

**3R - 427**

**3R WORKPLAN**

**09/19/2007**

# **GROUNDWATER INVESTIGATION AND REMEDIATION PLAN**

**Well Location:**

**El Paso 1A**

**API # 3004522778**

**SAN JUAN BASIN, NEW MEXICO**

**September 19, 2007**

**Prepared for:**

**New Mexico Oil Conservation Division  
Santa Fe, New Mexico 87505**

**Prepared by:**

**Burlington Resources Oil and Gas Company  
Farmington, New Mexico 87402**

## **ATTACHMENT 3**

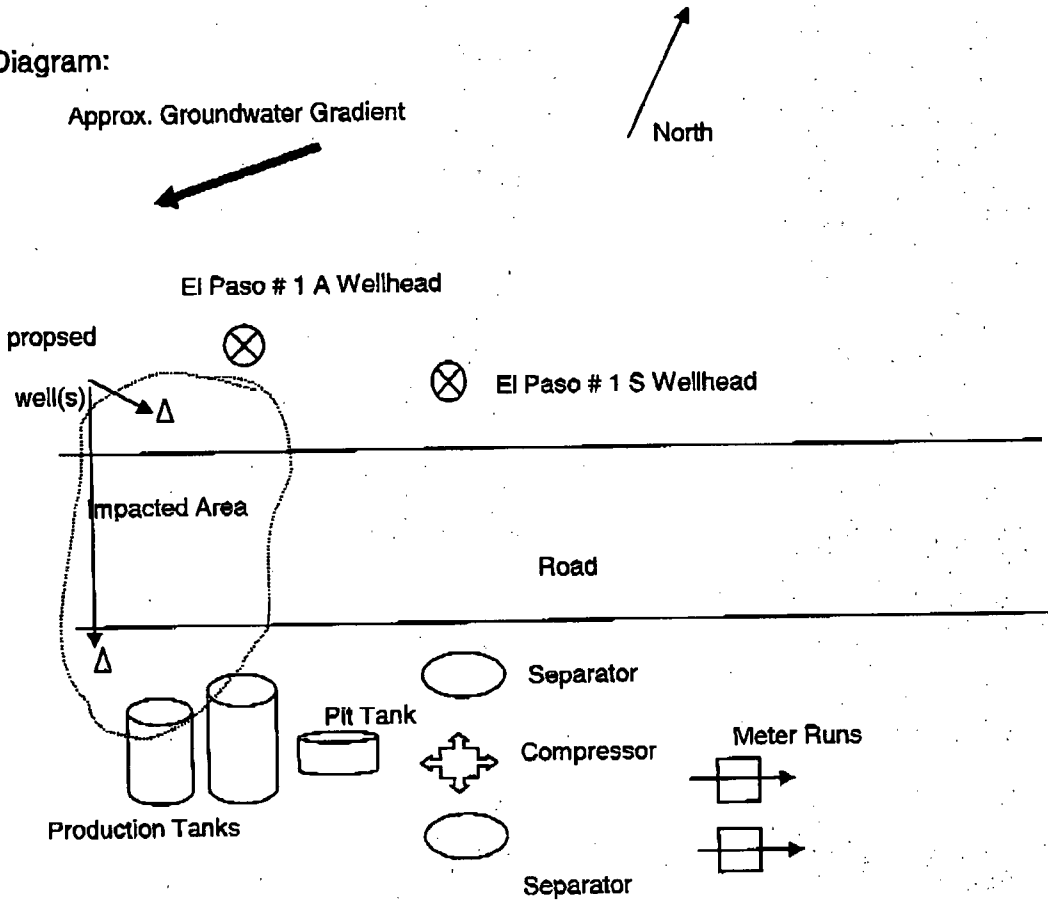
### **Burlington Resources**

#### **El Paso 1A**

#### **Site diagram**

Burlington Resources  
 El Paso # 1 A  
 500' FNL & 1840' FWL  
 Sec. 20, Twn 29 N, Rng 9 W  
 Lease # NM 0560422  
 36°43.0' & 107°48.3'

Diagram:



\* Please Note : Not to Scale

△ Proposed Well location

# TRANSACTION REPORT

P. 01

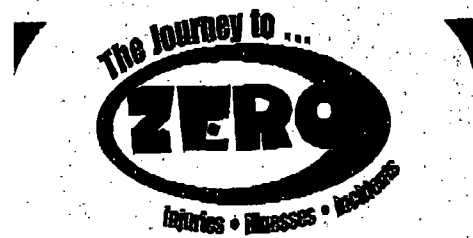
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PO BOX 4288, FARMINGTON NM 87489



# Fax

To: Glen Van Gonten	From: Gregg Wurtz
Fax: 476-3462	Phone:
Date: 9/19/07	E-mail:
Re: Groundwater	Fax:
El Paso LA	Pages: 15.

• Comments:

Questions? call me at 505 320-2653  
on Bruce. Thank you.

## **GROUNDWATER INVESTIGATION AND REMEDIATION PLAN**

### **Well Location:**

**El Paso 1A**

**API # 3004522778**

**SAN JUAN BASIN, NEW MEXICO**

**September 19, 2007**

### **Prepared for:**

**New Mexico Oil Conservation Division  
Santa Fe, New Mexico 87505**

### **Prepared by:**

**Burlington Resources Oil and Gas Company  
Farmington, New Mexico 87402**

## **Groundwater Investigation and Remediation Plan**

### **Well Location: El Paso 1A**

#### **INTRODUCTION**

Burlington Resources Oil and Gas Company (BR) discovered historic contamination on the well location El Paso 1A (T29N, R9W, SEC. 20, UNIT C) (Figure 1 and 2). A State of New Mexico Energy Minerals and Natural Resources Release Notification and Corrective Action Form C-141 was submitted to the Oil Conservation Division (Attachment 2). The soil contamination discovered was not related to a specific spill event. The impacted soils were removed and transported to a commercial landfarm. Groundwater was encountered during the excavation of the impacted soils. BR is submitting this Groundwater Investigation and Remediation Plan to address possible water quality impacts identified during soil excavation and remediation.

#### **OBJECTIVES**

The objective of this Groundwater Investigation and Remediation Plan is to properly address the protection of groundwater resources and human health and the environment.

#### **GROUNDWATER INVESTIGATION**

BR excavated approximately 450 cu. yds. of soil from an excavation 30 ft x 45 ft x 9 ft deep at the El Paso 1A. Two soil samples were collected and analyzed for BTEX and TPH from the excavation. The analytical results from a four wall composite sample and a southwest corner sample are provided in (Attachment 1). The sample analysis confirmed that the soil contamination was removed to below regulatory levels.

Groundwater was encountered during the excavation activities. In assessing the potential groundwater impacts BR will follow the NMOCD guidelines: Guidelines For Remediation Of Leaks, Spills, Releases (NMOCD, August 1993).

Groundwater data will be collected to determine potential groundwater impacts and if so data necessary to select and design an effective remediation strategy.

A temporary or permanent monitoring well will be installed in or immediately adjacent to the suspected source area to determine if the groundwater is impacted. The well is scheduled to be installed the week of September 24, 2007. This initial groundwater monitoring well (source well) will be sampled and analyzed for the parameters listed in the Sampling Procedures section of this plan. The Laboratory results should be available for review the week of October 8, 2007. If the values are below the closure standards, then no further groundwater investigation is required. If the values are above the standards, additional work will be required to define the impact. The NMOCD will be notified of the results of the groundwater investigation.

If the source well indicates there has been groundwater impact, a single, downgradient monitoring well will be installed. If the horizontal extent of the groundwater impact and/or the direction of groundwater flow is not adequately defined, then additional wells may be needed.



The additional monitoring wells will be located upgradient, downgradient, or cross-gradient from the source well to adequately characterize groundwater flow and quality. These wells may be permanent, temporary, or driven well points/piezometers.

Surface and top of casing elevations for the permanent wells will be surveyed to the nearest 0.01 foot for use in determining groundwater flow direction.

Information collected during the groundwater assessment will include lithologic logs, well completion diagrams, analytical work, and groundwater flow direction.

### **MONITORING WELL CONSTRUCTION**

Permanent monitoring wells will be constructed of 2-inch diameter PVC with 5 feet of screen above the water table and 10 feet of screen below the water table, subject to site/drilling conditions. Sand pack, bentonite seal and grout will be used to complete the wells which will have a concrete pad and be fitted with locking caps. The wells may be completed with a concrete pad flush to the ground surface in high traffic areas.

Temporary monitoring wells will be constructed of 2-inch diameter PVC with a minimum of 5 feet of slotted screen. Temporary wells may use a natural sand pack with a bentonite seal above the water table, subject to site/drilling conditions. Driven well points/piezometers will use a natural sand pack and will not have a bentonite seal in most cases. If continued monitoring of temporary wells is anticipated, concrete pads, temporary protective casing, and/or bumpers, etc. will be added to secure the well locations.

### **SAMPLING PROCEDURES**

The well(s) will be developed in order to obtain a representative groundwater sample. Development will be complete when pH and specific conductance stabilize and turbidity is reduced.

Groundwater samples will be collected following well purging (removal of a minimum of 3 well volumes, or until dry). Groundwater samples will be collected using laboratory supplied containers and preservatives. Zero headspace techniques will be used for those samples requiring analysis for volatile constituents. Samples will be stored on ice and delivered within required holding periods under chain-of-custody procedures to the analytical laboratory.

Based on the typical contaminants associated with oil and gas exploration/production activities, sampled water will be analyzed for the following constituents.

Total Dissolved Solids (TDS)	-	Standard Methods
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	-	EPA 602/8020
Cations/Anions	-	EPA or Standard Methods
RCRA Metals	-	EPA 6010 or 7000 Series

Additional analytical work may also be conducted to assist in the evaluation of subsurface conditions and remediation design.

If no cations/anions or heavy metals are detected above background or NMWQCC standards, future samples will only be analyzed for the constituent that was exceeded.

### **REMEDATION**

BR's basic approach to groundwater remediation is source removal and groundwater monitoring. The source removal promotes natural attenuation to restore hydrocarbon impacted groundwater. The groundwater monitoring will ensure the process is effective. If monitoring reveals that source removal is not adequately addressing the groundwater concerns at a certain site, more aggressive actions will be considered. Remediation technique will be submitted to and approved by the NMOCD prior to implementation.

Groundwater monitoring will be conducted to ensure the source removal activity is sufficient to adequately address the impacts to the groundwater. The monitoring wells located at or near the source and downgradient of the source will be sampled on a quarterly basis. When an individual monitoring well has shown compliance with NMWQCC groundwater standards for four (4) consecutive quarters, the quarterly monitoring will be discontinued for that individual well. These monitoring wells dropped from the quarterly sampling will be sampled at the time of final site closure to demonstrate that successful closure has been achieved.

If the quarterly monitoring does not demonstrate statistically significant improvement in groundwater within four (4) quarters, BR will evaluate the need to modify the site-specific remedy to enhance performance.

### **COMPLETION AND TERMINATION**

BR proposes that site remediation be considered complete after four (4) consecutive quarters of monitoring where groundwater quality meets NMWQCC standards or background concentrations. Subsequently, a closure report will be submitted to NMOCD for approval.

**FIGURE 1 AND 2**  
**SITE LOCATIONS**  
**EL PASO 1A**





## **ATTACHMENT 1**

### **SOIL SAMPLING DATA**

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons


Client:	Burlington	Project #:	92115-001-2133
Sample ID:	4 - Wall Comp @ 6"	Date Reported:	02-28-07
Laboratory Number:	40210	Date Sampled:	02-27-07
Chain of Custody No:	2133	Date Received:	02-27-07
Sample Matrix:	Soil	Date Extracted:	02-27-07
Preservative:	Cool	Date Analyzed:	02-28-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: El Paso 1S.

  
Analyst

  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Burlington	Project #:	92116-001-2133
Sample ID:	4 - Wall Comp @ 6'	Date Reported:	02-28-07
Laboratory Number:	40210	Date Sampled:	02-27-07
Chain of Custody:	2133	Date Received:	02-27-07
Sample Matrix:	Soil	Date Analyzed:	02-28-07
Preservative:	Cool	Date Extracted:	02-27-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	2.2	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	2.2	


ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: El Paso 13.

  
Analyst

  
Review



# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW.

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Burlington Resources  
Sample ID: SW Corner @ 8'  
Laboratory Number: 40182  
Chain of Custody No: 2123  
Sample Matrix: Soil  
Preservative: Cool  
Condition: Cool and Intact

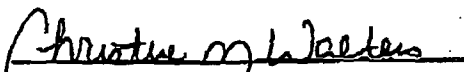
Project #: 92115-001-2123  
Date Reported: 02-26-07  
Date Sampled: 02-26-07  
Date Received: 02-26-07  
Date Extracted: 02-26-07  
Date Analyzed: 02-26-07  
Analysis Requested: 8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: El Paso 1S Spill.

  
Analyst

  
Review

**ENVIROTECH LABS**

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

**EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	Burlington Resources	Project #:	92115-001-2123
Sample ID:	SW Corner @ 8'	Date Reported:	02-26-07
Laboratory Number:	40182	Date Sampled:	02-26-07
Chain of Custody:	2123	Date Received:	02-26-07
Sample Matrix:	Soil	Date Analyzed:	02-26-07
Preservative:	Cool	Date Extracted:	02-26-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	6.1	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	21.8	2.2
o-Xylene	17.8	1.0
Total BTEX	45.7	

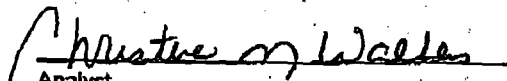

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: El Paso 15 Spill.

  
Analyst  
Review

**ATTACHMENT 2**

**OCD FORM C-141**

# ConocoPhillips El Paso 1A Release site



Oil Conservation Division

MapNotes

DrawnBy

3/1/2007 10:53:41 AM

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☐DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒OTHER ☐SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

El Paso Natural Gas Company

## 3. ADDRESS OF OPERATOR

PO Box 990, Farmington, NM 87401

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

500'N, 1840'W

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

## 16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320.00

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

4720'

Rotary

## 20. ROTARY OR CABLE TOOLS

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5559'GL

## 22. APPROX. DATE WORK WILL START\*

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	2325'	322 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2" liner	10.5#	2175-4720'	443 cu.ft. to fill to 2175'

Selectively perforate and sandwater fracture the Mesa Verde formation.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.

This gas is dedicated.

The W/2 of Section 20 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*A. G. Duice*

TITLE

Drilling Clerk

DATE

10-20-77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*Alcal*

OCT 21 1977

\*See Instructions On Reverse Side



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

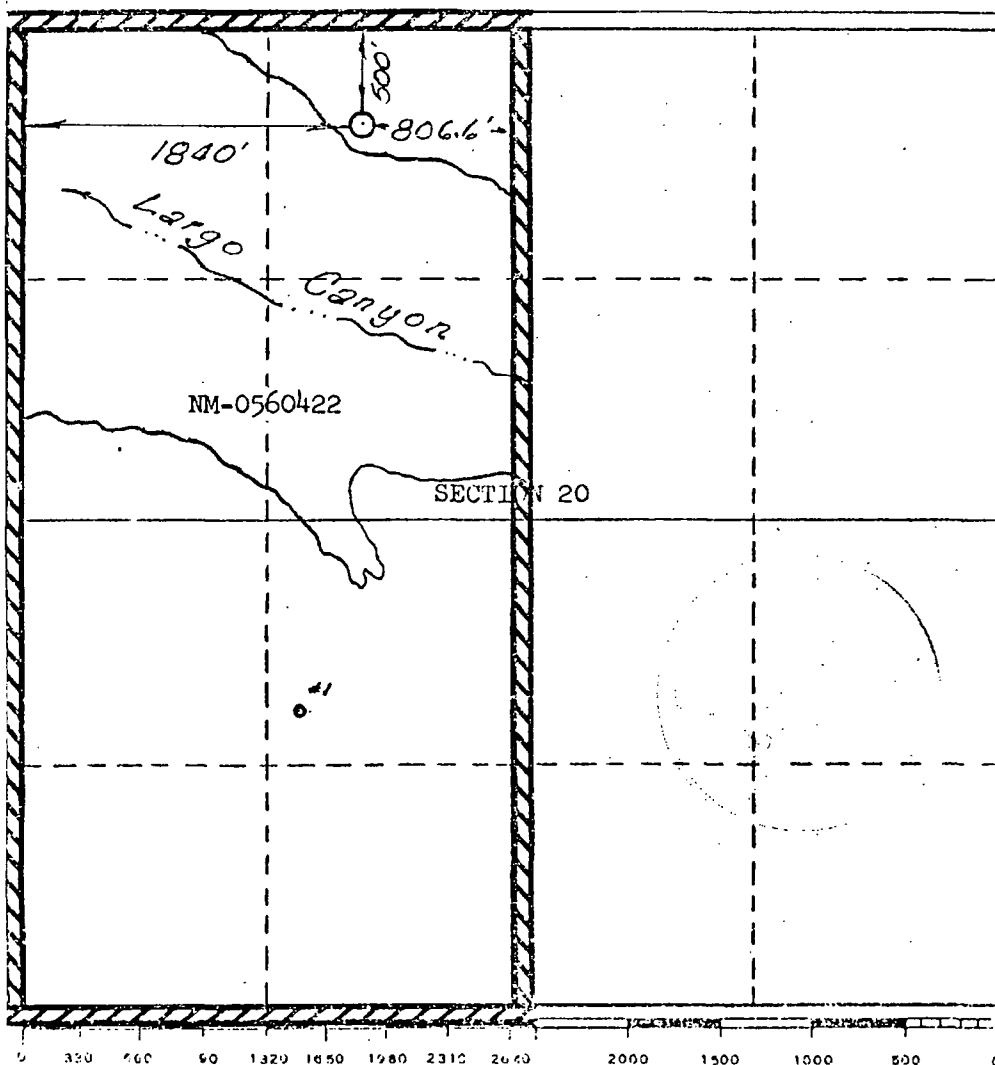
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>EL PASO (NM-0560422)</b>		Well No. <b>1A</b>
Unit Letter <b>C</b>	Section <b>20</b>	Township <b>29-N</b>	Range <b>9-W</b>	County <b>SAN JUAN</b>
Actual Footage Location of Well: <b>500</b> feet from the <b>NORTH</b> line and <b>1840</b> feet from the <b>WEST</b> line				
Ground Level Elev. <b>5559</b>	Producing Formation <b>MESA VERDE</b>	Pool <b>BLANCO MESA VERDE</b>	Dedicated Acreage: <b>320.00</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. THIS PLAT REISSUED TO SHOW REVISED NOMENCLATURE. 9-6-77



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Original Signed by  
**D. G. Brisco**

Name

**Drilling Clerk**

Position

**El Paso Natural Gas Co.**

Company

**October 20, 1977**

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

**AUGUST 28, 1977**

Registered Professional Engineer  
and/or Land Surveyor

*Paul Wilson*

Certificate No. **1760**

Multi-Point Surface Use Plan  
El Paso #1A

1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
3. Location of Existing Wells - Please refer to Map No. 2
4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines - Please refer to Maps No. 1 and No. 2. Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from a water hole located in the San Juan River.
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.


7.    Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
8.    Ancillary Facilities - No camps or airstrips will be associated with this project.
9.    Wellsite Layout - Please refer to the attached Plat No. 1.
10.   Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #2 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted brown (Federal Standard #595 30318).
11.   Other Information - The terrain is rolling hills and sand stone ledges covered with sage brush. Cattle occasionally graze the proposed project site.



12. Operator's Representative - W. D. Dawson, Post Office Box 990,  
Farmington, New Mexico 87401

13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

October 20, 1977

  
\_\_\_\_\_  
D. R. Read  
Division Drilling Engineer

DRR:pb

Operations Plan  
El Paso #1A

I. Location: 500'N, 1840'W, Section 20, T-29-N, R-9-W, San Juan County, NM

Field: Blanco Mesa Verde

Elevation: 5559'GL

II. Geology:

A. Formation Tops:	Surface	Nacimiento	Lewis	2125'
	Ojo Alamo	895'	Mesa Verde	3560'
	Kirtland	975'	Menefee	3735'
	Fruitland	1715'	Point Lookout	4271'
	Pic.Cliffs	1990'	Total Depth	4720'

B. Logging Program: GR-Ind. and GR-Density at Total Depth.

C. Coring Program: none

D. Natural Gauges: 3550', 3725', 4260' and at Total Depth.  
Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 2325'. Gas from intermediate casing to Total Depth.

IV. Materials:

A. Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt.&amp;Grade</u>
	13 3/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	2325'	7"	20.0# K-55
	6 1/4"	2175-4720'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

4 1/2" liner - 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).

C. Tubing: 4720' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.

D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

## Operations Plan - El Paso #1A

### V. Cementing:

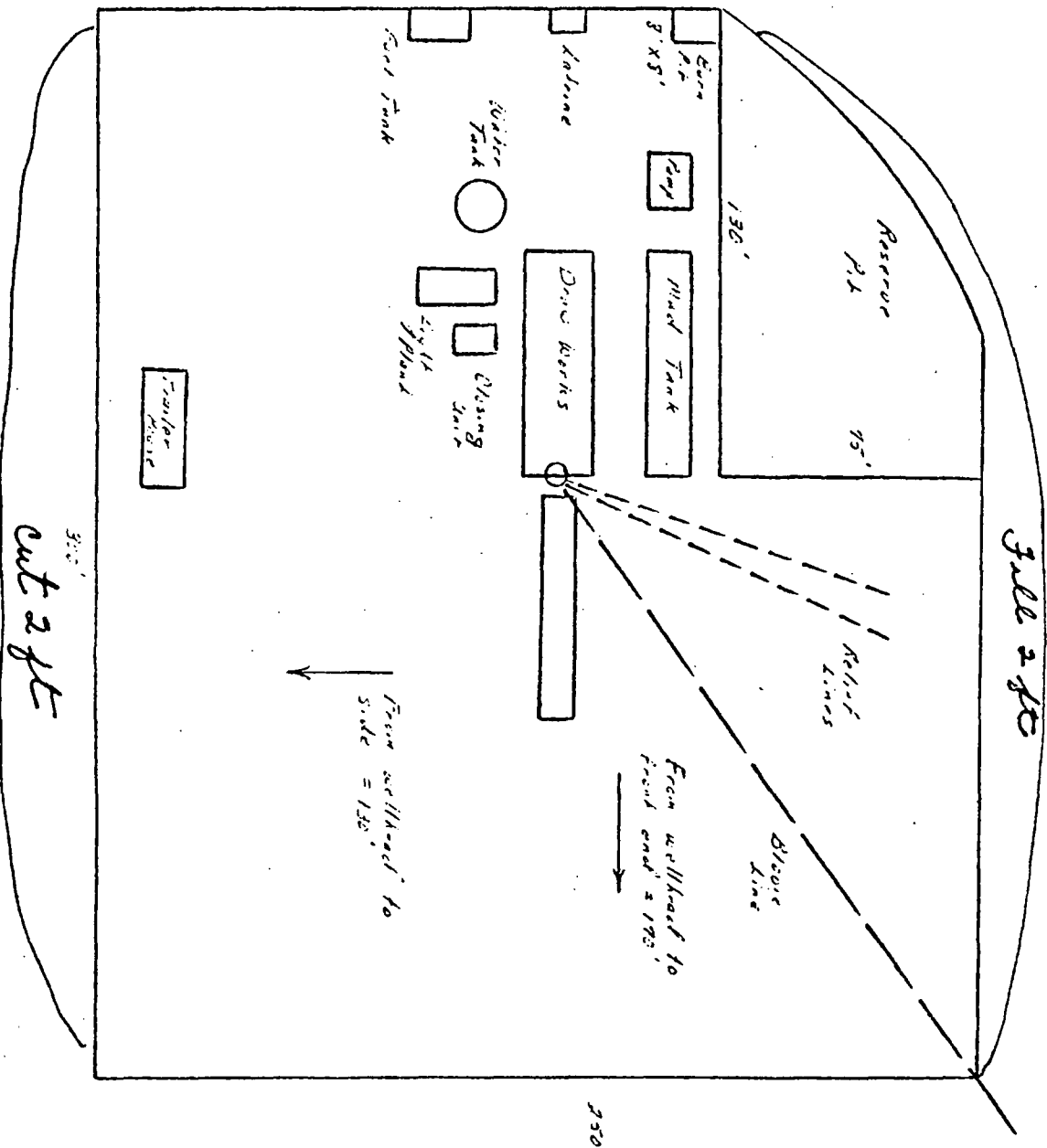
9 5/8" surface casing - use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.

7" intermediate casing - use 73 sks. of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (322 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.

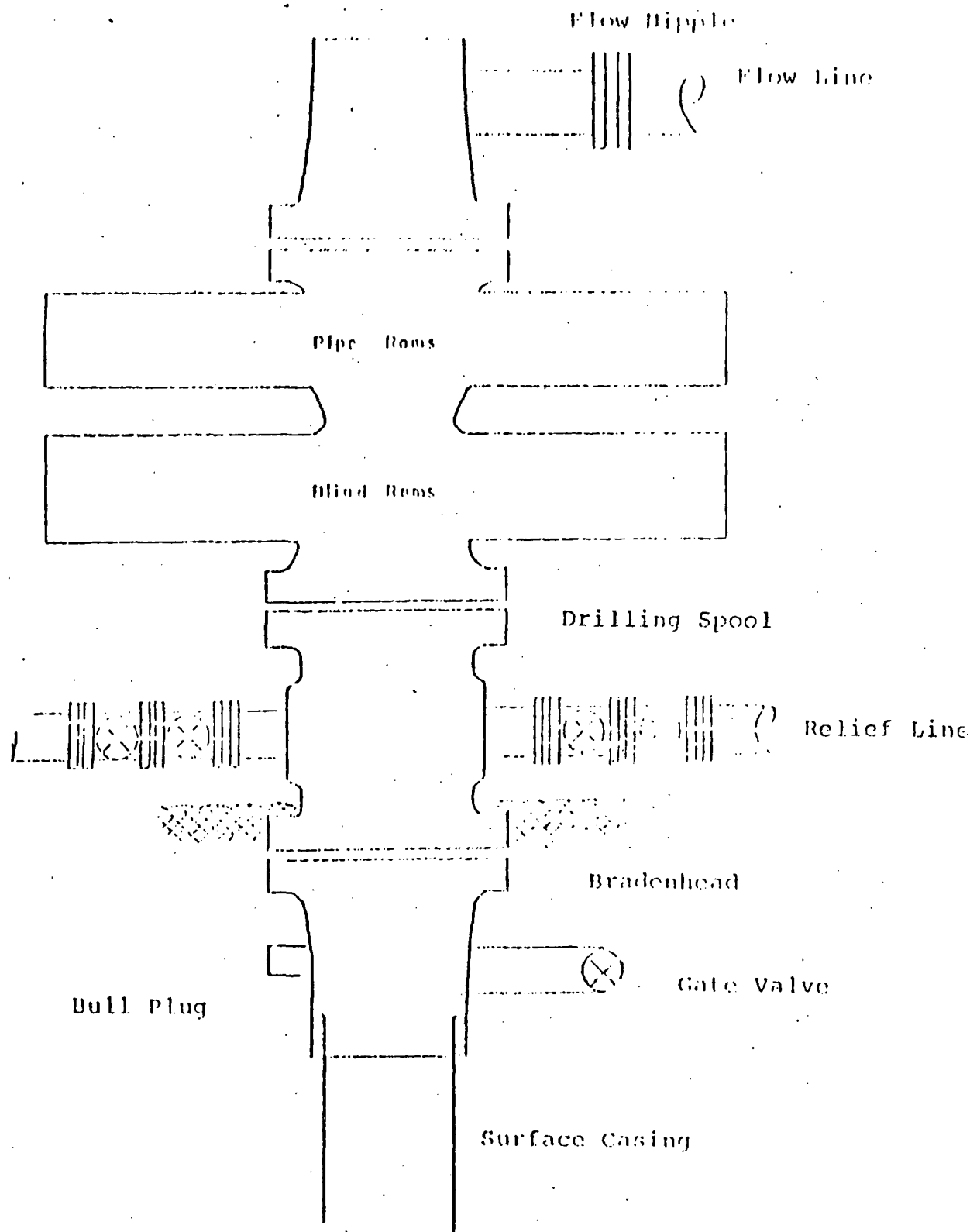
4 1/2" liner - precede cement with 20 barrels of gel water (2 sks. gel) Cement with 246 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (443 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

DRR:pb

El Paso Natural Gas Company  
 Typical location Plat for Miss Verde #50 - White Wells



# Typical B.O.P. Installation for Mesa Verde Well



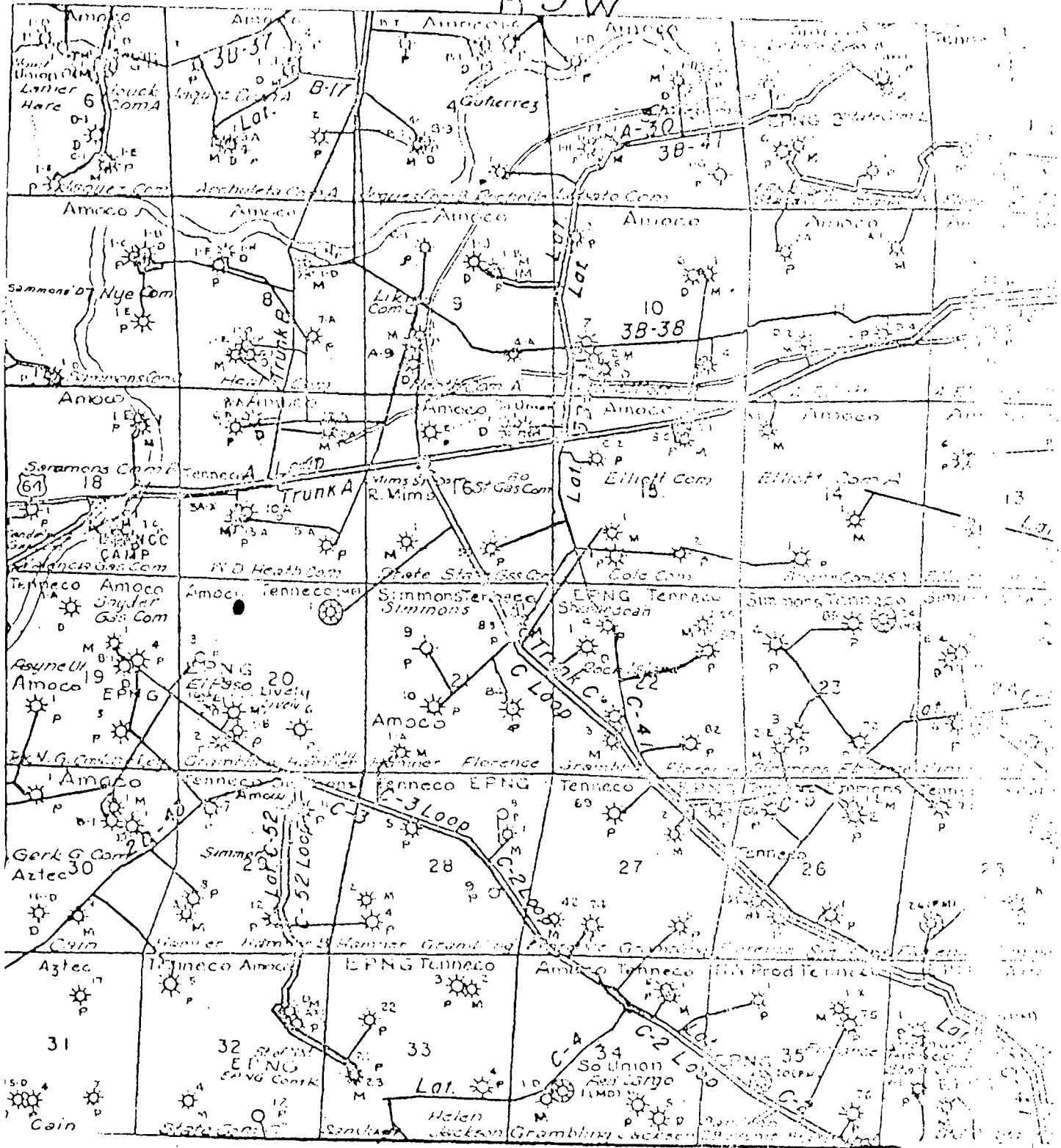
Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure  
When gas drilling operations begin a Shaffer type 50  
or equivalent rotating head is installed on top of the  
flow nipple and the flow line is converted into a blowie line

# EL PASO NATURAL GAS COMPANY

El Paso #1A

NW 20-29-9

R 9 W



MAP #2

Proposed Location

✓

OIL CONSERVATION COMMISSION  
San Juan DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE 11-20-77

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL ✓ \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated 11-20-77  
for the McDonald, John W. 20-20-77 C-20-77  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approved  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

W. B. Langford

**El Paso** NATURAL GAS  
COMPANY

P. O. BOX 990  
FARMINGTON, NEW MEXICO 87401  
PHONE: 505-325-2841

October 20, 1977

Mr. Joe Ramey  
New Mexico Oil Conservation Commission  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

This is a request for administrative approval for an unorthodox gas well location in the Blanco Mesa Verde pool.

It is intended to locate the El Paso Natural Gas Company's El Paso #1A well at 500' from the North line and 1840' from the West line of Section 20, T-29-N, R-9-W, San Juan County, New Mexico.

Largo Canyon and Largo Wash cover most of the northern half of this section, making it impossible to build an orthodox gas well location.

All operators of proration units offsetting the proposed unorthodox location have been notified of this application by certified mail.

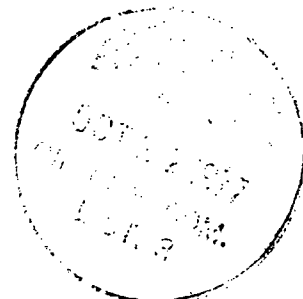
Plats showing the proposed well location and the terrain of Section 20, along with an ownership plat, are attached.

Yours truly,



D. R. Read  
Division Drilling Engineer

DRR:pb





# EL PASO NATURAL GAS COMPANY

Well Name El Paso #1 A, Blanco Mesaverde

Footage---- 500' FNL, 1840' FWL

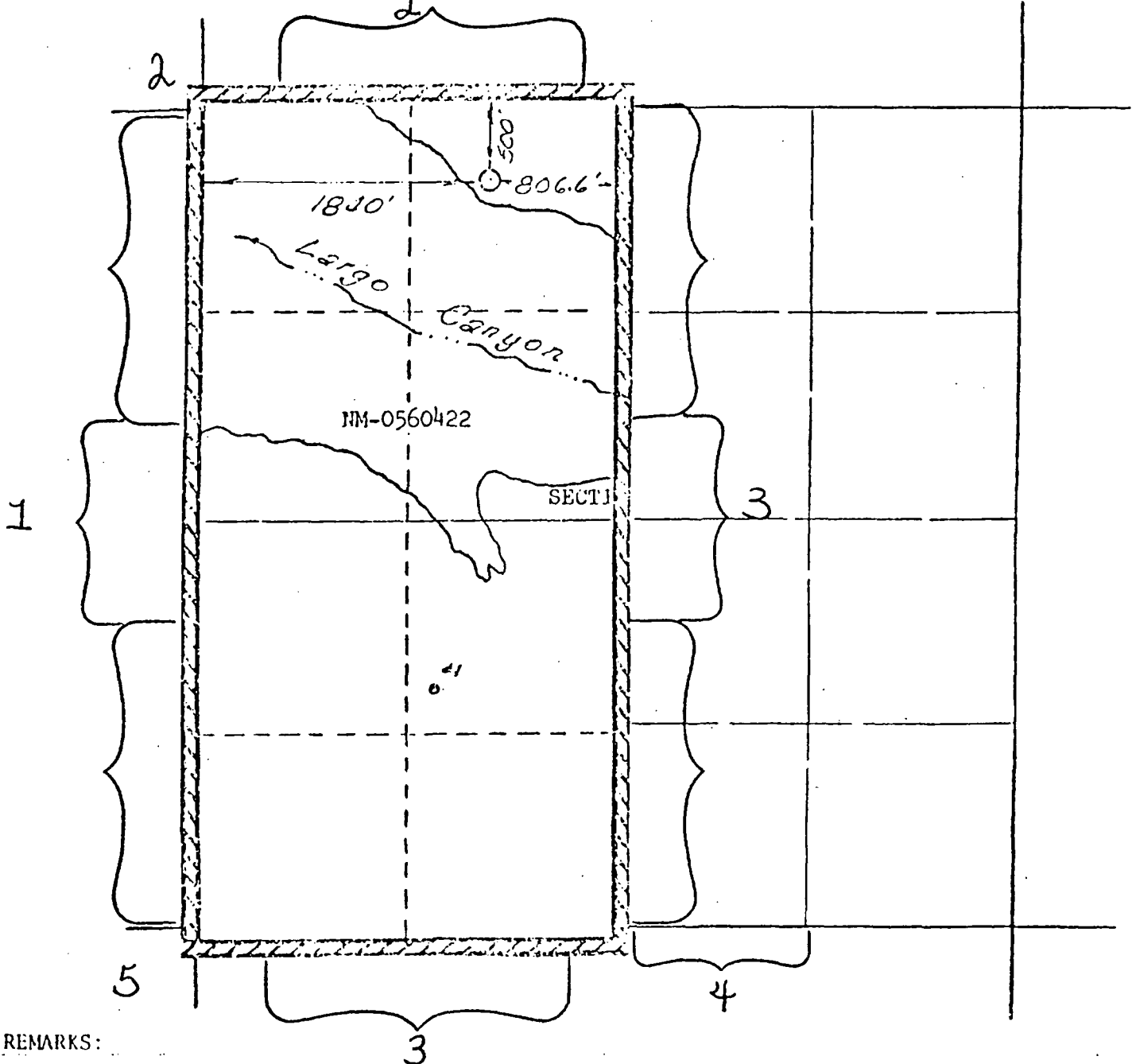
APPLICATION FOR NON-STANDARD LOCATION

County San Juan

State New Mexico

Section 20 Township 29N

Range 9W



REMARKS:

- (1) El Paso Natural Gas Company
- (2) Amoco
- (3) Tenneco Oil Company
- (4) D. J. Simmons
- (5) Aztec Oil & Gas Company

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

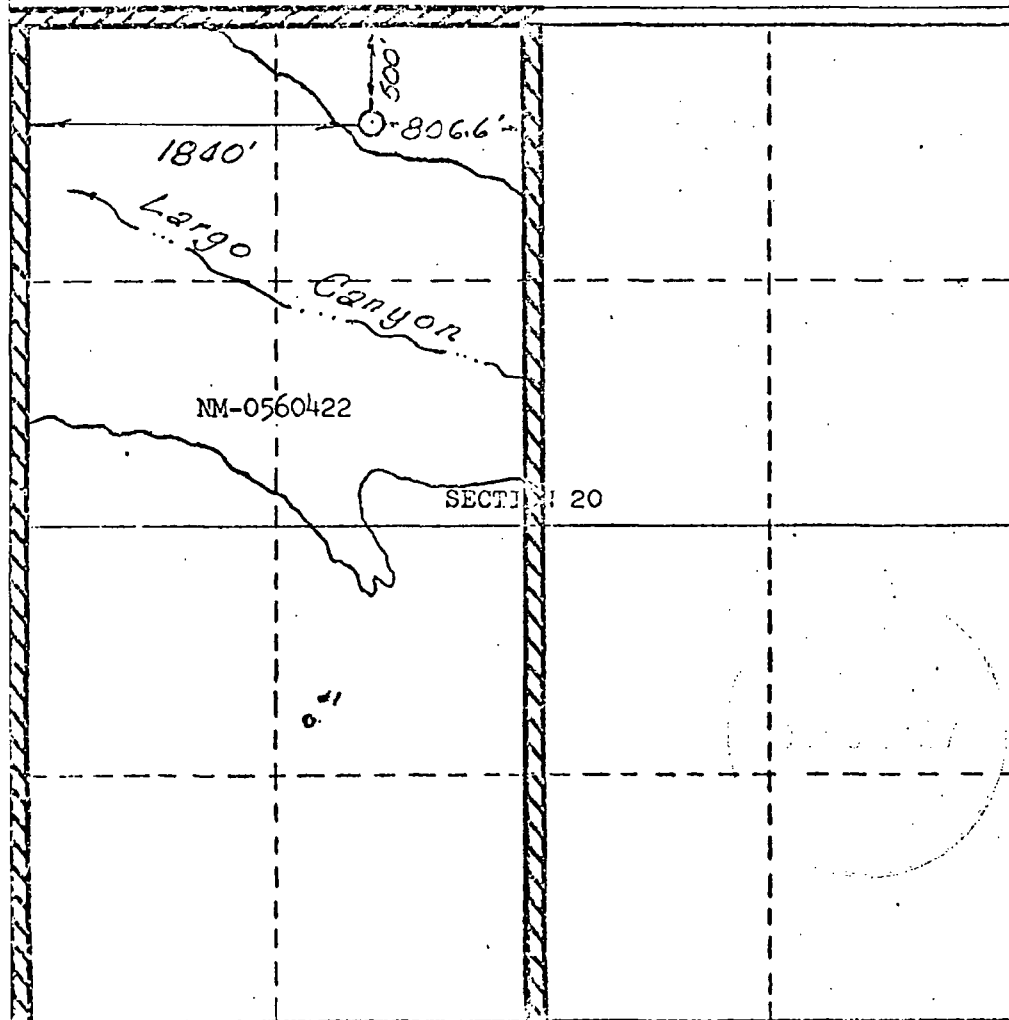
Operator <b>EL PASO NATURAL GAS COMPANY</b>		Lease <b>EL PASO (NM-0560422)</b>		Well No. <b>1A</b>
Unit Letter <b>C</b>	Section <b>20</b>	Township <b>29-N</b>	Range <b>9-W</b>	County <b>SAN JUAN</b>
Actual Footage Location of Well: <b>500</b> feet from the <b>NORTH</b> line and <b>1840</b> feet from the <b>WEST</b> line				
Ground Level Elev. <b>5559</b>	Producing Formation <b>MESA VERDE</b>	Pool <b>BLANCO MESA VERDE</b>	Dedicated Acreage: <b>320.00</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. THIS PLAT REISSUED TO SHOW REVISED NOMENCLATURE. 9-6-77



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Original Signed by  
D. G. Ericso

Name

Drilling Clerk

Position

El Paso Natural Gas Co.  
Company

October 20, 1977

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

AUGUST 28, 1977

Registered Professional Engineer  
and/or Land Surveyor

*[Signature]*

Certificate No. 1760

0 370 740 1110 1480 1850 2220 2590 2000 1500 1000 500 0

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☐DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒OTHER ☐SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

El Paso Natural Gas Company

## 3. ADDRESS OF OPERATOR

P.O. Box 990, Farmington, NM 87401

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

500'N, 1840'W

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5559'GL

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8"	32.3#	200'	224 cu.ft. to circulate
8 3/4"	7"	20.0#	2325'	322 cu.ft. to cover Ojo Alamo
6 1/4"	4 1/2" liner	10.5#	2175-4720'	443 cu.ft. to fill to 2175'

Selectively perforate and sandwater fracture the Mesa Verde formation.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.

This gas is dedicated.

The W/2 of Section 20 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*D. G. Dices*

TITLE

Drilling Clerk

DATE

10-20-77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

5. LEASE DESIGNATION AND SERIAL NO.

NM 0560422

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

El Paso

9. WELL NO.

1A

10. FIELD AND POOL, OR WILDCAT

Blanco Mesa Verde

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREASec. 20, T-29-N, R-9-W  
NMPM

12. COUNTY OR PARISH

San Juan

13. STATE

NM

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL.

320.00

19. PROPOSED DEPTH

4720'

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START\*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other \_\_\_\_\_  
2. NAME OF OPERATOR  
EL PASO NATURAL GAS CO.  
3. ADDRESS OF OPERATOR  
BOX 990, FARMINGTON, NEW MEXICO  
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 500'N, 1840'W  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input checked="" type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) _____	

5. LEASE  
NM 0560422  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
EL PASO  
9. WELL NO.  
1A  
10. FIELD OR WILDCAT NAME  
BLANCO MESA VERDE  
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 20, T-29-N, R-9-W  
NMPM  
12. COUNTY OR PARISH  
San Juan  
13. STATE  
New Mexico  
14. API NO.  
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5559' GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1/5/78: Spudded well. Drilled surface hole.

1/6/78: Ran 5 joints 9 5/8", 32.3#, H-40 surface casing, 227' set at 242'. Cemented with 525 cu. ft. cement. Circulated to surface. WOC 12 hours; held 600#/30 minutes.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

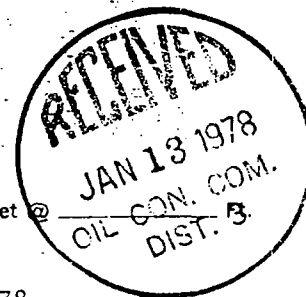
Set @ \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct

SIGNED D. P. Lucas TITLE Drilling Clerk DATE 1/10/78

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



\*See Instructions on Reverse Side

RECEIVED

JAN 11 1978

U.S. Geological Survey,  
Farmington, N.M.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM 0560422

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

EL PASO

9. WELL NO.

1A

10. FIELD AND POOL, OR WILDCAT

BLANCO MESA VERDE

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 20, T-29-N, R-9-W

NMPM

12. COUNTY OR PARISH 13. STATE

SAN JUAN

NEW MEXICO

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

EL PASO NATURAL GAS CO.

3. ADDRESS OF OPERATOR

BOX 990, FARMINGTON, NEW MEXICO 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

500'N, 1840'W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5559' GL

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETION

ABANDON\*

CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any  
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-  
nent to this work.)\*1/8/78: T.D. 2331'. Ran 58 joints 7", 20#, K-55 intermediate casing, 2316' set  
at 2331'. Cemented with 322 cu. ft. cement. WOC 12 hours, held 1200#/  
30 minutes. Top of cement at 525'.1/12/78: T.D. 4723'. Ran 79 joints 4 1/2", 10.5#, KS casing liner, 2560' set  
2163-4723'. Float collar set at 4706'. Cemented with 443 cu. ft.  
cement. WOC 18 hours.2/20/78: PBTD 4706'. Tested casing to 3500#, OK. Perfed C.H. and Men. 3652, 3660,  
3713, 3719, 3835, 3845, 4029, 4035, 4096, 4152, 4168, 4174, 4180, 4187' w/1 SPZ.  
Fraced with 40,000# 20/40 sand and 72,100 gal. water. Flushed with  
5000 gallons water. Perfed P.L. 4284, 4290, 4296, 4302, 4318, 4324, 4330, 4342,  
4349, 4355, 4361, 4409, 4439, 4444, 4461, 4490, 4501, 4521, 4548, 4566, 4582, 4675'  
w/1 SPZ. Fraced with 63,000# 20/40 sand and 104,800 gallons water.  
Flushed w/5100 gal. water.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Drilling Clerk

DATE 2/21/78

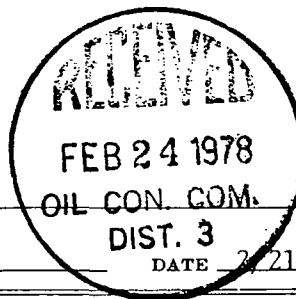
(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



RECEIVED

FEB 23 1978

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 24, 1978

El Paso Natural Gas Company  
P. O. Box 990  
Farmington, New Mexico 87401

Administrative Order NSL-927

Gentlemen:

Reference is made to your application for approval of a non-standard location for your El Paso Well No. 1A to be located 500 feet from the North line and 1840 feet from the West line of Section 20, Township 29 North, Range 9 West, NMPM, Blanco Mesaverde Pool, 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/RLS/jr

cc: U.S. Geological Survey - Farmington  
Oil & Gas Engineering Committee - Hobbs  
OCC - Aztec



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other \_\_\_\_\_

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other \_\_\_\_\_

2. NAME OF OPERATOR

EL PASO NATURAL GAS CO.

3. ADDRESS OF OPERATOR

BOX 990, FARMINGTON, NEW MEXICO

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface

500'N, 1840'W

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

1/5/78

16. DATE T.D. REACHED

1/11/78

17. DATE COMPL. (Ready to prod.)

3/9/78

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

5559' GR

20. TOTAL DEPTH, MD &amp; TVD

4723'

21. PLUG BACK T.D., MD &amp; TVD

4706'

22. IF MULTIPLE COMPL.,  
HOW MANY\*23. INTERVALS  
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-4723

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

3652-4675' (MV)

25. WAS DIRECTIONAL  
SURVEY MADE  
No

26. TYPE ELECTRIC AND OTHER LOGS RUN

I-GR; FDC-GR; Temp. Survey

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	32.3#	242'	13 3/4"	525 cf.	
7"	20#	2331'	8 3/4"	322 cf.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
4 1/2"	2163'	4723'	443 cf.		2 3/8"	4674'	

30. TUBING RECORD

31. PERFORATION RECORDED (Interval, size and number)

3652, 3660, 3713, 3719, 3835, 3845, 4029, 4035, 4096, 4152, 4168, 4174, 4180, 4187' w/1 SPZ. 4284, 4290, 4296, 4302, 4318, 4324, 4330, 4342, 4349, 4355, 4361, 4409, 4439, 4444, 4461, 4490, 4501, 4521, 4548, 4566, 4582, 4675' w/1 SPZ.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3652-4187'	40,000#sand; 72,100 gal. wat
4284-4675'	63,000#sand; 104,800 gal. wa

33.\*

PRODUCTION

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

After Frac Gauge - 1120 MCF/D

Shut In

DATE OF TEST

HOURS TESTED

CHOKE SIZE

PROD'N. FOR TEST PERIOD

OIL—BBL.

GAS—MCF.

WATER—BBL.

GAS OIL RATIO

3/9/78

FLOW. TUBING PRESS.

CASING PRESSURE

CALCULATED 24-HOUR RATE

OIL—BBL.

GAS—MCF.

WATER—BBL.

OIL GRAVITY-API (CORR.)

SI 461

SI 658

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

John Easley

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED



TITLE

Drilling Clerk

DATE

3/28/78

\*(See Instructions and Spaces for Additional Data on Reverse Side)

RECEIVED  
MAR 31 1978  
OIL CON. COM.  
DIST. 3

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any other items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequate for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH
				M.V.	3575
				P.L.	4276



Operator El Paso Natural Gas Company		Lease El Paso #1-A	
Location NW 20-29-09		County San Juan	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 4 1/2	Set At: Feet 4723'	Tubing: Diameter 2 3/8	Set At: Feet 4674'
Pay Zone: From 3652	To 4675'	Total Depth: 4723	Shut In 2-23-78
Stimulation Method Sandwater Frac		Flow Through Casing	Flow Through Tubing

Choke Size, Inches		Choke Constant: C			
Shut-In Pressure, Casing, PSIG 646	+ 12 = PSIA	Days Shut-In 14	Shut-In Pressure, Tubing PSIG 449	+ 12 = PSIA 461	
Flowing Pressure: P PSIG	+ 12 = PSIA		Working Pressure: P <sub>w</sub> PSIG	+ 12 = PSIA	
Temperature: T = °F Ft =	n =		F <sub>pv</sub> (From Tables)	Gravity F <sub>g</sub> =	

CHOKE VOLUME = Q = C x P<sub>t</sub> x F<sub>t</sub> x F<sub>g</sub> x F<sub>pv</sub>

Q =

= \_\_\_\_\_ MCF/D

$$\text{OPEN FLOW} = A_{of} = Q \left( \frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

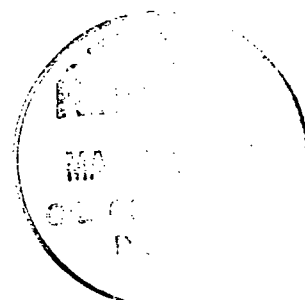
$$A_{of} = \left( \frac{\quad}{\quad} \right)^n =$$

A<sub>of</sub> = \_\_\_\_\_ MCF/D

TESTED BY J. Easley

WITNESSED BY \_\_\_\_\_

*C.R. Morgan*  
Well Test Engineer



Name Of Company EL PASO NATURAL GAS CO.		Address BOX 990, FARMINGTON, NEW MEXICO				
Lease EL PASO	Well No. 1A	Unit Letter C	Section 20	Township 29-N	Range 9-W	
Pool BLANCO MESA VERDE				County SAN JUAN		

DEPTH

DEVIATION

245'

3/4°

948'

3/4°

1500'

3/4°

2325'

1 1/4°

2869'

3/4°

3450'

1°

4150'

1°

4723'

1 1/4°



I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.

W. D. Dawson

Subscribed and sworn to before me this 28th day of March, 1978

Attest: J. L. Davis

Notary Public in and for San Juan County, New Mexico

My commission expires October 5, 1980



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

LAND COMMISSIONER

PHIL R. LUCERO



STATE GEOLOGIST

EMERY C. ARNOLD

DIRECTOR  
JOE D. RAMEY

February 24, 1978

El Paso Natural Gas Company  
P. O. Box 990  
Farmington, New Mexico 87401

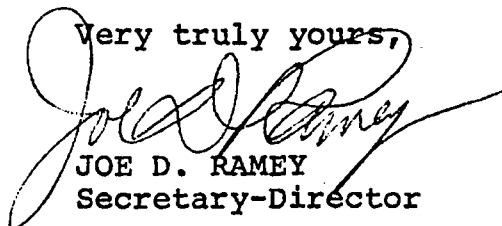
Administrative Order NSL-927

Gentlemen:

Reference is made to your application for approval of a non-standard location for your El Paso Well No. 1A to be located 500 feet from the North line and 1840 feet from the West line of Section 20, Township 29 North, Range 9 West, NMPM, Blanco Mesaverde Pool, 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.

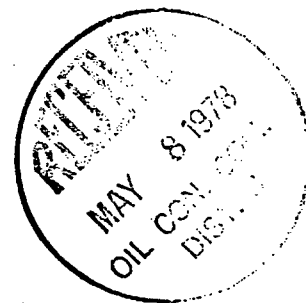
Very truly yours,



JOE D. RAMEY  
Secretary-Director

JDR/RLS/jr

cc: U.S. Geological Survey - Farmington  
Oil & Gas Engineering Committee - Hobbs  
OCC - Aztec



NO. OF COPIES RECEIVED	6
DISTRIBUTION	
SANTA FE	1
FILE	1
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	OIL 1 GAS 1
OPERATOR	2
PRODUCTION OFFICE	

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**REQUEST FOR ALLOWABLE**  
**AND**  
**AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS**

Form C-104  
 Supersedes Old C-104 and C-105  
 Effective 1-1-65

Operator EL PASO NATURAL GAS CO.	
Address BOX 990, FARMINGTON, NEW MEXICO	
Reason(s) for filing (check proper box)	Other (Please explain)
New Well <input checked="" type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Ownership <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>

If change of ownership give name and address of previous owner

**DESCRIPTION OF WELL AND LEASE**

Lease Name EL PASO	Well No. 1A	Pool Name, including Formation BLANCO MESA VERDE	Kind of Lease State, Federal or Fee	Lease No. NM 0560422
Location Unit Letter <u>C</u> : <u>500</u> Feet From The <u>North</u> Line and <u>1840</u> Feet From The <u>West</u>				
Line of Section <u>20</u> Township <u>29-N</u> Range <u>9-W</u> NMPM, <u>San Juan</u> County				

**DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS CO.	BOX 990, FARMINGTON, NEW MEXICO
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
EL PASO NATURAL GAS CO.	BOX 990, FARMINGTON, NEW MEXICO
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When
	C 20 29N 9W

If this production is commingled with that from any other lease or pool, give commingling order number:

**COMPLETION DATA**

Designate Type of Completion - (X)	Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> New Well <input checked="" type="checkbox"/> Workover <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Same Res'v. <input type="checkbox"/> Diff. Res'v. <input type="checkbox"/>
Date Spudded 1/5/78	Date Compl. Ready to Prod. 3/9/78
Elevations (DF, RAB, RT, GR, etc.) 5559' GR.	Name of Producing Formation Mesa Verde
Perforations 3652, 3660, 3713, 3719, 3835, 3845, 4029, 4035, 4096, 4152, 4168, 4180, 4187, 4284, 4290, 4296, 4302, 4318, 4324, 4330, 4342, 4349, 4355	Top Oil/Gas Pay 3652'
1, 4409, 4439, 4444, 4461, 4490, 4501, 4521, 4548, 4566, 4582, 4675'	Depth Casing Shoe 4723'
HOLE SIZE 13 3/4"	CASING & TUBING SIZE 9 5/8"
8 3/4"	7"
6 1/4"	4 1/2" liner
	2 3/8"
	DEPTH SET 242'
	2331'
	2163-4723'
	4674'
	SACKS CEMENT 525 cf
	322 cf
	443 cf
	tubing

**TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL**

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.
		Gas - MCF

**GAS WELL**

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size
	461	658	

**CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

A. B. Buies  
 (Signature)  
 Drilling Clerk  
 (Title)  
 3/28/78  
 (Date)

**OIL CONSERVATION COMMISSION**

APPROVED \_\_\_\_\_ 19\_\_\_\_  
 BY Original Signed by A. R. Kendrick  
 TITLE SUPERVISOR DIST. #2

This form is to be filed in compliance with RULE 1104.  
 If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.  
 All sections of this form must be filled out completely for allowable on new and recompleted wells.  
 Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.  
 Separate Form C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

NO. OF LEASE SECTIONS	
SECTION	
100% FE	
FILE	
U.S.G.S.	
LAND OFFICE	
TRANSPORTER	
OPERATOR	
PRODUCTION OFFICE	

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-104  
Revised 10-01-78  
Format 08-01-83  
Page 1

REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator <b>El Paso Natural Gas Company</b>	
Address <b>P. O. Box 4289, Farmington, NM 87499</b>	
Reason(s) for filing (Check proper box)	Other (Please explain)
<input type="checkbox"/> New Well <input type="checkbox"/> Recompletion <input type="checkbox"/> Change in Ownership	Change in Transporter of: <input type="checkbox"/> Oil <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Dry Gas <input type="checkbox"/> Condensate

If change of ownership give name and address of previous owner: \_\_\_\_\_

II. DESCRIPTION OF WELL AND LEASE

Lease Name <b>El Paso</b>	Well No. <b>1A</b>	Pool Name, including Formation <b>Blanco Mesa Verde</b>	Kind of Lease State (Federal or Fee) <b>NM 0560422</b> Lease No.
Location Unit Letter <b>C</b> : <b>500</b> Feet From The <b>North</b> Line and <b>1840</b> Feet From The <b>West</b> Line of Section <b>20</b> Township <b>29N</b> Range <b>9W</b> N.M.P.M., <b>San Juan</b> County			

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>Meridian Oil Inc.</b>	<b>P. O. Box 1599, Aztec, New Mexico 87410</b>
Name of Authorized Transporter of Gas or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<b>El Paso Natural Gas Company</b>	<b>P. O. Box 4289, Farmington, NM 87499</b>
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When
Unit <b>C</b> Sec. <b>20</b> Twp. <b>29N</b> Rng. <b>9W</b>	

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

*Peggy Oak*  
(Signature)  
Drilling Clerk  
5-1-86  
(Date)

JUN 11 1986  
OIL CON. DIV.  
DIST. 3

OIL CONSERVATION DIVISION

JUN 11 1986

APPROVED  
BY *[Signature]*  
TITLE *[Signature]*

This form is to be filed in compliance with RULE 1104.  
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.  
All sections of this form must be filled out completely for allowable on new and recompleted wells.  
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter or other such change of condition.  
Separate Forms C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES DESIRED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.A.	
LAND OFFICE	
TRANSPORTER	OIL
OPERATOR	GAS
PRODUCTION OFFICE	

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

Form C-104  
Revised 10-01-78  
Format 08-01-83  
Page 1

REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I. Operator  
Meridian Oil Inc.

Address  
P. O. Box 4289, Farmington, NM 87499

Reason(s) for filing (Check proper box)

<input type="checkbox"/> New Well	Change in Transporter of:	<input type="checkbox"/> Oil	<input type="checkbox"/> Dry Gas
<input type="checkbox"/> Recompletion	<input type="checkbox"/> Casinghead Gas	<input type="checkbox"/> Condensate	
<input checked="" type="checkbox"/> Change in COMMINGLED Operatorship			

Other (Please explain)  
Meridian Oil Inc. is Operator for El Paso Production Company

If change of ownership give name and address of previous owner El Paso Natural Gas Company, P. O. Box 4289, Farmington, NM 87499

II. DESCRIPTION OF WELL AND LEASE

Lease Name El Paso	Well No. 1A	Pool Name, including Formation Blanco Mesa Verde	Kind of Lease State (Federal) or Fee	Lease No. NM 0560422
Location Unit Letter <u>C</u> : <u>500</u> Feet From The <u>North</u> Line and <u>1840</u> Feet From The <u>West</u>				
Line of Section <u>20</u> Township <u>29N</u> Range <u>9W</u> , NMPM, <u>San Juan</u> County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Meridian Oil Inc.	P. O. Box 4289, Farmington, NM 87499
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
El Paso Natural Gas Company	P. O. Box 4289, Farmington, NM 87499
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. is gas actually connected? When?
	C 20 29N 9W

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

NOTE: Complete Parts IV and V on reverse side if necessary.

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

[Signature]  
(Signature)  
Drilling Clerk

[Title]  
1-86

RECEIVED  
NOV - 1 1986  
OIL CONSERVATION DIVISION

OIL CONSERVATION DIVISION

APPROVED \_\_\_\_\_, 19\_\_\_\_  
BY [Signature]  
TITLE SUPERVISION DISTRICT #8

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		3. LEASE DESIGNATION AND SERIAL NO. NM-0560422
2. NAME OF OPERATOR Meridian Oil Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR Post Office Box 4289, Farmington, NM 87499		7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 500'N, 1840'W		8. FARM OR LEASE NAME El Paso
14. PERMIT NO.		9. WELL NO. 1A
15. ELEVATIONS (Show whether OF, ST, OR, etc.) 5559'GL		10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde
		11. SEC., T., R., N., OR BLK. AND SUBST. OR AREA Sec. 20, T-29-N, R-9 -W N.M.P.M.
		12. COUNTY OR PARISH San Juan
		13. STATE NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(Other) ☐

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

08-08-88 Install Well Master plunger lift on well.

RECEIVED  
FARMINGTON RESOURCE AREA  
OCT 11 1989

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Regulatory Affairs DATE 01-11-89

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

FARMINGTON RESOURCE AREA

BY [Signature]

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

## Sundry Notices and Reports on Wells

1. Type of Well  
GAS

2. Name of Operator

**BURLINGTON  
RESOURCES**

OIL &amp; GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

500' FNL, 1840' FWL, Sec. 20, T-29-N, R-9-W, NMPM

C

Lease Number  
NM-0560422

If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
El Paso #1A

9. API Well No.  
30-045-22778

10. Field and Pool  
Blanco Mesaverde

11. County and State  
San Juan Co, NM

## 12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

## Type of Submission

## Type of Action

<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Bradenhead repair	

## 13. Describe Proposed or Completed Operations

10-5-96 MIRU. ND WH. NU BOP. TIH, tag up @ 4670'. TOOH w/150 jts 2 3/8" tbhg. TIH w/4 1/2" RBP, set @ 3517'. Load hole w/105 bbl wtr. PT csg to 1000 psi, OK. TOOH w/tbfg & retrieving tool. Dump sd on RBP. Load hole w/wtr. SD for Sunday.

10-7-96 TIH, ran CBL @ 0-1000', TOC @ 820'. Perf 2 sqz holes @ 500'. Establish circ down csg & out bradenhead. Pump 260 sx Class "B" cmt w/2% calcium chloride, 0.25 pps Celloflakes. Circ 3 bbl cmt to surface. Close bradenhead valve. Pump 17 bbl cmt. Displace w/11.5 bbl wtr. Sqz to 800 psi. WOC. SDON.

10-8-96 TIH, tag TOC @ 310'. Circ hole clean. Drill cmt @ 310-515'. PT csg to 900 psi, OK. TOOH. TIH w/7" csg scraper to 800'. TOOH. TIH w/4 1/2" retrieving tool, set @ 2020'. SDON.

10-9-96 Blow well & CO. TOOH w/RBP. TIH w/150 jts 2 3/8" 4.7# J-55 tbhg, landed @ 4670' ND BOP. NU WH. RD. Rig released.

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] Title Regulatory Administrator Date 10/15/96

(This space for Federal or State Office use)

APPROVED BY \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

CONDITION OF APPROVAL, if any:

**ACCEPTED FOR RECORD**

OCT 18 1996

NMCCD

FARMINGTON DISTRICT OFFICE



District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
P.O. Drawer DD, Artesia, NM 88211-0719

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals, & Natural Resources Department

Form C-104

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office.

5 Copies

OIL CONSERVATION DIVISION

PO Box 2088

Santa Fe, NM 87504-2088

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator Name and Address Burlington Resources Oil & Gas PO Box 4289 Farmington, NM 87499		OGRID Number 14538
		Reason for Filing Code CO - 7/11/96
API Number 30-045-22778	Pool Name BLANCO MESAVERDE (PRORATED) GAS	Pool Code 72319
Property Code 006966	Property Name EL PASO	Well Number #1A

II. Surface Location

UI or lot no. C	Section 20	Township 029N	Range 009W	Lot.Idn	Feet from the 500	North/South Line N	Feet from the 1840	East/West Line W	County SAN JUAN
--------------------	---------------	------------------	---------------	---------	----------------------	-----------------------	-----------------------	---------------------	--------------------

Bottom Hole Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West Line	County
Lse Code		Producing Method Code		Gas Connection Date		C-129 Permit Number		C-129 Effective Date	C-129 Expiration Date

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	POD	O/G	POD ULSTR Location and Description
7057	EL PASO FIELD SERVICES P.O. BOX 1492 EL PASO, TX 79978		G	C-20-T029N-R009W
9018	Giant Industries 5764 US Hwy 64 Farmington, NM 87401	1590410	O	C-20-T029N-R009W

IV. Produced Water

POD	POD ULSTR Location and Description
-----	------------------------------------

V. Well Completion Data

Spud Date	Ready Date	TD	PBTD	Perforations
Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement	

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date	Test Length	Tbg. Pressure	Csg. Pressure
Choke Size	Oil	Water	Gas	AOF	Test Method

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Dolores Diaz*

Approved by: Frank T. Chavez

Printed Name:  
Dolores Diaz

Title: District Supervisor

Title:  
Production Associate

Approved Date: July 11, 1996

Date:  
7/11/96

Phone  
(505) 326-9700

If this is a change of operator fill in the OGRID number and name of the previous operator  
14538 Meridian Oil Production

Previous Operator Signature

Printed Name

Title

Date

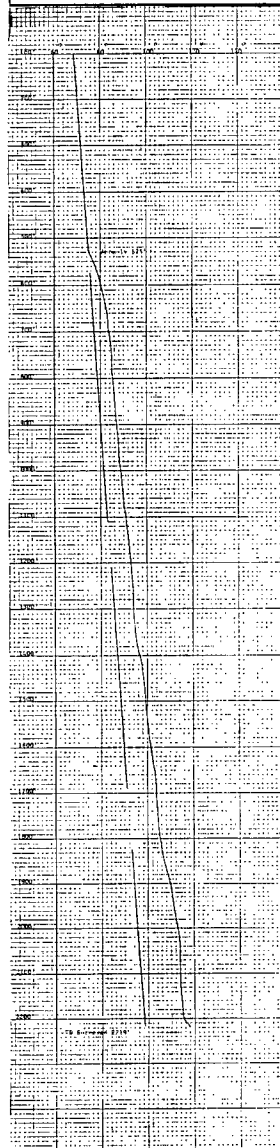
Signature: *Dolores Diaz*

Dolores Diaz

Production Associate

7/11/96

<b>WILSON</b>			
SERVICE COMPANY			
<b>TEMPERATURE SURVEY</b>			
COMPANY <u>El Paso Natural Gas Co.</u>			
WELL <u>1-8</u>	LEASE <u>St. Paul</u>		ST. PAUL
COUNTY <u>San Juan</u>	STATE <u>New Mexico</u>		
SEC <u>TWP</u>	RGE <u></u>		
APPROX. TOP CEMENT <u>333'</u>			
Survey Begins at <u>100'</u> Ft. Ends at <u>3333'</u> Ft.			
Approx. FID-LP <u></u> Max. Temp <u></u>			
Log Measured From <u>KB</u> Run No <u>1</u>			
Casing Size	Casing Depth	Diam. of Hole	Depth
1" from	to	from	to
from	to	from	to
Date of Cementing <u>1-8-78</u> Time <u>10:00 AM</u>			
Date of Survey <u>1-8-78</u> Time <u>6:00 PM</u>			
Amount of Cement <u>155 Bags 60/70 Class 8 Pct w/15 Gal. - 21 Cu. Ft.</u>			
Recorded by <u>John</u> Witnessed by <u></u>			
REMARKS OR OTHER DATA			
<u>Float Valve @ 3334'</u>			



State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

Form C-104B  
Permit 10710

Change of Operator Name

OGRID: 14538  
Effective Date: 12/31/2000

Previous Operator Name and Information

Name: BURLINGTON RESOURCES OIL & GAS  
CO  
Address: PO Box 4289  
Address: \_\_\_\_\_  
City, State, Zip: Farmington, NM 87499

New Operator Name and Information

Name: BURLINGTON RESOURCES OIL & GAS  
COMPANY LP  
Address: \_\_\_\_\_  
Address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given on this form and the certified list of wells is true to the best of my knowledge and belief.

Signature: Alan Alexander

Printed Name: ALAN ALEXANDER

Title: SENIOR LARAD ADVISOR

Date: 5/4/05 Phone: 505-326-9757

**NMOCD Approval**

Electronic Signature: David Brooks

District: District IV

Date: May 04, 2005