

HIP - 14

**GENERAL
CORRESPONDENCE**

YEAR(S):

1993 - 1982



RECEIVED

SEP 22 1993

OIL CONSERVATION DIV.
SANTA FE

VIA OVERNIGHT MAIL

September 21, 1993

New Mexico Oil Conservation Division
Attention: Mr. Chris Eustice
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87504

Re: Request for Permit to Discharge Hydrostatic Test Water from Used Pipe at El Paso Natural Gas Company's (EPNG's) Belen Station, SE/4, SE/4, Section 25, T4N, R2E, Valencia County, New Mexico.

Dear Mr. Eustice:

EPNG is planning to hydrostatic test its No. 1300 and 1301 pipelines between its Belen and Laguna Stations. Attached is a map depicting the subject pipelines and the location of the discharge. EPNG is proposing to use its Belen Station lined pit for the entire discharge. EPNG will be hydrostatic testing its pipelines during the month of October through the first part of November. The information below is provided in fulfillment of NMOCD's "Guidelines for Hydrostatic Testing" for old pipelines.

- a) Map is attached showing the location of the pipelines to be tested;
- b) Description of the test: EPNG will be testing various lengths of pipe during the above mentioned period. Prior to filling the pipeline with water, EPNG will pig the segment of the pipeline. Any pigging liquids will be discharged into Belen Station's used oil tanks.
- c) Source of test water: Belen Station water wells. This water will be tested as described in item f) below.
- d) Point of discharge of the test water: Belen station lined pit.
- e) Method and location for collection of fluids: All discharges will be made into Belen Station's lined pit. Various lengths of pipe will be tested and all water will be discharged into the lined pit and reused from the lined pit for subsequent tests. A total of 2.9 million gallons are proposed to be utilized during the testing period.
- f) Monitoring program: Since the same water will be used throughout a 5 week period, EPNG is proposing to sample of the discharge water on two occasions. The first sample would be during the mid-October and the second sample would be at the end of the final hydrostatic test discharge into the lined pit. Samples of the discharge water will be analyzed for organic compounds and major anions/cations. The analytical data will be made available to NMOCD upon request.
- g) Depth to ground water: Depth to ground water exceeds 150 feet.
- h) Geological characteristics: Top soil is sandy. Subsurface soils are chiefly caliche mixed with clayey sediments.
- i) Plan for disposal of the test water and solids. The water will be allowed to evaporate and the remaining solids will be analyzed and characterized for appropriate disposal.

Mr. C. Eustice, NMOCD

09/21/93

Page 2

j) Identification of landowners at discharge: El Paso Natural Gas Company.

k) Written permission from the landowner: Not applicable.

If you have any questions or need a clarification on the above information, please do not hesitate to contact me at 505/831-7763. Your prompt review of this matter is appreciated. Thank you.

Sincerely yours,



Richard Duarte

Sr. Compliance Engineer

Environmental Compliance Engineering

attachment





3801 Atrisco Blvd. NW
Albuquerque, NM 87120

RECEIVED

OCT 12 1993

OIL CONSERVATION

Bureau of Land Management

VIA OVERNIGHT MAIL

October 8, 1993

New Mexico Oil Conservation Division
Attention: Mr. Chris Eustice
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87504

Re: Request for Permit to Discharge Hydrostatic Test Water from Used Pipe at S/2, of Section 3, T1S, R9E, Socorro County, New Mexico.

Dear Mr. Eustice:

As per our conversation last week, EPNG is planning to hydrostatic test its No. 1300 and 1301 pipelines between its Belen and Roswell Stations. Attached is a map depicting the subject pipelines and the location of the discharge. During our conversation last week, I mentioned to you that because of operational and market conditions EPNG would need a temporary location to discharge its hydrostatic test water from its 1300 and 1301 lines at Valve No. 20 (legal description shown above). EPNG is proposing to use its Belen Station lined pit for the final disposal of the hydrostatic discharge water for which a request for permit was submitted to you on September 21, 1993. In short, if EPNG would get approval to discharge at a lined pit near Valve No. 20, the same water would be reused at an opportune time to test the remaining pipeline and dispose of the entire hydrostatic test discharge at Belen Station. Therefore, the information below is provided in fulfillment of NMOCD's "Guidelines for Hydrostatic Testing" for the discharge at Valve No. 20.

- a) Map is attached showing the location of the pipelines to be tested;
- b) Description of the test: EPNG will be testing various lengths of pipe during the above mentioned period.
- c) Source of test water: Belen Station water wells. This water will be tested as described in item f) below.
- d) Point of discharge of the test water: Interim discharge: Valve No. 20, S/2, Sec. 3, T-1-S, R-9-E, Socorro County. Final Discharge: Belen station lined pit, SE/4, SE/4, Sec. 25, T-4-N, R-2-E, Valencia County, New Mexico.
- e) Method and location for collection of fluids: All discharges will be made into a lined pit. Various lengths of pipe will be tested and all water will be discharged into the lined pit and reused from the lined pit for subsequent tests. A total of 2.9 million gallons are proposed to be utilized during the testing period.
- f) Monitoring program: Since the same water will be used throughout a 5 week period, EPNG is proposing to sample of the discharge water on two occasions. The first sample would be during the mid-October and the second sample would be at the end of the final hydrostatic test discharge into the lined pit. Samples of the discharge water will be analyzed for organic compounds and major anions/cations. The analytical data will be made available to NMOCD upon request.
- g) Depth to ground water: Depth to ground water exceeds 150 feet.

Mr. C. Eustice, NMOCD

10/08/93

Page 2

h) Geological characteristics: Top soil is sandy. Subsurface soils are chiefly caliche mixed with clayey sediments.

i) Plan for disposal of the test water and solids. The water will be allowed to evaporate and the remaining solids will be analyzed and characterized for appropriate disposal.

j) Identification of landowners at discharge: Mr. Wayne Lindsey.

k) Written permission from the landowner: See attached letter.

If you have any questions or need a clarification on the above information, please do not hesitate to contact me at 505/831-7763. Your prompt review of this matter is appreciated. Thank you.

Sincerely yours,



Richard Duarte

Sr. Compliance Engineer

Environmental Compliance Engineering

attachment

September 28, 1993

Mr. Wayne Lindsey
Route 1
Claunch, NM 87011

RE: R/W 930326
Hydrostatic Test
San Juan Lines

Dear Mr. Lindsey:

This will confirm our telephone conversation of this date concerning a 200' X 200' dewatering pit in the S/2 of Section 3, T-1-S, R-9-E, Socorro County, New Mexico.

El Paso Natural Gas Company agrees to the following stipulations:

1. Notify Wayne Lindsey at 505/849-1096 prior to entry.
2. Pit to be lined to prevent contamination to area.
3. Pit to be cleaned up and disturbed area restored as nearly as possible to its original condition.
4. Damages to be settled after clean up is complete.
5. All disturbed areas to be reseeded with a mixture recommended by the local ASC Office.

I appreciate your cooperation, and if you have any questions, do not hesitate to call me at 915/541-3047.

Sincerely yours,

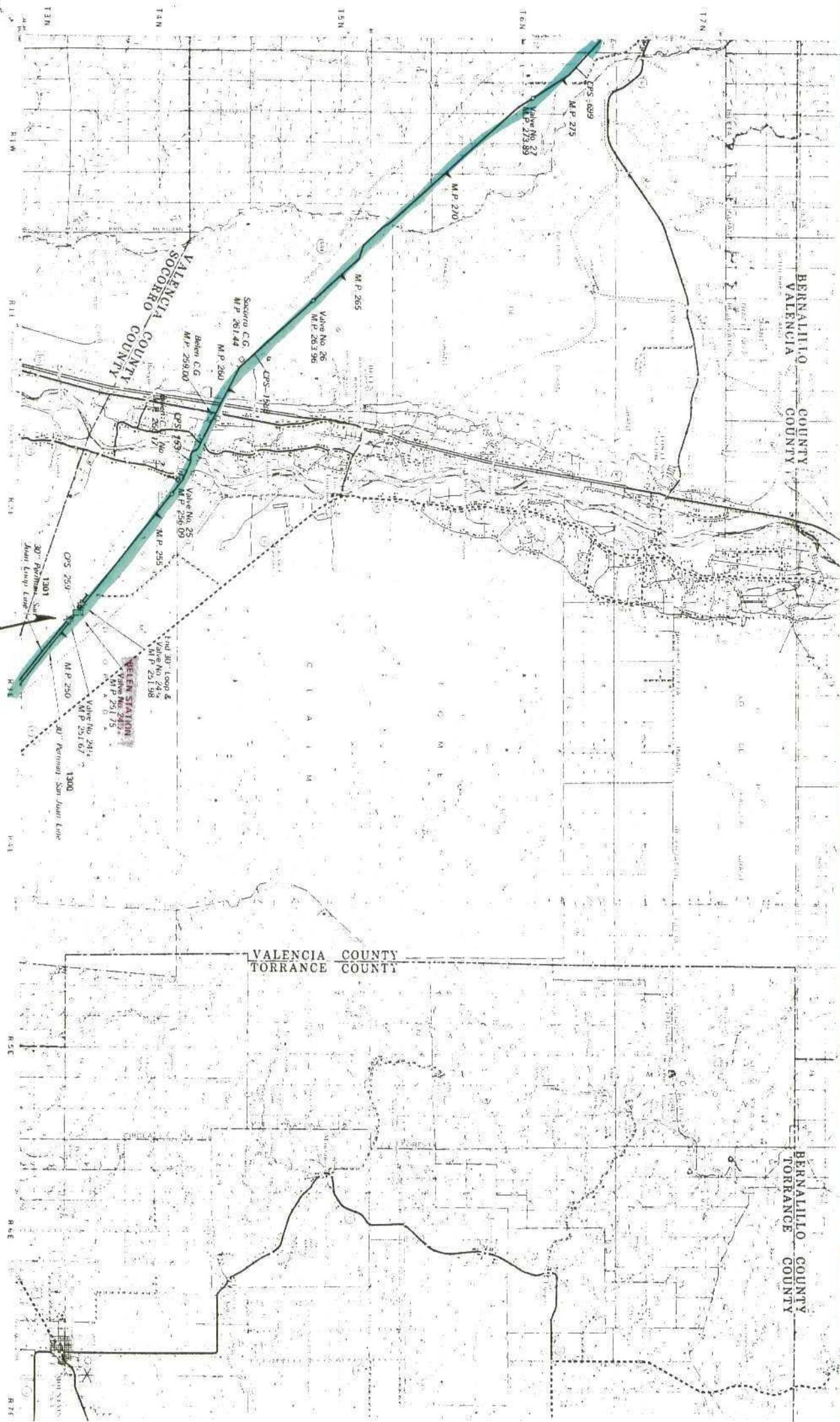
...GLEN SIGNED BY
GLEN E. ORR

Glen E. Orr
Manager
Purchase Division
Right of Way Department

GEO/mgd

cc: Tom Shofner
Richard Duarte

MATCH WITH SHEET B-7



Final Discharge Site

- lines to be tested

*Prepared By
Engineering Drafting*

MATCH WITH C-4

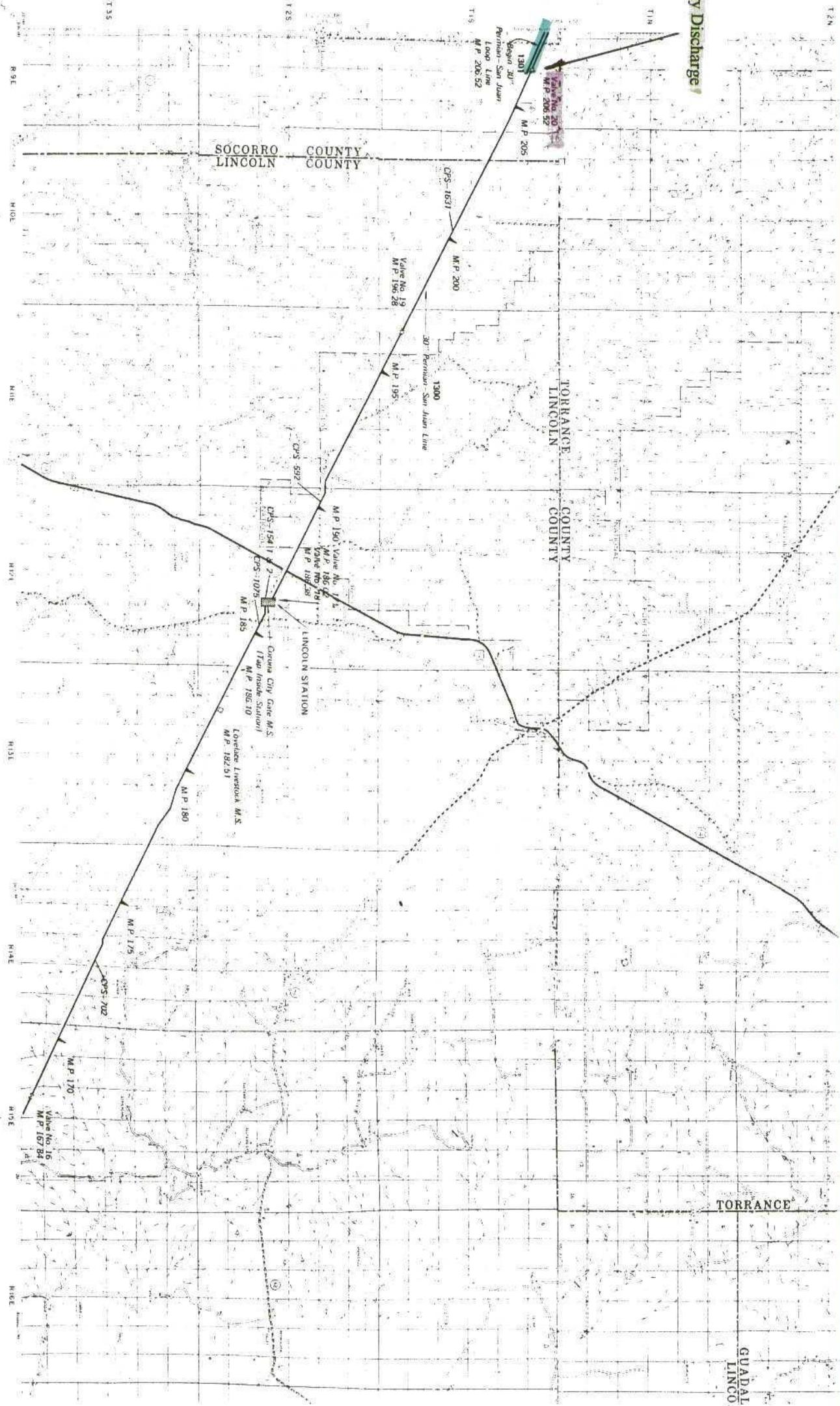
SOCORRO COUNTY
TORRANCE COUNTY

TORRANCE
COUNTY
SOCORRO

COUNTY
SOCORRO

Temporary Discharge Site

MATCH WITH SHEET C-6



OIL CONSERVATION DIVISION
RECEIVED



'90 JUL 13 AM 8 54

3801 ATRISCO, N. W.
ALBUQUERQUE, NEW MEXICO 87120
PHONE: 505-831-7700

July 10, 1990

Mr. David Boyer
New Mexico Oil Conservation Division
State Land Office
310 Old Santa Fe Trail #206
Santa Fe, New Mexico 87504

RE: Discharge Permits - Hydrostatic Test Water Discharge Cibola County

Dear Mr. Boyer:

El Paso Natural Gas Company wishes to advise you of location changes for two test water disposal sites previously sent to you in my letter of May 10, 1990. The new sites are as follows:

- The disposal site for test section No. 1, 22,700 feet of the Plains to San Juan Crossover, lines 1300 and 1301, will be located on EPNG fee property, NE/4 NE/4, Sec 31, T-11-N, R-9-W, Cibola County, New Mexico.

- The disposal site for test section No. 2, 3,710 feet of the Plains to San Juan Crossover, line 1300, will be located on private land, SW/4 SW/4, Sec. 19, T-11-N, R-9-W, Cibola County, New Mexico. A copy of the agreement with the land owner is attached for your information.

Should you have any questions, or wish to discuss this further, please give me a call at 505-831-7759.

Sincerely,

W. David Hall, P.E.
Senior Engineer

A G R E E M E N T

THIS AGREEMENT made and entered into this 21 day of May, 1990 by and between EL PASO NATURAL GAS COMPANY, P. O. Box 1492, El Paso, Texas 79948 and EDDIE GONZALES AND JEFFREY CHACHERE, as co-owners of:

A certain tract of land in SW/4 SW/4 Sec. 19, Township 11 North, Range 9 West, Cibola County, New Mexico,

and

EL PASO NATURAL GAS COMPANY desires to temporarily use a certain 100 foot by 100 foot portion of said land for the construction of a water disposal pond during a construction period of approximately July 1 thru August 31, 1990, after which time and use El Paso Natural Gas Company agrees to recontour and restore said parcel of land to an acceptable condition to said owners.

El Paso Natural Gas Company agrees to hold harmless and defend the above named owners against any claim or damages caused by their use of said land to any party and to take all necessary precautions to protect the general public from any harm or danger whatsoever.

Dated this 21 day of May, 1990.

SS# - 525-78-2221


Eddie Gonzales

SS# 546-70-1003


Jeffrey Chachere

APPROVED AND ACCEPTED by W. H. Ford, Contract Right of Way Agent for El Paso Natural Gas Company.


(W. H. Ford)



CC: DMW 11 AM 8 57

3801 ATRISCO, N. W.
ALBUQUERQUE, NEW MEXICO 87120
PHONE: 505-831-7700

May 10, 1990

Mr. David Boyer
New Mexico Oil Conservation Division
State Land Office
310 Old Santa Fe Trail #206
Santa Fe, New Mexico 87504

RE: Request for Discharge Permits - Hydrostatic Test Water Discharge

Dear Mr. Boyer:

El Paso Natural Gas Company respectfully requests discharge permits for hydrostatic test water discharge anticipated this summer. The pertinent information is included on the attached sheets. Some details are not known at this time but will be provided as soon as possible.

Additionally, a test consisting of new pipe will be conducted that falls under the blanket permit conditions. This section is located in the SE 1/4 , Sec. 3, T-11-N, R-10-W, Cibola County, New Mexico. The total volume is approximately 57,500 gallons of fresh water supply that will be discharged into an unlined pit.

Should you have any questions, or wish to discuss this further, please give me a call at 505-831-7759.

Sincerely,

A handwritten signature in black ink that reads "W. David Hall".

W. David Hall, P.E.
Senior Engineer

attachments

NEW MEXICO

HYDROSTATIC TEST INFORMATION FORM

Request Date 4-26-90
 Person Requesting E.K. MONTEITH
 Title _____

A. FACILITY DESCRIPTION

1. Facility Name PLAINS TO SAN JUAN CROSSOVER, LINES 1300 & 1301
2. Facility Owner EL PASO NATURAL GAS COMPANY
3. Beginning Of Test Section:
 Quarter Section SW 1/4
 Section 10
 Township T-10-N
 Range R-9-W
 County CIBOLA
 Nearest City GRANTS
 State NEW MEXICO
4. End Of Test Section:
 Quarter Section NW 1/4
 Section 32
 Township T-11-N
 Range R-9-W
 County CIBOLA
 Nearest City GRANTS
 State NEW MEXICO
4. Diameter Of Line 30" Total Length 22,700 Feet To Be Tested
5. Length Of Longest Test Section 11,350 (Ft)
6. Number of Test Sections TWO (ONE EACH LINE)
7. Check Type Of Line:
 Used Pipe New Pipe
8. Check Pipeline Use:
 Gathering Transmission
9. Will The Line Be Pigged Prior To Test?
 Yes No
 If yes, how will these fluids and/or solids be disposed? UNLINED PIT
10. Will the line be washed prior to test?
 Yes No
 If yes, how will these fluids and/or solids be disposed? UNLINED PIT

B. TEST DESCRIPTION

1. Water Source And Location NE 1/4 SEC. 5, T-10-N, R-9-W CITY OF GRANTS FIRE HYDRANT; TERESA ST.,
2. Test Start Date APPROX. JULY 20, 1990

B. TEST DESCRIPTION (Continued)3. Discharge Volume APPROX. 401,500 GALLONS (EACH LINE)

4. Check Discharge Path:

Lined Pond Mils Thickness LinerUnlined Pond Pond Size 150 (Ft) By 150 (Ft)Other 3 FT. DEEP5. Location Of Discharge: Quarter Section SW 1/4Section 4Township T-10-NRange R-9-WCounty CIBOLANearest City GRANTSState NEW MEXICO

6. Describe the geologic characteristics of the subsurface at the proposed discharge site:

7. Depth to groundwater at discharge location: LESS THAN 100'

8. Quality of groundwater at discharge location:

9. Depth to groundwater at collection/retention site: LESS THAN 100'10. Proposed method of disposal of fluids and solids after test completion including closure of any pits: RESTORE SURFACE TO ORIGINAL CONDITION AFTER EVAPORATION OF ALL LIQUID.

11. Landowner at discharge and collection/retention site?

12. Landowner adjacent to discharge and collection/retention site?

13. Is written permission from the landowner of the collection/retention site attached?

Yes No If no, please explain: CORRESPONDENCE IS CURRENTLY UNDERWAY WITH NECESSARY PARTIES.

NEW MEXICO

HYDROSTATIC TEST INFORMATION FORM

Request Date 4-26-90
 Person Requesting E. K. Monteith
 Title _____

A. FACILITY DESCRIPTION

1. Facility Name PLAINS TO SAN JUAN CROSSOVER, LINE 1300
2. Facility Owner EL PASO NATURAL GAS COMPANY
3. Beginning Of Test Section:
 Quarter Section SW 1/4
 Section 19
 Township T-11-N
 Range R-9-W
 County CIBOLA
 Nearest City GRANTS
 State NEW MEXICO
4. Diameter Of Line 30" Total Length 3,710 Feet To Be Tested
5. Length Of Longest Test Section 3,710 (Ft)
6. Number of Test Sections ONE
7. Check Type Of Line:
 Used Pipe New Pipe
8. Check Pipeline Use:
 Gathering Transmission
9. Will The Line Be Pigged Prior To Test?
 Yes No
 If yes, how will these fluids and/or solids be disposed?
UNLINED PIT
10. Will the line be washed prior to test?
 Yes No
 If yes, how will these fluids and/or solids be disposed?
UNLINED PIT

B. TEST DESCRIPTION

1. Water Source And Location CITY OF GRANTS FIRE HYDRANT; SAWMILL ST., SE 1/4, SEC. 24, T-11-N, R-10-W
2. Test Start Date AUGUST 1, 1990

B. TEST DESCRIPTION (Continued)3. Discharge Volume APPROX. 131,500 GALLONS

4. Check Discharge Path:

Lined Pond Mils Thickness LinerUnlined Pond Pond Size 50 (Ft) By 90 (Ft)
Other 4 FT. DEEP5. Location Of Discharge: Quarter Section SW 1/4
Section 19
Township T-11-N
Range R-9-W
County CIBOLA
Nearest City GRANTS
State NEW MEXICO

6. Describe the geologic characteristics of the subsurface at the proposed discharge site:

7. Depth to groundwater at discharge location: LESS THAN 100'

8. Quality of groundwater at discharge location:

9. Depth to groundwater at collection/retention site: LESS THAN 100'10. Proposed method of disposal of fluids and solids after test completion including closure of any pits: RESTORE SURFACE CONDITIONS TO ORIGINAL AFTER EVAPORATION OF ALL LIQUID.

11. Landowner at discharge and collection/retention site?

EPNG FEE PROPERTY

12. Landowner adjacent to discharge and collection/retention site?

13. Is written permission from the landowner of the collection/retention site attached?

Yes No If no, please explain: EPNG FEE PROPERTY

HYDROSTATIC TEST INFORMATION FORM

Request Date 4-26-90
 Person Requesting E.K. MONTEITH
 Title _____

A. FACILITY DESCRIPTION

1. Facility Name PLAINS TO SAN JUAN CROSSOVER ; LINE 1300
2. Facility Owner EL PASO NATURAL GAS COMPANY
3. Beginning Of Test Section:
 Quarter Section SW 1/4
 Section 18
 Township T-13-N
 Range R-11-W
 County MCKINLEY
 Nearest City THOREAU
 State NEW MEXICO
4. Diameter Of Line 30" Total Length 58,300 Feet To Be Tested
5. Length Of Longest Test Section 58,300 (Ft)
6. Number of Test Sections ONE
7. Check Type Of Line:
 Used Pipe New Pipe
8. Check Pipeline Use:
 Gathering Transmission
9. Will The Line Be Pigged Prior To Test?
 Yes No
 If yes, how will these fluids and/or solids be disposed?
LINED POND
10. Will the line be washed prior to test?
 Yes No
 If yes, how will these fluids and/or solids be disposed?
LINED POND

B. TEST DESCRIPTION

1. Water Source And Location EPNG BLUEWATER STATION, T-14-N, R-13-W
2. Test Start Date AUGUST 10, 1990

SW 1/4, SEC. 33,

B. TEST DESCRIPTION (Continued)3. Discharge Volume APPROX. 2,065,000 GALLONS

4. Check Discharge Path:

Lined Pond 15 Mils Thickness LinerUnlined Pond Pond Size 250 (Ft) By 250 (Ft)Other 5 FT. DEEP5. Location Of Discharge: Quarter Section NW 1/4Section 4Township T-13-NRange R-13-WCounty MCKINLEYNearest City THOREAUState NEW MEXICO

6. Describe the geologic characteristics of the subsurface at the proposed discharge site:

7. Depth to groundwater at discharge location: SEASONAL VARIATION,
CAN BE LESS THAN 100'

8. Quality of groundwater at discharge location:

9. Depth to groundwater at collection/retention site: SOME AS ABOVE10. Proposed method of disposal of fluids and solids after test completion including closure of any pits: Liquid will be
ALLOWED to EVAPORATE. Disposal of Solids & LINER to be decided
SUBSEQUENT to ANALYSIS.11. Landowner at discharge and collection/retention site? EPNG -
BLUEWATER STATION

12. Landowner adjacent to discharge and collection/retention site?

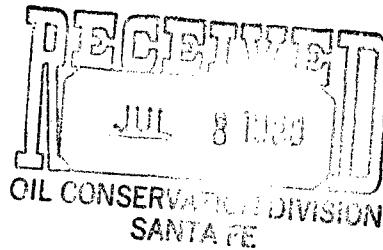
13. Is written permission from the landowner of the collection/retention site attached?

Yes No If no, please explain: EPNG PROPERTY - BLUEWATER STATION

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

July 6, 1988



Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Subject: Lab Results from the Disposal of Hydrotest Water from Used Pipe at
El Paso Natural Gas Co.'s Mile Post 264 of 30" Line 1300 in T5N, R1E
of Valencia County, New Mexico

Dear Mr. Anderson:

In fulfillment of condition 4 in Mr. LeMay's February 24, 1988, letter authorizing the discharge of 300,000 gallons of hydrotest water, I have enclosed the lab results of samples taken before, during and after the discharge.

The sample labeled "Field Blank" was taken from the Upper Sabinal Riverside Drain as the test section of the pipe between mile post 258 and 259 was being filled. The samples, labeled "Begin," "Mdpt," and "Endpt," were taken near mile post 259 on June 12, 1988, at the beginning, midpoint, and end of the discharge. The discharge at mile 259 did not go onto the ground but was directed into a five mile section of the same pipeline between mile post 260 and 264. Mile post 264 was chosen as the discharge site because the depth to groundwater was approximately 400' as opposed to 15' at mile post 259. A temporary unlined pond was constructed at mile post 264 and the sample labeled "Pond" was taken from the edge of this pond.

An inspection of the results revealed that the discharge water at mile post 259 exceeded some of the drinking water standards. Particularly notable was the total naphthalenes. A possible explanation for the high level of naphthalenes found in the pond sample (at mile post 264) is that the section of pipe, between mile post 260 and 264, which was used to transport the test water to the pond, contained additional naphthalenes. Further inspection of the results shows that the drinking water standards were not met in some of the samples for barium, lead, and iron.

Mr. Roger C. Anderson

July 6, 1988

Page 2

I have also included some photos which might be helpful. If you have any questions, please feel free to call me at 915/541-5341.

Sincerely yours,

Loren E. Gearhart

Loren E. Gearhart
Sr. Env. Engineer
Environmental and
Safety Affairs Dept.

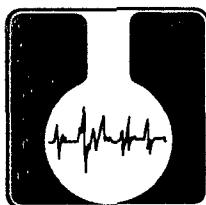
LEG:cds

Enclosures

bcc: J. C. Bridges
K. T. Bowden
K. E. Beasley
File: 24300 Waste Discharge (Hydrostatic Tests)

El Paso Natural Gas 30" Line 1300





ASSAIGAI
ANALYTICAL
LABORATORIES



TO: El Paso Natural Gas
ATTN: Loren Gearhart
PO Box 1492
El Paso, TX 79978

DATE: June 30, 1988
WORK ORDER NO: 2778

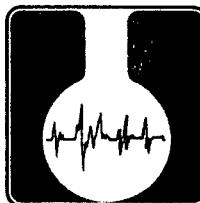
SAMPLE ID: Begin Hydrotest, 30" Line 1300, MP259.

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
As	0.068 mg/l	0.020 mg/l
Ba	1.28 mg/l	0.50 mg/l
Cd	<0.01 mg/l	0.005 mg/l
Cr	<0.05 mg/l	0.025 mg/l
Pb	0.070 mg/l	0.005 mg/l
Hg	<0.002 mg/l	0.001 mg/l
Se	<0.01 mg/l	0.005 mg/l
Ag	<0.05 mg/l	0.01 mg/l
Ca	86.10 mg/l	0.25 mg/l
P	0.33 mg/l	0.01 mg/l
Mg	13.18 mg/l	0.01 mg/l
Na	88.25 mg/l	0.02 mg/l
Cl	27.8 mg/l	1.0 mg/l
Duplicate	26.8 mg/l	1.0 mg/l
SO 4	136.9 mg/l	1.0 mg/l
TDS	432 mg/l	1 mg/l
Fe	2.60 mg/l	0.10 mg/l
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Xylenes	<1 ug/l	1 ug/l
Total Naphthalenes and Monomethyl Naphthalenes	11 ug/l	1 ug/l

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Balwant Chauhan, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas
ATTN: Loren Gearhart
PO Box 1492
El Paso, TX 79978

DATE: June 30, 1988
WORK ORDER NO: 2778

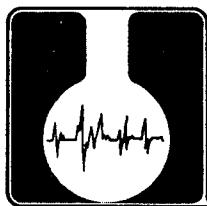
SAMPLE ID: Mdpt. Hydrotest, 30" Line 1300, MP259.

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
As	<0.05 mg/l	0.020 mg/l
Ba	<1.0 mg/l	0.50 mg/l
Cd	<0.01 mg/l	0.005 mg/l
Cr	<0.05 mg/l	0.025 mg/l
Pb	<0.05 mg/l	0.005 mg/l
Hg	<0.002 mg/l	0.001 mg/l
Se	<0.01 mg/l	0.005 mg/l
Ag	<0.05 mg/l	0.01 mg/l
Ca	59.50 mg/l	0.25 mg/l
P	0.42 mg/l	0.01 mg/l
Mg	10.80 mg/l	0.01 mg/l
Na	70.0 mg/l	0.02 mg/l
C1	26.8 mg/l	1.0 mg/l
SO 4	141.3 mg/l	1.0 mg/l
TDS	440 mg/l	1 mg/l
Fe	1.99 mg/l	0.10 mg/l
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Xylenes	<1 ug/l	1 ug/l
Total Naphthalenes and Monomethyl Naphthalenes	6.3 ug/l	1 ug/l

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Balwant Chauhan, Ph.D.
Laboratory Director



ASSAIGAI ANALYTICAL LABORATORIES

TO: El Paso Natural Gas
ATTN: Loren Gearhart
PO Box 1492
El Paso, TX 79978

DATE: June 30, 1988
WORK ORDER NO: 2778

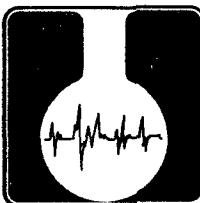
SAMPLE ID: Endpt. Hydrotest, 30" Line 1300, MP259.

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
As	<0.05 mg/l	0.020 mg/l
Ba	<1.0 mg/l	0.50 mg/l
Cd	<0.01 mg/l	0.005 mg/l
Cr	<0.05 mg/l	0.025 mg/l
Pb	<0.05 mg/l	0.005 mg/l
Hg	<0.002 mg/l	0.001 mg/l
Se	<0.01 mg/l	0.005 mg/l
Ag	<0.05 mg/l	0.01 mg/l
Ca	60.40 mg/l	0.25 mg/l
P	0.55 mg/l	0.01 mg/l
Duplicate	0.41 mg/l	0.01 mg/l
Mg	9.85 mg/l	0.01 mg/l
Na	67.0 mg/l	0.02 mg/l
Cl	26.8 mg/l	1.0 mg/l
SO 4	128.3 mg/l	1.0 mg/l
TDS	430 mg/l	1 mg/l
Fe	1.51 mg/l	0.10 mg/l
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Xylenes	<1 ug/l	1 ug/l
Total Naphthalenes and Monomethyl Naphthalenes	5.1 ug/l	1 ug/l

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Balwant Chauhan, Ph.D.
Laboratory Director



ASSAIGAI ANALYTICAL LABORATORIES

TO: El Paso Natural Gas
ATTN: Loren Gearhart
PO Box 1492
El Paso, TX 79978

DATE: June 30, 1988
WORK ORDER NO: 2778

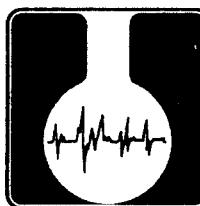
SAMPLE ID: Pond

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
As	0.272 mg/l	0.020 mg/l
Ba	3.12 mg/l	0.50 mg/l
Cd	<0.01 mg/l	0.005 mg/l
Cr	<0.05 mg/l	0.025 mg/l
Pb	0.080 mg/l	0.005 mg/l
Hg	<0.002 mg/l	0.001 mg/l
Se	<0.01 mg/l	0.005 mg/l
Ag	<0.05 mg/l	0.01 mg/l
Ca	137.80 mg/l	0.25 mg/l
P	0.73 mg/l	0.01 mg/l
Mg	17.60 mg/l	0.01 mg/l
Na	94.50 mg/l	0.02 mg/l
Cl	34.7 mg/l	1.0 mg/l
SO ₄	141.3 mg/l	1.0 mg/l
TDS	466 mg/l	1 mg/l
Fe	6.88 mg/l	0.10 mg/l
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Xylenes	<1 ug/l	1 ug/l
Total Naphthalenes and Monomethyl Naphthalenes	38 ug/l	1 ug/l

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Balwant Chauhan, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES



TO: El Paso Natural Gas
ATTN: Loren Gearhart
PO Box 1492
El Paso, TX 79978

DATE: June 30, 1988
WORK ORDER NO: 2778

SAMPLE ID: Field Blank (from the Upper Sabinal Riverside Drain)

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
As	<0.05 mg/l	0.020 mg/l
Ba	<1.0 mg/l	0.50 mg/l
Cd	<0.01 mg/l	0.005 mg/l
Cr	<0.05 mg/l	0.025 mg/l
Pb	<0.05 mg/l	0.005 mg/l
Hg	<0.002 mg/l	0.001 mg/l
Se	<0.01 mg/l	0.005 mg/l
Ag	<0.05 mg/l	0.01 mg/l
Ca	66.90 mg/l	0.25 mg/l
P	0.59 mg/l	0.01 mg/l
Mg	9.98 mg/l	0.01 mg/l
Na	71.75 mg/l	0.02 mg/l
Cl	26.8 mg/l	1.0 mg/l
SO ₄	143.5 mg/l	1.0 mg/l
TDS	452 mg/l	1 mg/l
Fe	0.455 mg/l	0.10 mg/l
Benzene	*	1 ug/l
Toluene	*	1 ug/l
Xylenes	*	1 ug/l
Total Naphthalenes and Monomethyl Naphthalenes	<1 ug/l	1 ug/l

* Not able to perform analysis due to improper sample container.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Balwant Chauhan, Ph.D.
Laboratory Director

El Paso
Natural Gas Company

April 15, 1988

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

P-2-B
R-2-B

Mr. William J. LeMay, Director
Energy, Minerals and Natural Resources Dept.
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Subject: Disposal of Hydrotest Water from 30" Line 1300
Near El Paso Natural Gas Co.'s Mile Post 264

Dear Mr. LeMay:

In accordance with your letter request dated February 24, 1988, I am enclosing the landowner's permission to construct and use a pit to accommodate the water from the hydrotest scheduled for June 11, 1988.

Sincerely,

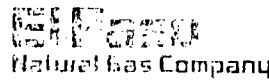
Loren E. Gearhart

Loren E. Gearhart, P.E.
Sr. Environmental Engineer
Environmental & Safety Affairs

ka

Enclosure

cc: Roger Anderson - NMOCD



P. O. BOX 14142
EL PASO, TEXAS 79978
PHONE 915 541 2690

March 1, 1988

Mr. Bob Collins
703 E. River Road
Belen, New Mexico 87002

Re: R/W 880185 - Hydrostatic Test; Line from
Plain Station to San Juan Line, M.P. 256-264;
Valencia County, New Mexico

Dear Mr. Collins:

Pursuant to agreements made between El Paso and Elizabeth Watson, record owner of Lots 458, 467 and 470, Ranch Rio Grande Subdivision (Unsurveyed Lands, Township 5 North, Range 1 East, Valencia County), permission is hereby granted to El Paso Natural Gas Company for use of the Lots for the purpose of constructing a disposal pit site to accommodate hydrostatic test water.

Disposal operations will be restricted to the pit site and the area restored to the condition that existed prior to our use.

All State of New Mexico environmental rules and regulations will be strictly adhered to by El Paso.

If you are in agreement with the above, please indicate your acceptance by signing in the space provided and return two copies for our records.

Your cooperation is most appreciated.

Very truly yours,

A handwritten signature in black ink, appearing to read "Bruce Meyerson".

Bruce Meyerson
Senior Right of Way Negotiator
Right of Way Department

BM/yf

AGREED TO AND ACCEPTED this 3d day of MARCH, 1988.

By Elizabeth Watson
For: Elizabeth Watson

El Paso
Natural Gas Company

February 17, 1988

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915/541-2600

FER 22 1988

CONSERVATION DIVISION

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Subject: Contingency Plan for the Failure of the Proposed
Hydrotest of El Paso Natural Gas Company's 30"
Line 1300 at M.P. 259 in Valencia County

Dear Mr. Anderson:

Failure during the proposed hydrotest has the potential of contaminating groundwater or a natural waterway. The test covers approximately 8,400 feet of pipe between Points A and C on the enclosed EPNG Dwg. No. 1300.0-52, Rev. J. The elevation at Point A is 4,836 and slopes to 4,780 at the Bosque Drain (Point B). From Point B to Point C the slope is essentially flat.

Prior to any testing, EPNG plans to scrub and flush the entire test section with 30,000 gallons of water. This water will be removed from the test section prior to the filling operation for the hydrotest. It will be disposed of at one of the disposal sites proposed in my letter to you dated February 1, 1988. This cleaning should remove virtually all contaminates from the test section and thereby mitigate groundwater contamination in the event of a pipe failure during the hydrotest.

The greatest potential for an environmental impact is to both the Bosque Drain (Point B) and the Sabinal Riverside Drain (Point C). EPNG proposes to be prepared to dam up these drains both upstream and downstream until the water can be pumped out and hauled to the approved disposal site. In all other areas between Points A and C, EPNG proposes to be prepared to throw up berms to contain the water to the smallest area possible and then transfer the water to the approved disposal site. If soil is contaminated by the hydrotest water, the soil will be removed and replaced.

EPNG trusts that this plan will be acceptable to the NMOCD and that your written approval will be forthcoming soon.

Thank you.

Sincerely,

L. E. Gearhart

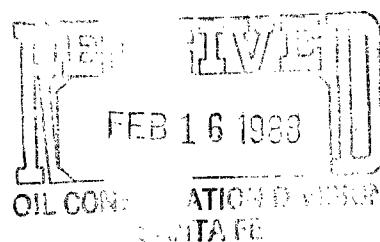
L. E. Gearhart, P.E.
Sr. Environmental Engineer
Environmental and Safety Affairs

ka

Enclosure



February 1, 1988



P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Subject: Disposal of Hydrotest Water from 8,500' of 30" Line
1300 at Mile Post 259 in Valencia County

Dear Mr. Anderson:

Per our phone conversation yesterday, I am enclosing several maps showing two sites El Paso Natural Gas (EPNG) is proposing for the disposal of 300,000 gallons of hydrotest water from used pipe. Site #1 is located near Mile Post 261 on EPNG Dwg. No. 1300.0-52. If Site #1 is used, the water would be pumped via a temporary pipe from the test site to an unlined pit. Site #2 is located near Mile Post 264 on EPNG Dwg. No. 1300.0-53. If Site #2 is used, the water would be transported through the existing 30" gas line to Valve #26 where it would be discharged into an unlined pit. When all of the water has evaporated the disposal site would be restored to the original grade. We will contact the landowners for their approvals once the disposal site is chosen. Please let us know your concurrence with either or both of the sites proposed.

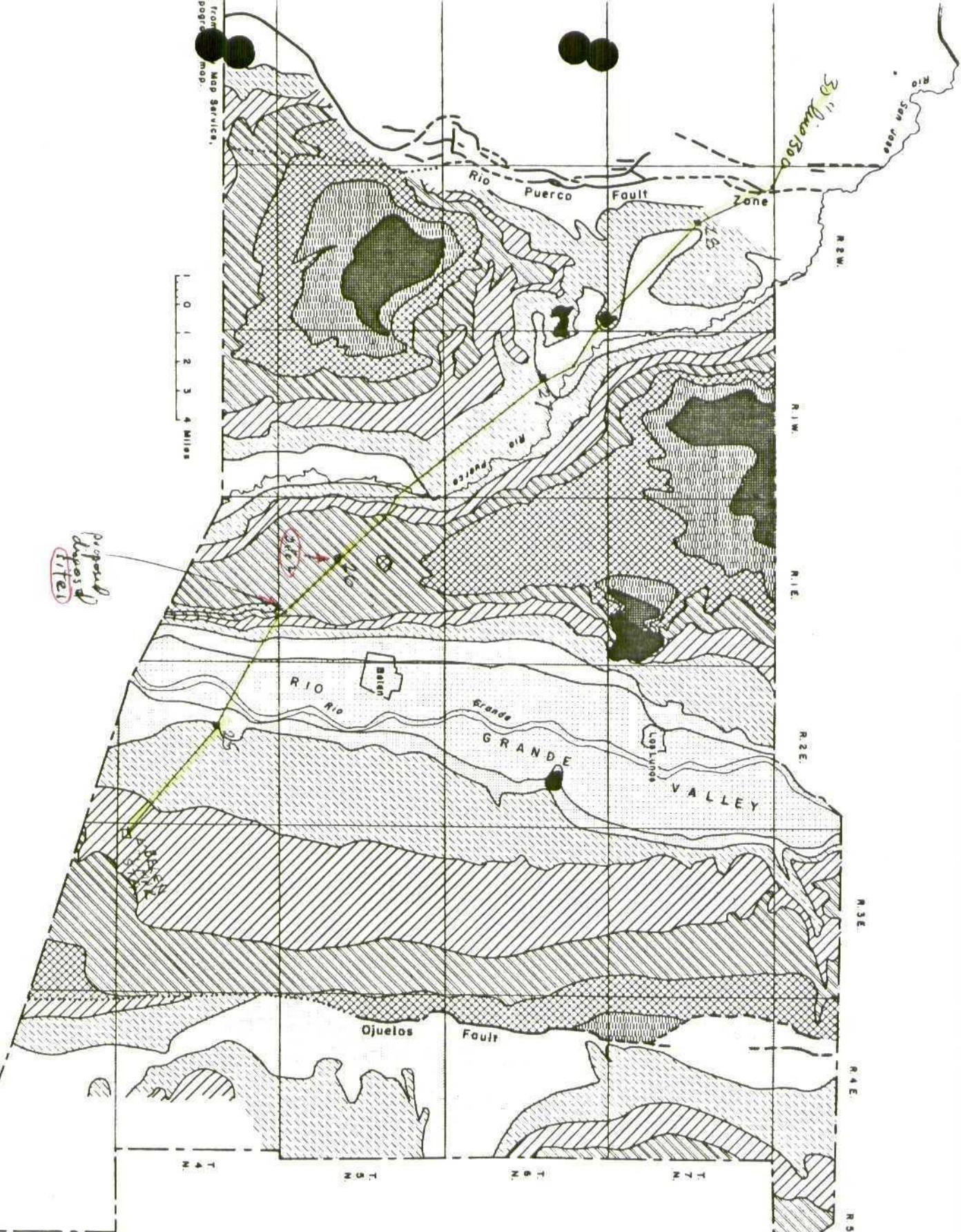
EPNG is working on developing a contingency plan in the event the hydrotest fails. If you have any questions, please feel free to call me at 915/541-5341.

Very truly yours,

L. E. Gearhart, P.E.
Sr. Environmental Engineer

ka

Enclosures



Compiled by
F. B. Titus, Jr., 1937

Volcanic plug
or center

Fault

Dashed where approx.
dotted where conc.

More than 600

500-600

400-500

300-400

200-300

100-200

50-100

Less than 15

EXPLANATION
Depth to water, in f

Roger Anderson NMOCO
505/827-5800

12
34

8

6"- B.C. Ringer Well TSN RIE Sec 28.114 - 4pm

5198' elev. [393.1' to water] ← Roger, I think this
well is located at
the windmill shown
≈ 2000 ft south of
"Valve 26".
P.O. #7255
Santa Fe, 87504. 2088

1162230°
31° 52' 30"

GROUND-WATER REPORT 7

Geology and Ground-Water Conditions in Eastern Valencia County, New Mexico

by FRANK B. TITUS, JR.

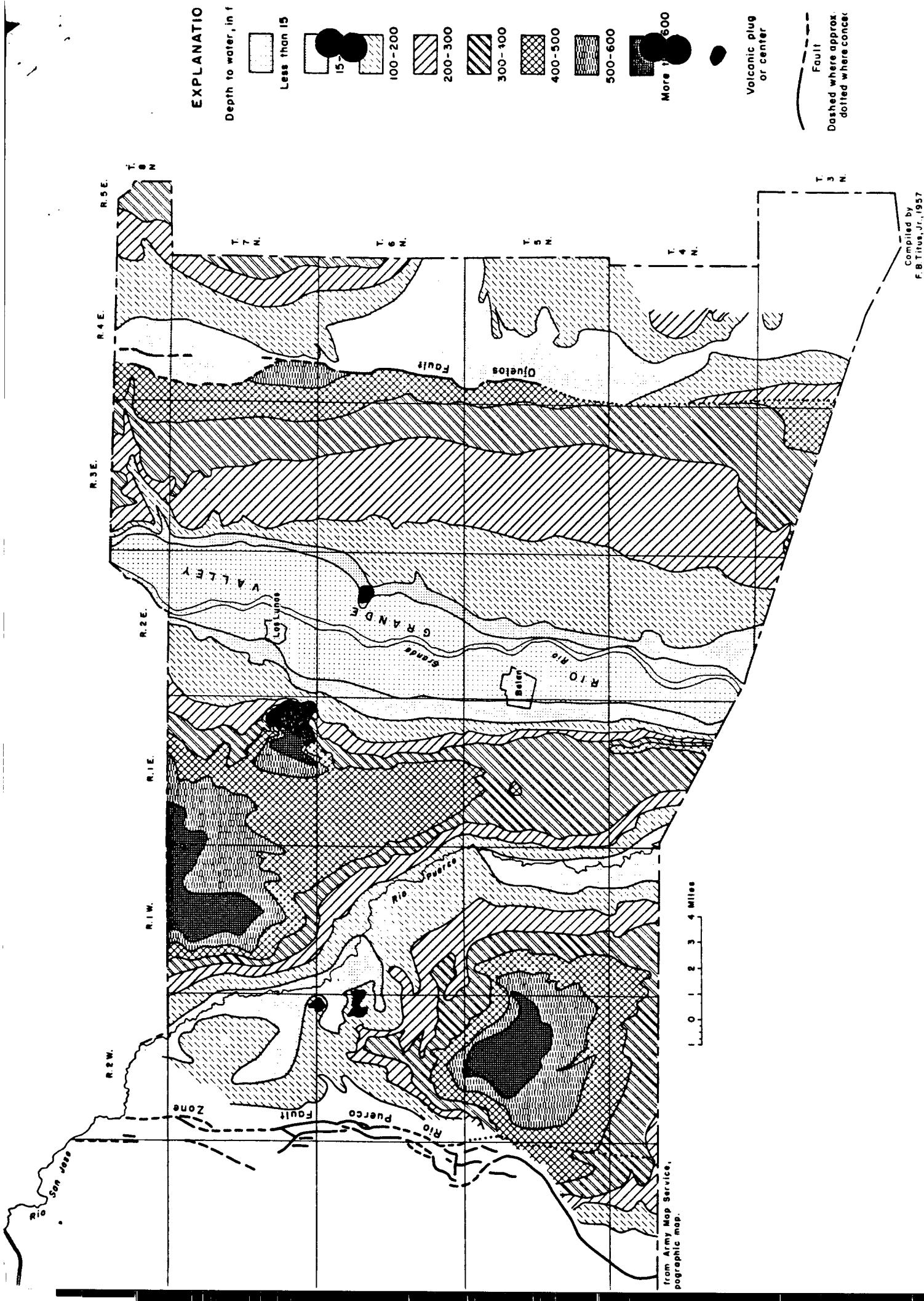
UNITED STATES GEOLOGICAL SURVEY

Prepared in co-operation with the
New Mexico Institute of Mining and Technology,
State Bureau of Mines and Mineral Resources,
and the New Mexico State Engineer

1963

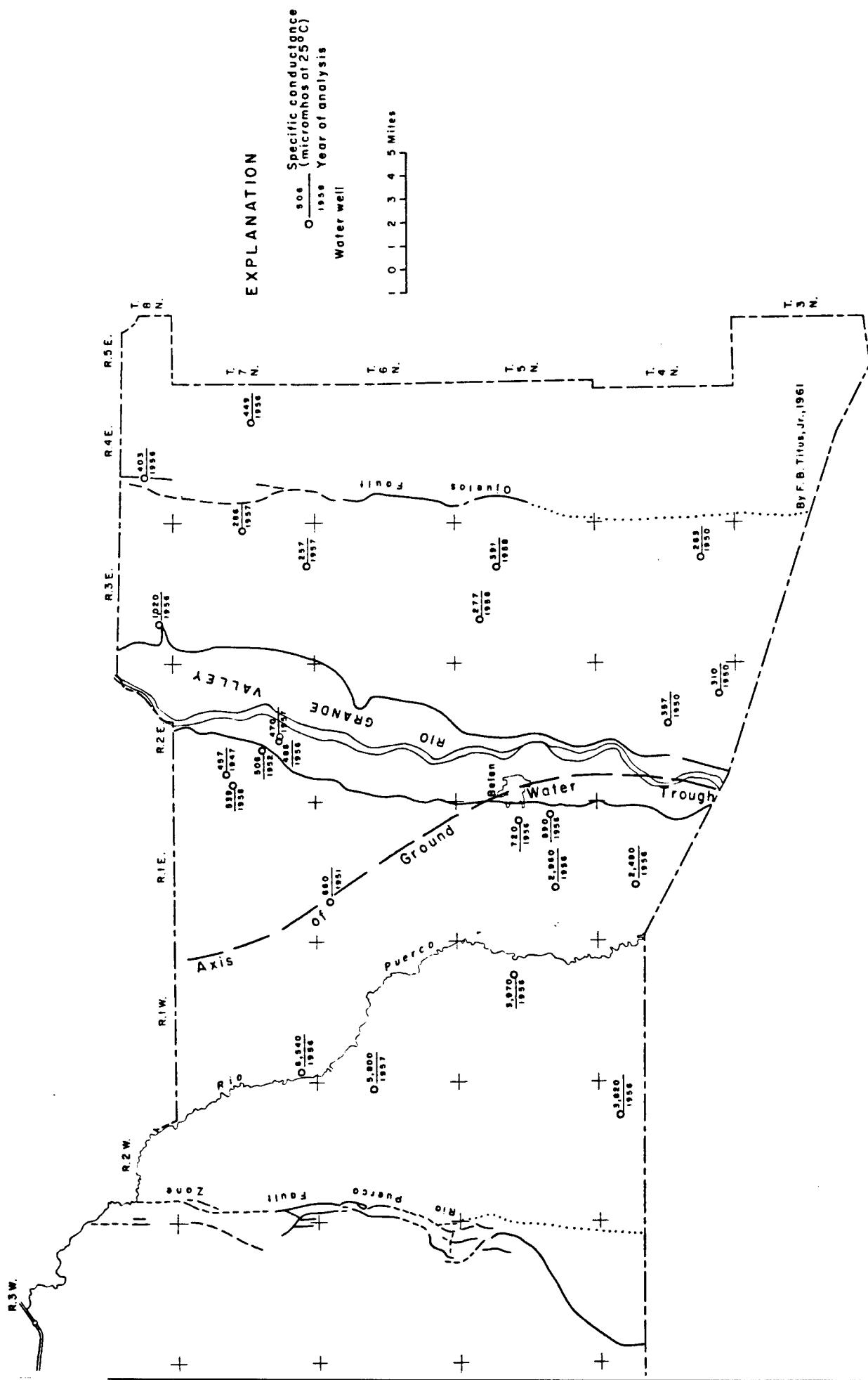
DEPTH-TO-WATER MAP FOR THE RIO GRANDE GRAVEN IN VALENCIA COUNTY, N. MEX.

Plate 2



SPECIFIC CONDUCTANCE OF GROUND WATER FROM THE SANTA FE GROUP IN EASTERN VALENCIA COUNTY, N. MEX.

Plate 6





MATERIAL DETAIL

LEGEND

WELD-O-LET	WELD CAP	CATHODIC PROTECTION SYSTEM & NO.
WELD SADDLE	WELD REDUCER	CPS
WELD YEE	FLANGE	
SPLIT TEE	BLOW-OFF & SIZE	LONG ANCHOR & ANCHOR FLANGE
WELD ELL	PLUG VALVE : SIZE & RATING	METER RUN
VERT & SIZE	DATE VALVE : SIZE & RATING	
DNIF	BALL VALVE : SIZE & RATING	
BOLT-ON RIVER WEIGHT-	CHECK VALVE : SIZE & RATING	
SET-ON RIVER WEIGHT-	REGULATOR : SIZE & RATING	
ELECTROLYSIS TEST LEAD	SOLID VALVE DENOTES FULL OPENING	

MATERIAL DATA

PIPE	COATING	REFERENCE DRAWINGS	REVISIONS	GEODETIC POSITIONS	WORK ORDER	ENGINEERING RECORD
30" O.D. X 335" W.T. PIPE - X52 - F.W. - A.D. SMITH	PRIMER - PITTSBURGH STANDARD ENAMEL - PITTSBURGH STANDARD	1000.2-6	NO. DATE BY	DATE NO.	DRAWN BY	
30" O.D. X 375" W.T. PIPE - X52 - F.W. - A.D. SMITH	PRIMER - PITTSBURGH STANDARD ENAMEL - PITTSBURGH STANDARD	1000.2-7	10-5-76 AD Redrawn Per 1974 Photographs	1000.5-4	Aero-Graphics	
30" O.D. X 375" W.T. PIPE	WRAP - FIBERGLASS	1000.2-8	10-5-76 AD Redrawn Per 1974 Photographs	1000.4		
30" O.D. X 500" W.T. PIPE	PRIMER - PITTSBURGH STANDARD ENAMEL - PITTSBURGH STANDARD	1000.2-9	10-5-76 AD Redrawn Per 1974 Photographs	1000.5-5		
34" O.D. X 375" W.T. CASING	PRIMER - BARRETT'S MILLWRAP ENAMEL - BARRETT'S MILLWRAP WRAP - FIBERGLASS	1000.3-10	10-5-76 AD Belen Microwave Site (Diagrammatic Plan) (Laguna District)	1000.5-6		
	PRIMER - BARRETT'S MILLWRAP ENAMEL - BARRETT'S MILLWRAP WRAP - FIBERGLASS	1000.3-11	10-5-76 AD Belen Microwave Site (Diagrammatic Plan) (Laguna District)	1000.5-7		
	PRIMER - BARRETT'S MILLWRAP ENAMEL - BARRETT'S MILLWRAP WRAP - FIBERGLASS	1000.3-12	10-5-76 AD Belen Microwave Site (Diagrammatic Plan) (Laguna District)	1000.5-8		
	PRIMER - BARRETT'S MILLWRAP ENAMEL - BARRETT'S MILLWRAP WRAP - FIBERGLASS	1000.3-13	10-5-76 AD Belen Microwave Site (Diagrammatic Plan) (Laguna District)	1000.5-9		

REVISIONS

NO.	DATE	BY	DESCRIPTION
1000.2-6	10-5-76	AD	Redrawn Per 1974 Photographs
1000.2-7	10-5-76	AD	Redrawn Per 1974 Photographs
1000.2-8	10-5-76	AD	Redrawn Per 1974 Photographs
1000.2-9	10-5-76	AD	Redrawn Per 1974 Photographs
1000.2-10	10-5-76	AD	Belen Microwave Site (Diagrammatic Plan) (Laguna District)
1000.2-11	10-5-76	AD	Belen Microwave Site (Diagrammatic Plan) (Laguna District)
1000.2-12	10-5-76	AD	Belen Microwave Site (Diagrammatic Plan) (Laguna District)
1000.2-13	10-5-76	AD	Belen Microwave Site (Diagrammatic Plan) (Laguna District)

GEODETIC POSITIONS

MON.	COORDINATE
1000.5-4	1000.5-5
1000.5-6	1000.5-7
1000.5-8	1000.5-9

WORK ORDER

DATE	NO.	DRAWN BY
1000.5-4	1000.5	Aero-Graphics
1000.5-6	1000.4	
1000.5-8	5-1865	

ENGINEERING RECORD

DATE	NO.	DRAWN BY
1000.5-4	1000.5	Aero-Graphics
1000.5-6	1000.4	
1000.5-8	5-1865	

LINE FROM PLAINS STATION TO SAN JUAN LINE

M.P. 255+4,633.5' TO M.P. 261+308.8'
TWS. 4-N B 5-N, RANGE 2-E B 1-E
VALENCIA COUNTY, NEW MEXICO

DWG. NO. 1300.0-52

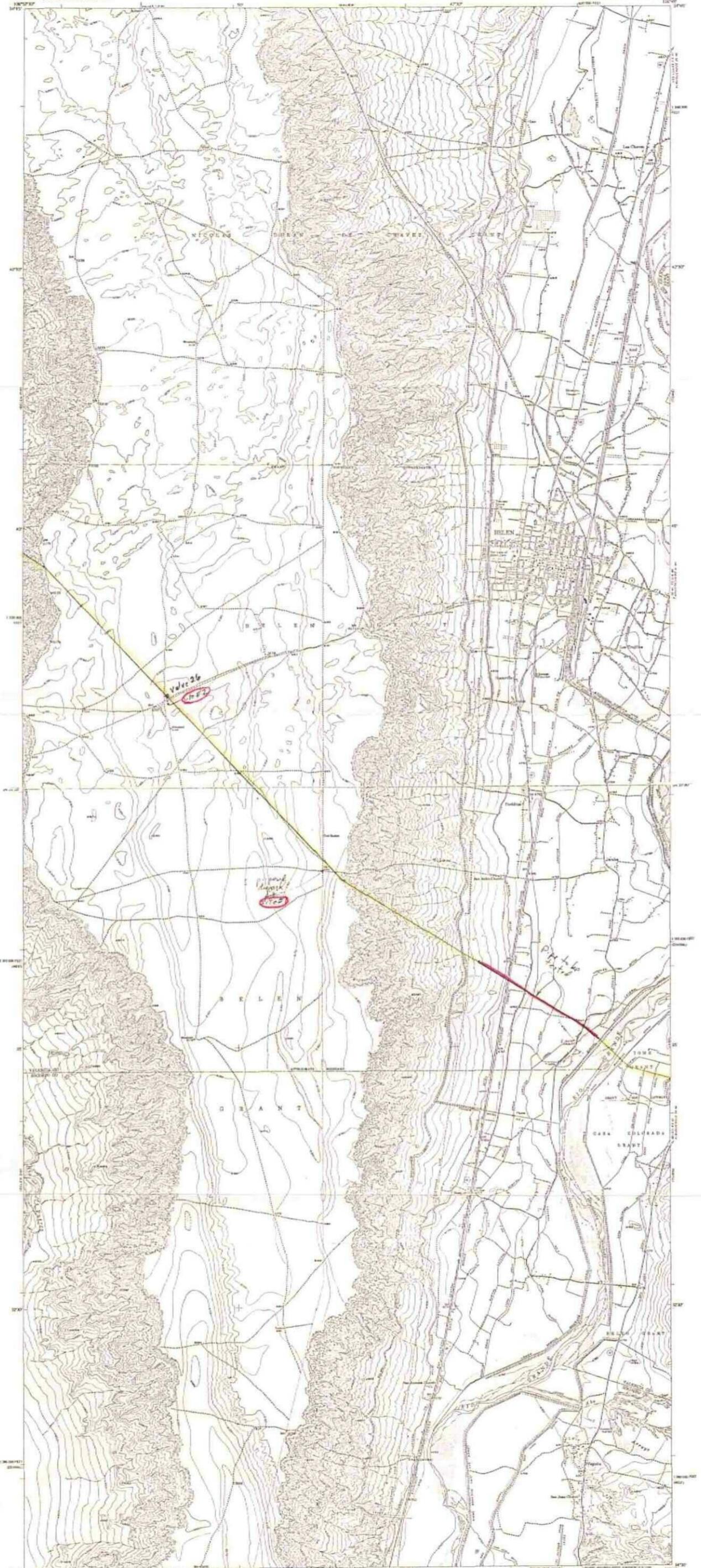
eEl Paso Natural Gas Company
ENGINEERING DRAFTING DIVISION

SCALE IN FEET

REV. J

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BELEN QUADRANGLE
NEW MEXICO-VALENCIA CO.
U.S. WHITE SERIES TOPOGRAPHIC
1:250,000 SCALE



Prepared, edited, and published by the Geological Survey
Dated by 1930 and 1942
Colors and drainage in part compiled from aerial photograph
1941. Topography by available sources 1942
Polygons generalized 1942 North American datum
100,000 scale based on New Mexico coordinate system
Vertical and west axes

Boundaries of Town, State, and County Defense Grid
adjusted to the Grid and the Survey of State Grid
adjusted to the National Control because of inaccuracy, date



SCALE 1:250,000

1 MILE 1.6 KILOMETERS 1.6 MI 1.6 KM

1000 FEET 300 METERS 300 FT 300 M

CONTOUR INTERVAL 10 FEET

1000 FEET 300 METERS

ROAD CLASSIFICATION

Highway — All-Purpose — Highways
Secondary — Secondary roads

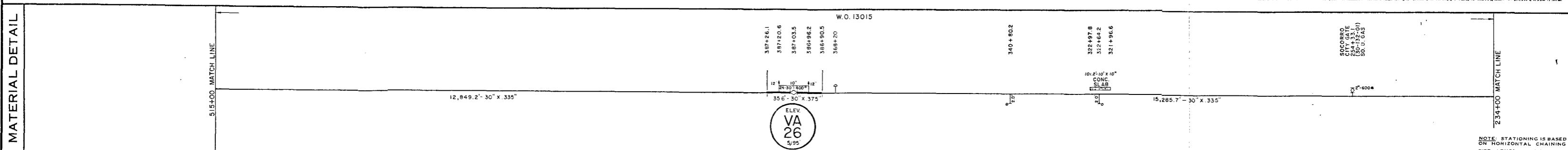
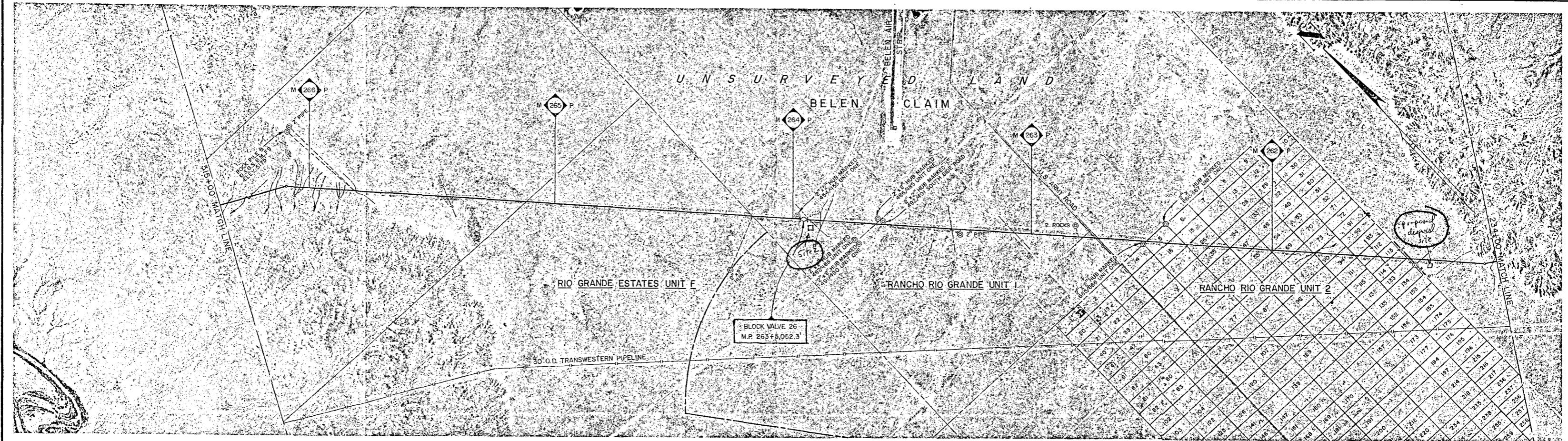
Local — Local roads

U.S. Roads — State Roads

State Roads

Local Roads

ALIGNMENT	RODS OWNERSHIP	S. A. MCLEOD	CAMPBELL FARMING CORPORATION	CAMPBELL FARMING CORPORATION	EDUARDO SANCHEZ



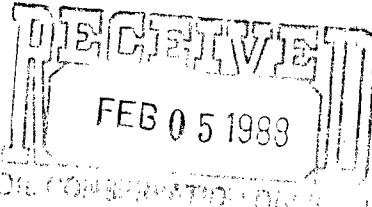
LEGEND		MATERIAL DATA	REFERENCE DRAWINGS	REVISIONS	U.S. ARMY RD.	GEODETIC POSITIONS	WORK ORDER	ENGINEERING RECORD
WELD-LETT WELD SADDLE WELD TEE WELD ELL WELD VENT & SIZE Drip BOLT-ON RIVER WEIGHT ELECTROLYSIS TEST LEAD	WELD CAP WELD REDUCER FLANGES CATHODIC PROTECTION STATION & NO. COIL, ANCHOR & ANCHOR FLANGE BLOW-OFF & SIZE PLUG VALVE - SIZE & RATING GATE VALVE - SIZE & RATING BALL VALVE - SIZE & RATING CHECK VALVE - SIZE & RATING REGULATOR - SIZE & RATING	PIPE COATING PRIMER-BARRETT'S MILLWRAP ENAMEL-BARRETT'S MILLWRAP WRAP-FIBERGLASS ASSEMBLY DIAGNOSTIC PLATE EQUATION MAP MISC. PHOTO REVISED REDRAWN PER 1976 PHOTOGRAPHY REDRAWN PER 1978 PHOTOGRAPHY REDRAWN PER 1981 PHOTOGRAPHY MISC. REVISIONS	DRAWN BY: Aero-Graphics TRACED BY: CHECKED BY: Aero-Graphics APPROVED: DATE: 6-23-67 PHOTO DATE: 7-21-81 PHOTO CHECK: SCALE IN FEET: 0-3000	DWG. NO. 1300.0-53				

EiPaso
Natural Gas Company
PIPELINE SERVICES DIVISION

LINE FROM PLAINS STATION TO SAN JUAN LINE
M.P. 261+308.8' TO M.P. 266+2,008.8'
TWS. 5-N, RANGE I-E
VALENCIA COUNTY, NEW MEXICO

El Paso
Natural Gas Company

February 1, 1988



P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

Mr. Roger C. Anderson
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Subject: Disposal of Hydrotest Water from Used Pipe
near El Paso Natural Gas Co.'s Belen Compressor
Station - Valencia County

Dear Mr. Anderson:

El Paso Natural Gas Company is planning to hydrotest 8500' of 30" used pipe sometime in May of this year. We are requesting your guidance on how to dispose of this water in an environmentally safe and economic manner.

Per our phone conversation today, I am enclosing the lab results showing the contaminant concentrations from two previous hydrotests. The samples from the Alamogordo test, which you and I observed, were taken from pipe that had been cleaned with soapy water prior to the hydrotest. The sample numbers and description are as follows:

S86-0058 - Source water
S86-0062 - Begin dewater
S86-0063 - Midpoint dewater
S86-0064 - End of dewater

The second test consisted of testing a 26" pipe and then using the water from the 26" pipe to hydrotest the 30" pipe. Each pipe was approximately 17 miles long and was dry pigged prior to the hydrotest. The sample numbers and description are as follows:

S86-0041 - Source water to 26" pipe
S86-0042 - Begin dewater 26" pipe
S86-0043 - Midpoint dewater 26" pipe
S86-0044 - End of dewater 26" pipe

S86-0023 - Source water transferred
from 26" pipe to 30" pipe
S86-0024 - Begin dewater 30" pipe
S86-0025 - Midpoint dewater 30" pipe
S86-0026 - End of dewater 30" pipe
S86-0027 - Pond water from 30" pipe

Mr. Roger Anderson
February 1, 1988
Page Two

Please feel free to call me at 915/541-5341 if you have any questions.

Very truly yours,



L. E. Gearhart, P.E.
Sr. Environmental Engineer

ka



Analytical **Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

PNA AND PHENOLS

Almogordo Hydrotest

Source Water

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER
METHOD: 8310, HPLC
PROJECT: WATER SAMPLES
UNITS: ug/l

SAMPLE I.D.: S86-0058
DATE REC'D BY LAB: 09/15/86
DATE EXTRACTED: 09/19/86
DATE ANALYZED: 10/01/86
ANALYST: SD

	DETECTION LIMIT	RESULT
NAPHTHALENE	5	<5
ACENAPHTHYLENE	5	<5
ACENAPHTHENE	5	<5
FLUORENE	1	<1
PHENANTHRENE	1	<1
ANTHRACENE	1	<1
FLUORANTHENE	1	<1
PYRENE	1	<1
BENZO(a)ANTHRACENE	1	<1
CHRYSENE	1	<1
BENZO(b)FLUORANTHENE	1	<1
BENZO(k)FLUORANTHENE	1	<1
BENZO(a)PYRENE	1	<1
DIBENZO(a,h)ANTHRACENE ...	5	<5
BENZO(g,h,i)PERYLENE	1	<1
INDENO(1,2,3-cd)PYRENE ..	1	<1

COMMENTS:



Analytical **Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

METHOD 601 & 602

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER
PROJECT: WATER SAMPLES
UNITS: ug/l

SAMPLE I.D.: S86-0058
DATE REC'D BY LAB: 09/15/86
DATE ANALYZED: 09/19/86
ANALYST: MGB

<0.02 CHLOROMETHANE
<0.06 BROMOMETHANE
N/D DICHLORODIFLUOROMETHANE
<0.05 VINYL CHLORIDE
<0.1 CHLOROETHANE
104 METHYLENE CHLORIDE
N/D TRICHLOROFUOROMETHANE
<0.07 1,1-DICHLOROETHENE
<0.05 1,1-DICHLOROETHANE
<0.09 TRANS-1,2-DICHLOROETHENE
17.0 CHLOROFORM
<0.07 1,2-DICHLOROETHANE
<0.03 1,1,1-TRICHLOROETHANE
<0.08 CARBON TETRACHLORIDE
4.1 BROMODICHLOROMETHANE
<0.03 1,2-DICHLOROPROPANE
<0.11 TRANS-1,3-DICHLOROPROPENE
<0.06 TRICHLOROETHENE
<0.07 DIBROMOCHLOROMETHANE
<0.03 1,1,2-TRICHLOROETHANE
<0.07 CIS-1,3-DICHLOROPROPENE
<0.03 2-CHLOROETHYL VINYL ETHER
<0.09 BROMOFORM
<0.03 1,1,2,2-TETRACHLOROETHANE
<0.03 TETRACHLOROETHENE
<0.16 CHLORBENZENE
<0.4 1,3-DICHLOROBENZENE
<0.4 1,2-DICHLOROBENZENE
<0.6 1,4-DICHLOROBENZENE
<0.2 BENZENE
<0.1 ETHYLBENZENE
<0.4 TOLUENE
<1.0 M-XYLENES
<1.0 O,P-XYLENES

COMMENTS: MDL 10 TIMES NORMAL DUE TO MATRIX.



Analytical**Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

CLIENT: EL PASO NATURAL GAS CO.
PROJECT: WATER SAMPLES
UNITS: mg/l

SAMPLE
S86-0058

ALUMINUM (Al).....	<0.21
BORON (B).....	0.8
COBALT (Co).....	<0.02
IRON (Fe).....	0.38
MANGANESE (Mn).....	0.03
MOLYBDENUM (Mo).....	<0.02
NICKEL (Ni).....	<0.01
ZINC (Zn).....	0.03



Analytical **Technologies**, Inc.

2113 S 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

6" Line 2068

PNA AND PHENOLS Almogordo Hydrotect
Begin dewater - Used pipe

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER
METHOD: 8310, HPLC
PROJECT: WATER SAMPLES
UNITS: ug/l

SAMPLE I.D.: S86-0062
DATE REC'D BY LAB: 09/15/86
DATE EXTRACTED: 09/19/86
DATE ANALYZED: 10/01/86
ANALYST: SD

	DETECTION LIMIT	RESULT
NAPHTHALENE	5	<5
ACENAPHTHYLENE	5	<5
ACENAPHTHENE	5	<5
FLUORENE	1	<1
PHENANTHRENE	1	<1
ANTHRACENE	1	<1
FLUORANTHENE	1	<1
PYRENE	1	<1
BENZO(a)ANTHRACENE	1	<1
CHRYSENE	1	<1
BENZO(b)FLUORANTHENE	1	<1
BENZO(k)FLUORANTHENE	1	<1
BENZO(a)PYRENE	1	<1
DIBENZO(a,h)ANTHRACENE ...	5	<5
BENZO(g,h,i)PERYLENE	1	<1
INDENO(1,2,3-cd)PYRENE ..	1	<1

COMMENTS:



Analytical **Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

METHOD 601 & 602

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER

SAMPLE I.D.: S86-0062
DATE REC'D BY LAB: 09/15/86

PROJECT: WATER SAMPLES

DATE ANALYZED: 09/19/86

UNITS: ug/l

ANALYST: MGB

52 FR 41534	limit	<0.02	CHLOROMETHANE
	ug/l	<0.06	BROMOMETHANE
		N/D	DICHLORODIFLUOROMETHANE
2		<0.05	VINYL CHLORIDE
		<0.1	CHLOROETHANE
		<0.02	METHYLENE CHLORIDE
		N/D	TRICHLOROFLUOROMETHANE
7		<0.07	1,1-DICHLOROETHENE
		<0.05	1,1-DICHLOROETHANE
		<0.09	TRANS-1,2-DICHLOROETHENE
		2.5	CHLOROFORM
5		<0.07	1,2-DICHLOROETHANE
200		<0.03	1,1,1-TRICHLOROETHANE
5		<0.08	CARBON TETRACHLORIDE
		<0.04	BROMODICHLOROMETHANE
		<0.03	1,2-DICHLOROPROPANE
		<0.11	TRANS-1,3-DICHLOROPROPENE
5		<0.06	TRICHLOROETHENE
		<0.07	DIBROMOCHLOROMETHANE
		<0.03	1,1,2-TRICHLOROETHANE
		<0.07	CIS-1,3-DICHLOROPROPENE
		<0.03	2-CHLOROETHYL VINYL ETHER
		<0.09	BROMOFORM
		<0.03	1,1,2,2-TETRACHLOROETHANE
		<0.03	TETRACHLOROETHENE
		<0.16	CHLOROBENZENE
		<0.4	1,3-DICHLOROBENZENE
		<0.4	1,2-DICHLOROBENZENE
75		<0.6	1,4-DICHLOROBENZENE
5		<0.2	BENZENE
		<0.1	ETHYLBENZENE
		<0.4	TOLUENE
		<1.0	M-XYLENES
		<1.0	O.P-XYLENES

COMMENTS: MDL 10 TIMES NORMAL DUE TO MATRIX.



Analytical**Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

CLIENT: EL PASO NATURAL GAS CO.
PROJECT: WATER SAMPLES
UNITS: mg/l

SAMPLE
S86-0062

ALUMINUM (Al).....	<0.21	<i>Limit 1113/8</i>
BORON (B).....	<0.5	
COBALT (Co).....	<0.02	
IRON (Fe).....	14.7	0.30
MANGANESE (Mn).....	0.20	0.05
MOLYBDENUM (Mo).....	<0.02	
NICKEL (Ni).....	<0.01	
ZINC (Zn).....	0.10	5.0



Analytical **Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

6" - Line 2068

PNA AND PHENOLS *Alamogordo Hydrotest
Midpoint - Devister; Used pipe*

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER
METHOD: 8310, HPLC
PROJECT: WATER SAMPLES
UNITS: ug/l

SAMPLE I.D.: S86-0063
DATE REC'D BY LAB: 09/15/86
DATE EXTRACTED: 09/19/86
DATE ANALYZED: 10/01/86
ANALYST: SD

	DETECTION LIMIT	RESULT
NAPHTHALENE	5	<5
ACENAPHTHYLENE	5	<5
ACENAPHTHENE	5	<5
FLUORENE	1	<1
PHENANTHRENE	1	<1
ANTHRACENE	1	<1
FLUORANTHENE	1	1.0
PYRENE	1	<1
BENZO(a)ANTHRACENE	1	<1
CHRYSENE	1	<1
BENZO(b)FLUORANTHENE	1	<1
BENZO(k)FLUORANTHENE	1	<1
BENZO(a)PYRENE	1	<1
DIBENZO(a,h)ANTHRACENE ...	5	<5
BENZO(g,h,i)PERYLENE ...	1	<1
INDENO(1,2,3-cd)PYRENE ..	1	<1

COMMENTS:



Analytical**Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

METHOD 601 & 602

CLIENT: EL PASO NAT GAS CO.
SAMPLE MATRIX: WATER
PROJECT: WATER SAMPLES
UNITS: ug/l

SAMPLE I.D.: S86-0063
DATE REC'D BY LAB: 09/15/86
DATE ANALYZED: 09/19/86
ANALYST: MGB

<0.02 CHLOROMETHANE
<0.06 BROMOMETHANE
N/D DICHLORODIFLUOROMETHANE
<0.05 VINYL CHLORIDE
<0.1 CHLOROETHANE
<0.02 METHYLENE CHLORIDE
N/D TRICHLOROFUOROMETHANE
<0.07 1,1-DICHLOROETHENE
<0.05 1,1-DICHLOROETHANE
<0.09 TRANS-1,2-DICHLOROETHENE
3.9 CHLOROFORM
<0.07 1,2-DICHLOROETHANE
<0.03 1,1,1-TRICHLOROETHANE
<0.08 CARBON TETRACHLORIDE
<0.04 BROMODICHLOROMETHANE
<0.03 1,2-DICHLOROPROPANE
<0.11 TRANS-1,3-DICHLOROPROPENE
<0.06 TRICHLOROETHENE
<0.07 DIBROMOCHLOROMETHANE
<0.03 1,1,2-TRICHLOROETHANE
<0.07 CIS-1,3-DICHLOROPROPENE
<0.03 2-CHLOROETHYL VINYL ETHER
<0.09 BROMOFORM
<0.03 1,1,2,2-TETRACHLOROETHANE
<0.03 TETRACHLOROETHENE
<0.16 CHLOROBENZENE
<0.4 1,3-DICHLOROBENZENE
<0.4 1,2-DICHLOROBENZENE
<0.6 1,4-DICHLOROBENZENE
<0.2 BENZENE
<0.1 ETHYLBENZENE
<0.4 TOLUENE
<1.0 M-XYLENES
<1.0 O,P-XYLENES

COMMENTS: MDL 10 TIMES NORMAL DUE TO MATRIX.



Analytical**Technologies**, Inc.

2113 S 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

ACCESSION: PH-03-008760

CLIENT: EL PASO NATURAL GAS CO.
PROJECT: WATER SAMPLES
UNITS: mg/l

SAMPLE
S86-0063

ALUMINUM (Al).....	<0.21
BORON (B).....	<0.5
COBALT (Co).....	<0.02
IRON (Fe).....	36.34 0.30
MANGANESE (Mn).....	0.21 0.05
MOLYBDENUM (Mo).....	<0.02
NICKEL (Ni).....	<0.01
ZINC (Zn).....	0.15 5.0



Analytical **Technologies**, Inc.

2113 S. 48th Street Suite 110 Tempe, AZ 85282 (602) 438-1530

p 1. f 1

ACCESSION: PH-03-008760

6"- Line 2068

METHOD 601 & 602 *Azogoro Hydrotest*
End of Dewster. Used pipe

CLIENT: EL PASO NAT GAS CO.

SAMPLE I.D.: 586-0064

SAMPLE MATRIX: WATER

DATE REC'D BY LAB: 09/15/86

PROJECT: WATER SAMPLES

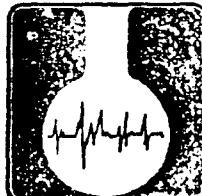
DATE ANALYZED: 09/19/86

UNITS: ug/l

ANALYST: MGB

<0.02 CHLOROMETHANE
<0.06 BROMOMETHANE
N/D DICHLORODIFLUOROMETHANE
<0.05 VINYL CHLORIDE
<0.1 CHLOROETHANE
<0.02 METHYLENE CHLORIDE
N/D TRICHLOROFUOROMETHANE
<0.07 1,1-DICHLOROETHENE
<0.05 1,1-DICHLOROETHANE
<0.09 TRANS-1,2-DICHLOROETHENE
2.5 CHLOROFORM
<0.07 1,2-DICHLOROETHANE
<0.03 1,1,1-TRICHLOROETHANE
<0.08 CARBON TETRACHLORIDE
<0.04 BROMODICHLOROMETHANE
<0.03 1,2-DICHLOROPROPANE
<0.11 TRANS-1,3-DICHLOROPROPENE
<0.06 TRICHLOROETHENE
<0.07 DIBROMOCHLOROMETHANE
<0.03 1,1,2-TRICHLOROETHANE
<0.07 CIS-1,3-DICHLOROPROPENE
<0.03 2-CHLOROETHYLVINYL ETHER
<0.09 BROMOFORM
<0.03 1,1,2,2-TETRACHLOROETHANE
<0.03 TETRACHLOROETHENE
<0.16 CHLOROBENZENE
<0.4 1,3-DICHLOROBENZENE
<0.4 1,2-DICHLOROBENZENE
<0.6 1,4-DICHLOROBENZENE
<0.2 BENZENE
<0.1 ETHYLBENZENE
<0.4 TOLUENE
<1.0 M-XYLENES
<1.0 O,P-XYLENES

COMMENTS: MDL 10 TIMES NORMAL DUE TO MATRIX.



ASSAIG
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas
Attn: Darrell Campbell
8645 Railroad Drive
El Paso, TX 79904

DATE: 22 August 1986
1346

SAMPLE ID: S86-0041

^{24"}
Hueco Line 1100 Hydrottest - Old Pipe
Source Water

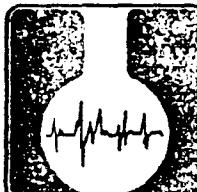
ANALYTE	ANALYTICAL RESULTS	Detection Limit
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Cr	<0.050 mg/l	0.050 mg/l
Hg	0.002 mg/l	0.002 mg/l
Fe	0.52 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Labortories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas
Attn: Darrell Campbell
8645 Railroad Drive
El Paso, TX 79904

DATE: 22 August 1986
1346

SAMPLE ID: S86-0042 Hueco 26" Line 1100 Hydrotest - Old Pipe
Begin Dewat or

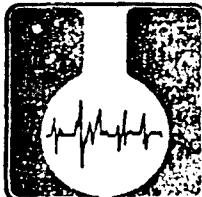
ANALYTE	ANALYTICAL RESULTS	Detection Limit
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Cr	<0.050 mg/l	0.050 mg/l
Hg	0.002 mg/l	0.002 mg/l
Fe	33 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES



TO: El Paso Natural Gas
Attn: Darrell Campbell
8645 Railroad Drive
El Paso, TX 79904

DATE: 22 August 1986
1346

SAMPLE ID: S86-0043 Huco 26" line 1100 Hydrotest - Old Pipe
Midpt - Donister

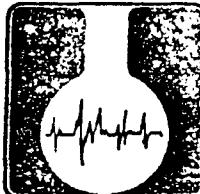
ANALYTE	ANALYTICAL RESULTS	Detection Limit
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Cr	<0.050 mg/l	0.050 mg/l
Hg	0.002 mg/l	0.002 mg/l
Fe	9 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Labortories.

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Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas
Attn: Darrell Campbell
8645 Railroad Drive
El Paso, TX 79904

DATE: 22 August 1986
1346

SAMPLE ID: S86-0044 Hueco 26" Line 1100 Hydrotest - Old Pipe
End Pt - Denaturer

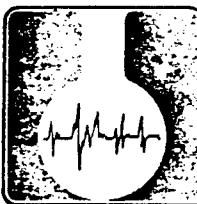
ANALYTE	ANALYTICAL RESULTS	Detection Limit
Benzene	<1 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Cr	<0.050 mg/l	0.050 mg/l
Hg	0.002 mg/l	0.002 mg/l
Fe	184 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGA ANALYTICAL LABORATORIES

TO: El Paso Natural Gas Co.
Attn: Darrell Campbell
PO Box 1432
El Paso, TX 79978

DATE: 28 July 1986
1071

Sample Date: 6/19/86 4 pm.

SAMPLE ID: S86-0023 - *Huaco 30" Hydrotest Source Water*

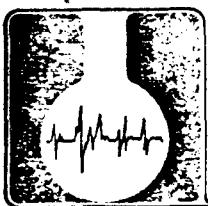
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
Benzene	3 ug/l	1 ug/l
Toluene	15 ug/l	1 ug/l
Cr	0.016 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Fe	0.02 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaiga Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGA ANALYTICAL LABORATORIES

TO: El Paso Natural Gas Co.
Attn: Darrell Campbell
PO Box 1432
El Paso, TX 79978

DATE: 28 July 1986
1071

Sample: 6/24/86 5:15 p

SAMPLE ID: S86-0024- Hueco 30 Hydrat, - Begin dewater

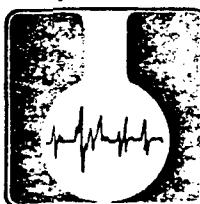
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
Benzene	15 ug/l	1 ug/l
Toluene	<1 ug/l	1 ug/l
Cr	0.040 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Fe	17.2 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGA
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas Co.
Attn: Darrell Campbell
PO Box 1432
El Paso, TX 79978

DATE: 28 July 1986
1071

Sampled: 6/26/86 11:30p

SAMPLE ID: S86-0025-Huaco Sta -30" Hydrant-Middle Run

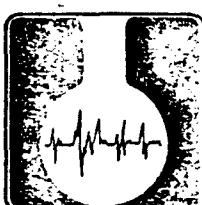
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
Benzene	2 ug/l	1 ug/l
Toluene	9 ug/l	1 ug/l
Cr	0.015 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Fe	3.36 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaiga Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas Co.
Attn: Darrell Campbell
PO Box 1432
El Paso, TX 79978

DATE: 28 July 1986
1071

Sample: 6/25/86 - 6 a.m.

SAMPLE ID: S86-0026 Line Sta. 30" Hydrotast - End Dewat -

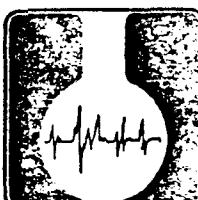
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
Benzene	3 ug/l	1 ug/l
Toluene	8 ug/l	1 ug/l
Cr	0.041 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Fe	2.86 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director



ASSAIGAI
ANALYTICAL
LABORATORIES

TO: El Paso Natural Gas Co.
Attn: Darrell Campbell
PO Box 1432
El Paso, TX 79978

DATE: 28 July 1986
1071

SAMPLE ID: S86-0027-Huaco 56 30' Hydostat - Dewater Pond - Composite after dewater

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMIT
Benzene	4 ug/l	1 ug/l
Toluene	7 ug/l	1 ug/l
Cr	0.390 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Fe	12.0 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith
Jennifer V. Smith, Ph.D.
Laboratory Director