

1R - 427 - 145

REPORTS

DATE:

8-5-04

EME Ser. 0-24-1

1R#427-145

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	O-24-1	O	24	20S	36E	Lea	eliminated--no box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Dale Cooper Family Trust OTHER _____

Depth to Groundwater 36-117? feet NMOCD SITE ASSESSMENT RANKING SCORE: ? *

Date Started 5/19/2004 Date Completed 6/16/2004 OCD Witness No

Soil Excavated 44 cubic yards Excavation Length 10 Width 10 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: Sample Date 5/21/2004 Sample Depth 12 ft

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

CHLORIDE FIELD TESTS

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
BOTTOM	0.0 (grab)	<10.0	<10.0	42.5
BACKFILL	0.0	<10.0	<10.0	48

LOCATION	DEPTH (ft)	ppm
Vertical	6	449
at source	7	359
	8	689
	9	929
	10	539
	11	629
	12	299
5 ft West	6	149
	8	179
	10	179
	12	149
5 ft East	6	119
	8	209
	10	179
	12	89

General Description of Remedial Action: Delineation and excavation were performed at this junction box site with a backhoe as chloride field tests and PID field screenings were conducted at regular intervals. Vertical delineation at the box yielded an overall trend of chloride decline and low concentrations. A spike was observed at around 9 ft indicating a mass of historical chloride that has been flushed through the loose sand by recent rains (see graph). The graph indicates non-saturated vadose conditions that are not threatening to groundwater. All PID readings were 0.0 ppm and laboratory results confirmed TPH concentrations well below NMOCD guidelines. Soils from the 10 x 10 x 12-ft deep excavation were blended before they were backfilled into the hole. The surface has been contoured and will be seeded with a blend of native vegetation. This junction has been eliminated with a new pipeline re-plumbed straight through.

enclosures: groundwater map, chloride graph, photos, lab results, PID field screenings

* Depth to groundwater here is ambiguous. USGS maps indicate that the site is located on a hydrogeologic boundary or fault north of which groundwater is around 36 ft but is 117 ft to the south.

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

SITE SUPERVISOR Rob Elam SIGNATURE *Rob Elam* COMPANY Curt's Environmental--Odessa, TX

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE *Kristin Farris Pope*

DATE 8/5/2004 TITLE Project Scientist

EME jct. O-24-1

unit 'O', Sec. 24, T20S, R36E



Undisturbed junction box

5/7/2004



backhoe delineation

5/19/2004



seeding disturbed surface

8/4/2004

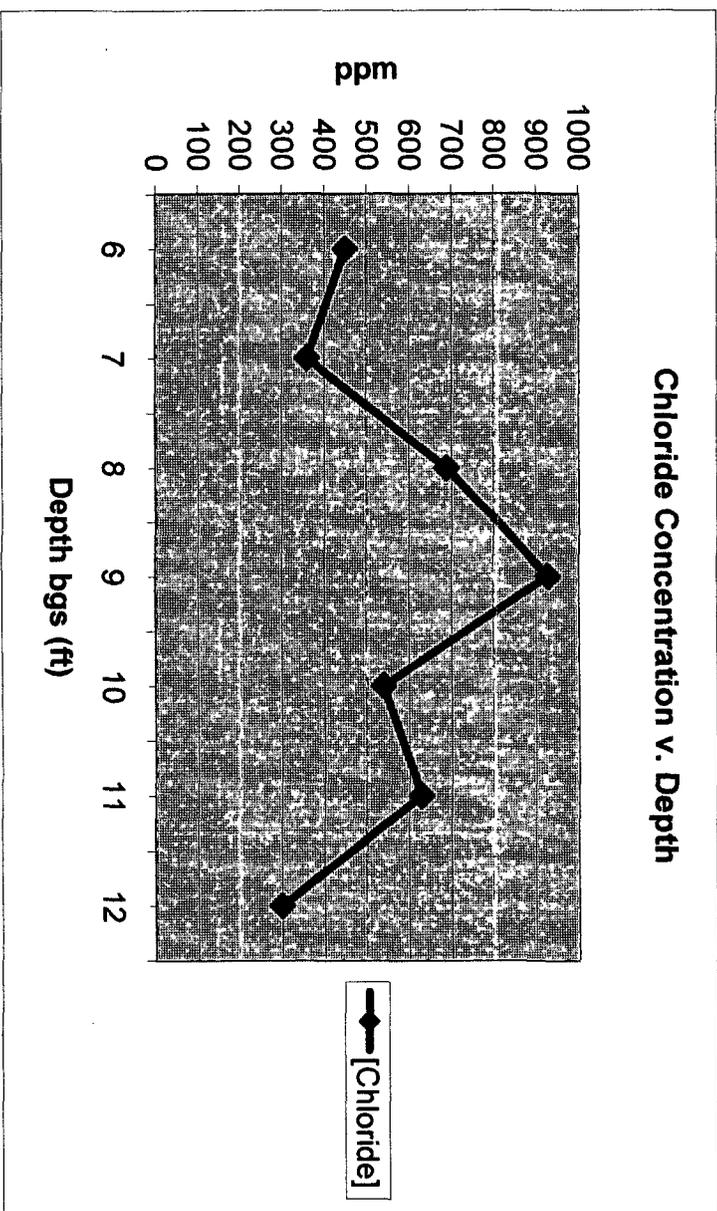
EME jct. O-24-1

T20S, R36E

Vertical Delineation at Source

Depth bgs (ft)	Cl ⁻ (ppm)
6	449
7	359
8	689
9	929
10	539
11	629
12	299

Groundwater = 36-117 ft





**ARDINAL
LABORATORIES**

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: ROY RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 07/30/04
Reporting Date: 08/02/04
Project Number: NOT GIVEN
Project Name: JCT O-24-1
Project Location: EME

Sampling Date: 07/30/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: HM
Analyzed By: BC/AH

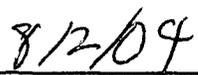
LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		08/02/04	08/02/04	08/02/04
H8961-1	BACKFILL COMPOSITE	<10.0	<10.0	48
Quality Control		785	749	1000
True Value QC		800	800	1000
% Recovery		98.1	93.7	100
Relative Percent Difference		0.6	2.2	1.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

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

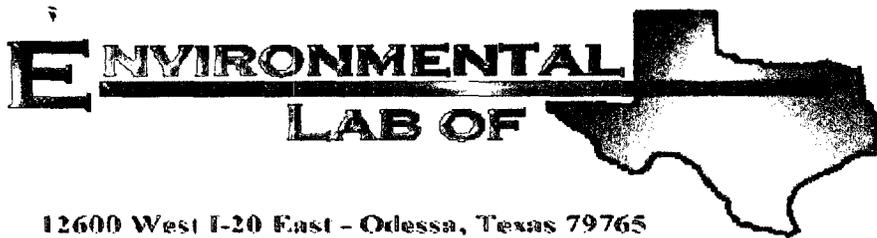


Chemist



Date

H8961.XLS



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris
Rice Operating Co.
122 W. Taylor
Hobbs, NM 88240

Project: Jct. O-24-1
Project Number: None Given
Location: EME

Lab Order Number: 4E25002

Report Date: 05/28/04

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

Project: Jct. O-24-1
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
12' Bottom	4E25002-01	Soil	05/21/04 16:30	05/25/04 08:05

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240	Project: Jct. O-24-1 Project Number: None Given Project Manager: Kristin Farris	Fax: (505) 397-1471 Reported: 05/28/04 10:47
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**Organics by GC
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12' Bottom (4E25002-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EE42503	05/25/04	05/26/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		98.8 %	70-130		"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Smith

Quality Assurance Review

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240	Project: Jct. O-24-1 Project Number: None Given Project Manager: Kristin Farris	Fax: (505) 397-1471 Reported: 05/28/04 10:47
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**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12' Bottom (4E25002-01) Soil									
Chloride	42.5	20.0	mg/kg Wet	2	EE42609	05/26/04	05/26/04	SW 846 9253	
% Solids	86.0		%	1	EE42605	05/25/04	05/25/04	% calculation	

Environmental Lab of Texas

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Roland K. [Signature]

Quality Assurance Review

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

Project: Jct. O-24-1
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:47

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EE42503 - Solvent Extraction (GC)

Blank (EE42503-BLK1)

Prepared & Analyzed: 05/25/04

Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	43.3		mg/kg	50.0		86.6	70-130			
Surrogate: 1-Chlorooctadecane	43.4		"	50.0		86.8	70-130			

LCS (EE42503-BS1)

Prepared & Analyzed: 05/25/04

Gasoline Range Organics C6-C12	417		mg/kg	500		83.4	75-125			
Diesel Range Organics >C12-C35	448		"	500		89.6	75-125			
Total Hydrocarbon C6-C35	865		"	1000		86.5	75-125			
Surrogate: 1-Chlorooctane	47.5		"	50.0		95.0	70-130			
Surrogate: 1-Chlorooctadecane	35.9		"	50.0		71.8	70-130			

Calibration Check (EE42503-CCV1)

Prepared: 05/25/04 Analyzed: 05/27/04

Gasoline Range Organics C6-C12	403		mg/kg	500		80.6	80-120			
Diesel Range Organics >C12-C35	479		"	500		95.8	80-120			
Total Hydrocarbon C6-C35	882		"	1000		88.2	80-120			
Surrogate: 1-Chlorooctane	55.9		"	50.0		112	70-130			
Surrogate: 1-Chlorooctadecane	43.7		"	50.0		87.4	70-130			

Matrix Spike (EE42503-MS1)

Source: 4E25003-02

Prepared: 05/25/04 Analyzed: 05/26/04

Gasoline Range Organics C6-C12	469	10.0	mg/kg dry	556	ND	84.4	75-125			
Diesel Range Organics >C12-C35	522	10.0	"	556	ND	93.9	75-125			
Total Hydrocarbon C6-C35	991	10.0	"	1110	ND	89.3	75-125			
Surrogate: 1-Chlorooctane	57.1		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	40.8		"	50.0		81.6	70-130			

Matrix Spike Dup (EE42503-MSD1)

Source: 4E25003-02

Prepared: 05/25/04 Analyzed: 05/26/04

Gasoline Range Organics C6-C12	512	10.0	mg/kg dry	556	ND	92.1	75-125	8.77	20	
Diesel Range Organics >C12-C35	539	10.0	"	556	ND	96.9	75-125	3.20	20	
Total Hydrocarbon C6-C35	1050	10.0	"	1110	ND	94.6	75-125	5.78	20	
Surrogate: 1-Chlorooctane	59.9		mg/kg	50.0		120	70-130			
Surrogate: 1-Chlorooctadecane	43.1		"	50.0		86.2	70-130			

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Roland K. Smith

Quality Assurance Review

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

Project: Jct. O-24-1
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471
Reported:
05/28/04 10:47

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EE42605 - General Preparation (Prep)

Blank (EE42605-BLK1) Prepared & Analyzed: 05/25/04

% Solids 100 %

Duplicate (EE42605-DUP1) Source: 4E24004-01 Prepared & Analyzed: 05/25/04

% Solids 70.0 % 71.0 1.42 20

Batch EE42609 - Water Extraction

Blank (EE42609-BLK1) Prepared & Analyzed: 05/26/04

Chloride ND 20.0 mg/kg Wet

Matrix Spike (EE42609-MS1) Source: 4E25002-01 Prepared & Analyzed: 05/26/04

Chloride 510 20.0 mg/kg Wet 500 42.5 93.5 80-120

Matrix Spike Dup (EE42609-MSD1) Source: 4E25002-01 Prepared & Analyzed: 05/26/04

Chloride 521 20.0 mg/kg Wet 500 42.5 95.7 80-120 2.13 20

Reference (EE42609-SRM1) Prepared & Analyzed: 05/26/04

Chloride 5000 mg/kg 5000 100 80-120

Environmental Lab of Texas

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Quality Assurance Review

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

Project: Jct. O-24-1
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:47

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

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Roland K. Smith

Quality Assurance Review

Page 6 of 6

*** TX REPORT ***

TRANSMISSION OK

TX/RX NO 1342
CONNECTION TEL 14325631713
SUBADDRESS
CONNECTION ID
ST. TIME 05/25 07:52
USAGE T 00'59
PGS. SENT 2
RESULT OK

RICE Operating Company

122 West Taylor
Hobbs, NM 88240
Phone: (505) 393-9174
Fax: (505) 397-1471

TO: Samples + Drop Box FROM: Rob Elam

FAXNUMBER: 432 563 1713 DATE: 5/25/04

COMPANY: Env. Lab of TX TOTAL NO. OF PAGE INCLUDING COVER: 2

RE: _____

NOTES/COMMENTS:

RICE OPERATING COMPANY

122 WEST TAYLOR

HOBBS, NEW MEXICO 88240

PHONE: (505) 393-9174 FAX: (505) 397-1471

VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S
 CALIBRATION GAS
 GAS COMPOSITION: ISOBUTYLENE
 AIR
 LOT NO: 03-2475
 EXP. DATE: 10-19-07
 METER READING
 ACCURACY: 100.1

SERIAL NO: 104412
 100 PPM
 BALANCE
 FILL DATE: 4-19-04
 ACCURACY: ± 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	0-24-1	0	24	20-5	36E

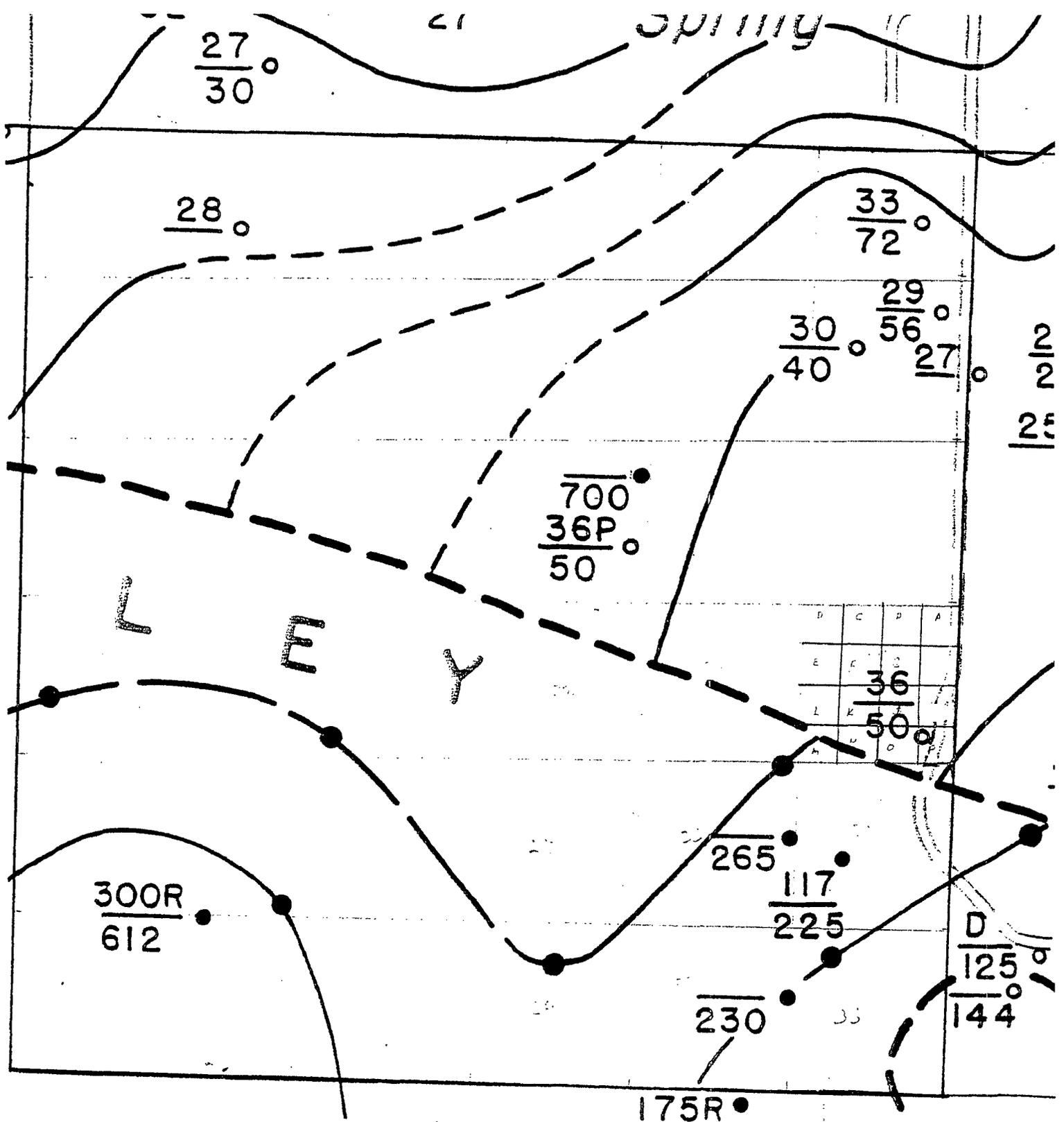
Source: 5' West

SAMPLE	PID RESULT	SAMPLE	PID RESULT
6'	0	6'	0
7'	0	7'	0
8'	0	8'	0
9'	0	9'	0
10'	0	10'	0
11'	0	11'	0
12'	0	12'	0

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

Rob Elam
 Signature

5-19-04
 Date



blown-up from Plate 2 Groundwater Map of Southern
Lea County, New Mexico
 Map

from USGS book "Geology & Groundwater Conditions in
 Southern Lea County, New Mexico.

by Nicholson & Clebsch 1961