

ENGINEERING AND DESIGN
OF
PLATA DISPOSAL FACILITY
SECTION 16, TOWNSHIP 20 SOUTH, RANGE 32 EAST
LEA COUNTY, NEW MEXICO

PETRO-THERMO CORPORATION
HOBBS, NEW MEXICO

PREPARED FOR:
NEW MEXICO OIL CONSERVATION DIVISION
CASE NO. 8781
APRIL 9, 1986

OIL & GAS CONSERVATION DIVISION	
BUREAU OF OIL CONSERVATION	
Case No. <u>8781</u>	File No. <u>8</u>
Submitted by _____	
Hearing Date _____	

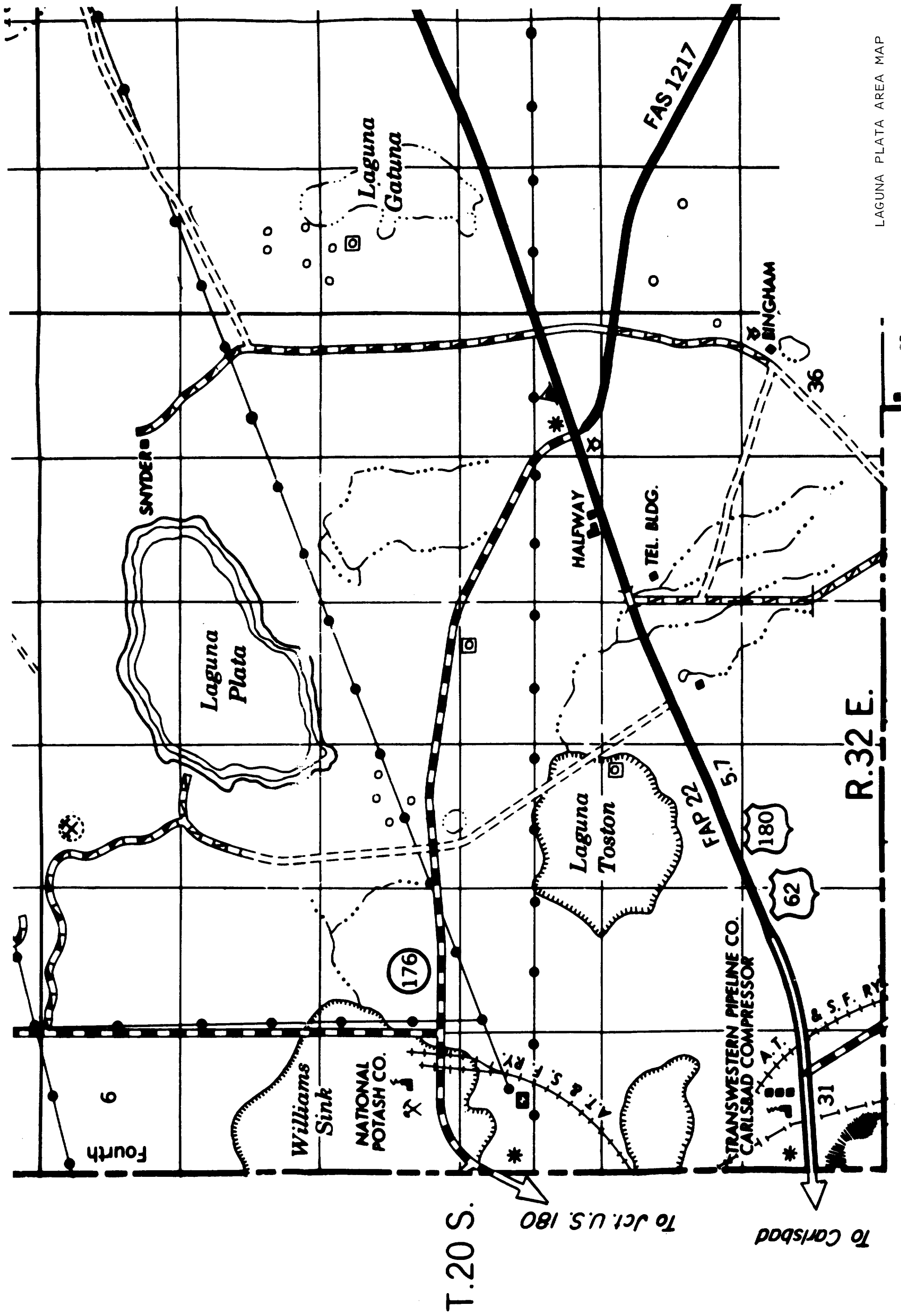
PETRO-THERMO CORPORATION

P.O. BOX 2069 PHONES (505) 393-2417 — 397-3557
HOBBS, NEW MEXICO 88241-2069

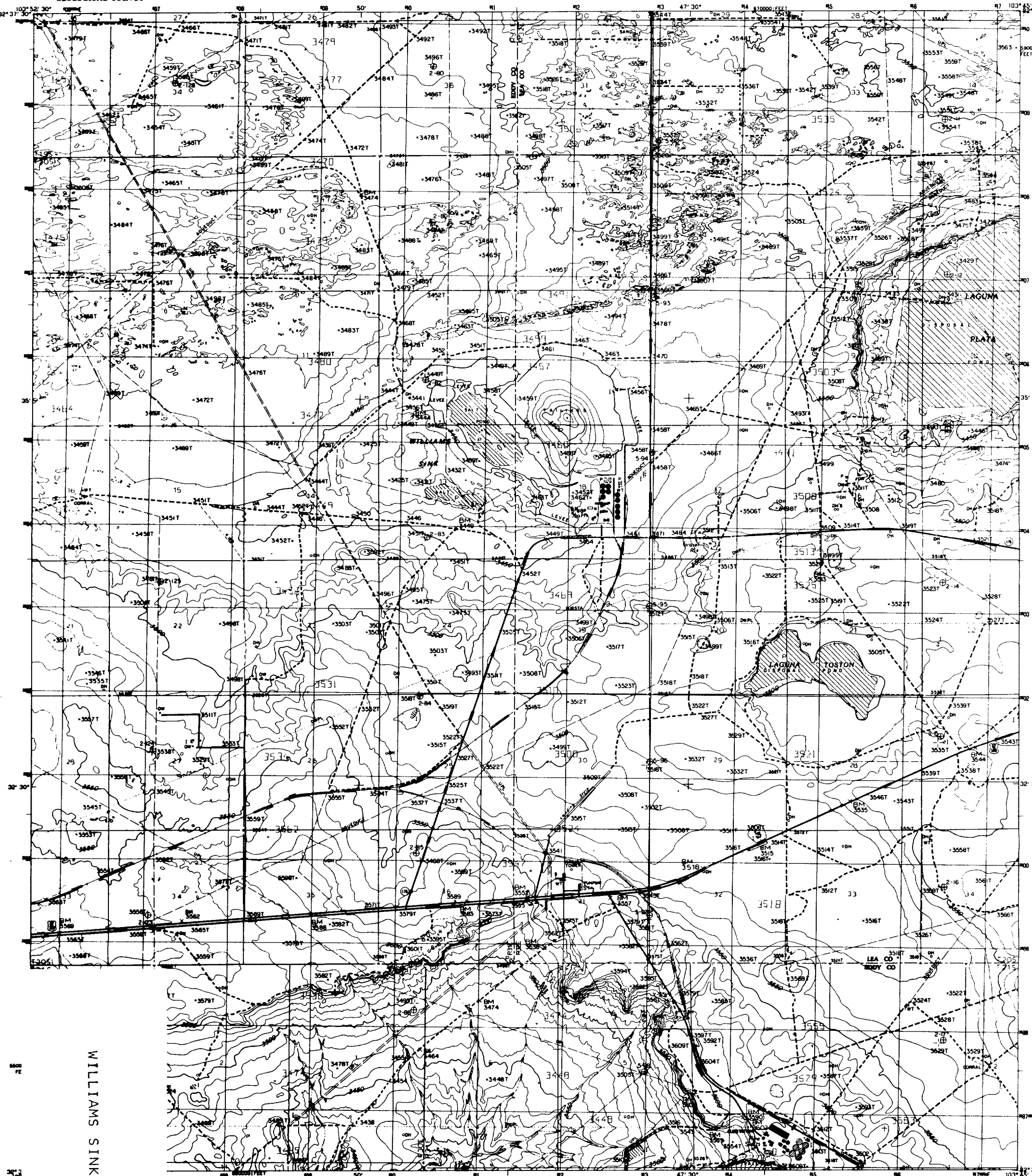


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LAGUNA PLATA AREA MAP



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100. ALL SURVEY

PROVISIONAL MAP
Produced from original
manuscript drawings. Infor-
mation shown as of date of
field check.



1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10

ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route
U.S. Route
State Route

WILLIAMS SINK, NEW MEXICO
PROVISIONAL EDITION 1985

3255-77-024

PETRO-THERMO CORPORATION

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WATER ANALYSIS

SAMPLE: LAGUNA PLATA LAKE WATER

LOCATION: APPROXIMATELY 2500' FNL, 1800' FEL
SECTION 10, TOWNSHIP 20 SOUTH, RANGE 32 EAST
LEA COUNTY, NEW MEXICO

DATE: DECEMBER 11, 1985

SPECIFIC GRAVITY AT 60 ⁰ F	1.2205
pH	7.34
CALCIUM	940 MG/L
MAGNESIUM	3,317 MG/L
SODIUM	124,644 MG/L
BICARBONATE	71 MG/L
CARBONATE AS $C_A CO_3$	16,000 MG/L
HYDROXIDE	NOT RUN
SULFATE	10,124 MG/L
CHLORIDES	196,012 MG/L
IRON	.25 MG/L
BARIUM	NOT RUN
MANGANESE	NOT RUN
TOTAL DISSOLVED SOLIDS	335,108 MG/L

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WATER ANALYSIS

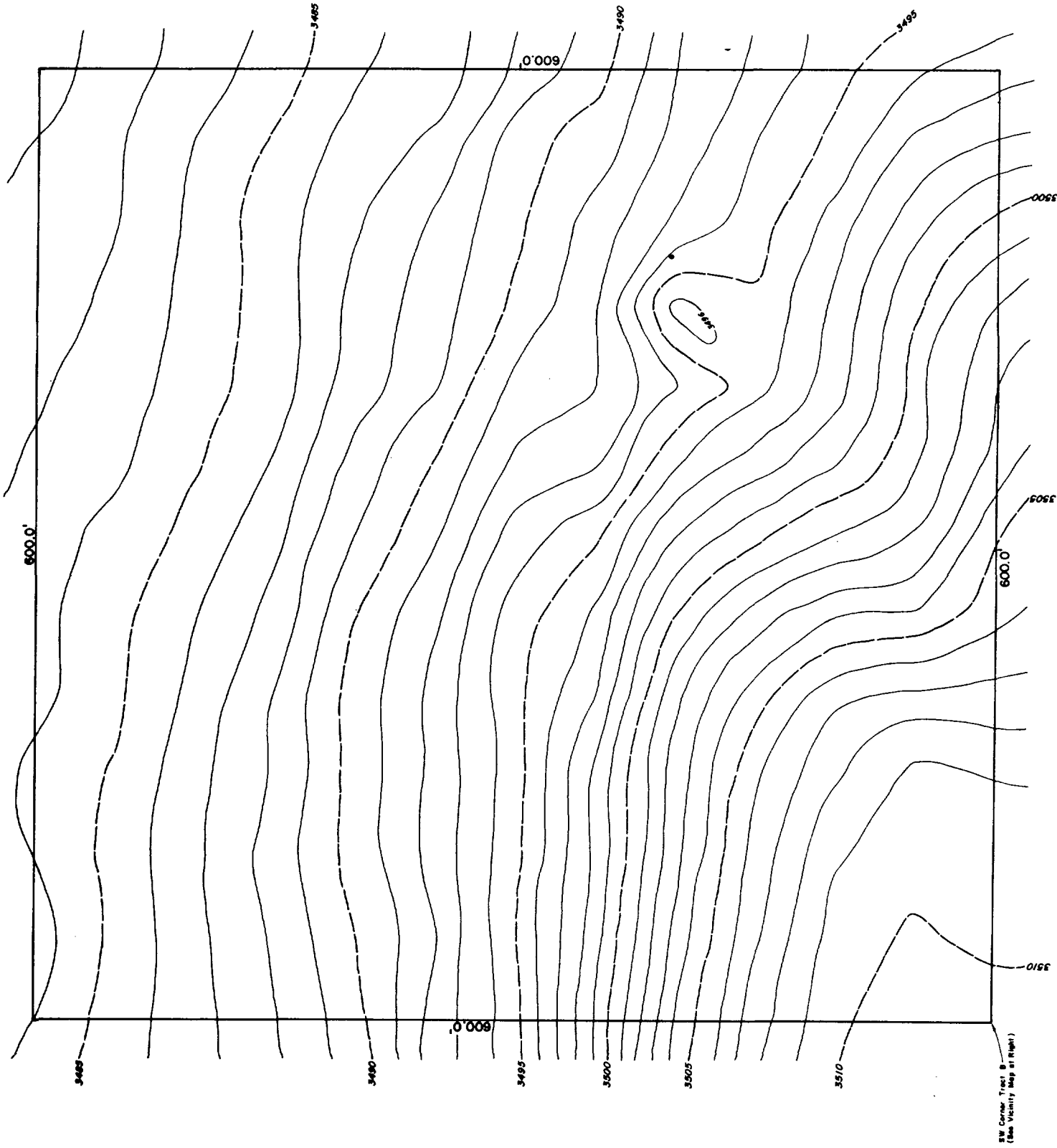
SAMPLE: SPRING DISCHARGE

LOCATION: APPROXIMATELY 1220' FNL, 1320' FEL
SECTION 16, TOWNSHIP 20 SOUTH, RANGE 32 EAST
LEA COUNTY, NEW MEXICO

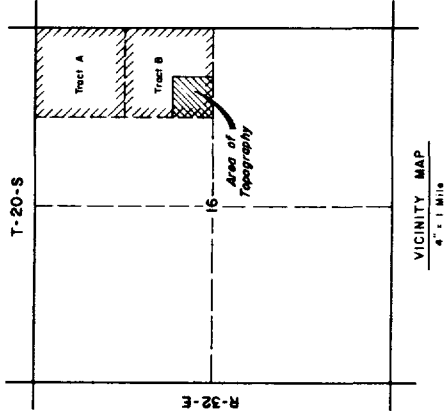
DATE: MARCH 27, 1986

SPECIFIC GRAVITY AT 60°F	1.035
pH	8.21
CALCIUM	801 MG/L
MAGNESIUM	1,633 MG/L
SODIUM	15,594 MG/L
BICARBONATE	170 MG/L
CARBONATE	30 MG/L
HYDROXIDE	0 MG/L
SULFATE	16,375 MG/L
CHLORIDES	18,000 MG/L
IRON	.3 MG/L
BARIUM	0 MG/L
MANGANESE	NOT RUN
TOTAL DISSOLVED SOLIDS	52,605 MG/L

52,605 mg/L
total dissolved solids



Scale: 1" = 40'
Contour Interval: 1 foot



I HEREBY CERTIFY THAT THIS PLAT
WAS MADE BY ME OR UNDER MY CLOSE
SUPERVISION, AND THAT THE SAME IS TRUE
AND CORRECT TO THE BEST OF MY KNOWL-
EDGE AND BELIEF.

JOHN W. WEST, N.M. P.E., License No. 876
TEXAS R.P.S. No. 1156

AGUA, INC.

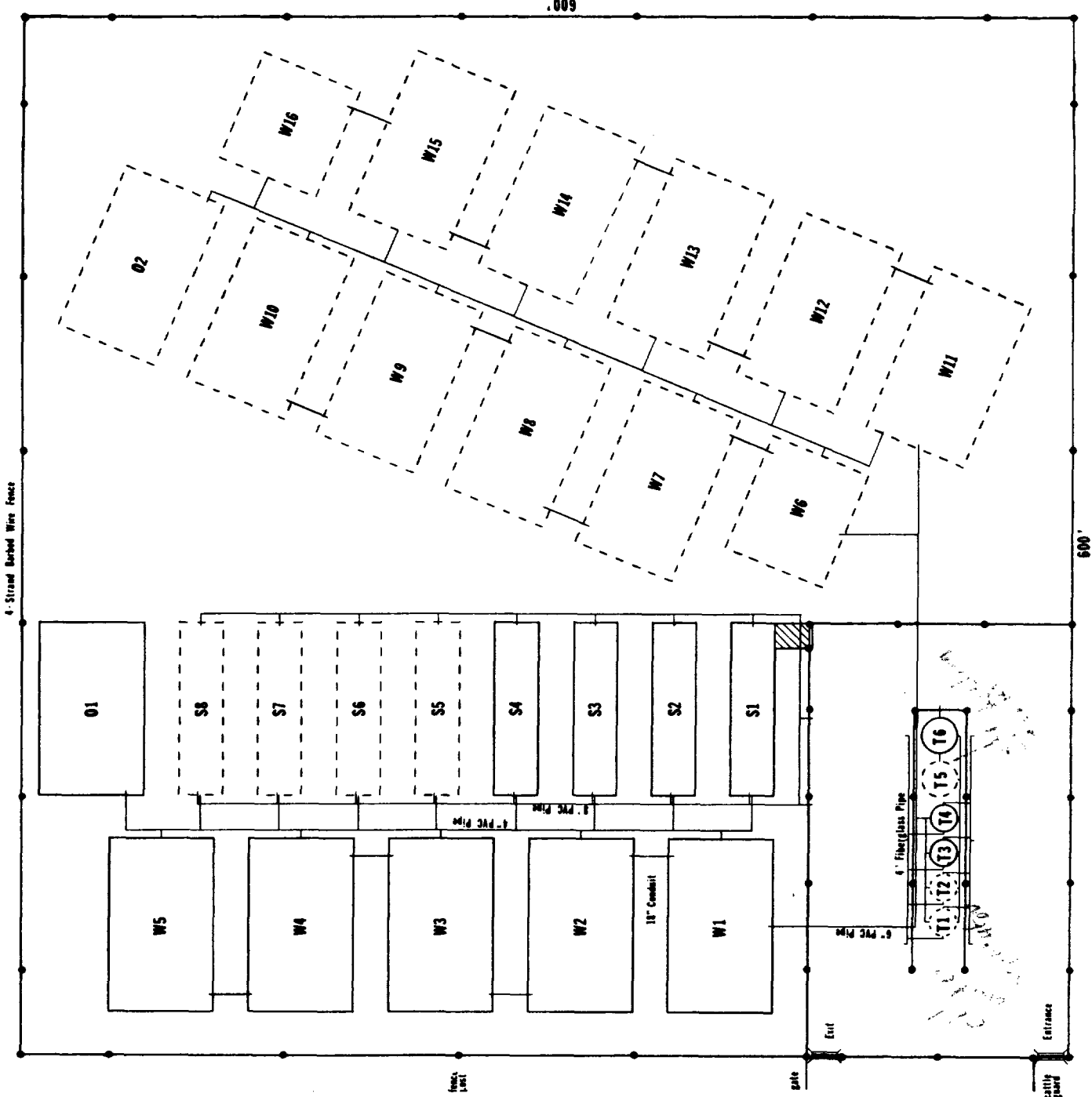
TOPOGRAPHY OF A 600' x 600' AREA OUT OF TRACT B,
BEING THE SE 1/4 NE 1/4 OF SECTION 16, T 20 S,
R 32 E, N.M.P.M., LEA COUNTY, NEW MEXICO.

JOHN WEST ENGINEERING CO.
CONSULTANTS

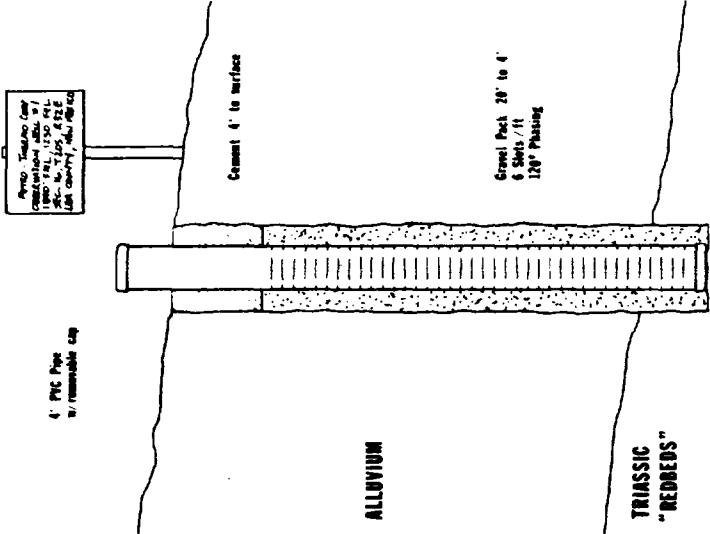
HOURS		NEW MEXICO	
Surveyed By	J. D. HARRIS	Drawn By	J. D. HARRIS
Checked By	J. D. HARRIS	Scale	10' = 1" (AS SHOWN)
Date	10/25/83	Sheet	1 OF 1
Project No.	10-118-83	Contract No.	10-118-83

W - WATER PIT
S - SOLIDS PIT
O - OVERFLOW PIT
T - TANK BATTERY

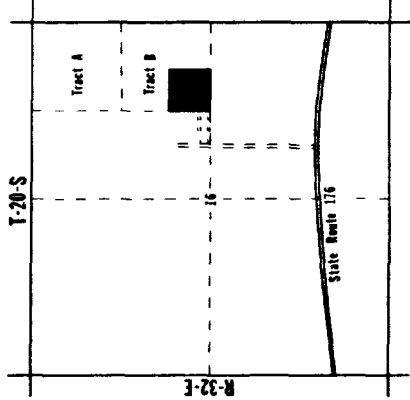
WELL NO. 1 WELL NO. 2
(See OBSERVATION WELL DIAGRAM)



PHASE 1 - solid lines
PHASE 2 - dashed lines



OBSERVATION WELL
DIAGRAM



VICINITY MAP
1\"/>



PLATA DISPOSAL DESIGN			
SCALE	1" = 40'	APPROVED BY	JDT
DATE	4-9-86	DESIGNED BY	
Section 16, Township 20 South, Range 32 East			
Lea County, New Mexico			

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APRIL 9, 1986

PLATA DISPOSAL PIT AND TANK CHART

<u>PIT OR TANK NUMBER</u>	<u>CAPACITY (BBLs)</u>	<u>LENGTH (FT)</u>	<u>WIDTH (FT)</u>	<u>DEPTH (FT)</u>	<u>BOTTOM ELEVATION (FT)</u>
W1	7480	100	60	10	3496
W2	6411	100	60	9	3490
W3	4274	100	60	7	3487
W4	4274	100	60	7	3484
W5	4274	100	60	7	3481
W6	5236	70	60	10	3492
W7	5343	100	60	8	3488
W8	4274	100	60	7	3486
W9	4274	100	60	7	3483
W10	4274	100	60	7	3481
W11	5343	100	60	8	3492
W12	5343	100	60	8	3488
W13	5343	100	60	8	3487
W14	4274	100	60	7	3483
W15	4274	100	60	7	3481
W16	2778	65	60	7	3479
	<u>77469</u>				
S1	3117	100	25	10	3495
S2	3117	100	25	10	3491
S3	2671	100	25	9	3489
S4	2226	100	25	8	3487
S5	2226	100	25	8	3485
S6	2226	100	25	8	3483
S7	2226	100	25	8	3481
S8	2226	100	25	8	3480
	<u>20035</u>				
O1	4274	100	60	7	3478
O2	4274	100	60	7	3477
	<u>8548</u>				
T1	750				3509
T2	750				3509
T3	750				3509
T4	750				3509
T5	1000				3509
T6	1000				3509
	<u>5000</u>				