		96.5	85-115			
LCS Dup (B403198-BSD1)										Prepared & Analyzed: 21-Mar-14
Iron	3.81	0.050	mg/kg dry	4.00		95.2	85-115	1.35	20	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Ability 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



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

**Analytical Results For:**

Eddie Seay Consulting 601 W. Illinois Hobbs NM, 88242	Project: DD LANDFARM (NM-01-0034) BI-A Project Number: DD LF Project Manager: Eddie Seay Fax To: (505) 392-6949	Reported: 31-Mar-14 14:56
---	--	------------------------------

**Total Metals by ICPMS - Quality Control****Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B403197 - EPA 3050M**

Blank (B403197-BLK1)	Prepared & Analyzed: 21-Mar-14						
Arsenic	ND	0.0005	mg/kg dry				
Lead	ND	0.0005	mg/kg dry				
Chromium	ND	0.0010	mg/kg dry				
Manganese	ND	0.0005	mg/kg dry				
Cadmium	ND	0.0001	mg/kg dry				
Selenium	ND	0.0010	mg/kg dry				
Copper	0.0002	0.0001	mg/kg dry				
Silver	ND	0.0001	mg/kg dry				
Barium	ND	0.0005	mg/kg dry				
Zinc	0.0054	0.0010	mg/kg dry				

LCS (B403197-BS1)	Prepared & Analyzed: 21-Mar-14						
Silver	0.0508	0.0001	mg/kg dry	0.0500	102	85-115	
Manganese	0.0494	0.0005	mg/kg dry	0.0500	98.8	85-115	
Zinc	0.0581	0.0010	mg/kg dry	0.0500	116	80-120	
Lead	0.0499	0.0005	mg/kg dry	0.0500	99.7	85-115	
Arsenic	0.0511	0.0005	mg/kg dry	0.0500	102	85-115	
Cadmium	0.0509	0.0001	mg/kg dry	0.0500	102	85-115	
Selenium	0.260	0.0010	mg/kg dry	0.250	104	85-115	
Barium	0.0490	0.0005	mg/kg dry	0.0500	98.1	85-115	
Chromium	0.0500	0.0010	mg/kg dry	0.0500	100	85-115	
Copper	0.0506	0.0001	mg/kg dry	0.0500	101	85-115	

LCS Dup (B403197-BSD1)	Prepared & Analyzed: 21-Mar-14						
Arsenic	0.0484	0.0005	mg/kg dry	0.0500	96.9	85-115	5.38
Cadmium	0.0519	0.0001	mg/kg dry	0.0500	104	85-115	2.00
Copper	0.0511	0.0001	mg/kg dry	0.0500	102	85-115	1.10
Selenium	0.248	0.0010	mg/kg dry	0.250	99.0	85-115	4.81
Chromium	0.0499	0.0010	mg/kg dry	0.0500	99.9	85-115	0.0895
Manganese	0.0482	0.0005	mg/kg dry	0.0500	96.4	85-115	2.51
Barium	0.0488	0.0005	mg/kg dry	0.0500	97.6	85-115	0.468
Lead	0.0505	0.0005	mg/kg dry	0.0500	101	85-115	1.33
Zinc	0.0567	0.0010	mg/kg dry	0.0500	113	80-120	2.45

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



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

***Analytical Results For:***

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
Project Number: DD LF  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
31-Mar-14 14:56

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B403197 - EPA 3050M**

LCS Dup (B403197-BSD1)	Prepared & Analyzed: 21-Mar-14								
Silver	0.0515	0.0001	mg/kg dry	0.0500	103	85-115	1.37	20	

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:*

Eddie Seay Consulting  
 601 W. Illinois  
 Hobbs NM, 88242

Project: DD LANDFARM (NM-01-0034) BI-A  
 Project Number: DD LF  
 Project Manager: Eddie Seay  
 Fax To: (505) 392-6949

Reported:  
 31-Mar-14 14:56

**Total Mercury by CVAA - Quality Control**
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B403235 - EPA 7471**

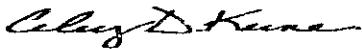
Blank (B403235-BLK1)						Prepared: 26-Mar-14	Analyzed: 27-Mar-14			
Mercury	ND	0.0002	mg/kg wet							
LCS (B403235-BS1)						Prepared: 26-Mar-14	Analyzed: 27-Mar-14			
Mercury	0.0021	0.0002	mg/kg wet	0.00200		105	85-115			

LCS Dup (B403235-BSD1)						Prepared: 26-Mar-14	Analyzed: 27-Mar-14			
Mercury	0.0021	0.0002	mg/kg wet	0.00200		105	85-115	0.00	20	

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



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

### Notes and Definitions

B1	Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.
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 interruption, 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*

---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
 (575) 393-2328 FAX (575) 393-2476

Page 20 of 20

Company Name: Eddie Sosa Consulting		P.O. #:		ANALYSIS REQUEST																										
Project Manager: Eddie Sosa	Address: 601 W 3rd Nw	City: Hobbs	State: NM	Zip: 88240-2	Company:																									
Phone #: 2-2236	Fax #: 2-6949	Attn:																												
Project #: DD-LF	Project Owner: J. Cooper	Address:																												
Project Name: DD Landfarm (NM-01-0024)	City:																													
Project Location: S. 43° 31' T. 21 R. 38 E. Espanola	State:																													
Sampler Name: Eddie Sosa (Bio-Armed Analysis)	Phone #:																													
FOR LAB USE ONLY		MATRIX		PRESERV.		SAMPLING																								
Lab I.D.	Sample I.D.	(GRAB OR CTD)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER:	DATE	TIME	BTEX	TPH (gas)	Chloride	Water Soluble Soil												
HYDOSY		1	2										3/19	8:20																
1 Cell 1 V		✓	✓			✓			✓		✓		3/19	8:50	✓	✓	✓													
2 Cell 2 V		✓	✓			✓			✓		✓		3/19	9:30	✓	✓	✓													
3 Cell 3 V		✓	✓			✓			✓		✓		3/19	10:15	✓	✓	✓													
4 Cell 1 T		✓	✓			✓			✓		✓		3/19	10:40	✓	✓	✓													
5 Cell 2 T		✓	✓			✓			✓		✓		3/19	11:05	✓	✓	✓													
6 Cell 3 T		✓	✓			✓			✓		✓		3/19	11:30	✓	✓	✓													

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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Eddie Sosa	Date: 3/19	Received By: Jodi Lenson	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
	Time: 2:05		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:
Delivered By: (Circle One)	Sample Condition: Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Other <input type="checkbox"/>	Checked By: J.M.	V - Verdose
Sampler - UPS - Bus - Other: 4.88	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		T - Treatment

\* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

September 30, 2013

RECEIVED OCD

2013 OCT -2 P 1:53

NMOC Environmental  
ATTN: Brad Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: DD Landfarm (Permit #01-0034)  
Semi-Annual Sampling

Mr. Jones:

Find within the semi-annual sampling for both the treatment zone and vadose zone as required.

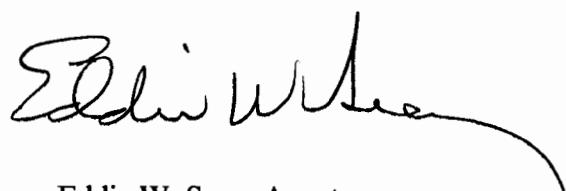
The treatment zone samples were taken at two to four inches of surface making one composite from four discrete samples for each cell, testing for TPH and Chloride.

The vadose zone samples were taken at approximately three feet below the natural surface level. There were four samples from each cell, composited and tested for BTEX, TPH and Chloride.

We will continue to operate and maintain the facility as our permit and rule 36 requires. Cell one was tested for the "five year monitoring", taking four randomly selected samples and testing as 20-6-2-3103 A & B requires.

If you have any questions or need anything further, please call.

Sincerely,



Eddie W. Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

cc: DD Landfarm



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

September 25, 2013

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: D D LANDFARM

Enclosed are the results of analyses for samples received by the laboratory on 09/23/13 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 (V1, 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	09/23/2013	Sampling Date:	09/23/2013
Reported:	09/25/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	DD LF	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE SECT31-T21-R38		

**Sample ID: CELL 1-T (H302309-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/24/2013	ND	416	104	400	3.77		
<b>TPH 8015M</b>										
mg/kg										
Analyzed By: MS										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186		
<b>DRO &gt;C10-C28</b>	<b>49.3</b>	10.0	09/23/2013	ND	194	97.0	200	0.388		
<i>Surrogate: 1-Chlorooctane</i>										
107 %										
<i>Surrogate: 1-Chlorooctadecane</i>										
116 %										

**Sample ID: CELL 2-T (H302309-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/24/2013	ND	416	104	400	3.77		
<b>TPH 8015M</b>										
mg/kg										
Analyzed By: MS										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186		
<b>DRO &gt;C10-C28</b>	<b>102</b>	10.0	09/23/2013	ND	194	97.0	200	0.388		
<i>Surrogate: 1-Chlorooctane</i>										
116 %										
<i>Surrogate: 1-Chlorooctadecane</i>										
133 %										

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	09/23/2013	Sampling Date:	09/23/2013
Reported:	09/25/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	DD LF	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE SECT31-T21-R38		

**Sample ID: CELL 3-T (H302309-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/25/2013	ND	416	104	400	3.92		
TPH 8015M										
mg/kg										
Analyte		Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10		<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186	
DRO >C10-C28		18.2	10.0	09/23/2013	ND	194	97.0	200	0.388	

Surrogate: 1-Chlorooctane      119 %      65.2-140  
Surrogate: 1-Chlorooctadecane      130 %      63.6-154

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	09/23/2013	Sampling Date:	09/23/2013
Reported:	09/25/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	DD LF	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE SECT31-T21-R38		

**Sample ID: CELL 1-V (H302309-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					A-01b	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/23/2013	ND	1.90	95.0	2.00	8.98		
Toluene*	<0.050	0.050	09/23/2013	ND	2.01	100	2.00	8.85		
Ethylbenzene*	<0.050	0.050	09/23/2013	ND	2.11	105	2.00	8.63		
Total Xylenes*	<0.150	0.150	09/23/2013	ND	6.35	106	6.00	8.10		
Total BTEX	<0.300	0.300	09/23/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID)	129 %	89.4-126							
<b>Chloride, SM4500Cl-B</b>									
mg/kg									
Analyzed By: AP									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2013	ND	416	104	400	3.92	
<b>TPH 8015M</b>									
mg/kg									
Analyzed By: MS									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186	
DRO >C10-C28	<10.0	10.0	09/23/2013	ND	194	97.0	200	0.388	

Surrogate: 1-Chlorooctane	109 %	65.2-140
Surrogate: 1-Chlorooctadecane		
115 %		
63.6-154		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	09/23/2013	Sampling Date:	09/23/2013
Reported:	09/25/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	DD LF	Sample Received By:	Jodi Henson
Project Location:	E. EUNICE SECT31-T21-R38		

**Sample ID: CELL 2-V (H302309-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					A-01b	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/23/2013	ND	1.90	95.0	2.00	8.98		
Toluene*	<0.050	0.050	09/23/2013	ND	2.01	100	2.00	8.85		
Ethylbenzene*	<0.050	0.050	09/23/2013	ND	2.11	105	2.00	8.63		
Total Xylenes*	<0.150	0.150	09/23/2013	ND	6.35	106	6.00	8.10		
Total BTEX	<0.300	0.300	09/23/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID)	127 %	89.4-126							
<b>Chloride, SM4500Cl-B</b>									
mg/kg									
Analyzed By: AP									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/25/2013	ND	416	104	400	3.92	
<b>TPH 8015M</b>									
mg/kg									
Analyzed By: MS									
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186	
DRO >C10-C28	<10.0	10.0	09/23/2013	ND	194	97.0	200	0.388	

Surrogate: 1-Chlorooctane	117 %	65.2-140
Surrogate: 1-Chlorooctadecane		
125 %		
63.6-154		

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received: 09/23/2013 Sampling Date: 09/23/2013  
Reported: 09/25/2013 Sampling Type: Soil  
Project Name: D D LANDFARM Sampling Condition: Cool & Intact  
Project Number: DD LF Sample Received By: Jodi Henson  
Project Location: E. EUNICE SECT31-T21-R38

**Sample ID: CELL 3-V (H302309-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					A-01a	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/23/2013	ND	1.90	95.0	2.00	8.98		
Toluene*	<0.050	0.050	09/23/2013	ND	2.01	100	2.00	8.85		
Ethylbenzene*	<0.050	0.050	09/23/2013	ND	2.11	105	2.00	8.63		
Total Xylenes*	<0.150	0.150	09/23/2013	ND	6.35	106	6.00	8.10		
Total BTEX	<0.300	0.300	09/23/2013	ND						
Surrogate: 4-Bromofluorobenzene (PID		127 %	89.4-126							
Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/25/2013	ND	416	104	400	3.92		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	09/23/2013	ND	199	99.4	200	0.186		
DRO >C10-C28	<10.0	10.0	09/23/2013	ND	194	97.0	200	0.388		
Surrogate: 1-Chlorooctane		125 %	65.2-140							
Surrogate: 1-Chlorooctadecane		133 %	63.6-154							

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 rendered 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

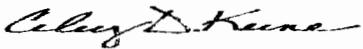
**Notes and Definitions**

- A-01b Surrogates failed QC limits, High. No target compounds detected above PQL.
- A-01a Surrogate failed QC limits High. No target compounds detected above PQL.
- A-01 BFB surrogate failed high. No target compounds detected in associated samples.
- 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

---

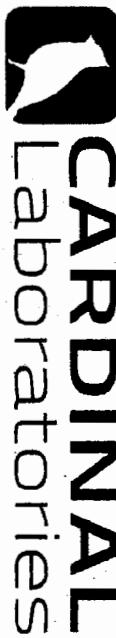
**Cardinal Laboratories****\*=Accredited Analyte**

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**



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2328 FAX (575) 393-2476

		ANALYSIS REQUEST										
Company Name:	<u>EPA - Illinois Consulting</u> <th>P.O. #:</th> <td colspan="9"></td>	P.O. #:										
Project Manager:	<u>Edna S. Schaefer</u> <th>Company:</th> <td colspan="9"></td>	Company:										
Address:	<u>1601 W. Illinois</u> <th>Attn:</th> <td colspan="9"></td>	Attn:										
City:	<u>Hobbs</u> <th>Address:</th> <td colspan="9"></td>	Address:										
Phone #:	<u>2. 2234</u> <th>State:</th> <td><u>NM</u></td> <th>Zip:</th> <td><u>88244-2</u></td> <th colspan="6"></th>	State:	<u>NM</u>	Zip:	<u>88244-2</u>							
Project #:	<u>DD LF</u> <th>Fax #:</th> <td colspan="9"><u>2. 65949</u> </td>	Fax #:	<u>2. 65949</u>									
Project Name:	<u>DD Landfarm - San Juan</u> <th>Project Owner:</th> <td colspan="9"><u>3. Corp</u> </td>	Project Owner:	<u>3. Corp</u>									
Project Location:	<u>E. Espanola Rd. 31-Tail R. 28</u> <th>City:</th> <td colspan="9"></td>	City:										
Sampler Name:	<u>E. Schaefer</u> <th>State:</th> <td colspan="9"></td>	State:										
Phone #:	<u>505.51-0034</u> <th>ZIP:</th> <td colspan="9"></td>	ZIP:										
FOR LAB USE ONLY		Fax #:										
Lab I.D.	Sample I.D.	(GRAB OR COMB)	# CONTAINERS	MATRIX	PRESERV	SAMPLING						
H30229												
1	CdQ 1-T	X	1									
2	CdQ 2-T	X	1									
3	CdQ 3-T	X	1									
4	CdQ 1-V	X	1									
5	CdQ 2-V	X	1									
6	CdQ 3-V	X	1									
<b>BTEX</b> <b>TPH</b> <b>Chlorides</b>												
<small>PLEASE NOTE: Liability and Damages. Cardinal's liability and/or liability resulting from any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims involving losses for negligence and any other cause whatsoever shall be dismissed without unless made in writing and received by Cardinal within 30 days after completion of the applicable services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client. In addition, Cardinal reserves the right to disclaim any liability resulting from any claim arising out of the use of this form.</small>												
<small>Method of Disposition: Return sample to the person who furnished the sample. Retention by Cardinal: Samples of materials which contain hazardous substances will be held for a period of 30 days from the date of analysis.</small>												
<small>Method of Disposition: Return sample to the person who furnished the sample. Retention by Cardinal: Samples of materials which contain hazardous substances will be held for a period of 30 days from the date of analysis.</small>												
Received By:	<u>Dell Menden</u>	Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add Phone #:							
Delivered By:	(Circle One)	REMARKS:										
Relinquished By:	Time: <u>2:15</u>	Sample Condition:	<input checked="" type="checkbox"/> Cool	<input type="checkbox"/> Infect	Initials:							
	Date:	No. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										
	Time:											

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2328

April 15, 2013

NMOCDD Environmental  
ATTN: Brad Jones  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: DD Landfarm (Permit #01-0034)  
Semi-Annual Sampling

Mr. Jones:

Find within the semi-annual sampling for both the treatment zone and vadose zone as required.

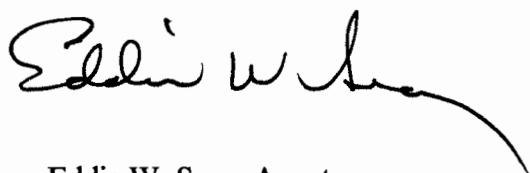
The treatment zone samples were taken at two to four inches of surface making one composite from four discrete samples for each cell, testing for TPH and Chloride.

The vadose zone samples were taken at approximately three feet below the natural surface level. There were four samples from each cell, composited and tested for BTEX, TPH and Chloride.

We will continue to operate and maintain the facility as our permit and rule 36 requires. Cell one was tested for the "five year monitoring", taking four randomly selected samples and testing as 20-6-2-3103 A & B requires.

If you have any questions or need anything further, please call.

Sincerely,



Eddie W. Seay, Agent  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242  
575-392-2236  
[seay04@leaco.net](mailto:seay04@leaco.net)

cc: DD Landfarm

RECEIVED  
NMOCDD  
2013 APR 19 P 2:27



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

March 19, 2013

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: D D LANDFARM

Enclosed are the results of analyses for samples received by the laboratory on 03/14/13 9:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 (V1, 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

Eddie Seay Consulting  
 Eddie Seay  
 601 W. Illinois  
 Hobbs NM, 88242  
 Fax To: (505) 392-6949

Received:	03/14/2013	Sampling Date:	03/13/2013
Reported:	03/19/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	D D LANDFARM - SEMI ANNUAL	Sample Received By:	Jodi Henson
Project Location:	D D LAND FARM		

**Sample ID: CELL 1 -T (H300635-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2013	ND	448	112	400	0.00		
<b>TPH 8015M</b>										
Analyte		mg/kg		Analyzed By: MS						
GRO C6-C10	<50.0	50.0	03/18/2013	ND	192	96.2	200	0.686		
DRO >C10-C28	<50.0	50.0	03/18/2013	ND	192	95.9	200	0.902		
Surrogate: 1-Chlorooctane	84.0 %	65.2-140								
Surrogate: 1-Chlorooctadecane	85.6 %	63.6-154								

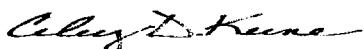
**Sample ID: CELL 2 -T (H300635-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2013	ND	448	112	400	0.00		
<b>TPH 8015M</b>										
Analyte		mg/kg		Analyzed By: MS						
GRO C6-C10	<50.0	50.0	03/18/2013	ND	192	96.2	200	0.686		
DRO >C10-C28	<50.0	50.0	03/18/2013	ND	192	95.9	200	0.902		
Surrogate: 1-Chlorooctane	95.3 %	65.2-140								
Surrogate: 1-Chlorooctadecane	99.8 %	63.6-154								

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:**

Eddie Seay Consulting  
 Eddie Seay  
 601 W. Illinois  
 Hobbs NM, 88242  
 Fax To: (505) 392-6949

Received:	03/14/2013	Sampling Date:	03/13/2013
Reported:	03/19/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	D D LANDFARM - SEMI ANNUAL	Sample Received By:	Jodi Henson
Project Location:	D D LAND FARM		

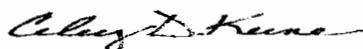
**Sample ID: CELL 3 -T (H300635-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>80.0</b>	16.0	03/15/2013	ND	448	112	400	0.00		
<b>TPH 8015M</b>										
mg/kg										
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/15/2013	ND	192	96.2	200	0.686		
DRO >C10-C28	<10.0	10.0	03/15/2013	ND	192	95.9	200	0.902		
Surrogate: 1-Chlorooctane	79.4 %	65.2-140								
Surrogate: 1-Chlorooctadecane	97.8 %	63.6-154								

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	03/14/2013	Sampling Date:	03/13/2013
Reported:	03/19/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	D D LANDFARM - SEMI ANNUAL	Sample Received By:	Jodi Henson
Project Location:	D D LAND FARM		

**Sample ID: CELL 2 -V (H300635-04)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/15/2013	ND	1.97	98.5	2.00	19.8		
Toluene*	<0.050	0.050	03/15/2013	ND	1.92	96.1	2.00	18.7		
Ethylbenzene*	<0.050	0.050	03/15/2013	ND	1.83	91.7	2.00	19.2		
Total Xylenes*	<0.150	0.150	03/15/2013	ND	5.55	92.5	6.00	19.0		
Total BTEX	<0.300	0.300	03/15/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2013	ND	448	112	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/15/2013	ND	192	96.2	200	0.686		
DRO >C10-C28	<10.0	10.0	03/15/2013	ND	192	95.9	200	0.902		

Surrogate: 1-Chlorooctane 83.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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



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

**Analytical Results For:**

Eddie Seay Consulting  
Eddie Seay  
601 W. Illinois  
Hobbs NM, 88242  
Fax To: (505) 392-6949

Received:	03/14/2013	Sampling Date:	03/13/2013
Reported:	03/19/2013	Sampling Type:	Soil
Project Name:	D D LANDFARM	Sampling Condition:	Cool & Intact
Project Number:	D D LANDFARM - SEMI ANNUAL	Sample Received By:	Jodi Henson
Project Location:	D D LAND FARM		

**Sample ID: CELL 3 -V (H300635-05)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	03/15/2013	ND	1.97	98.5	2.00	19.8		
Toluene*	<0.050	0.050	03/15/2013	ND	1.92	96.1	2.00	18.7		
Ethylbenzene*	<0.050	0.050	03/15/2013	ND	1.83	91.7	2.00	19.2		
Total Xylenes*	<0.150	0.150	03/15/2013	ND	5.55	92.5	6.00	19.0		
Total BTEX	<0.300	0.300	03/15/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	03/15/2013	ND	448	112	400	0.00		
TPH 8015M										mg/kg
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	03/15/2013	ND	192	96.2	200	0.686		
DRO >C10-C28	<10.0	10.0	03/15/2013	ND	192	95.9	200	0.902		

Surrogate: 1-Chlorooctane 67.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 84.7 % 63.6-154

\*=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



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

#### Notes and Definitions

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.

A handwritten signature in black ink that appears to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**101 East Mariland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476**

Final cannot accept verbal changes. Please fax written changes.



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

April 12, 2013

Eddie Seay  
Eddie Seay Consulting  
601 W. Illinois  
Hobbs, NM 88242

RE: DD LANDFARM (01-0034) 5 YR MONITORING

Enclosed are the results of analyses for samples received by the laboratory on 03/14/13 9:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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 (V1, 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CELL 1 - 1	H300636-01	Soil	13-Mar-13 13:45	14-Mar-13 09:20
CELL 1 - 2	H300636-02	Soil	13-Mar-13 14:35	14-Mar-13 09:20
CELL 1 - 3	H300636-03	Soil	13-Mar-13 15:15	14-Mar-13 09:20
CELL 1 - 4	H300636-04	Soil	13-Mar-13 16:10	14-Mar-13 09:20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**

H300636-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	7.91	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		71.3 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		93.0 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds**

SUB-SS

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		54.9 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides**

SUB-RS

Radium-226	ND	0.70	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**

H300636-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Methylene chloride*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Toluene*	<b>0.0962</b>	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Surrogate: Dibromofluoromethane	95.8 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: Toluene-d8	95.3 %	70-130		3032207	ms	22-Mar-13	8260	
Surrogate: 4-Bromofluorobenzene	98.8 %	70-130		3032207	ms	22-Mar-13	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1****H300636-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5		106 %	16.1-91.8		3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl		106 %	27.2-92.9		3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d14		108 %	21.3-96.1		3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.6		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	ND	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	1.61	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	1.01	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 1**  
**H300636-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	1890	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.593	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	10.3	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.104	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.54	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.689	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	1.65	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	19.4	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0100	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0562	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	3.74	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0962	mg/kg dry	481	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	8.10	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		80.4 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		99.5 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds****SUB-SS**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		46.4 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides****SUB-RS**

Radium-226	ND	0.50	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Methylene chloride*	0.649	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Toluene*	0.104	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Surrogate: Dibromoformmethane		92.8 %		70-130	3032207	ms	22-Mar-13	8260
Surrogate: Toluene-d8		93.7 %		70-130	3032207	ms	22-Mar-13	8260
Surrogate: 4-Bromofluorobenzene		96.3 %		70-130	3032207	ms	22-Mar-13	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5	103 %	16.1-91.8			3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl	100 %	27.2-92.9			3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d4	102 %	21.3-96.1			3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.1		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	1.04	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	2.93	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	0.746	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 2****H300636-02 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2040	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.683	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	13.1	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.121	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.80	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.781	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	2.03	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	23.7	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0101	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0614	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	4.95	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0962	mg/kg dry	481	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

**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 profit 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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3****H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	8.11	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		88.3 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		103 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds****SUB-SS**

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		47.7 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides****SUB-RS**

Radium-226	ND	0.50	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.90	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.90	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3****H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Methylene chloride*	<b>0.240</b>	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	B
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Toluene*	<b>0.109</b>	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260	
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260	
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260	
Surrogate: Dibromoformmethane	95.1 %	70-130			3032207	ms	22-Mar-13	8260	
Surrogate: Toluene-d8	94.2 %	70-130			3032207	ms	22-Mar-13	8260	
Surrogate: 4-Bromofluorobenzene	97.4 %	70-130			3032207	ms	22-Mar-13	8260	

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3****H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5		120 %	16.1-91.8		3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl		109 %	27.2-92.9		3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d4		113 %	21.3-96.1		3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	ND	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	98.3		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (D1 Water Extraction)**

Fluoride	1.75	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	6.03	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	0.284	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 3****H300636-03 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2110	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.827	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	20.1	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.134	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.86	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.819	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	2.39	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	22.9	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	0.0102	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0911	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	6.38	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.0970	mg/kg dry	485	B303135	JGS	20-Mar-13	EPA7471
---------	----	--------	-----------	-----	---------	-----	-----------	---------

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	ND	16.0	mg/kg	4	3031503	DW	18-Mar-13	4500-Cl-B
pH*	7.83	0.100	pH Units	1	3031501	DW	15-Mar-13	9045
Phenols	ND	0.5	mg/kg dry wt.	1	3041212	CK	04-Apr-13	EPA9065
Sulfate	ND	40.0	mg/kg	4	3031803	AP	20-Mar-13	375.4

**Organic Compounds**

GRO C6-C10	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
DRO >C10-C28	ND	10.0	mg/kg	1	3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctane		85.0 %	65.2-140		3031801	MS	18-Mar-13	8015M
Surrogate: 1-Chlorooctadecane		104 %	63.6-154		3031801	MS	18-Mar-13	8015M

**Organic Compounds**

SUB-SS

PCB 1016	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1221	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1232	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1242	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1248	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1254	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
PCB 1260	ND	10.0	ug/kg	1	3041211	CK	21-Mar-13	8082
Surrogate: Tetrachloro-meta-xylene		47.7 %	35-140		3041211	CK	21-Mar-13	8082

**Radionuclides**

SUB-RS

Radium-226	ND	0.60	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Radium-228	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904
Total Radium	ND	0.80	pCi/gram	1	3041213	CK	28-Mar-13	903.1/904

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Methylene chloride*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Chloroform*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Carbon tetrachloride*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,1-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Benzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Trichloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Toluene*	<b>0.107</b>	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Tetrachloroethene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2-Trichloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
1,2-Dibromoethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Ethylbenzene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
m-p Xylenes*	ND	0.100	mg/kg	50	3032207	ms	22-Mar-13	8260
o-Xylene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Total Xylenes*	ND	0.150	mg/kg	50	3032207	ms	22-Mar-13	8260
1,1,2,2-Tetrachloroethane*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Naphthalene*	ND	0.0500	mg/kg	50	3032207	ms	22-Mar-13	8260
Surrogate: Dibromofluoromethane		96.6 %	70-130		3032207	ms	22-Mar-13	8260
Surrogate: Toluene-d8		94.8 %	70-130		3032207	ms	22-Mar-13	8260
Surrogate: 4-Bromofluorobenzene		98.1 %	70-130		3032207	ms	22-Mar-13	8260

**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
2-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
1-Methylnaphthalene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Acenaphthylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Acenaphthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluorene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Phenanthrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Carbazole	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Fluoranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Chrysene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[b]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[k]flouranthene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[a]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Dibenz[a,h]anthracene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Benzo[g,h,i]perylene	ND	0.040	mg/kg	40	3032103	ms	22-Mar-13	8270C
Surrogate: Nitrobenzene-d5	120 %	16.1-91.8			3032103	ms	22-Mar-13	8270C
Surrogate: 2-Fluorobiphenyl	115 %	27.2-92.9			3032103	ms	22-Mar-13	8270C
Surrogate: Terphenyl-d4	114 %	21.3-96.1			3032103	ms	22-Mar-13	8270C

**Green Analytical Laboratories****General Chemistry**

Cyanide, Total	4.41	1.00	mg/kg dry	100	B303184	KLM	21-Mar-13	EPA9012 B
% Dry Solids	97.7		%	1	B303135	JGS	20-Mar-13	EPA160.3

**Soluble (DI Water Extraction)**

Fluoride	0.813	0.800	mg/kg dry	4	B304012	ABP	01-Apr-13	4500-F- C
Nitrate/Nitrite as N	3.16	0.320	mg/kg dry	8	B303178	KLM	22-Mar-13	EPA353.2
Nitrite as N	1.42	0.160	mg/kg dry	8	B303183	KLM	21-Mar-13	EPA353.2

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**CELL 1 - 4****H300636-04 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	--------	-------

**Green Analytical Laboratories****Total Metals by ICP**

Iron	2110	5.00	mg/kg dry	100	B303155	JGS	22-Mar-13	EPA6010 B
------	------	------	-----------	-----	---------	-----	-----------	-----------

**Total Metals by ICPMS**

Arsenic	0.689	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Barium	11.3	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Cadmium	0.119	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Chromium	1.72	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Copper	0.708	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Lead	1.74	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Manganese	18.0	0.0500	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Selenium	ND	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Silver	ND	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Uranium	0.0682	0.0100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A
Zinc	4.58	0.100	mg/kg dry	100	B303202	JGS	28-Mar-13	6020 A

**Total Mercury by CVAA**

Mercury	ND	0.100	mg/kg dry	500	B303135	JGS	20-Mar-13	EPA7471
---------	----	-------	-----------	-----	---------	-----	-----------	---------

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Inorganic Compounds - Quality Control**  
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3031501 - NO PREP**

LCS (3031501-BS1)	Prepared & Analyzed: 15-Mar-13					
pH	7.13		pH Units	7.00	102	90-110
Duplicate (3031501-DUP1)	Source: H300636-01 Prepared & Analyzed: 15-Mar-13					
pH	8.05	0.100	pH Units	7.91	1.75	20

**Batch 3031503 - 1:4 DI Water**

Blank (3031503-BLK1)	Prepared & Analyzed: 15-Mar-13								
Chloride	ND	16.0	mg/kg						
LCS (3031503-BS1)	Prepared & Analyzed: 15-Mar-13								
Chloride	448	16.0	mg/kg	400	112	80-120			
LCS Dup (3031503-BSD1)	Prepared & Analyzed: 15-Mar-13								
Chloride	448	16.0	mg/kg	400	112	80-120	0.00	20	

**Batch 3031803 - General Prep - Wet Chem**

Blank (3031803-BLK1)	Prepared & Analyzed: 20-Mar-13								
Sulfate	ND	10.0	mg/kg						
LCS (3031803-BS1)	Prepared & Analyzed: 20-Mar-13								
Sulfate	21.8	10.0	mg/kg	20.0	109	80-120			
LCS Dup (3031803-BSD1)	Prepared & Analyzed: 20-Mar-13								
Sulfate	20.0	10.0	mg/kg	20.0	100	80-120	8.28	20	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Inorganic Compounds - Quality Control**  
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3041212 - General Prep**

Blank (3041212-BLK1)		Prepared & Analyzed: 04-Apr-13						
Phenols	ND	0.5	mg/kg dry wt.					
LCS (3041212-BS1)		Prepared & Analyzed: 04-Apr-13						
Phenols	0.4	mg/kg	0.400		106	70-130		
Matrix Spike (3041212-MS1)		Source: H300636-01 Prepared & Analyzed: 04-Apr-13						
Phenols	4.6	mg/kg	4.08	0.0	112	70-130		
Matrix Spike Dup (3041212-MSD1)		Source: H300636-01 Prepared & Analyzed: 04-Apr-13						
Phenols	4.5	mg/kg	4.08	0.0	111	70-130	0.883	20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Organic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3031801 - General Prep - Organics**

Blank (3031801-BLK1)						
Prepared & Analyzed: 18-Mar-13						
GRO C6-C10	ND	10.0	mg/kg			
DRO >C10-C28	ND	10.0	mg/kg			
EXT DRO >C28-C35	ND	10.0	mg/kg			
Total TPH C6-C28	ND	10.0	mg/kg			
Surrogate: 1-Chlorooctane	38.7		mg/kg	50.0	77.4	65.2-140
Surrogate: 1-Chlorooctadecane	50.0		mg/kg	50.0	100	63.6-154
LCS (3031801-BS1)						
Prepared & Analyzed: 18-Mar-13						
GRO C6-C10	173	10.0	mg/kg	200	86.5	66.4-124
DRO >C10-C28	169	10.0	mg/kg	200	84.5	61.6-132
Total TPH C6-C28	342	10.0	mg/kg	400	85.5	69.7-122
Surrogate: 1-Chlorooctane	44.0		mg/kg	50.0	88.0	65.2-140
Surrogate: 1-Chlorooctadecane	48.0		mg/kg	50.0	95.9	63.6-154
LCS Dup (3031801-BSD1)						
Prepared & Analyzed: 18-Mar-13						
GRO C6-C10	186	10.0	mg/kg	200	93.0	66.4-124
DRO >C10-C28	185	10.0	mg/kg	200	92.6	61.6-132
Total TPH C6-C28	371	10.0	mg/kg	400	92.8	69.7-122
Surrogate: 1-Chlorooctane	47.7		mg/kg	50.0	95.5	65.2-140
Surrogate: 1-Chlorooctadecane	53.8		mg/kg	50.0	108	63.6-154

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Organic Compounds - Quality Control**  
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 3041211 - 3550****Blank (3041211-BLK1)**

Prepared: 15-Mar-13 Analyzed: 21-Mar-13

PCB 1016	ND	1.00	ug/kg							
PCB 1221	ND	1.00	ug/kg							
PCB 1232	ND	1.00	ug/kg							
PCB 1242	ND	1.00	ug/kg							
PCB 1248	ND	1.00	ug/kg							
PCB 1254	ND	1.00	ug/kg							
PCB 1260	ND	1.00	ug/kg							

*Surrogate: Tetrachloro-meta-xylene*

5.31 ug/L 10.0 53.1 35-140

**LCS (3041211-BS1)**

Prepared: 15-Mar-13 Analyzed: 21-Mar-13

PCB 1016	94.8	ug/L	100	94.8	70-130
PCB 1242	ND	1.00	ug/kg		70-130
PCB 1254	ND	1.00	ug/kg		70-130
PCB 1260	85.8	ug/L	100	85.8	70-130

*Surrogate: Tetrachloro-meta-xylene*

5.12 ug/L 10.0 51.2 35-140

**Matrix Spike (3041211-MS1)**

Source: H300636-01 Prepared: 15-Mar-13 Analyzed: 21-Mar-13

PCB 1016	78.7	ug/L	100	ND	78.7	70-130
PCB 1242	ND	1.00	ug/kg			70-130
PCB 1254	ND	1.00	ug/kg			70-130
PCB 1260	70.9	ug/L	100	ND	70.9	70-130

*Surrogate: Tetrachloro-meta-xylene*

4.69 ug/L 10.0 46.9 35-140

**Matrix Spike Dup (3041211-MSD1)**

Source: H300636-01 Prepared: 15-Mar-13 Analyzed: 21-Mar-13

PCB 1016	81.1	ug/L	100	ND	81.1	70-130	3.00	20
PCB 1242	ND	1.00	ug/kg			70-130		20
PCB 1254	ND	1.00	ug/kg			70-130		20
PCB 1260	79.5	ug/L	100	ND	79.5	70-130	11.4	20

*Surrogate: Tetrachloro-meta-xylene*

5.11 ug/L 10.0 51.1 35-140

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3032207 - Volatiles****Blank (3032207-BLK1)**

Prepared &amp; Analyzed: 22-Mar-13

Vinyl chloride	ND	0.0500	mg/kg							
1,1-Dichloroethene	ND	0.0500	mg/kg							
Methylene chloride	0.0956	0.0500	mg/kg							
1,1-Dichloroethane	ND	0.0500	mg/kg							
Chloroform	ND	0.0500	mg/kg							
Carbon tetrachloride	ND	0.0500	mg/kg							
1,1,1-Trichloroethane	ND	0.0500	mg/kg							
Benzene	ND	0.0500	mg/kg							
1,2-Dichloroethane	ND	0.0500	mg/kg							
Trichloroethene	ND	0.0500	mg/kg							
Toluene	ND	0.0500	mg/kg							
Tetrachloroethene	ND	0.0500	mg/kg							
1,1,2-Trichloroethane	ND	0.0500	mg/kg							
1,2-Dibromoethane	ND	0.0500	mg/kg							
Ethylbenzene	ND	0.0500	mg/kg							
m-p Xylenes	ND	0.100	mg/kg							
o-Xylene	ND	0.0500	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
1,1,2,2-Tetrachloroethane	ND	0.0500	mg/kg							
Naphthalene	ND	0.0500	mg/kg							
Surrogate: Dibromoformmethane	0.477		mg/kg	0.500		95.5	70-130			
Surrogate: Toluene-d8	0.476		mg/kg	0.500		95.1	70-130			
Surrogate: 4-Bromoformbenzene	0.489		mg/kg	0.500		97.8	70-130			

**LCS (3032207-BS1)**

Prepared &amp; Analyzed: 22-Mar-13

Vinyl chloride	1.92	0.0500	mg/kg	2.00		96.0	70-130			
1,1-Dichloroethene	2.02	0.0500	mg/kg	2.00		101	70-130			
Methylene chloride	2.05	0.0500	mg/kg	2.00		102	70-130			
1,1-Dichloroethane	1.70	0.0500	mg/kg	2.00		84.9	70-130			
Chloroform	1.87	0.0500	mg/kg	2.00		93.7	70-130			
Carbon tetrachloride	2.04	0.0500	mg/kg	2.00		102	70-130			
1,1,1-Trichloroethane	2.00	0.0500	mg/kg	2.00		100	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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3032207 - Volatiles**

Prepared & Analyzed: 22-Mar-13						
Benzene	1.96	0.0500	mg/kg	2.00	97.9	70-130
1,2-Dichloroethane	1.39	0.0500	mg/kg	2.00	69.4	70-130
Trichloroethene	2.05	0.0500	mg/kg	2.00	103	70-130
Toluene	1.90	0.0500	mg/kg	2.00	95.0	70-130
Tetrachloroethene	2.19	0.0500	mg/kg	2.00	110	70-130
1,1,2-Trichloroethane	1.85	0.0500	mg/kg	2.00	92.5	70-130
1,2-Dibromoethane	1.85	0.0500	mg/kg	2.00	92.4	70-130
Ethylbenzene	1.97	0.0500	mg/kg	2.00	98.6	70-130
m-p Xylenes	4.11	0.100	mg/kg		70-130	
o-Xylene	2.17	0.0500	mg/kg	2.00	108	70-130
Total Xylenes	6.28	0.150	mg/kg	6.00	105	70-130
1,1,2,2-Tetrachloroethane	1.58	0.0500	mg/kg	2.00	79.0	70-130
Naphthalene	1.32	0.0500	mg/kg	2.00	66.2	70-130
Surrogate: Dibromoformmethane	0.485		mg/kg	0.500	97.0	70-130
Surrogate: Toluene-d8	0.480		mg/kg	0.500	96.0	70-130
Surrogate: 4-Bromoformbenzene	0.496		mg/kg	0.500	99.1	70-130

Prepared & Analyzed: 22-Mar-13						
Vinyl chloride	1.96	0.0500	mg/kg	2.00	97.9	70-130
1,1-Dichloroethene	2.08	0.0500	mg/kg	2.00	104	70-130
Methylene chloride	2.08	0.0500	mg/kg	2.00	104	70-130
1,1-Dichloroethane	1.73	0.0500	mg/kg	2.00	86.3	70-130
Chloroform	1.94	0.0500	mg/kg	2.00	96.9	70-130
Carbon tetrachloride	2.07	0.0500	mg/kg	2.00	104	70-130
1,1,1-Trichloroethane	2.05	0.0500	mg/kg	2.00	102	70-130
Benzene	1.98	0.0500	mg/kg	2.00	99.0	70-130
1,2-Dichloroethane	1.41	0.0500	mg/kg	2.00	70.6	70-130
Trichloroethene	2.09	0.0500	mg/kg	2.00	105	70-130
Toluene	1.92	0.0500	mg/kg	2.00	96.2	70-130
Tetrachloroethene	2.26	0.0500	mg/kg	2.00	113	70-130
1,1,2-Trichloroethane	1.84	0.0500	mg/kg	2.00	92.2	70-130
1,2-Dibromoethane	1.87	0.0500	mg/kg	2.00	93.5	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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3032207 - Volatiles****LCS Dup (3032207-BSD1)****Prepared & Analyzed: 22-Mar-13**

Ethylbenzene	1.97	0.0500	mg/kg	2.00	98.3	70-130	0.281	20
m-p Xylenes	4.11	0.100	mg/kg			70-130	0.128	20
o-Xylene	2.17	0.0500	mg/kg	2.00	109	70-130	0.365	20
Total Xylenes	6.28	0.150	mg/kg	6.00	105	70-130	0.0427	20
1,1,2,2-Tetrachloroethane	1.64	0.0500	mg/kg	2.00	81.8	70-130	3.53	20
Naphthalene	1.44	0.0500	mg/kg	2.00	72.1	70-130	8.52	20
<i>Surrogate: Dibromofluoromethane</i>	0.480		mg/kg	0.500	96.1	70-130		
<i>Surrogate: Toluene-d8</i>	0.480		mg/kg	0.500	96.1	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	0.498		mg/kg	0.500	99.7	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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Semivolatile Organic Compounds by GCMS - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3032103 - SW846-3510**

**Blank (3032103-BLK1)** Prepared: 21-Mar-13 Analyzed: 22-Mar-13

Naphthalene	ND	0.040	mg/kg							
2-Methylnaphthalene	ND	0.040	mg/kg							
1-Methylnaphthalene	ND	0.040	mg/kg							
Acenaphthylene	ND	0.040	mg/kg							
Acenaphthene	ND	0.040	mg/kg							
Fluorene	ND	0.040	mg/kg							
Phenanthrene	ND	0.040	mg/kg							
Anthracene	ND	0.040	mg/kg							
Carbazole	ND	0.040	mg/kg							
Fluoranthene	ND	0.040	mg/kg							
Pyrene	ND	0.040	mg/kg							
Benzo[a]anthracene	ND	0.040	mg/kg							
Chrysene	ND	0.040	mg/kg							
Benzo[b]flouranthene	ND	0.040	mg/kg							
Benzo[k]flouranthene	ND	0.040	mg/kg							
Benzo[a]pyrene	ND	0.040	mg/kg							
Indeno[1,2,3-cd]pyrene	ND	0.040	mg/kg							
Dibenz[a,h]anthracene	ND	0.040	mg/kg							
Benzo[g,h,i]perylene	ND	0.040	mg/kg							
<i>Surrogate: Nitrobenzene-d5</i>	2.39		mg/kg	2.00		119	16.1-91.8			
<i>Surrogate: 2-Fluorobiphenyl</i>	2.08		mg/kg	2.00		104	27.2-92.9			
<i>Surrogate: Terphenyl-d14</i>	2.17		mg/kg	2.00		109	21.3-96.1			

**LCS (3032103-BS1)** Prepared: 21-Mar-13 Analyzed: 22-Mar-13

Naphthalene	0.454	0.040	mg/kg	0.400		113	5.46-157			
2-Methylnaphthalene	0.448	0.040	mg/kg	0.400		112	16.1-146			
Acenaphthylene	0.437	0.040	mg/kg	0.400		109	21.6-144			
Acenaphthene	0.431	0.040	mg/kg	0.400		108	27-143			
Fluorene	0.425	0.040	mg/kg	0.400		106	30.9-138			
Phenanthrene	0.449	0.040	mg/kg	0.400		112	38.6-149			
Anthracene	0.462	0.040	mg/kg	0.400		115	36.1-149			
Carbazole	0.472	0.040	mg/kg	0.400		118	29.8-144			

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Semivolatile Organic Compounds by GCMS - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 3032103 - SW846-3510****LCS (3032103-BS1)**

					Prepared: 21-Mar-13	Analyzed: 22-Mar-13	
Fluoranthene	0.445	0.040	mg/kg	0.400	111	34.6-148	
Pyrene	0.401	0.040	mg/kg	0.400	100	24.8-154	
Benzo[a]anthracene	0.439	0.040	mg/kg	0.400	110	0-179	
Chrysene	0.432	0.040	mg/kg	0.400	108	35.1-150	
Benzo[b]flouranthene	0.303	0.040	mg/kg	0.400	75.8	17.6-158	
Benzo[k]flouranthene	0.374	0.040	mg/kg	0.400	93.6	10.6-169	
Benzo[a]pyrene	0.352	0.040	mg/kg	0.400	88.0	2.25-166	
Indeno[1,2,3-cd]pyrene	0.356	0.040	mg/kg	0.400	88.9	0-181	
Dibenz[a,h]anthracene	0.370	0.040	mg/kg	0.400	92.4	2.49-177	
Benzo[g,h,i]perylene	0.320	0.040	mg/kg	0.400	80.0	0-173	
<i>Surrogate: Nitrobenzene-d5</i>	3.03		mg/kg	2.00	152	16.1-91.8	
<i>Surrogate: 2-Fluorobiphenyl</i>	2.73		mg/kg	2.00	136	27.2-92.9	
<i>Surrogate: Terphenyl-d4</i>	2.77		mg/kg	2.00	138	21.3-96.1	

**LCS Dup (3032103-BSD1)**

					Prepared: 21-Mar-13	Analyzed: 22-Mar-13		
Naphthalene	0.460	0.040	mg/kg	0.400	115	5.46-157	1.31	6.7
2-Methylnaphthalene	0.464	0.040	mg/kg	0.400	116	16.1-146	3.44	8.99
Acenaphthylene	0.431	0.040	mg/kg	0.400	108	21.6-144	1.39	14.6
Acenaphthene	0.434	0.040	mg/kg	0.400	109	27-143	0.608	6.99
Fluorene	0.425	0.040	mg/kg	0.400	106	30.9-138	0.198	13.9
Phenanthrene	0.453	0.040	mg/kg	0.400	113	38.6-149	0.869	14.6
Anthracene	0.460	0.040	mg/kg	0.400	115	36.1-149	0.417	18.5
Carbazole	0.485	0.040	mg/kg	0.400	121	29.8-144	2.77	23.4
Fluoranthene	0.460	0.040	mg/kg	0.400	115	34.6-148	3.33	19.7
Pyrene	0.386	0.040	mg/kg	0.400	96.5	24.8-154	3.88	23
Benzo[a]anthracene	0.442	0.040	mg/kg	0.400	110	0-179	0.663	32.5
Chrysene	0.433	0.040	mg/kg	0.400	108	35.1-150	0.284	19.4
Benzo[b]flouranthene	0.299	0.040	mg/kg	0.400	74.6	17.6-158	1.60	31.4
Benzo[k]flouranthene	0.368	0.040	mg/kg	0.400	92.1	10.6-169	1.62	44.6
Benzo[a]pyrene	0.351	0.040	mg/kg	0.400	87.7	2.25-166	0.302	60.5
Indeno[1,2,3-cd]pyrene	0.359	0.040	mg/kg	0.400	89.7	0-181	0.887	77
Dibenz[a,h]anthracene	0.371	0.040	mg/kg	0.400	92.8	2.49-177	0.434	63.3

**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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Semivolatile Organic Compounds by GCMS - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

**Batch 3032103 - SW846-3510**

Prepared: 21-Mar-13 Analyzed: 22-Mar-13						
Benzo[g,h,i]perylene	0.335	0.040	mg/kg	0.400	83.9	0-173
Surrogate: Nitrobenzene-d5	3.06		mg/kg	2.00	153	16.1-91.8
Surrogate: 2-Fluorobiphenyl	2.68		mg/kg	2.00	134	27.2-92.9
Surrogate: Terphenyl-d14	2.77		mg/kg	2.00	138	21.3-96.1

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**General Chemistry - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------	-------

**Batch B303184 - General Prep - Wet Chem**

**Blank (B303184-BLK1)** Prepared: 20-Mar-13 Analyzed: 21-Mar-13

Cyanide, Total ND 0.0100 mg/kg wet

**LCS (B303184-BS1)** Prepared: 20-Mar-13 Analyzed: 21-Mar-13

Cyanide, Total 0.0474 0.0100 mg/kg wet 0.0500 94.8 85-115

**LCS Dup (B303184-BSD1)** Prepared: 20-Mar-13 Analyzed: 21-Mar-13

Cyanide, Total 0.0971 0.0100 mg/kg wet 0.100 97.1 85-115 68.8 20

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Soluble (DI Water Extraction) - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

**Batch B303178 - General Prep - Wet Chem**

Blank (B303178-BLK1)								
						Prepared & Analyzed: 22-Mar-13		
Nitrate/Nitrite as N	ND	0.040	mg/kg wet					
LCS (B303178-BS1)								
						Prepared & Analyzed: 22-Mar-13		
Nitrate/Nitrite as N	0.105	0.040	mg/kg wet	0.100	105	85-115		
LCS Dup (B303178-BSD1)								
						Prepared & Analyzed: 22-Mar-13		
Nitrate/Nitrite as N	0.105	0.040	mg/kg wet	0.100	105	85-115	0.00	20

**Batch B303183 - General Prep - Wet Chem**

Blank (B303183-BLK1)							
						Prepared & Analyzed: 21-Mar-13	
Nitrite as N	ND	0.020	mg/kg wet				
LCS (B303183-BS1)							
						Prepared & Analyzed: 21-Mar-13	
Nitrite as N	0.098	0.020	mg/kg wet			85-115	
LCS Dup (B303183-BSD1)							
						Prepared & Analyzed: 21-Mar-13	
Nitrite as N	0.098	0.020	mg/kg wet		85-115	0.102	20

**Batch B304012 - General Prep - Wet Chem**

Blank (B304012-BLK1)						
						Prepared & Analyzed: 01-Apr-13
Fluoride	ND	0.200	mg/kg wet			
LCS (B304012-BS1)						
						Prepared & Analyzed: 01-Apr-13
Fluoride	0.991	0.200	mg/kg wet	1.00	99.1	85-115

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Soluble (DI Water Extraction) - Quality Control**

**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B304012 - General Prep - Wet Chem**

LCS Dup (B304012-BSD1)	Prepared & Analyzed: 01-Apr-13									
Fluoride	0.991	0.200	mg/kg wet	1.00		99.1	85-115	0.00	20	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Total Metals by ICP - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%RBC Limits	RPD RPD	RPD Limit	Notes
<b>Batch B303155 - EPA 3050</b>										
<b>Blank (B303155-BLK1)</b>										
Iron	ND	0.050	mg/kg dry		Prepared & Analyzed: 22-Mar-13					
<b>LCS (B303155-BS1)</b>										
Iron	3.97	0.050	mg/kg dry	4.00		99.2	85-115			
<b>LCS Dup (B303155-BSD1)</b>										
Iron	3.98	0.050	mg/kg dry	4.00		99.4	85-115	0.234	20	

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:**

Eddie Seay Consulting  
 601 W. Illinois  
 Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
 Project Number: DD LANDFARM  
 Project Manager: Eddie Seay  
 Fax To: (505) 392-6949

Reported:  
 12-Apr-13 16:03

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B303202 - EPA 3050M**
**Blank (B303202-BLK1)**

Silver	ND	0.0001	mg/kg dry							
Barium	ND	0.0005	mg/kg dry							
Selenium	ND	0.0010	mg/kg dry							
Lead	ND	0.0005	mg/kg dry							
Copper	ND	0.0001	mg/kg dry							
Cadmium	ND	0.0001	mg/kg dry							
Arsenic	ND	0.0005	mg/kg dry							
Manganese	ND	0.0005	mg/kg dry							
Chromium	ND	0.0010	mg/kg dry							
Zinc	ND	0.0010	mg/kg dry							
Uranium	ND	0.0001	mg/kg dry							

**LCS (B303202-BS1)**

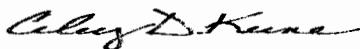
Silver	0.0467	0.0001	mg/kg dry	0.0500	93.3	85-115				
Chromium	0.0479	0.0010	mg/kg dry	0.0500	95.7	85-115				
Cadmium	0.0462	0.0001	mg/kg dry	0.0500	92.3	85-115				
Arsenic	0.0445	0.0005	mg/kg dry	0.0500	89.0	85-115				
Manganese	0.0475	0.0005	mg/kg dry	0.0500	95.1	85-115				
Copper	0.0489	0.0001	mg/kg dry	0.0500	97.7	85-115				
Lead	0.0479	0.0005	mg/kg dry	0.0500	95.7	85-115				
Uranium	0.0492	0.0001	mg/kg dry	0.0500	98.5	85-115				
Zinc	0.0445	0.0010	mg/kg dry	0.0500	89.0	80-120				
Selenium	0.233	0.0010	mg/kg dry	0.250	93.3	85-115				
Barium	0.0488	0.0005	mg/kg dry	0.0500	97.7	85-115				

**LCS Dup (B303202-BSD1)**

Silver	0.0494	0.0001	mg/kg dry	0.0500	98.8	85-115	5.74	20		
Manganese	0.0507	0.0005	mg/kg dry	0.0500	101	85-115	6.42	20		
Lead	0.0460	0.0005	mg/kg dry	0.0500	92.0	85-115	3.94	20		
Chromium	0.0504	0.0010	mg/kg dry	0.0500	101	85-115	5.18	20		
Arsenic	0.0470	0.0005	mg/kg dry	0.0500	94.0	85-115	5.49	20		
Uranium	0.0481	0.0001	mg/kg dry	0.0500	96.1	85-115	2.42	20		
Selenium	0.234	0.0010	mg/kg dry	0.250	93.7	85-115	0.371	20		

**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



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

***Analytical Results For:***

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Total Metals by ICPMS - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------

**Batch B303202 - EPA 3050M**

Prepared & Analyzed: 28-Mar-13									
LCS Dup (B303202-BSD1)									
Copper	0.0496	0.0001	mg/kg dry	0.0500	99.2	85-115	1.52	20	
Cadmium	0.0486	0.0001	mg/kg dry	0.0500	97.2	85-115	5.13	20	
Barium	0.0484	0.0005	mg/kg dry	0.0500	96.7	85-115	0.991	20	
Zinc	0.0475	0.0010	mg/kg dry	0.0500	95.1	80-120	6.59	20	

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



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

**Analytical Results For:**

Eddie Seay Consulting  
601 W. Illinois  
Hobbs NM, 88242

Project: DD LANDFARM (01-0034) 5 YR MO  
Project Number: DD LANDFARM  
Project Manager: Eddie Seay  
Fax To: (505) 392-6949

Reported:  
12-Apr-13 16:03

**Total Mercury by CVAA - Quality Control**  
**Green Analytical Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch B303135 - EPA 7471**

Blank (B303135-BLK1)		Prepared: 19-Mar-13 Analyzed: 20-Mar-13								
Mercury	ND	0.0002	mg/kg wet							
LCS (B303135-BS1)		Prepared: 19-Mar-13 Analyzed: 20-Mar-13								
Mercury	0.0020	0.0002	mg/kg wet	0.00200		101	85-115			
LCS Dup (B303135-BSD1)		Prepared: 19-Mar-13 Analyzed: 20-Mar-13								
Mercury	0.0020	0.0002	mg/kg wet	0.00200		100	85-115	0.598	20	

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



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

### Notes and Definitions

SUB-SS	Analysis subcontracted to SunStar Laboratories, Inc.
SUB-RS	Analysis subcontracted to Radiation Safety Engineering, Inc.
GAL	Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.
B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
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



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

ANALYSIS REQUEST

Company Name: <u>Eddy County Consulting</u>	P.O. #:
Project Manager: <u>Edwin W. Johnson</u>	Company:
Address: <u>101 W. Marland</u>	Attn:
City: <u>Hobbs</u>	Address:
Phone #: <u>222-3266</u>	State: <u>NM</u> Zip: <u>88242</u>
Fax #: <u>222-6949</u>	City:
Project #: <u>DD LF</u>	State:
Project Name: <u>DD Landfarm (01-0034)</u>	Zip:
Project Location: <u>Cerro Prieto, S.E. of Hobbs, NM</u>	Phone #: <u>381-3121</u>
Sampler Name: <u>Edwin W. Johnson</u>	Fax #: <u>381-3121</u>
FOR LAB USE ONLY	

Lab I.D.	Sample I.D.	GROSSOR (C)OMP.	# CONTAINERS	MATRIX	PRESERVAT.		SAMPLING
					DATE	TIME	
H200637	1 Call 1 - 1	WATER	1	WATER	3/13	1:45	
	2 Call 1 - 2	WATER	1	WATER	3/13	2:35	
	3 Call 1 - 3	WATER	1	WATER	3/13	3:16	
	4 Call 1 - 4	WATER	1	WATER	3/13	4:10	

BTEX  
TPH (8015)  
Chlorides  
Arsenic  
Barium  
Cadmium  
Cyanide  
Lead  
Mercury  
Selenium  
Silver  
PCB

PLEASE NOTE: Liability and Damage: Cardinal Health and others, contractors, employees, or any other persons acting under contract or by direction of Cardinal, shall not be liable for any damages, indirect, special, or otherwise, resulting from the handling of samples or materials, whether in transit or held at Cardinal's facility, or for any damage, loss, or expense incurred by others, in connection with the handling of samples or materials. All claims, including those for negligence and any other cause of action, shall be filed with Cardinal within 30 days after completion of the analytical work. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruption, loss of time, or loss of profits incurred by others, in connection with the performance of services, transportation of samples, or delivery of results.							
Received By: <u>John W. Johnson</u>	Date: <u>3/14</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:					
Released By: <u>John W. Johnson</u>	Date: <u>3/14</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #:					
Delivered By: (Circle One)	Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Frozen <input type="checkbox"/> Other: <u>None</u>	REMARKS:					
Delivered By: <u>John W. Johnson</u>	Date: <u>3/14</u>						
Sample - UPS - Bus - Other:	Time: <u>9:20</u>						

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



**CARDINAL**  
Laboratories

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**101 East Marland; Hobbs, NM 88240  
(575) 393-2328 FAX (575) 393-2476**

**†** *Final cannot accept verbal changes. Please fax written changes to (575) 383-2226.*



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3 of 3

101 East Marland; Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

#### ANALYSIS REQUEST

Company Name: <i>ESQ, Inc.</i>	Project Manager: <i>Sandy Gandy</i>	P.O. #: _____
Address: _____	City: _____	Company: _____
State: _____	Zip: _____	Attn: _____
Phone #: _____	Fax #: _____	Address: _____
Project #: <i>DD LF</i>	Project Owner: <i>J. Clegg</i>	City: _____
Project Name: <i>DD Landfill (SO24)</i>	State: _____	Phone #: _____
Project Location: <i>El Paso, TX</i>	ZIP: _____	Fax #: _____
Sampler Name: <i>Sue Murchison</i>		

FOR LABORATORY ONLY

#### Sample I.D.

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE      TIME

*EDC*

*DCE*

*PCE*

*TCE*

*Methylene Chloride*  
*Chloroform*

*EDB*

*Trichloroethane*  
*Tetrachloroethane*  
*Vinyl Chloride*  
*Poly(vinylidene) Hydro.*

MATRIX

PRESERV

SAMPLING

PLEASE NOTE: Liability and clients will assume responsibility for any claim arising whether based in contract or law, that is related to the amount paid by the client for the analysis. 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 services. In no event shall Cardinal be liable for incidental or consequential damages, including actual damages, loss of use, or loss of profits incurred by client. By submitting samples to Cardinal, client agrees to hold Cardinal harmless from all claims, legal expenses, and attorney's fees arising out of the defense of claims of liability.

Sample Submission is subject to the following conditions:  
1. Samples must be received at Cardinal within 30 days of collection.  
2. Samples must be received in original containers.

Reinquished By:

*John W. Hagan*

Date: *3/14*

Time: *9:20*

Received By:

Delivered By: (Circle One)  
Sample - UPS - Bus - Other:

Sample Condition  
Cool      Intact  
 Yes     No  
 Yes     No  
 Yes     No

Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add Phone #: _____
Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add Fax #: _____
REMARKS:	

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326