Jerry Fant
DEPUTY OIL & GAS INSPECTOR

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 21 1998

Approved

RECEIVED
JUL 2 1999
OIL CON. DIV.
DIST. 3

ANNIE B#1
Meter/Line ID - 89898

SITE DETAILS

Legals - Twn: 30 **Rng:** 12 **Sec:** 13 **Unit:** N
NMOCD Hazard Ranking: 50 **Land Type:** 4 - Fee
Operator: MANANA GAS, INC **Pit Closure Date:** 01/03/95

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89898 Location: ANNIE B #1
Operator #: _____ Operator Name: MANANA GAS P/L District: KUTZ
Coordinates: Letter: N Section 13 Township: 30 Range: 12
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 12-12-94 Area: 02 Run: 63

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☐ (1)
State ☐ (2)
Fee ☒ (3)
Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☒ (1) YES (20 points) ☐ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☐ (1)
200 Ft to 1000 Ft (10 points) ☒ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body HALFORD INDEPENDENT DITCH
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 50 **POINTS**

REMARKS

Remarks : REDLINE & TOPO SHOW LOCATION INSIDE V.Z. TWO PITS ON LOCATION - ONE BELONGS TO OPERATOR WILL CLOSE EPNG'S DEHY PIT.

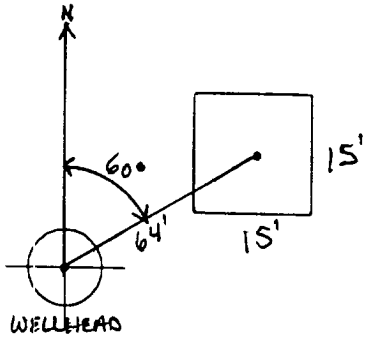
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 60° Footage from Wellhead 64'

b) Length : 15' Width : 15' Depth : 3'



REMARKS

Remarks :

PHOTOS - 1425

Completed By:

Fred Thompson

Signature

12.12.94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89898 Location: ANNIE B #1

Coordinates: Letter: N Section 13 Township: 30 Range: 12

Or Latitude _____ Longitude _____

Date Started : 1-3-95 Run: 02 63

FIELD OBSERVATIONS

Sample Number(s): KP371 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 703 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 60

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☐ ☒ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 1-3-95 Pit Closed By: B.E.I

REMARKS

Remarks : Some Line markers started Remediating To 12' Soil Turned Dark gray with A Hydro carbon order. AT 12' Soil STill The SAme.

Signature of Specialist: Kelly Padilla

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 371	94547
MTR CODE | SITE NAME:	89898	N/A
SAMPLE DATE | TIME (Hrs):	1-3-95	1220
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	1-5-95	1-5-95
DATE OF BTEX EXT. | ANAL.:		1/6/95
TYPE | DESCRIPTION:	VC	Gray/Brown Clay

REMARKS: Sample was very wet clay.

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	4.76	MG/KG	0.21645		2.31	20
TOLUENE	32.94	MG/KG	↓		↓	↓
ETHYL BENZENE	4.53	MG/KG	↓		↓	↓
TOTAL XYLENES	56.8	MG/KG	↓		↓	↓
TOTAL BTEX	98.5	MG/KG				
TPH (418.1)	147	MG/KG			1.98	28
HEADSPACE PID	703	PPM				
PERCENT SOLIDS	79.5	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 113 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 2-22-95

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

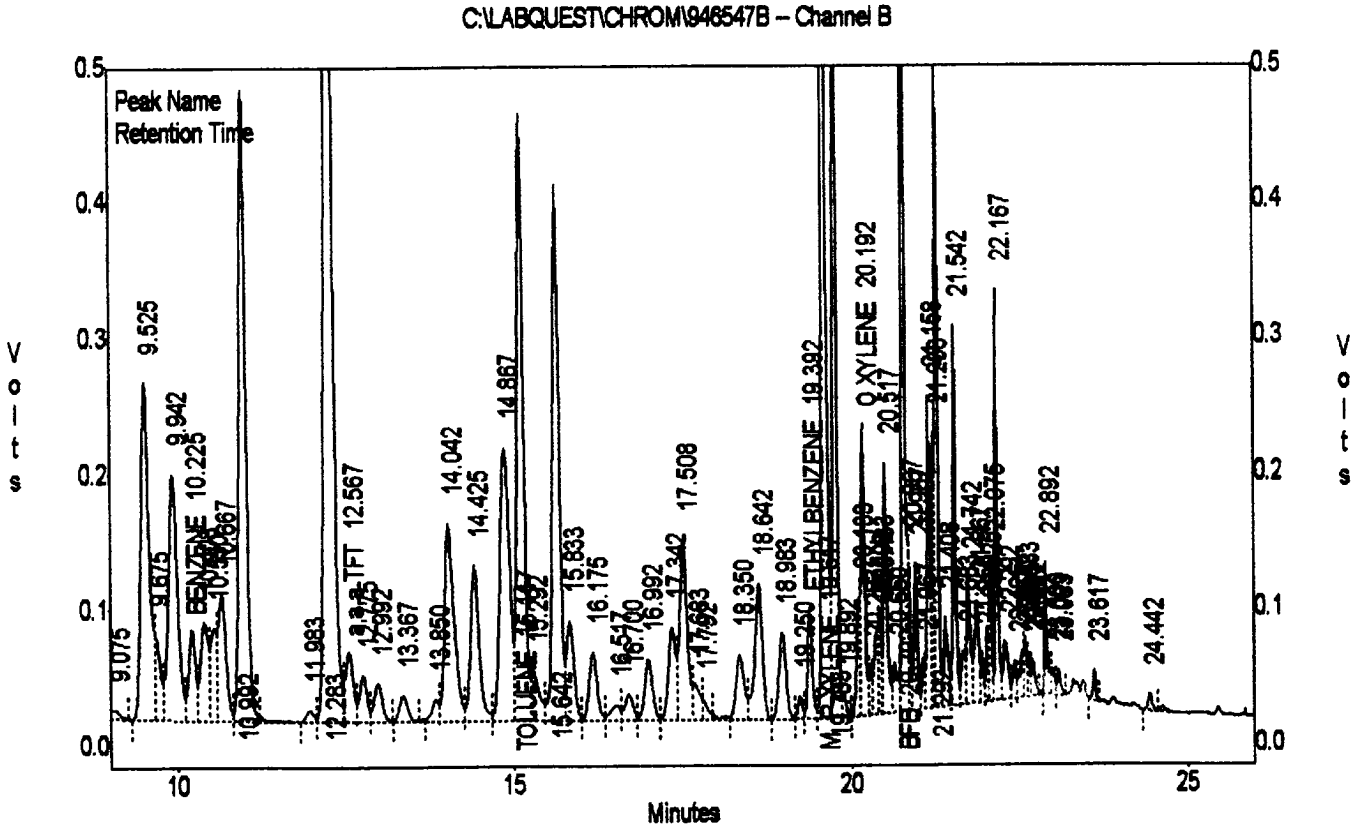
File : C:\LABQUEST\CHROM\946547B
Method : C:\LABQUEST\METHODS\SOILS.MET
Sample ID : 946547A,2.31G/200uL
Acquired : Jan 06, 1995 13:41:13
Printed : Jan 06, 1995 14:07:35
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.225	467397	20735.91406	23.0570
a,a,a TFT	12.567	420109	1914.54138	208.2781
TOLUENE	15.117	2985807	21257.20508	148.7496
ETHYLBENZENE	19.392	380075	19772.41406	19.8453
M & P XYLENE	19.617	3793419	20137.20898	191.4246
O XYLENE	20.192	802195	19526.79688	42.4401
BFB	20.792	3289309	25983.21484	125.0278

Totals :

12138314		758.8224



BTEX SOIL SAMPLE WORKSHEET

File	946547B	**Date Printed**	1/8/95
Soil Mass (g)	2.31	**Multiplier (L/g)**	0.00216
Extraction vol. (mL)	20	**DF (Analytical)**	100
Shot Volume (uL)	200	**DF (Report)**	0.21645

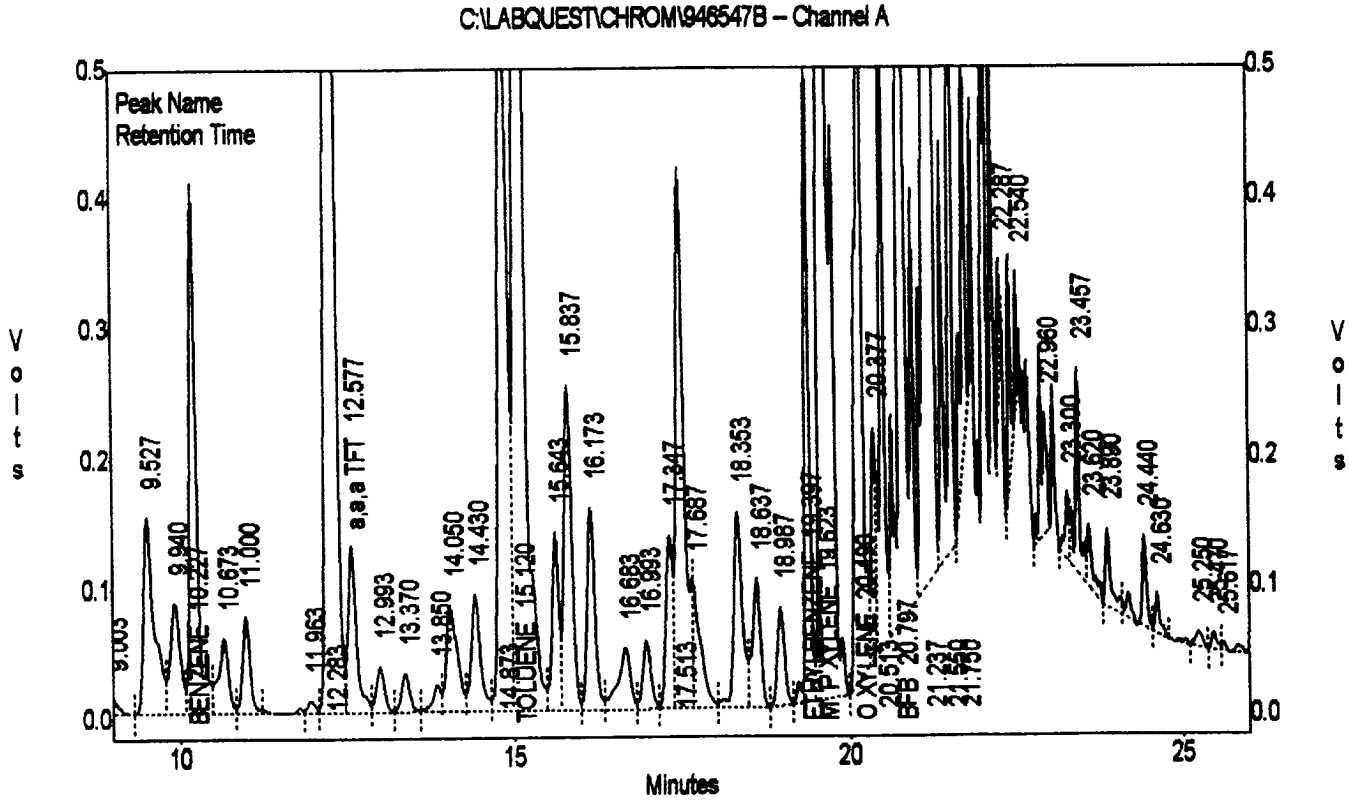
			Det. Limit
Benzene (ug/L)	21.98	**Benzene (mg/Kg):**	**4.758**	1.082
Toluene (ug/L)	149.52	**Toluene (mg/Kg):**	**32.364**	1.082
Ethylbenzene (ug/L)	20.92	**Ethylbenzene (mg/Kg):**	**4.528**	1.082
p & m-xylene (ug/L)	206.49	p & m-xylene (mg/Kg):	44.695	2.165
o-xylene (ug/L)	55.95	o-xylene (mg/Kg):	12.110	1.082
		Total xylenes (mg/Kg):	**56.805**	3.247
		Total BTEX (mg/Kg):	**98.455**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946547B
Method : C:\LABQUEST\METHODS\SOILS.MET
Sample ID : 946547A,2.31G/200uL
Acquired : Jan 06, 1995 13:41:13
Printed : Jan 06, 1995 14:07:28
User : Tony

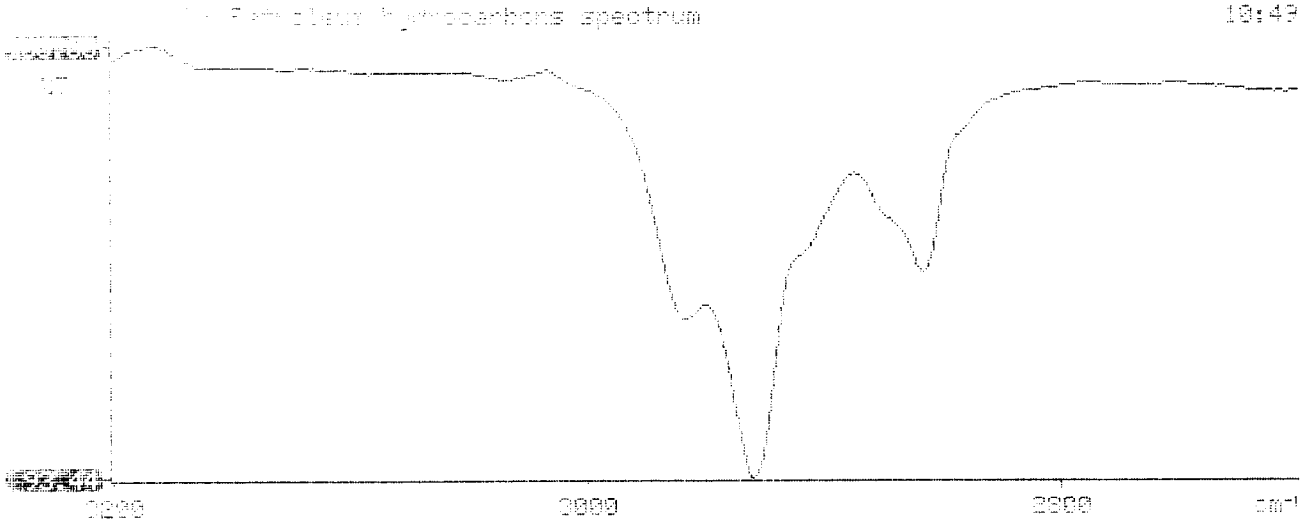
Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.227	2924149	139592.09375	21.9822
a,a,a TFT	12.577	1124364	6372.49561	152.5142
TOLUENE	15.120	19955382	169100.54688	149.5213
ETHYLBENZENE	19.397	2467619	129068.31250	20.9195
M & P XYLENE	19.623	27415272	178734.17188	206.4855
O XYLENE	20.190	6163716	127976.28906	55.9505
BFB	20.797	26669424	232900.28125	113.4255
Totals :		86719928		720.7986



Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report



PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

Philip Environmental Services Corp.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase ~~601~~ 6000
Project Location Annie B #1, ~~89898~~

Elevation
Borehole Location T30, R12, S.13, N
GWL Depth
Logged By S.Kelly
Drilled By M. Donahue
Date/Time Started 10/6/95, 1145
Date/Time Completed 10/6/95, 1255

Well Logged By S.Kelly
Personnel On-Site J. Long, J. Johnson
Contractors On-Site
Client Personnel On-Site
Drilling Method 4¼" ID HSA
Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S/HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	14.5-16.5	.91/2.0'	silty CLAY, brown, 5-25% silt, med. plasticity, damp					0/0	12 05
20				TOB-16.5'						
25										
30										
35										
40										

Comments: 14.5'-16.5' sample (SEK 95) sent to lab (BTEX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sarah Kelly

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK95	947601
MTR CODE | SITE NAME:	89898	Annie B #1
SAMPLE DATE | TIME (Hrs):	10-06-95	1205
PROJECT:	Phase II Drillig	
DATE OF TPH EXT. | ANAL.:	10/9/95	
DATE OF BTEX EXT. | ANAL.:	10/9/95	10/9/95
TYPE | DESCRIPTION:	VG	Brown Clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	< 10	MG/KG			2.01	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	80.2	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 96% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-11-95

```
**************************************************
*                    Test Method for             *
*      Oil and Grease and Petroleum Hydrocarbons  *
*                   in Water and Soil            *
*                                                *
*             Perkin-Elmer Model 1600 FT-IR      *
*                   Analysis Report              *
**************************************************
*
 95/10/09  14:49
*
*  Sample identification
 947601
*
*  Initial mass of sample, g
 2.010
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 -222.946
*  Net absorbance of hydrocarbons (2930 cm-1)
 -0.017
*
*
*
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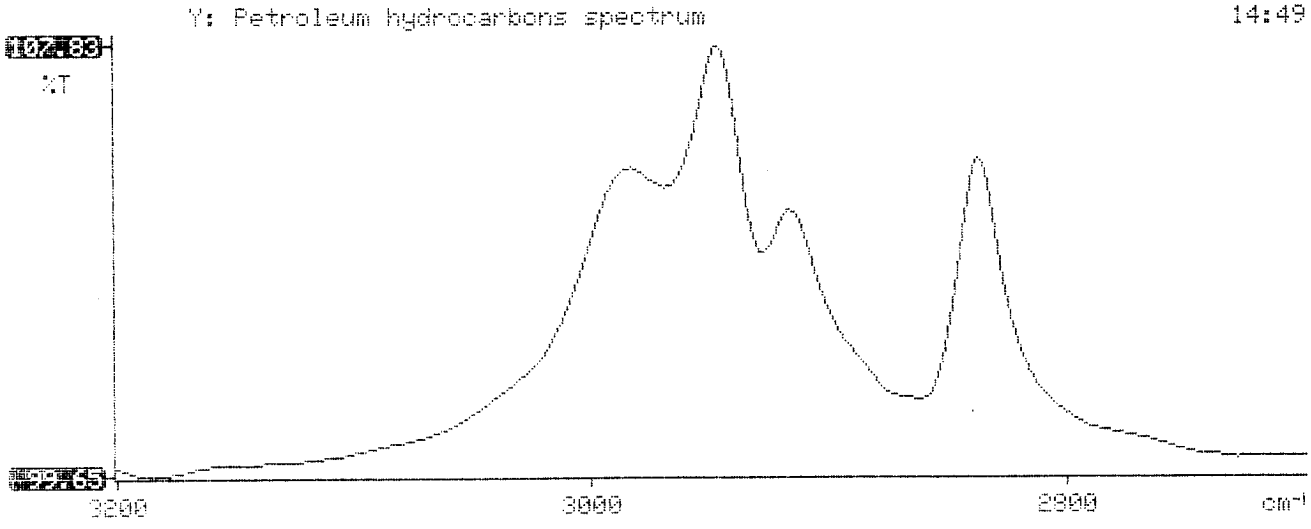


BTEX SOIL SAMPLE WORKSHEET

File	947601	**Date Printed**	10/10/95	
Soil Mass (g)	4.94	**Multiplier (L/g)**	0.00101	
Extraction vol. (mL)	10	**DF (Analytical)**	200	
Shot Volume (uL)	50	**DF (Report)**	0.20243	

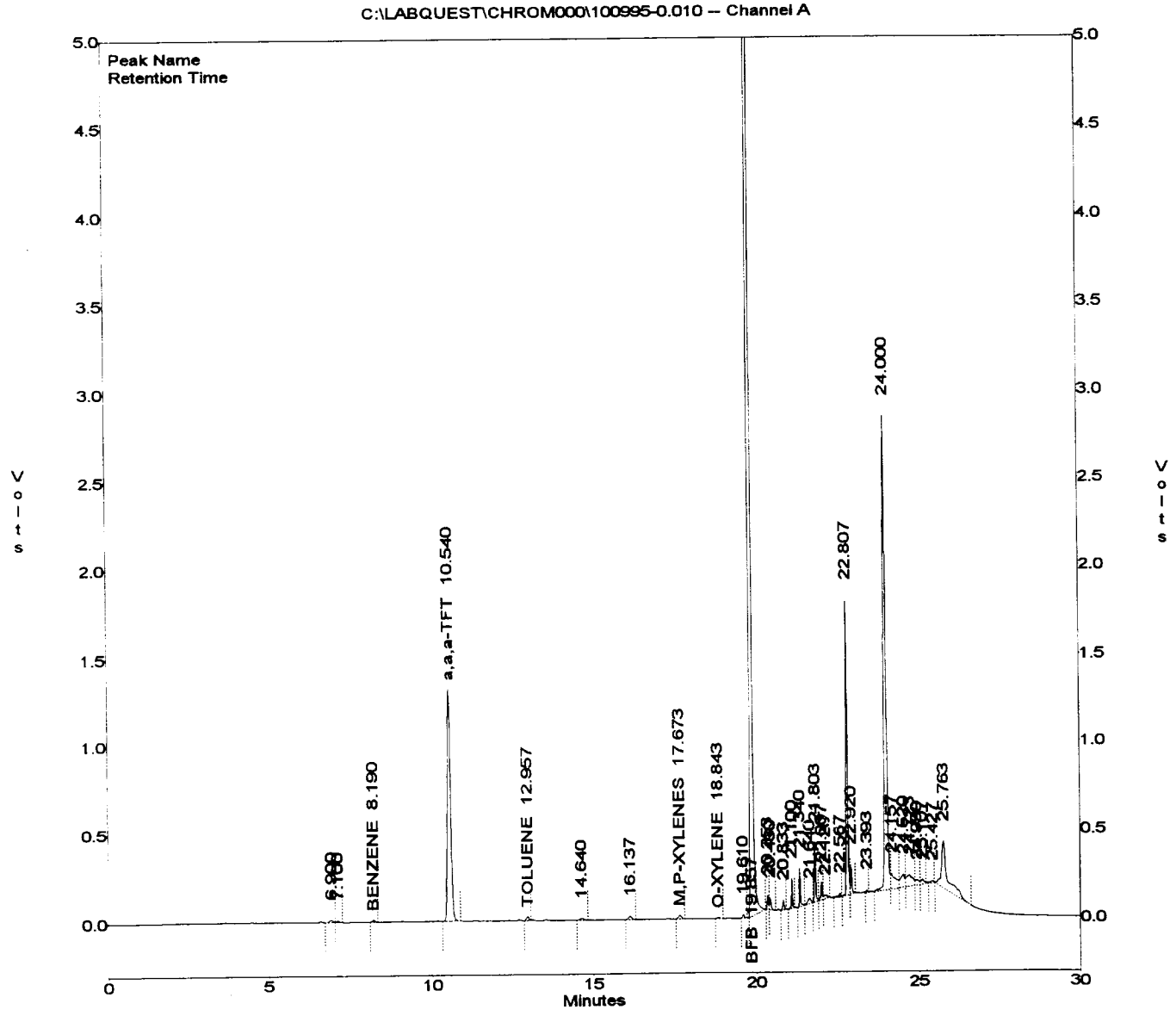
				Det. Limit
Benzene (ug/L)	0.19	**Benzene (mg/Kg):**	**0.038**	0.506
Toluene (ug/L)	0.33	**Toluene (mg/Kg):**	**0.067**	0.506
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.506
p & m-xylene (ug/L)	0.33	p & m-xylene (mg/Kg):	0.067	1.012
o-xylene (ug/L)	0.12	o-xylene (mg/Kg):	0.024	0.506
		Total xylenes (mg/Kg):	**0.091**	1.518
		Total BTEX (mg/Kg):	**0.196**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\100995-0.010
Method : C:\LABQUEST\METHODS\0-092095.MET
Sample ID : 947601,4.94G,50U
Acquired : Oct 09, 1995 19:02:10
Printed : Oct 10, 1995 08:01:18
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.190	72751	0.1944
a,a,a-TFT	10.540	9242082	105.6409
TOLUENE	12.957	121389	0.3335
ETHYLBENZENE	17.170	0	0.0000
M,P-XYLENES	17.673	133220	0.3321
O-XYLENE	18.843	40498	0.1237
BFB	19.857	52513968	96.3416



7-25-77
S-3-77

OIL CONSERVATION COMMISSION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

July 13, 1977

Manana Gas, Inc.
P. O. Box 10010
Albuquerque, New Mexico 87103

Attention: Betty M. Hartman

Administrative Order NSL-865

Gentlemen:

Reference is made to your application for approval of a non-standard location for your Annie B Well No. 1 located 840 feet from the South line and 1400 feet from the West line of Section 13, Township 30 North, Range 12 West, NMPM, Basin Dakota Gas Field, San Juan County, New Mexico.

By authority granted me under the provisions of Rule 104 F of the Commission Rules and Regulations, the above-described unorthodox location is hereby approved.

Very truly yours,

JOE D. RAMEY,
Secretary-Director

JDR/JEK/dr

cc: Oil Conservation Commission - Aztec
Oil & Gas Engineering Committee - Hobbs

COPY

OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

7-5-77

OIL CONSERVATION COMMISSION
Ceptex DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

Jim Kapteine

DATE June 29, 1977

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL V
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated June 22, 1977

for the Manana Gas, Inc. Annie B #1 N-13-30N-12W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

AR Kendrick

Manana Gas, Inc.

~~XXXXXXXXXXXXXXXX~~

~~ALBUQUERQUE, NEW MEXICO 87106~~

EDWARD M. HARTMAN, PRES.

P.O. Box 80068
Albuquerque, New Mexico 87108

TEL. (505) 842-9313

June 22, 1977

Mr. Joe D. Ramey, Director
Oil Conservation Commission
State of New Mexico
P.O. Box 2088
Santa Fe, New Mexico 87501

APPLICATION FOR ADMINISTRATIVE APPROVAL

Re: Unorthodox Location
Basin Dakota Gas Field
840' FSL & 1400' FWL
Section 13, T 30N, R 12W
San Juan County, New Mexico

Dear Sir:

Enclosed in triplicate are plats showing ownership of all leases and Dakota wells offsetting our proration unit and a topographic map of the area.

Approval for this unorthodox location is requested in order to avoid unnecessary damage to fee surface land owned by Mr. and Mrs. Cecil S. Henry of Farmington, New Mexico. Mr. Henry requested the drillsite be located in the extreme northwest corner of his pasture as close as possible to the existing road and his fence line.

Manana Gas, Inc. has notified all offsetting operators of this application by certified mail.

Yours very truly,

MANANA GAS, INC.

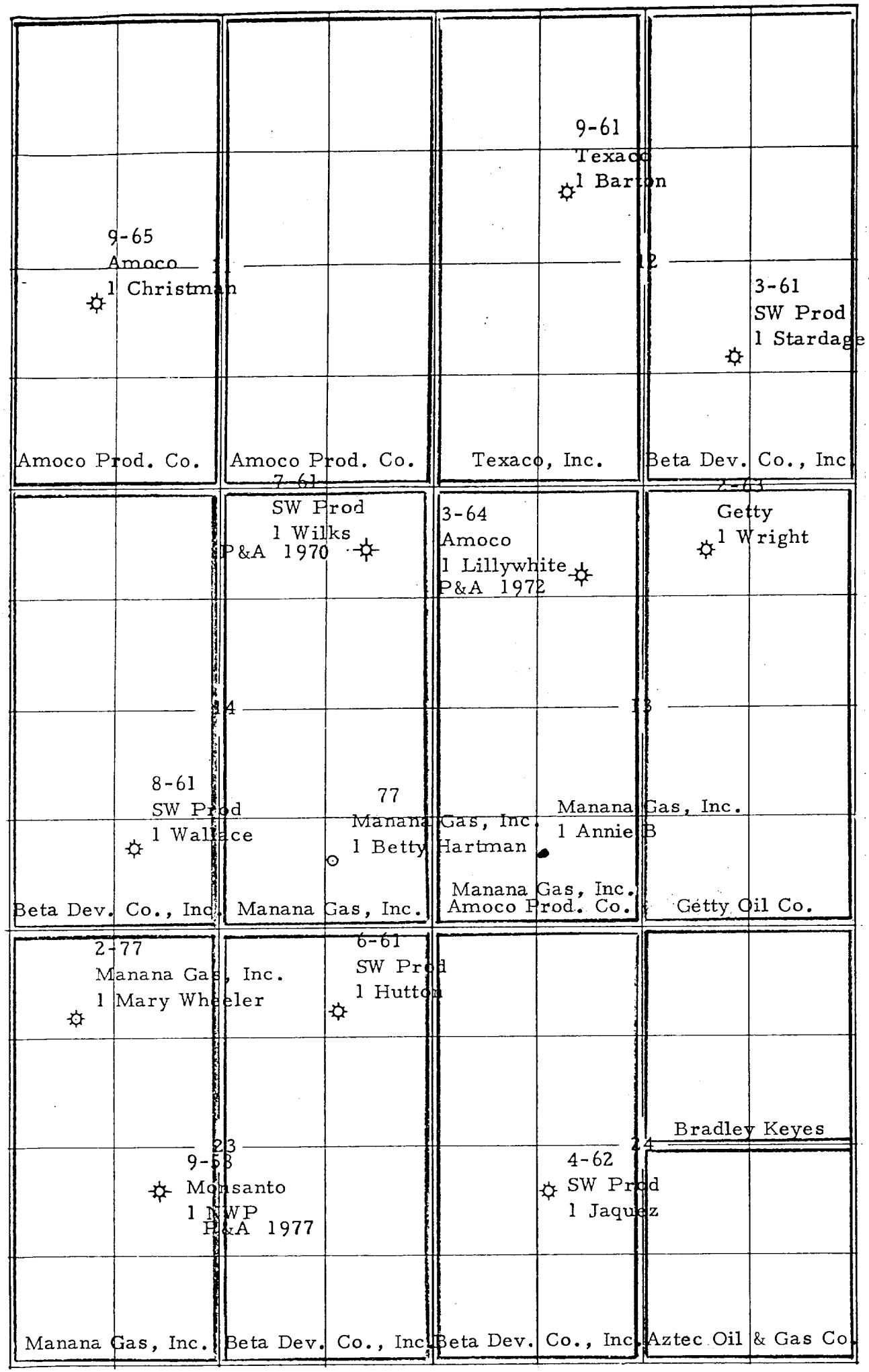
Betty M Hartman

Betty M. Hartman, Secretary

pc: Amoco Production Company
Aztec Oil and Gas Company
Beta Development Co., Inc.
Getty Oil Company
Texaco, Inc.
Bradley Keyes

R 12 W

T 30 N


9-61
Texaco
1 Barton
9-65
Amoco
1 Christman
12
3-61
SW Prod
1 Stardage
Amoco Prod. Co.
Amoco Prod. Co.
Texaco, Inc.
Beta Dev. Co., Inc
7-61
SW Prod
1 Wilks
P&A 1970
3-64
Amoco
1 Lillywhite
P&A 1972
2-63
Getty
1 Wright
14
13
8-61
SW Prod
1 Wallace
77
Manana Gas, Inc.
1 Betty Hartman
Manana Gas, Inc.
1 Annie B
Beta Dev. Co., Inc.
Manana Gas, Inc.
Manana Gas, Inc.
Amoco Prod. Co.
Getty Oil Co.
2-77
Manana Gas, Inc.
1 Mary Wheeler
6-61
SW Prod
1 Hutton
Bradley Keyes
23
24
9-58
Monsanto
1 NWP
P&A 1977
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1 Jaquez
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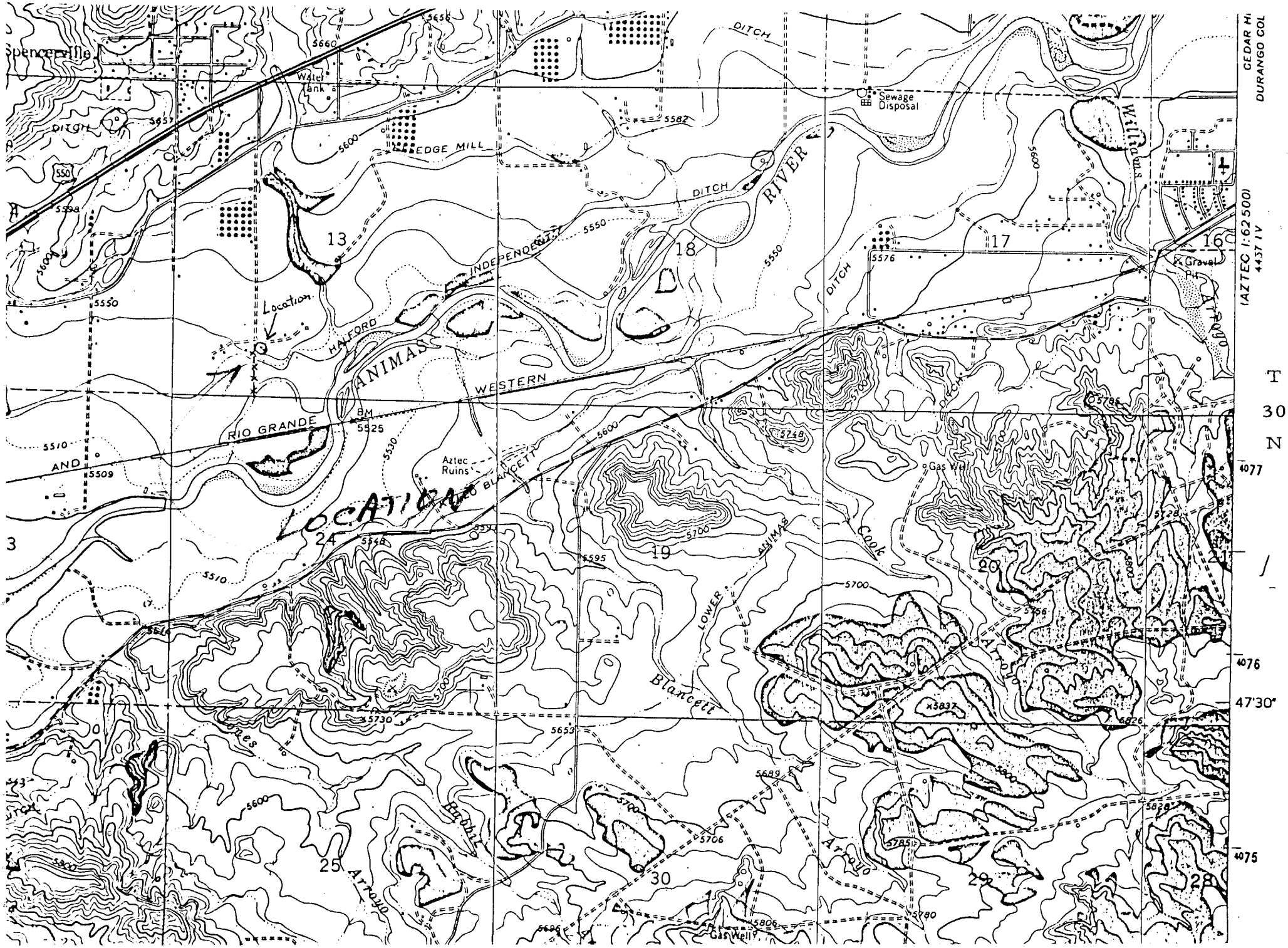
Beta Dev. Co., Inc.
Beta Dev. Co., Inc.
Aztec Oil & Gas Co.


R 12 W
R 11 W
Spencerville
Water Tank
DITCH
EDGE MILL
Sewage Disposal
Williams
RIVER
INDEPENDENT
Location
HALFORD
ANIMAS
WESTERN
RIO GRANDE
BM 5525
AND
Aztec Ruins
BLANCETT
LOCATION
Gas Well
Cook
LOWER
Blancett
Arroyo
Gravel Pit
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18
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16
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T 30 N
4077
4076
47'30"
4075
AZTEC 1:62 500
4437 IV

Manana Gas, Inc.

~~3001 SUGAR CHUTE.~~
~~ALBUQUERQUE, NEW MEXICO 87106~~

EDWARD M. HARTMAN, PRES.

P.O. Box 80068
Albuquerque, New Mexico 87108

TEL. (505) 842-9313

June 22, 1977

Amoco Production Company
Security Life Building
Denver, Colorado 80202
Attn: Division Production Manager

Aztec Oil & Gas Company
P.O. Box 570
Farmington, New Mexico 87401

Beta Development Co., Inc.
P.O. Box 1659
Midland, Texas 79701

Getty Oil Company
1860 Lincoln Street
Denver, Colorado 80203

Texaco, Inc.
P.O. Box 2100
Denver, Colorado 80201

Bradley Keyes
103 N. Main
Aztec, New Mexico 87410

Re: Non-Standard Location
Basin Dakota Gas Field
San Juan County, New Mexico

Gentlemen:

Each of you has a direct or diagonal offset to Manana Gas, Inc.'s location (840' FSL and 1400' FWL) for a 6600 ft Dakota test in Section 13, T 30N, R 12W, San Juan County, New Mexico.

New Mexico Oil Conservation Commission Rule 104, paragraph D, sub-paragraph II-C states that if the applicant presents written consent in the form of waivers from all offset operators, the Secretary-Director of the Commission may grant administrative approval for an unorthodox location.

Manana Gas, Inc. would greatly appreciate your granting a waiver for this location.

Yours very truly,

MANANA GAS, INC.

Betty M Hartman

Betty M. Hartman, Secretary