



District I  
P.O. Box 1980, Hobbs, NM 88241-1980  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
2040 South Pacheco  
Santa Fe, NM 87505  
**OPERATOR'S MONTHLY REPORT**

Form C-141  
Originated 2/13/97

Submit 2 copies to  
Appropriate District  
Office in accordance  
with Rule 116 on  
back side of form

**Release Notification and Corrective Action**  
**OPERATOR**

Initial Report     Final Report

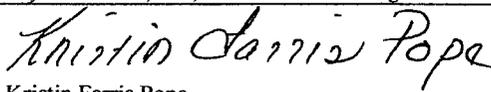
Name Rice Operating Company	Contact Kristin Farris Pope
Address 122 West Taylor                      Hobbs, NM 88240	Telephone No. 505-393-9174
Facility Name Eunice-Monument-Eumont (EME) SWD System	Facility Type SWD Disposal Line

Surface Owner DLD Land Corporation	Mineral Owner	Lease No.
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**LOCATION OF RELEASE**

Unit Letter M	Section 36	Township 19S	Range 36E	Feet from the	North/South line	Feet from the	East/West Line	County LEA
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**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release Unknown	Volume Recovered 100 bbls
Source of Release 3-inch 'T' in pipeline	Date and Hour of Occurrence 8/8/2002 12:15 pm	Date and Hour of Discovery 8/8/2002 12:15 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Larry Johnson    NMOCD-Hobbs	
By Whom? Chris Rodriguez	Date and Hour 8/12/2002 3:30 pm	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. n/a	
If a Watercourse was Impacted, Describe Fully. (Attach Additional Sheets If Necessary)  n/a		
Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sheets If Necessary) The pipeline inside the junction box pressured up causing failure of the 3-inch 'T' in the pipeline. 84 cubic yards of high-impact soils near the surface were removed and disposed of at a permitted facility.		
Describe Area Affected and Cleanup Action Taken. (Attach Additional Sheets If Necessary) Approximately 7,100 sq. ft. Implemented soil flushing procedure by applying gypsum and flushing the soil with fresh water over a period of approx. 18 months. When chloride concentrations in the root zone were at levels that would sustain native vegetation, the site was seeded and fertilized. ROC will continue to monitor growth at this site.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and /or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Kristin Farris Pope	Approved by District Supervisor: 	
Title: Project Scientist	Approval Date: 9/14/07	Expiration Date: 9/14/07
Date: 9-22-04                      Phone: 505-393-9174	Conditions of Approval:	Attached <input type="checkbox"/>

# EME State 'F' EOL Leach/Leak Site

unit 'M', sec. 36, T19S, R36E

NO GROUNDWATER PRESENT

## CHLORIDE CONCENTRATIONS AFTER SEEDING SITE SEEDED IN 2004



 = 10 x 10 ft

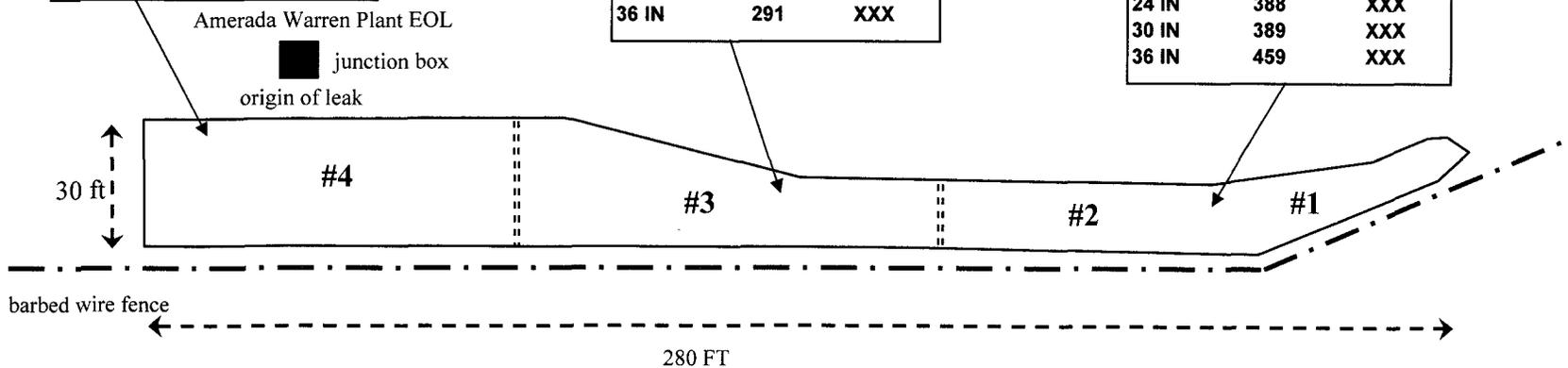
 = dividing berms

**#1** = test points

LAB RESULTS 7/17/07			
SURFACE 5 PT COMPOSITE			
Cl (PPM)			48
CHLORIDES (PPM)			
AFTER LEACHING PROGRAM			
DEPTH	3/26/04	8/1/06	
SURFACE	134	113	
6 IN	234	118	
12 IN	169	150	
18 IN	200	XXX	
24 IN	236	XXX	
30 IN	194	XXX	
36 IN	263	XXX	

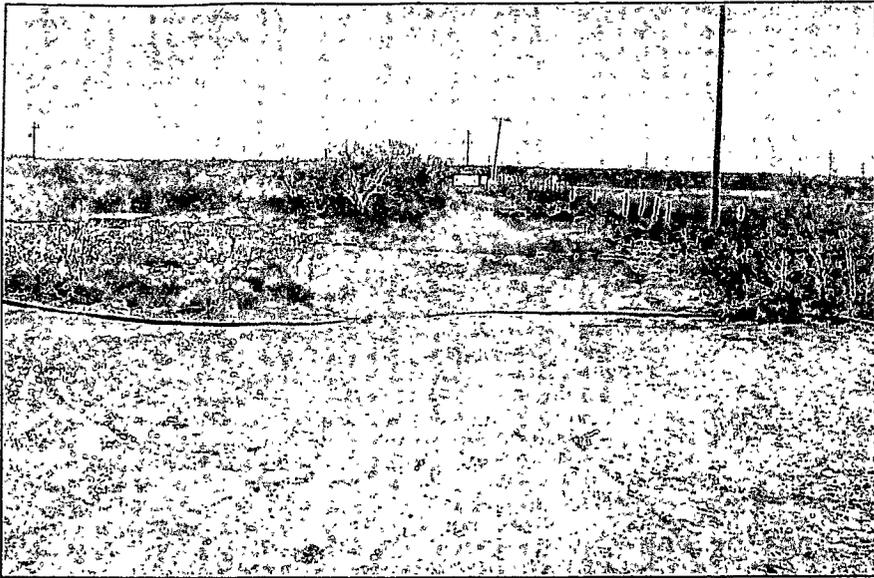
LAB RESULTS 7/17/07			
SURFACE 5 PT COMPOSITE			
Cl (PPM)			<16
CHLORIDES (PPM)			
AFTER LEACHING PROGRAM			
DEPTH	3/26/04	8/1/06	
SURFACE	135	87	
6 IN	234	119	
12 IN	280	176	
18 IN	233	179	
24 IN	451	XXX	
30 IN	236	XXX	
36 IN	291	XXX	

LAB RESULTS 7/17/07			
SURFACE 5 PT COMPOSITE			
Cl (PPM)			16
CHLORIDES (PPM)			
AFTER LEACHING PROGRAM			
DEPTH	5/20/04	8/1/06	
SURFACE	302	86	
6 IN	336	139	
12 IN	368	169	
18 IN	355	XXX	
24 IN	388	XXX	
30 IN	389	XXX	
36 IN	459	XXX	

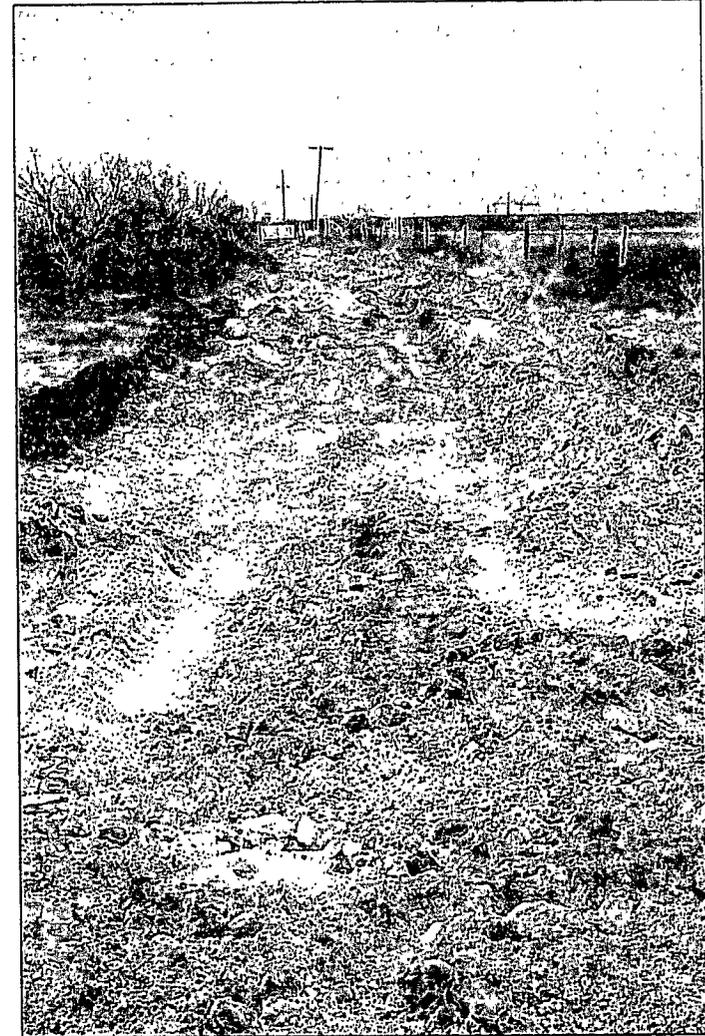


# EME State 'F' Leach/Leak site

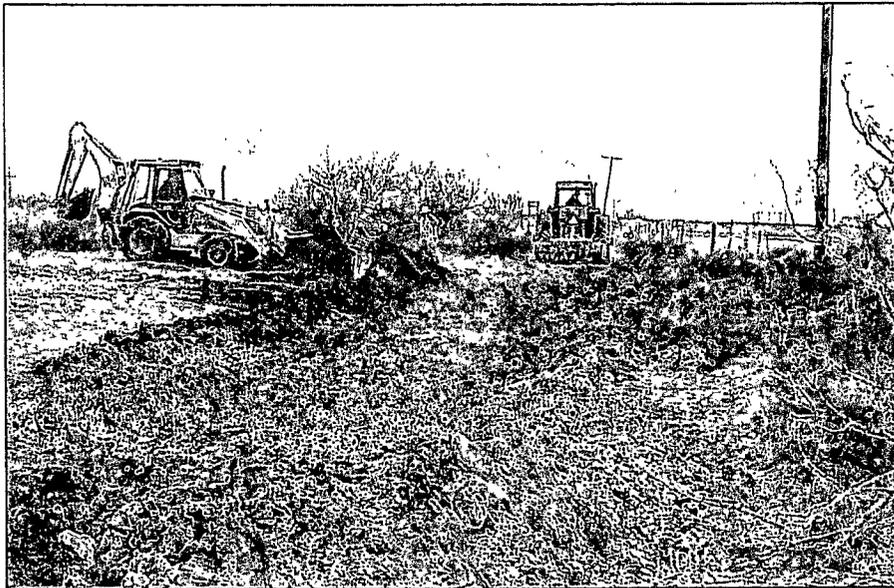
unit 'M', sec. 36, T19S, R36E



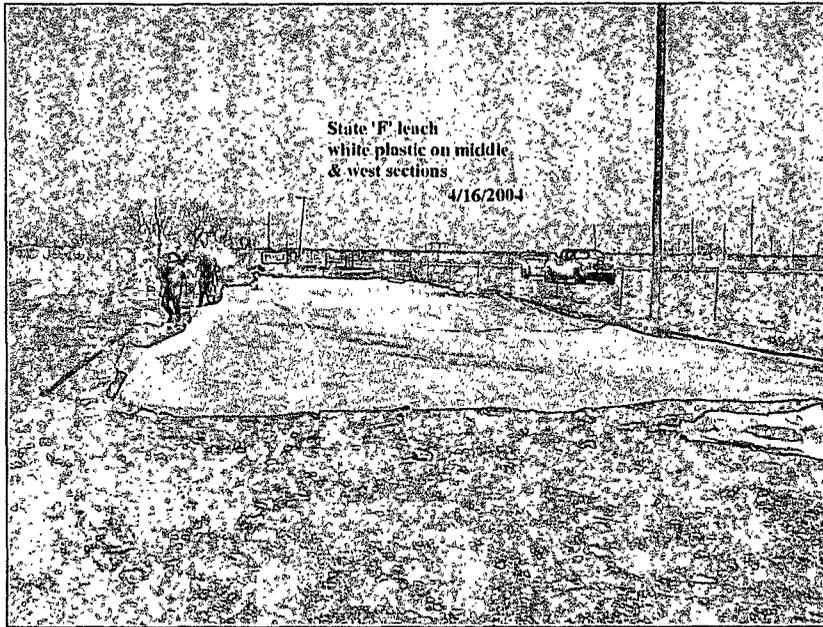
before amendments; after 4 inches of surface removed 11/20/2002



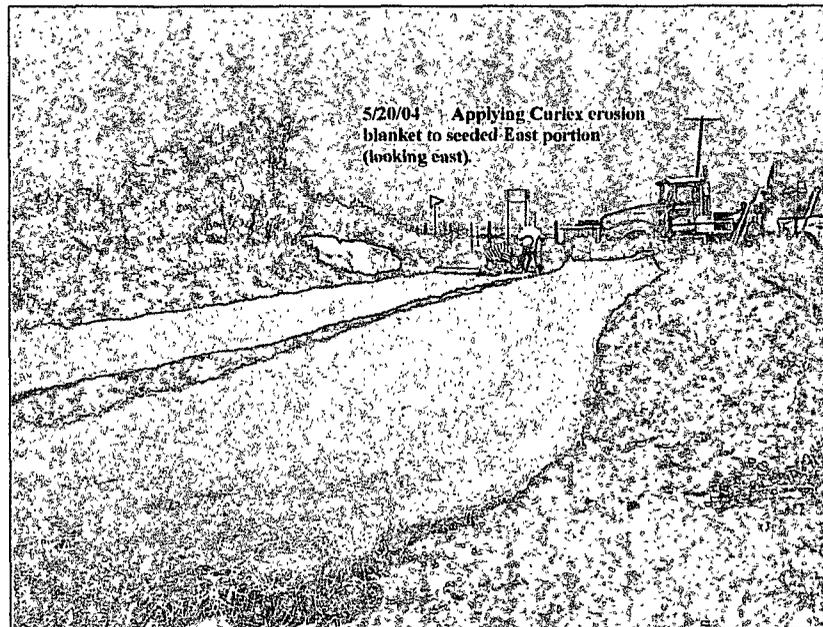
1,500 lbs. gypsum applied (looking east) 11/25/2002



tilling hay & gypsum; building berms & dividing site 11/25/2002



covering section with plastic 4/16/2004



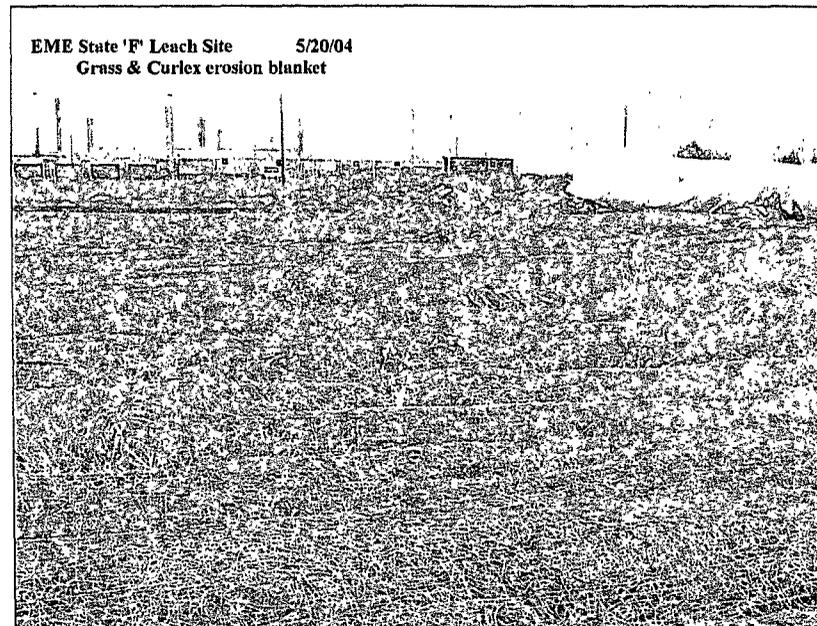
laying jute erosion blanket 5/20/2004



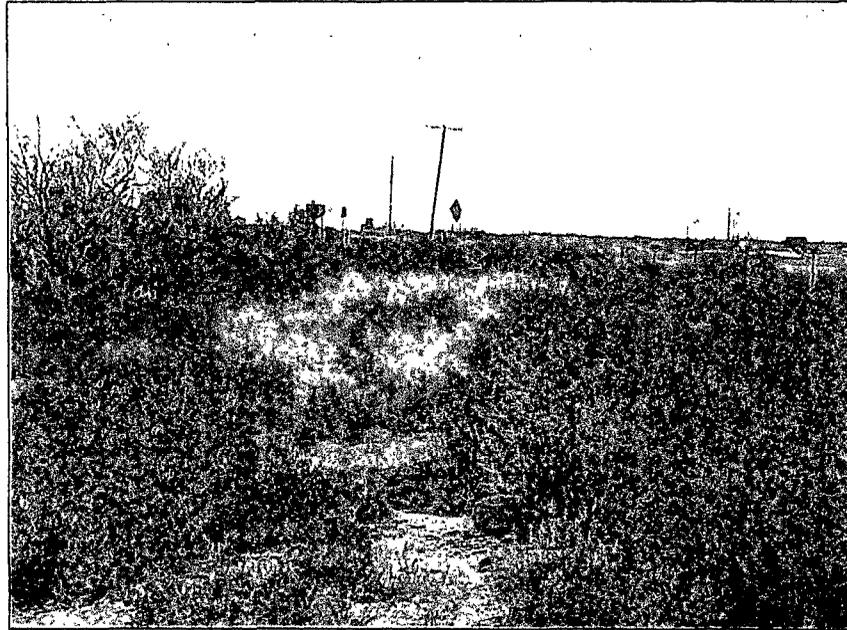
sampling at test point 1/7/2004



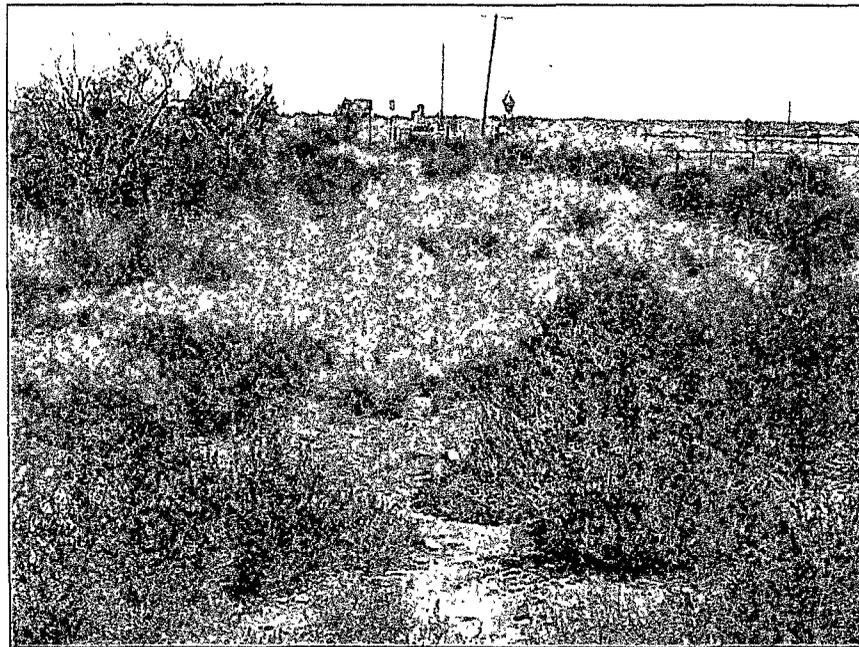
native grasses > 1 ft tall emerging through erosion blanket



grasses emerging through erosion blanket



completed site (looking east)





State 'F' EOL leak site; 3 years after seeding (facing East)

2-12-2007



7-2-2007



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE TX 79603

PHONE (505) 393-2326 • 101 E MARLAND • HOBBS NM 88240

**ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: HACK CONDER  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471**

Receiving Date: 07/18/07  
Reporting Date: 07/19/07  
Project Owner: NOT GIVEN  
Project Name: EME STATE "F" LEACH/LEAK SITE  
Project Location: W. OF ARTESIA, NM

Analysis Date: 07/18/07  
Sampling Date: 07/17/07  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: NF  
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H12920-1	AREA 1 AND 2 SURF COMP	16
H12920-2	AREA 3 SURF COMP	< 16
H12920-3	AREA 4 SURF COMP	48
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		4.1

METHOD: Standard Methods      4500-Cl<sup>-</sup>B

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

*[Signature]*  
Chemist

07-19-07  
Date

H12920 RICE

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

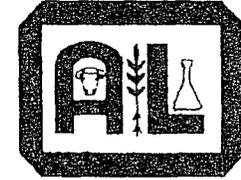


(ESP-12)(CEC)(0.00078) = \_\_\_\_\_ lbs. CaSO<sub>4</sub>/sq. ft.

**A & L PLAINS AGRICULTURAL LABORATORIES, INC.**

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FAX (806) 763-2762 • www.al-labs-plains.com



REPORT NUMBER

02-280-02a

October 7, 2002

RICE Operating Co.

122 West Taylor

Hobbs, N.M. 88240

Attn. D. Anderson

**Saturated Paste Extract**

Lab No.	Sample ID	Matrix	SAR	Sodium	Calcium	Magnesium
				ppm	ppm	ppm

95286 ST."F" EDL Soil 68.10 14323.8 2661.0 401.8

95287 BD B-4-1 Soil 24.23 2290.9 600.9 42.9

Lab No.	Sample ID	Matrix	pH	ESP	E.C	CEC
			ppm		mmhos/cm	meq/100g

95286 ST."F" EDL Soil 7.00 49.80 63.30 7.3

95287 BD B-4-1 Soil 7.39 26.30 13.80 3.6

Respectfully submitted,

by

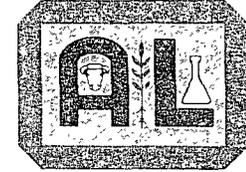
A&L Plains Ag Labs, Inc.

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04-089-185



REPORT NUMBER

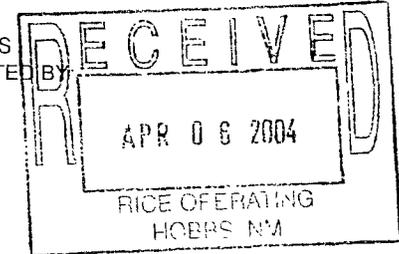
CLIENT NO: 1228

SEND TO:

GROWER:

Rice Operating Co.  
122 W. Taylor  
Hobbs, NM 88240-

SAMPLES SUBMITTED BY:



DATE 03/31/04

## SOIL ANALYSIS REPORT

PAGE 1

SAMPLE ID	LAB NUMBER	ORGANIC MATTER % RATE ENR lbs/A	PHOSPHORUS		POTASSIUM	MAGNESIUM	CALCIUM	SODIUM	pH		Cation Exchange CEC meq/100g	COMPUTED PERCENT BASE SATURATION				
			P1 (Weak Bray) ppm-P RATE	P2 (Strong Bray) ppm-P RATE	K ** ppm-K RATE	Mg *** ppm-Mg RATE	Ca *** ppm-Ca RATE	Na *** ppm-Na RATE	SOIL pH	BUFFER INDEX		K	Mg	Ca	H	Na
			1	15742	1.2L 54	22M	55H	489VH	167L	2702M		1141VH	8.1		21.1	5.9

SAMPLE ID	NITRATE NO <sub>3</sub> *** ppm-NO <sub>3</sub> N RATE	SULFUR S *** ppm-S RATE	ZINC Zn *** ppm-Zn RATE	MANGANESE Mn *** ppm-Mn RATE	IRON Fe *** ppm-Fe RATE	COPPER Cu *** ppm-Cu RATE	BORON B *** ppm-B RATE	EX-CESS LIME RATE	SOLUBLE SALTS mmhos/cm RATE	CODE TO RATINGS	
1	7L	4VL	5.8H	11M	41H	2.8H	1.5H	L	1.1M	VL = VERY LOW      L = LOW M = MEDIUM        H = HIGH VH = VERY HIGH    NR = NOT RATED	
ND = NONE DETECTED IS = INSUFFICIENT SAMPLE ENR = ESTIMATED NITROGEN RELEASE											
This report applies only to the sample(s) tested. Samples are retained for a maximum of thirty days after testing.											
<b>A &amp; L PLAINS AGRICULTURAL LABORATORIES, INC.</b>											
By: E. A. COLEMAN, PhD											

PHOSPHORUS - Multiply the results in ppm by 4.6 to convert to lbs per acre P2O5

\*\*\* - Multiply the results in ppm by 2 to convert to lbs per acre of the elemental form

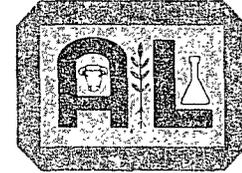
\*\* - Multiply the results in ppm by 2.4 to convert to lbs per acre K2O

Most soils weigh two (2) million pounds (dry weight) for an acre of soil 6-2/3 inches deep

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REPORT NUMBER

04-089-185

Client No: 1228

SEND TO:

Rice Operating Co.  
122 W. Taylor  
Hobbs, NM 88240-

GROWER:

Date: 03/31/2004

SUBMITTED BY:

Page: 1

## SOIL FERTILITY GUIDELINES (lbs/A)

SAMPLE NUMBER	CROP	YIELD	AMENDMENTS	N Nitrogen	P205 Phosphate	K2O Potash	Mg Magnesium	S Sulfur	Zn Zinc	Mn Manganese	Fe Iron	Cu Copper	B Boron
1	NATIVE GRASS		GYPSUM 1000	90	20		10						

### COMMENTS:

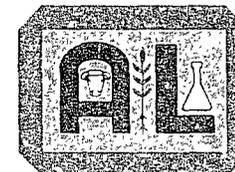
TOP DRESS WITH 80-0-0 AFTER EACH HARVEST.

WATCH HIGH Na. GYPSUM OR OTHER Ca SOURCE SHOULD HELP. TRY TO KEEP % BASE SATURATION Na <8% IF POSSIBLE.  
CONSIDER IRR WATER ANALYSIS TO DETERMINE SOURCE OF Na.

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04-089-185

REPORT NUMBER

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SEND TO

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Rice Operating Co.  
122 W. Taylor  
Hobbs, NM 88240-

DATE 03/31/04

## SOIL ANALYSIS REPORT

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SAMPLE ID	LAB NUMBER	ORGANIC MATTER % RATE ENR lbs/A	PHOSPHORUS		POTASSIUM	MAGNESIUM	CALCIUM	SODIUM	pH		COMPUTED					
			P1 (Weak Bray) ppm-P RATE	P2 (Strong Bray) ppm-P RATE	K ** ppm-K RATE	Mg *** ppm-Mg RATE	Ca *** ppm-Ca RATE	Na *** ppm-Na RATE	SOIL pH	BUFFER INDEX	Cation Exchange CEC meq/100g	PERCENT BASE SATURATION				
												K	Mg	Ca	H	Na
1	15742	1.2L 54	22M	55H	489VH	167L	2702M	1141VH	8.1		21.1	5.9	6.5	64.0	0.0	23.5

SAMPLE ID	NITRATE NO <sub>3</sub> *** ppm-NO <sub>3</sub> N RATE	SULFUR S *** ppm-S RATE	ZINC Zn *** ppm-Zn RATE	MANGANESE Mn *** ppm-Mn RATE	IRON Fe *** ppm-Fe RATE	COPPER Cu *** ppm-Cu RATE	BORON B *** ppm-B RATE	EX-CESS LIME RATE	SOLUBLE SALTS mmhos/cm RATE			CODE TO RATINGS VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH NR = NOT RATED
1	7L	4VL	5.8H	11M	41H	2.8H	1.5H	L	1.1M			ND = NONE DETECTED IS = INSUFFICIENT SAMPLE ENR = ESTIMATED NITROGEN RELEASE  This report applies only to the sample(s) tested. Samples are retained for a maximum of thirty days after testing.  A & L PLAINS AGRICULTURAL LABORATORIES, INC.  By E. A. COLEMAN, PhD

PHOSPHORUS - Multiply the results in ppm by 4.6 to convert to lbs per acre P2O5

\*\* - Multiply the results in ppm by 2.4 to convert to lbs per acre K2O

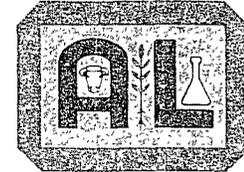
\*\*\* - Multiply the results in ppm by 2 to convert to lbs per acre of the elemental form

Most soils weigh two (2) million pounds (dry weight) for an acre of soil 6-2/3 inches deep

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REPORT NUMBER

04-089-185

Client No: 1228

SEND TO:

Rice Operating Co.  
122 W. Taylor  
Hobbs, NM 88240-

GROWER:

Date: 03/31/2004

SUBMITTED BY:

Page 1

## SOIL FERTILITY GUIDELINES (lbs/A)

SAMPLE NUMBER	CROP	YIELD	AMENDMENTS	N Nitrogen	P205 Phosphate	K2O Potash	Mg Magnesium	S Sulfur	Zn Zinc	Mn Manganese	Fe Iron	Cu Copper	B Boron
1	NATIVE GRASS		GYPSUM 1000	90	20		10						

### COMMENTS:

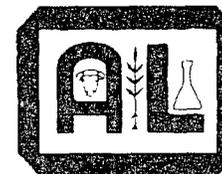
TOP DRESS WITH 80-0-0 AFTER EACH HARVEST.

WATCH HIGH Na. GYPSUM OR OTHER Ca SOURCE SHOULD HELP. TRY TO KEEP % BASE SATURATION Na <8% IF POSSIBLE. CONSIDER IRR WATER ANALYSIS TO DETERMINE SOURCE OF Na.

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SAMPLE ID	LAB NUMBER	ORGANIC MATTER % RATE ENR lbs/A	PHOSPHORUS		POTASSIUM K ** ppm-K RATE	MAGNESIUM Mg *** ppm-Mg RATE	CALCIUM Ca *** ppm-Ca RATE	SODIUM Na *** ppm-Na RATE	pH		Cation Exchange C E C meq/100g	COMPUTED PERCENT BASE SATURATION				
			P1 (Weak Bray) ppm-P RATE	P2 (Strong Bray) ppm-P RATE					SOIL pH	BUFFER INDEX		K	Mg	Ca	H	Na
			1	15742					1.2L 54	22M		55H	489VH	167L	2702M	1141VH

SAMPLE ID	NITRATE NO <sub>3</sub> *** ppm-NO <sub>3</sub> RATE	SULFUR S *** ppm-S RATE	ZINC Zn *** ppm-Zn RATE	MANGANESE Mn *** ppm-Mn RATE	IRON Fe *** ppm-Fe RATE	COPPER Cu *** ppm-Cu RATE	BORON B *** ppm-B RATE	EXCESS LIME RATE	SOLUBLE SALTS mmhos/cm RATE	CODE TO RATINGS: VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH NR = NOT RATED
1	7L	4VL	5.8H	11M	41H	2.8H	1.5H	L	1.1M	ND = NONE DETECTED IS = INSUFFICIENT SAMPLE ENR = ESTIMATED NITROGEN RELEASE

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A & L PLAINS AGRICULTURAL LABORATORIES, INC

By E. A. COLEMAN, PhD

PHOSPHORUS - Multiply the results in ppm by 4.6 to convert to lbs per acre P2O5

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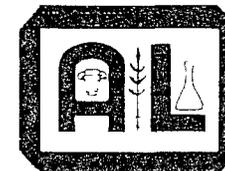
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SAMPLE NUMBER	CROP	YIELD	AMENDMENTS	N Nitrogen	P205 Phosphate	K2O Potash	Mg Magnesium	S Sulfur	Zn Zinc	Mn Manganese	Fe Iron	Cu Copper	B Boron
1	NATIVE GRASS		GYPSUM 1000	90	20		10						

### COMMENTS:

TOP DRESS WITH 80-0-0 AFTER EACH HARVEST.

WATCH HIGH Na. GYPSUM OR OTHER Ca SOURCE SHOULD HELP. TRY TO KEEP % BASE SATURATION Na <8% IF POSSIBLE  
CONSIDER IRR WATER ANALYSIS TO DETERMINE SOURCE OF Na.

$$(ESP-5)(CEC)(0.00078) = \text{--- lbs. gyp. / ft}^2$$

$$(49.8-5)(21.1)(0.00078) = .74$$

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 FAX (806) 763-2762 • www.al-labs-plains.com



REPORT NUMBER

02-280-02a

October 7, 2002

RICE Operating Co.  
 122 West Taylor  
 Hobbs, N.M. 88240

Attn: D. Anderson

**Saturated Paste Extract**

Lab No.	Sample ID	Matrix	SAR	Sodium	Calcium	Magnesium
				ppm	ppm	ppm

95286	ST."F" EDL	Soil	68.10	14323.8	2661.0	401.8
-------	------------	------	-------	---------	--------	-------

95287	BD B-4-1	Soil	24.23	2290.9	600.9	42.9
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Lab No.	Sample ID	Matrix	pH	ESP	E.C.	CEC
			ppm		mmhos/cm	meq/100g

95286	ST."F" EDL	Soil	7.00	49.80	63.30	7.3
-------	------------	------	------	-------	-------	-----

95287	BD B-4-1	Soil	7.39	26.30	13.80	3.6
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Respectfully submitted,

by  
 A&L Plains Ag Labs, Inc.

