

1R - 427-369

**REPORTS**

**DATE:**

4-26-12

1R427-369

RECEIVED OGD

2012 MAY -1 P 1:51

Jct  
EME C-10 EOL  
^  
2011

**CLOSURE**

# RICE *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

May 1, 2012

Mr. Edward Hansen  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505

RE: Termination Request  
EME C-10 EOL: UL/C, Sec. 10, T20S, R36E  
RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

## **Background**

In 2011, ROC initiated work on the former C-10 EOL. The site is located in UL/C, Sec. 10, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 35 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 10x10x12-ft deep excavation. Each sample was field titrated for chlorides, resulting in low concentrations, and field screened using a PID for hydrocarbons, resulting in some elevated concentrations. The excavated soil was blended on site and representative samples were collected from the blended backfill, the bottom of the excavation, and the excavation walls. The representative samples were sent to a commercial laboratory for analysis of chloride, TPH, and BTEX. The 4-wall composite sample resulted in a chloride concentration of 16 mg/kg, concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits, benzene, toluene, and ethyl benzene concentration of <0.050 mg/kg and a total xylene concentration of <0.150 mg/kg. The bottom composite sample resulted in a chloride concentration of 32 mg/kg, a GRO concentration below detectable limits, and a DRO concentration of 42.1 mg/kg. The blended backfill sample resulted in a chloride concentration of <16 mg/kg, a GRO concentration below detectable limits, and a DRO concentration of 55.7 mg/kg. The excavated soil was backfilled with the blended backfill to ground surface and contoured to the surrounding area. On 7/8/2011, the site was

seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. The junction box final report, photo documentation, laboratory analysis, PID sheet, chloride graph, and revegetation form are attached.

**Recommendations**

Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read "H. Conder". The signature is fluid and cursive, with a long horizontal stroke at the end.

Hack Conder  
Environmental Manager

enclosures

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Eunice Monument Eumont (EME)	C-10 EOL	C	10	20S	36E	Lea	Eliminated		

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER Faye Klein Trust OTHER \_\_\_\_\_

Depth to Groundwater 35 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 5/7/2011 Date Completed 7/8/2011 OCD Witness No

Soil Excavated 44.4 cubic yards Excavation Length 10 Width 10 Depth 12 feet

Soil Disposed None cubic yards Offsite Facility n/a Location n/a

**FINAL ANALYTICAL RESULTS:** Sample Date 6/1/2011 Sample Depth 12'

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

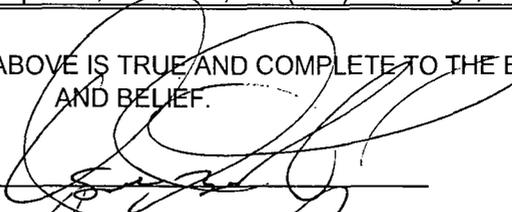
Sample Location	PID (field) ppm	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	108	<0.050	<0.050	<0.050	<0.150	<10.0	<10.0	16
BOTTOM COMP.	11.6					<10.0	42.1	32
BLENDED BACKFILL	76					<10.0	55.7	<16

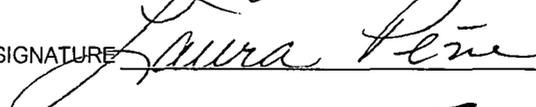
**General Description of Remedial Action:** This junction and line were eliminated during the pipeline replacement/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals creating a 10X10X12-ft. deep excavation. Chloride field test performed on each sample yielded concentrations similar to that of the background sample. Organic vapors were measured using a PID, which yielded some elevated concentration. The excavated soil was blended on site and representative samples were collected from the blended backfill, the bottom of the excavation, and the excavation walls. The representative samples were sent to a commercial laboratory for analysis of chloride, TPH, and BTEX which yielded low concentrations of each. The excavation was backfilled using the blended backfill to ground surface and contoured to the surrounding area. On 7/8/2011, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

CHLORIDE FIELD TESTS		
LOCATION	DEPTH	mg/kg
4-wall comp.	N/A	56
bottom comp.	12'	111
blended	N/A	83
background	6"	82
vertical delineation trench 5' east of source	2'	152
	4'	147
	6'	147
	8'	139
	10'	140
	12'	131

enclosures: photos, lab results, PID (field) screenings, chloride graph, revegetation form

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Oscar Frayre SIGNATURE 

REPORT ASSEMBLED BY Laura Peña SIGNATURE  COMPANY RICE OPERATING COMPANY

PROJECT LEADER Zach Conder SIGNATURE  DATE 4-26-12

# EME C-10 EOL

Unit C, Section 10, T20S, R36E



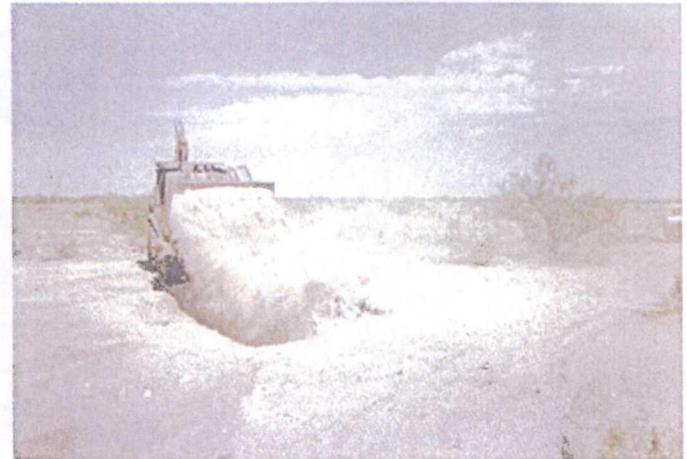
Excavating the former junction box site, facing east  
5.7.11



Collecting sample, facing north  
6.1.11



Blending backfill, facing south  
6.28.11



Backfilling, facing northwest  
6.28.11



Seeding site, facing north  
7.8.11



Site completed, facing north  
7.8.11

June 03, 2011

Hack Conder  
Rice Operating Company  
112 W. Taylor  
Hobbs, NM 88240

RE: EME C-10 EOL (21/36)

Enclosed are the results of analyses for samples received by the laboratory on 06/01/11 14:10.

Cardinal Laboratories is accredited through Texas NELAP for:

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

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Celey D. Keene  
Lab Director/Quality Manager

COPY

**Analytical Results For:**

 Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received:	06/01/2011	Sampling Date:	06/01/2011
Reported:	06/03/2011	Sampling Type:	Soil
Project Name:	EME C-10 EOL (21/36)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: 5 PT. BOTTOM COMP (H101124-01)**

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>	<b>32.0</b>	16.0	06/02/2011	ND	400	100	400	7.69		
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	06/03/2011	ND	185	92.4	200	6.70		
<b>DRO &gt;C10-C28</b>	<b>42.1</b>	10.0	06/03/2011	ND	156	77.9	200	12.7		

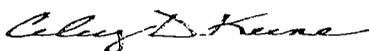
Surrogate: 1-Chlorooctane	141 %	70-130
Surrogate: 1-Chlorooctadecane	134 %	70-130

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received:	06/01/2011	Sampling Date:	06/01/2011
Reported:	06/03/2011	Sampling Type:	Soil
Project Name:	EME C-10 EOL (21/36)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: 4 WALL COMP (H101124-02)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/01/2011	ND	2.04	102	2.00	2.47		
Toluene*	<0.050	0.050	06/01/2011	ND	2.02	101	2.00	2.53		
Ethylbenzene*	<0.050	0.050	06/01/2011	ND	2.12	106	2.00	2.03		
Total Xylenes*	<0.150	0.150	06/01/2011	ND	6.23	104	6.00	2.08		

Surrogate: 4-Bromofluorobenzene (PIL) 93.7 % 70-130

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/02/2011	ND	400	100	400	7.69		

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	06/03/2011	ND	185	92.4	200	6.70		
DRO >C10-C28	<10.0	10.0	06/03/2011	ND	156	77.9	200	12.7		

Surrogate: 1-Chlorooctane 139 % 70-130

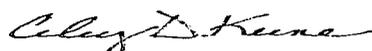
Surrogate: 1-Chlorooctadecane 134 % 70-130

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received:	06/01/2011	Sampling Date:	06/01/2011
Reported:	06/03/2011	Sampling Type:	Soil
Project Name:	EME C-10 EOL (21/36)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: BLENDED BACKFILL COMP (H101124-03)**

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	06/02/2011	ND	400	100	400	7.69		
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	06/03/2011	ND	185	92.4	200	6.70		
<b>DRO &gt;C10-C28</b>	<b>55.7</b>	10.0	06/03/2011	ND	156	77.9	200	12.7		
<i>Surrogate: 1-Chlorooctane</i>	<i>144 %</i>	<i>70-130</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>136 %</i>	<i>70-130</i>								

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

- Z-01 One or more surrogates above historical limits.
- 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

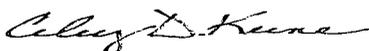
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\* = Accredited Analyte

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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: <u>Rice</u>		<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																							
Project Manager: <u>Halle Condon</u>		P.O. #:																											
Address: <u>1322 W. Tompkins</u>		Company:																											
City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u>		Attn:																											
Phone #: _____ Fax #: _____		Address:																											
Project #: _____ Project Owner: _____		City:																											
Project Name: _____		State: _____ Zip: _____																											
Project Location: <u>EMC C-10502 20 38</u>		Phone #: _____																											
Sampler Name: <u>James Kasper</u>		Fax #: _____																											
FOR LAB USE ONLY																													
Lab I.D.	Sample I.D.	(G)PAB OR (C)COMP	# CONTAINERS	MATRIX														PRESERV.	SAMPLING										
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME															
HDI124																													
-1	5pt Bottom Comp				X					X			6-11-11	11:15	X	X													
-2	4 wall Comp				X					X			6-11-11	11:20	X	X	X												
-3	Blended Pres 1/4 Comp				X					X			6-11-11	12:00	X	X													

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy in 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: <u>[Signature]</u>	Date: <u>6-11-11</u>	Received By: <u>Jodi Hanson</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: _____	Time: <u>14:10</u>	Received By: _____	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One)	Sampler - UPS - Bus - Other:	Sample Condition: Cool, Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	REMARKS: <u>B. Batten @ Rice.com L. Winkelman @ Rice.com</u> <u>H. Condon @ Rice.com D. Kasper @ Rice.com</u> <u>K. Tompkins @ Rice.com</u>	
CHECKED BY: <u>[Signature]</u>				

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

# RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240  
 PHONE: (505) 393-9174 FAX: (505) 397-1471  
 PID METER CALIBRATION & FIELD REPORT FORM

CK.	<input type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000508
MODEL	<input type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000504
NO.	<input type="checkbox"/>	MODEL: PGM 7320	SERIAL NO: 592-903318
	<input checked="" type="checkbox"/>	MODEL: PGM 7300	SERIAL NO: 590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO :930132	EXPIRATION DATE:4-28-13
METER READING ACCURACY:100.00	

ACCURACY : +/- 2%

<b>COMPANY</b>
RICE

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
EME	C-10 EOL	C	10	20S	36E

SAMPLE ID	PID	SAMPLE ID	PID
5pt Bottom Comp	11.6		
4wall Comp	108		
Blended Backfill	76		

COPY

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE:

DATE: 6-1-11

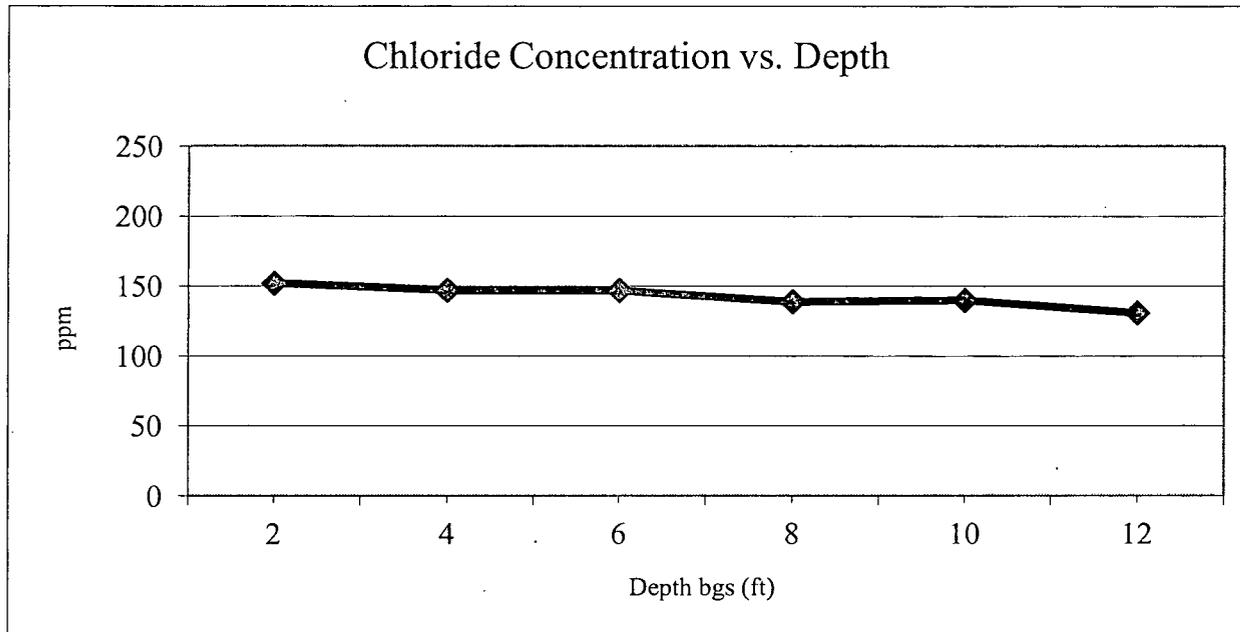
# EME C-10 EOL

Unit 'C', Sec. 10, T20S, R36E

*Backhoe samples 5' east of source*

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
2	152
4	147
6	147
8	139
10	140
12	131

Groundwater = 35 ft





PO Box 5630  
 Hobbs, NM 88241  
 Phone: (575) 393-4411  
 Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: Rice EME C-10 EOL						
U/L C	Section 10	Township 20	Range 36	County Lea	Latitude N. 32° 35' 28.077"	Longitude W. 103° 20' 46.83"
Contact Name: Hack Conder						
Email: hconder@rice-ecs.com						
Site size 3,055 square feet			Map detail of site attached <input type="checkbox"/>			
Additional information:						

### 2. Soils *\*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):	
Texture:		Describe soil & subsoil:			
Soil prep methods:	Rip <input type="checkbox"/>	Depth(in):	Disc <input type="checkbox"/>	Depth (in):	Rollerpack <input type="checkbox"/>
Date completed: 7/8/2011					

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input type="checkbox"/>
Type:	Describe:	
Lbs/acre:		

### 4. Seeding *\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: Boyd Johnston Mix	Seeding date: 7/8/2011
Broadcast <input checked="" type="checkbox"/>			
Method: seeding Broadcaster			
Soil conditions during seeding: Dry <input checked="" type="checkbox"/> Damp <input type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input type="checkbox"/>	Observations:		
Number of photos:			

### 5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Kyle Norman	Title: Environmental Tech	Date: 7/8/2011
Signature: <i>Kyle Norman</i>		

COPY