

1R - 427 - 146

REPORTS

DATE:

8-25-04

EME Gully "A" EOL

1R0427-146

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	Gully 'A' EOL	O	24	20S	36E	Lea	Length	Width	Depth
							Eliminated		

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

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

Date Started 5/20/2004 Date Completed 6/16/2004 OCD Witness No

Soil Excavated 89 cubic yards Excavation Length 10 Width 20 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 5/24/2004 Sample Depth 12 ft

Procure 5-point composite sample of bottom and a composite sample of sidewalls. 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
3-WALL COMP.	XXX	<10.0	<10.0	213
BOTTOM	XXX	<10.0	<10.0	<20
REMEDIED	XXX	<10.0	<10.0	85.1

LOCATION	DEPTH (ft)	ppm
Vertical	5	749
at box	6	809
	7	779
	8	539
	9	629
	10	539
	11	629
	12	479
15 ft West	6	1139
	7	1289
	8	1499
	9	1559
	10	1349
	11	1109
	12	929
3-wall comp.	n/a	599
bottom comp.	12	149
remed. comp.	n/a	300

General Description of Remedial Action: This end-of-line (EOL) box was located west of an active production facility. Delineation and excavation were performed with a backhoe as chloride tests and PID readings were conducted at regular intervals. The source at the box yielded a conclusive trend of declination to a depth of 12 ft BGS (see graph), indicative of non-saturated conditions in the vadose zone below the box. All PID field screenings were 0.0 ppm and lab results confirmed TPH concentrations well below NMOCD guidelines. The excavated soil from the 10 x 20 x 12-ft deep hole was blended on site and then backfilled. The disturbed surface was contoured and seeded with a blend of native vegetation. This EOL has been eliminated with a new pipeline re-plumbed straight through. No excavation was conducted east of the box due to proximity of the battery.

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

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

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 8/25/2004 TITLE Project Scientist

EME Gullyully 'A' EOL

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



undisturbed junction box

1/12/2004



final excavation

5/24/2004



backfilling excavation

6/16/2004



seeding backfilled site

8/4/2004

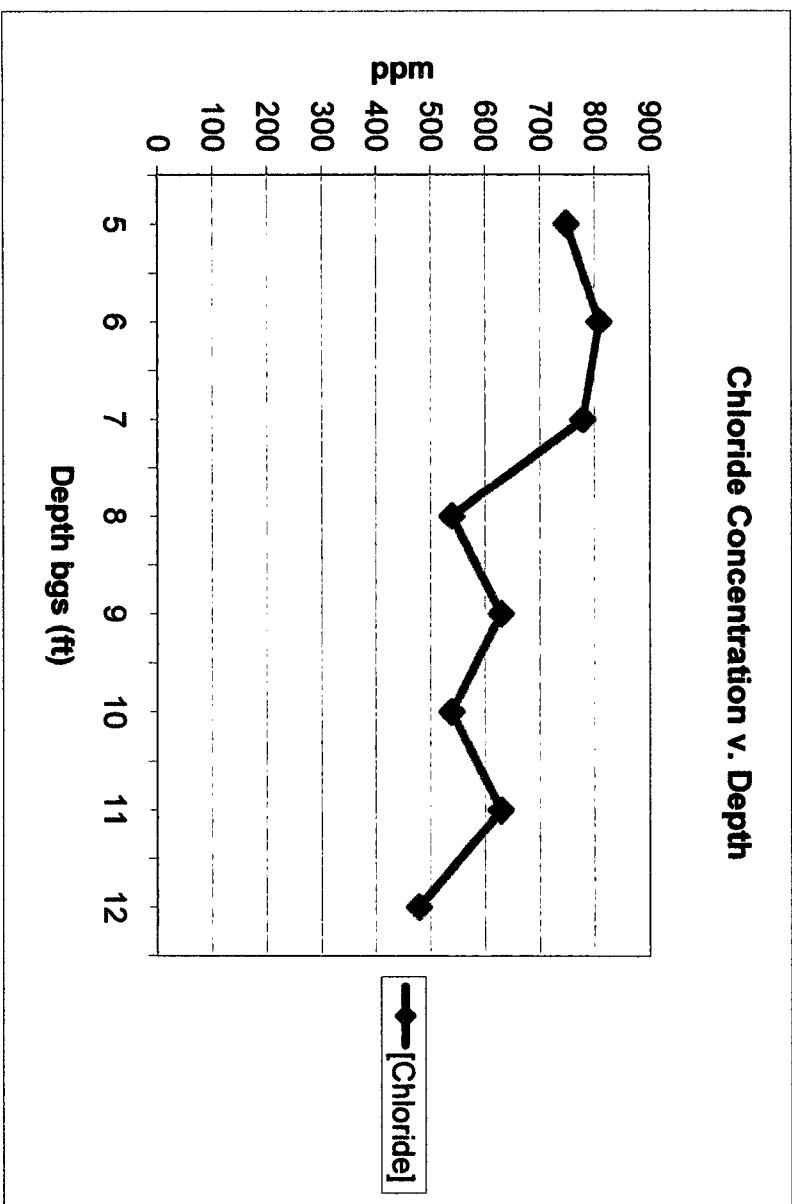
EME Gully 'A' EOL

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

Vertical Delineation at Source

Depth bgs (ft)	[Cl] ppm
5	749
6	809
7	779
8	539
9	629
10	539
11	629
12	479

Depth to groundwater here is ambiguous. USGS maps indicate that the site is located on a hydrogeologic boundary line to the north of which groundwater depth is ~36 ft and 117 ft to the south.



CHLORIDE CONCENTRATION CURVE

RICE Operating Company

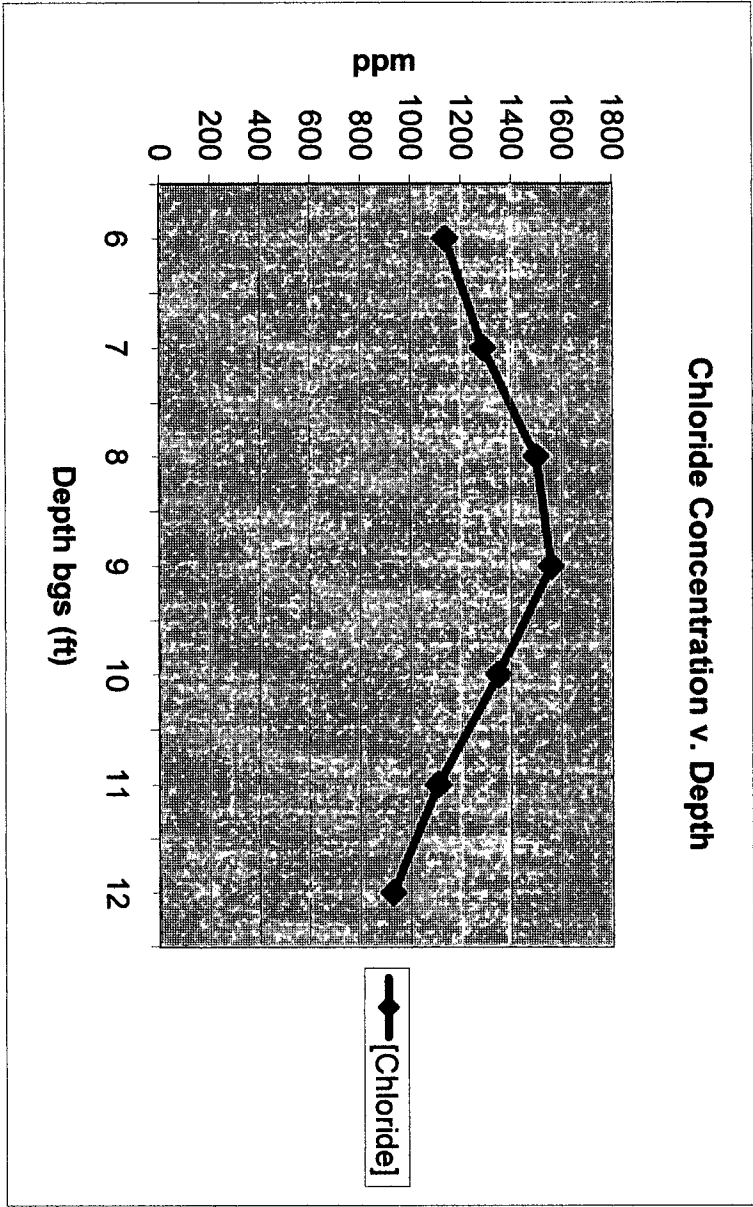
EME Gully 'A' EOL

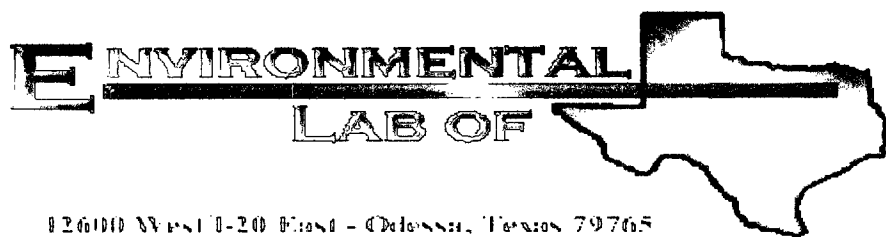
Unit 'O', Sec. 24, T20S, R36E

15 ft West of box

Depth bgs (ft)	[Cl] ppm
6	1139
7	1289
8	1499
9	1559
10	1349
11	1109
12	929

Depth to groundwater here is ambiguous. USGS maps indicate that the site is located on a hydrogeologic boundary line to the north of which groundwater depth is ~36 ft and 117 ft to the south.





126100 West 10-20 Road - Odessa, Texas 79765

Analytical Report

Prepared for:

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

Project: Gullully 'A' EOL
Project Number: None Given
Location: EME

Lab Order Number: 4E25003

Report Date: 05/28/04

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

Project: Gullully 'A' EOL
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Wall Composite	4E25003-01	Soil	05/24/04 11:30	05/25/04 08:05
12' Bottom Composite	4E25003-02	Soil	05/24/04 13:30	05/25/04 08:05
Stockpile	4E25003-03	Soil	05/24/04 16:00	05/25/04 08:05

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

Project: Gullully 'A' EOL
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:46

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Wall Composite (4E25003-01) 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	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		98.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		90.4 %	70-130		"	"	"	"	
12' Bottom Composite (4E25003-02) 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	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		91.0 %	70-130		"	"	"	"	
Stockpile (4E25003-03) 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	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		77.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		80.6 %	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

Page 2 of 6

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

Project: Gullully 'A' EOL
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471
Reported:
05/28/04 10:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Wall Composite (4E25003-01) Soil									
Chloride	213	20.0	mg/kg Wet	2	EE42609	05/26/04	05/26/04	SW 846 9253	
% Solids	77.0		%	1	EE42605	05/25/04	05/25/04	% calculation	
12' Bottom Composite (4E25003-02) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42609	05/26/04	05/26/04	SW 846 9253	
% Solids	90.0		%	1	EE42605	05/25/04	05/25/04	% calculation	
Stockpile (4E25003-03) Soil									
Chloride	85.1	20.0	mg/kg Wet	2	EE42609	05/26/04	05/26/04	SW 846 9253	
% Solids	99.0		%	1	EE42605	05/25/04	05/25/04	% calculation	

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122 W. Taylor
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Fax: (505) 397-1471

Reported:
05/28/04 10:46

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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Quality Assurance Review

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Rice Operating Co.
122 W. Taylor
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Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/28/04 10:46

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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Quality Assurance Review

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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

SERIAL NO: 104412

CALIBRATION GAS

GAS COMPOSITION: ISOBUTYLENE

100 PPM

AIR

BALANCE

LOT NO: 0-22-30

FILL DATE: 6-20-03

EXP. DATE: 11-20-04

ACCURACY: 100-200

METER READING

ACCURACY: 100.1

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	Occidental Gully A	0	24	20-S	36E

Source

5' West

SAMPLE	PID RESULT	SAMPLE	PID RESULT
5'	Q	5'	Q
6'	Q	6'	Q
7'	Q	7'	Q
8'	Q	8'	Q
9'	Q	9'	Q
10'	Q	10'	Q
11'	Q	11'	Q
12'	Q	12'	Q

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



Signature

5-20-04

Date

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

SERIAL NO: 104412

CALIBRATION GAS

GAS COMPOSITION: ISOBUTYLENE

100 PPM

AIR

BALANCE

LOT NO: 0-22-30

FILL DATE: 6-20-03

EXP. DATE: 11-20-04

ACCURACY: $\pm 0.5 - 2\%$

METER READING

ACCURACY: 100%

10' West

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	Occidental Gully A	0	24	20-S	36-E

10' West *15' West*

SAMPLE	PID RESULT	SAMPLE	PID RESULT
5'	0		
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
13'	0		
14'	0		
15'	0		

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

R. Elam

Signature

5-20 / 5-21

Date

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: 0-22-30
EXP. DATE: 11-20-08
METER READING
ACCURACY: 100.1

SERIAL NO: 104412

100 PPM
BALANCE
FILL DATE: 6-20-03
ACCURACY: 400-290

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	Occidental Gullally A	0	24	20-S	36E

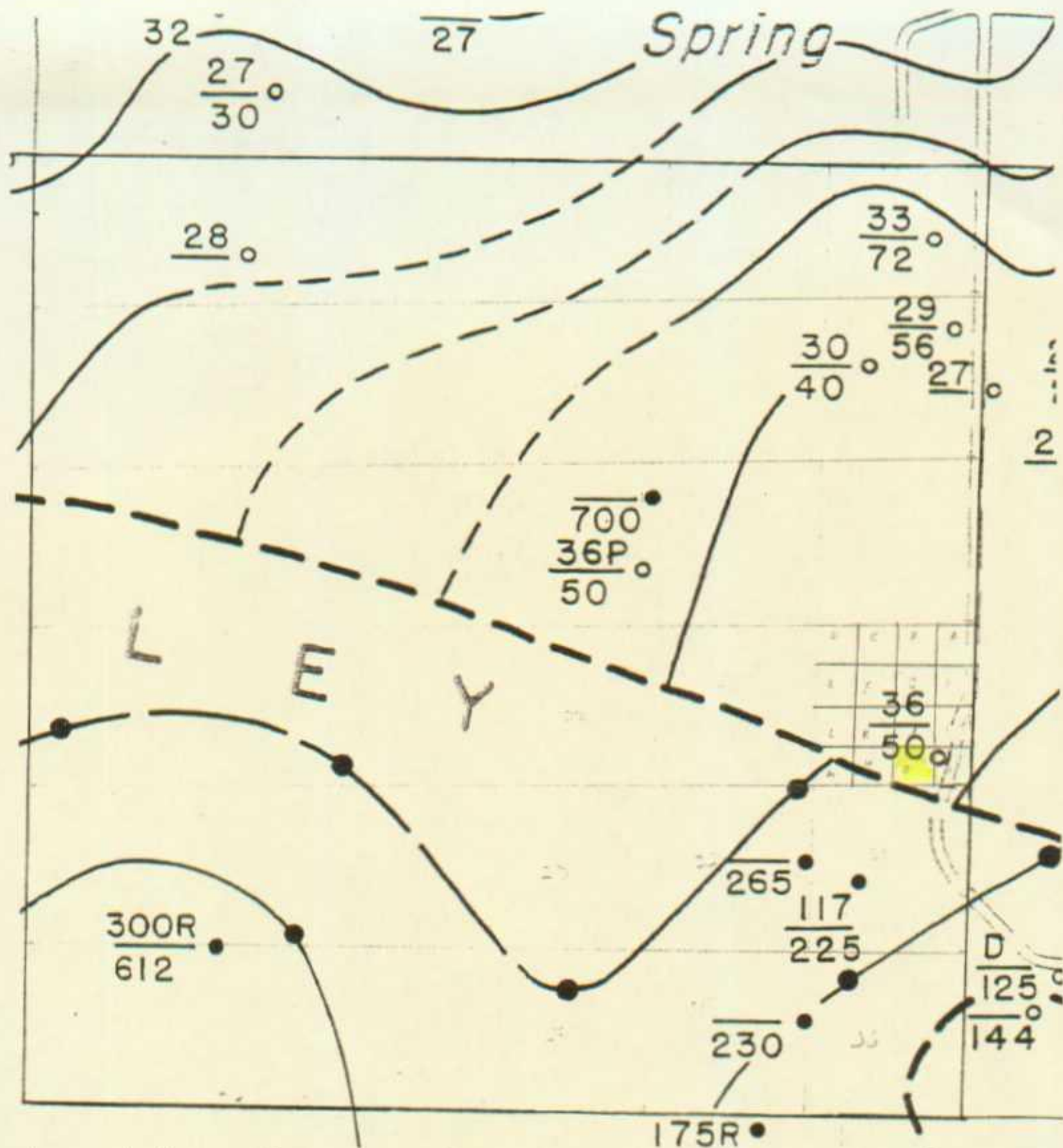
5' South

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
13'	0		
14'	0		
15'	0		

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


Signature

5-21-524
Date



enlarged from Plate 2 "Groundwater Map of Southern
Map Lea County, New Mexico"

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

by Nicholson + Clebsch 1961