

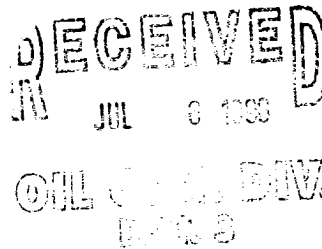


NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

June 30, 1998

Burlington Resources Oil & Gas Company  
P. O. Box 4289  
Farmington, New Mexico 87499-4289  
Attention: Peggy Bradfield



*Administrative Order NSL-4080*

Dear Ms. Bradfield:

Reference is made to your application dated June 22, 1998 for an exception to the well location requirements provided within the "Special Rules and Regulations for the Blanco-Mesaverde Pool," as promulgated by Division Order No. R-10987, for a non-standard Blanco-Mesaverde infill gas well location in an existing non-standard 196.56-acre stand-up gas spacing and proration unit for the Blanco-Mesaverde Pool comprising Lots 7, 8, 9, 10, 15, 16, 17, and 18 (W/2 equivalent) of irregular Section 30, Township 32 North, Range 9 West, NMPM, San Juan County, New Mexico. This unit is currently dedicated to Burlington Resources Oil & Gas Company's San Juan "32-9" Unit Well No. 40 (API No. 30-045-11220), located at a standard gas well location 890 feet from the South and West lines (Lot 18/Unit N) of Section 30.


The application has been duly filed under the provisions of Rules 104.F and 605.B of the Rules and Regulations of the New Mexico Oil Conservation Division ("Division").

By the authority granted me under the provisions of Division Rule 104.F(2), the following described well to be drilled at an unorthodox infill gas well location in Section 30 is hereby approved:

**San Juan "32-9" Unit Well No. 40-A  
1620' FNL & 1645' FWL (Lot 10/Unit F)  
(API No. 30-045-29627)**

Further, both of the aforementioned San Juan "32-9" Unit Well Nos. 40 and 40-A and the existing gas spacing and proration unit will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest, New Mexico.

Sincerely,

  
Lori Wrotenbery  
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec /  
U. S. Bureau of Land Management - Farmington

# BURLINGTON RESOURCES

SAN JUAN DIVISION

June 22, 1998

SENT FEDERAL EXPRESS

Ms. Lori Wrotenbery, Director  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

RECEIVED  
JUN 22 1998

OIL CONSERVATION DIV.  
SANTA FE, NM

Re: San Juan 32-9 Unit #40A  
1620'FNL, 1645'FWL, Section 30, T-32-N, R-9-W, San Juan County, NM  
30-045-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Blanco Mesa Verde pool. This application for the referenced location is for topographic and archaeological reasons, and at the request of the Bureau of Land Management.

Production from the Blanco Mesa Verde pool is to be included in a 207.48 acre gas spacing and proration unit comprising of the west half (W/2) of Section 30 which is currently dedicated to the San Juan 32-9 Unit #40 (30-045-11220) located at 890'FSL, 890'FWL of Section 30. Meridian Oil (Burlington Resources) assumed operatorship of this well effective November 1989. Attached is a letter from W.G. Macey dated September 5, 1955 defining the proration units for the San Juan 32-9 Unit.

The following attachments are for your review:

1. Application for Permit to Drill.
2. Completed C-102 at referenced location.
3. Offset operators/owners plat.
4. 7.5 minute topographic map, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,

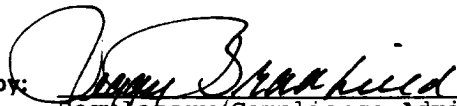


Peggy Bradfield  
Regulatory/Compliance Administrator

xc: NMOCD - Aztec District Office  
Bureau of Land Management - Farmington District Office

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number SF-078509 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	7. Unit Agreement Name San Juan 32-9 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 32-9 Unit 9. Well Number 40A	
4. Location of Well 1620' FNL, 1645' FWL Latitude 36° 57.5, Longitude 107° 49.2	10. Field, Pool, Wildcat Blanco Mesa Verde 11. Sec., Twn, Rge, Mer. (NMPM) Sec 30, T-32-N, R-9-W API # 30-045-	
14. Distance in Miles from Nearest Town 4 miles to Cedar Hill	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1620'	17. Acres Assigned to Well 207.48 W/2	
16. Acres in Lease		
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1500'	20. Rotary or Cable Tools Rotary	
19. Proposed Depth 6150'		
21. Elevations (DF, FT, GR, Etc.) 6609' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by:  Regulatory/Compliance Administrator	5-9-91 Date	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

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

District II  
PO Drawer 00, 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

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C  
Revised February 21,  
Instructions on  
Submit to Appropriate District C  
State Lease - 4 C  
Fee Lease - 3 C

☐ AMENDED REP

### WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-		*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 7473	*Property Name SAN JUAN 32-9 UNIT		*Well Number 40A
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6609'

#### 10 Surface Location

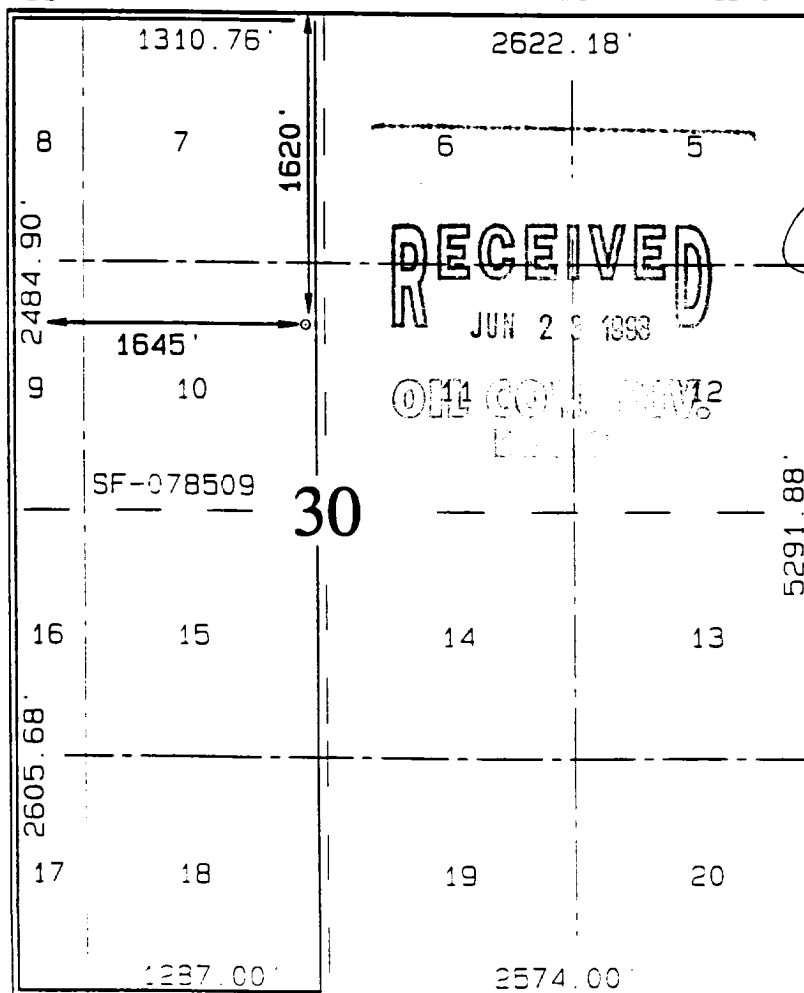
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	30	32N	9W		1620	NORTH	1645	WEST	SAN J.

#### 11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

*Dedicated Acres W/207.48	*Joint or Infill	*Consolidation Code	*Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
404.58' OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



#### 17 OPERATOR CERTIFICATION

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

*Peggy Bradfield*  
Signature  
Peggy Bradfield  
Printed Name  
Regulatory Administrator  
Title

Date

#### 18 SURVEYOR CERTIFICATION

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

MARCH 17, 1998  
Date of Survey

Signature and Seal of Professional Surveyor

*Neale C. Edwards*  
NEALE C. EDWARDS  
NEW MEXICO  
6857  
Professional Surveyor  
Certificate Number

## OPERATIONS PLAN

**Well Name:** San Juan 32-9 Unit #40A  
**Location:** 1620' FNL, 1645' FWL Section 30, T-32-N, R-9-W  
San Juan County, New Mexico  
Latitude 36° 57.5, Longitude 107° 49.2  
**Formation:** Blanco Mesa Verde  
**Elevation:** 6609' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2015'	aquifer
Ojo Alamo	2015'	2126'	aquifer
Kirtland	2126'	2850'	
Fruitland	2850'	3449'	
Pictured Cliffs	3449'	3585'	gas
Lewis	3585'	4177'	gas
Intermediate TD	3685'		
Huerfanito Bentonite	4177'	4630'	
Chacra	4630'	5409'	
Massive Cliff House	5409'	5434'	gas
Menefee	5434'	5750'	gas
Massive Point Lookout	5750'	6140'	gas
Mancos Shale	6140'		
Total Depth	6150'		

### Logging Program:

Cased hole logging - Gamma Ray Neutron  
Coring/DST - none

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-3685'	LSND	8.4-9.0	30-60	no control
3685-6150'	Gas/Mist	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

### Casing Program (as listed, the equivalent, or better):

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3685'	7"	20.0#	J-55
6 1/4"	3585' - 6150'	4 1/2"	10.5#	J-55

### Tubing Program:

0' - 6150'      2 3/8"      4.7#      J-55

### BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).  
After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

BOP Specifications, Wellhead and Tests (cont'd):

**Intermediate TD to Total Depth -**

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).  
After nipple-up prior to drilling out intermediate casing, rams  
and casing will be tested to 1500 psi for 30 minutes.

**Surface to Total Depth -**

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

**Completion Operations -**

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2).  
After nipple-up prior to completion, pipe rams, casing and liner  
top will be tested to 2000 psi for 15 minutes.

**Wellhead -**

9 5/8" x 7" x 2 3/8" x 2000 psi tree assembly.

**General -**

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

**Cementing:**

9 5/8" surface casing - cement with 163 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

**7" intermediate casing -**

Lead w/307 sx Class "B" w/3% econolite, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% gel, 2% calcium chloride, 0.5# flocele/sx, and 10# gilsonite/sx (989 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 2126'. Two turbolating centralizers at the base of the Ojo Alamo at 2126'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

**4 1/2" Production Liner -**

Cement to circulate liner top. Lead with 129 sx 65/35 Class "B" poz w/6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 150 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (438 cu.ft., 75% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.
- The pipe will be rotated and/or reciprocated, if hole conditions permit.

**Special Drilling Operations (Gas/Mist Drilling):**

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

**Additional Information:**

- The Mesa Verde formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	400 psi
Pictured Cliffs	750 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of the section is dedicated to the Mesa Verde.
- This gas is dedicated.

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Drilling Engineer

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Date

# ***BURLINGTON RESOURCES***

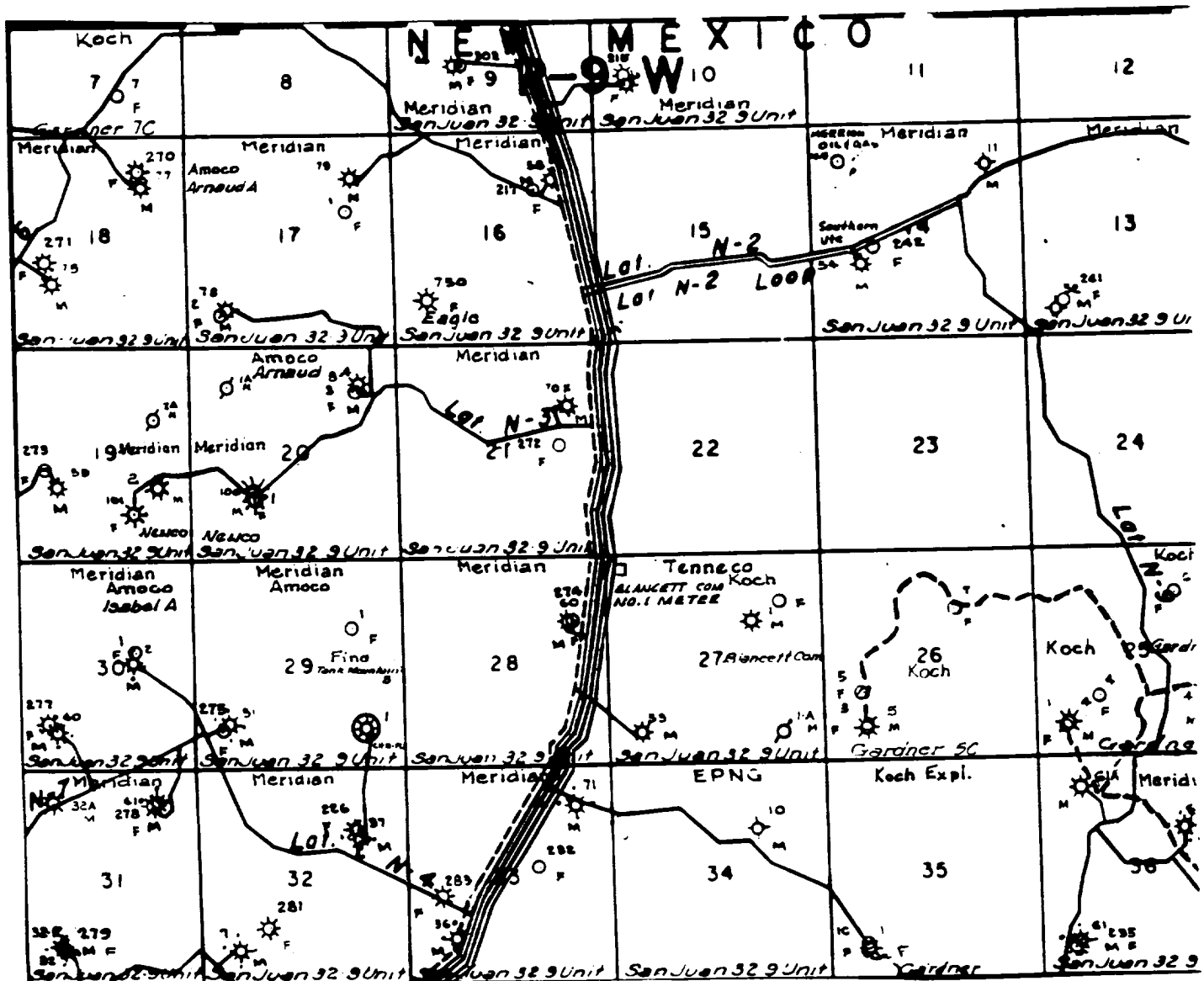
San Juan 32-9 Unit #40A  
Multi-Point Surface Use Plan

1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 1600' of access road will be constructed. Pipelines are indicated on Map No. 1A.
3. Location of Existing Wells - Refer to Map No. 1A.
4. Location of Existing and/or Proposed Facilities if Well is Productive -
  - a. On the Well Pad - Refer to Plat No. 1, anticipated production facilities plat.
  - b. Off the Well Pad - Anticipated pipeline facilities as shown on the attached plat from El Paso Field Services.
5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from Pump Wash Water Hole #2 located in SW/4 Section 36, T-31-N, R-9-W, New Mexico.
6. Source of Construction Materials - If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
7. Methods of Handling Waste Materials - All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If 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 waste materials into the watershed. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
8. Ancillary Facilities - None anticipated.
9. Wellsite Layout - Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.



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 as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
11. Surface Ownership - Bureau of Land Management
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
13. Operator's Representative and Certification - Burlington Resources Oil & Gas Company Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Burlington Resources Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

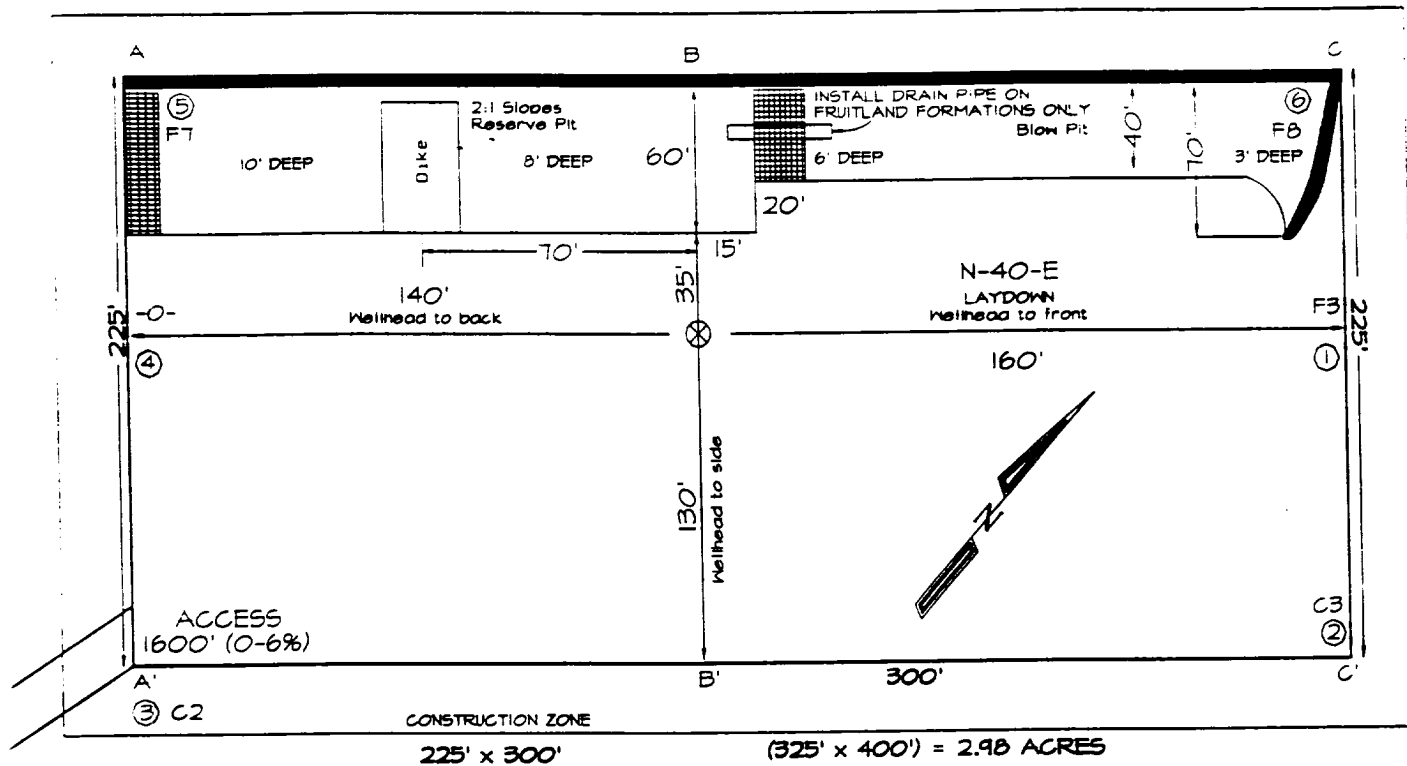
  
Regulatory/Compliance Administrator      5-9-98  
Date



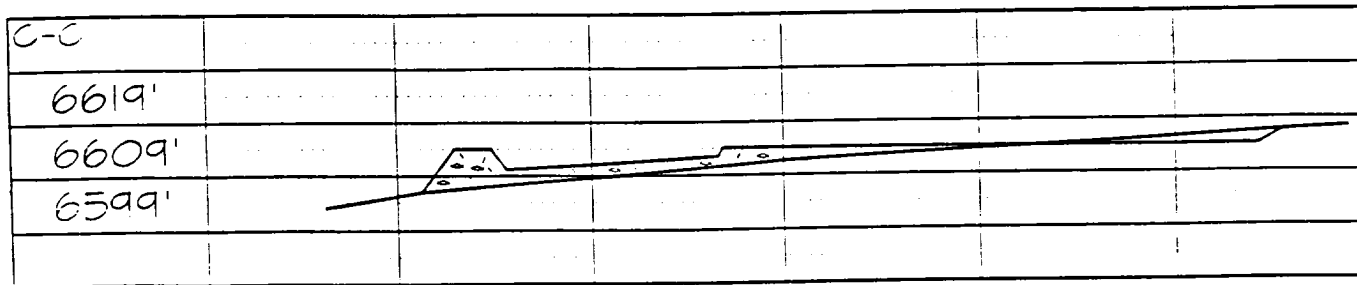
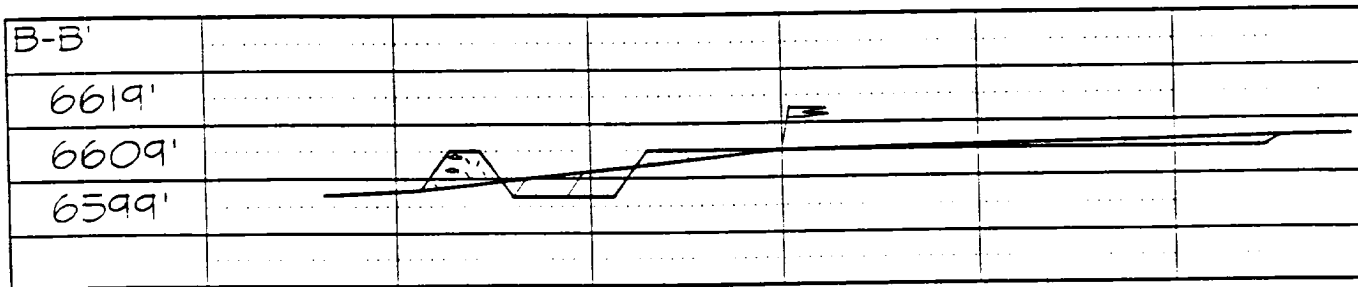
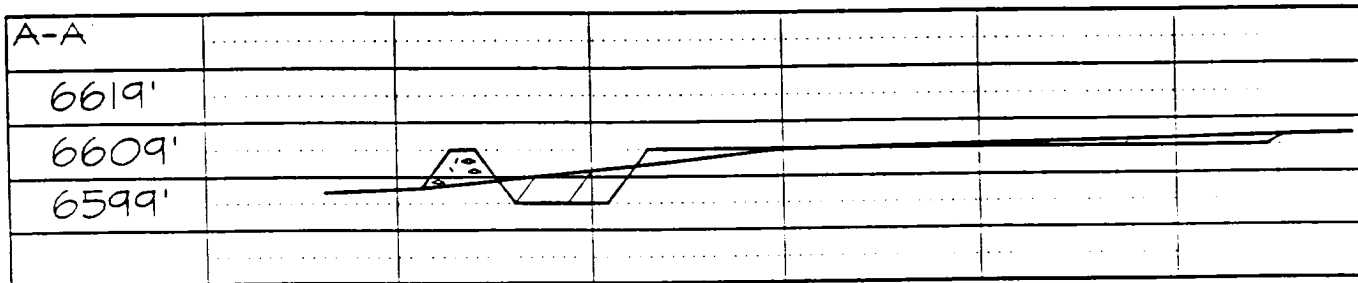
MERIDIAN OIL INC.  
 Pipeline Map  
 T-32-N, R-09-W  
 San Juan County, New Mexico  
 San Juan 32-9 Unit 40A

**PLAT #1**

**BURLINGTON RESOURCES OIL & GAS COMPANY  
SAN JUAN 32-9 UNIT #40A, 1620' FNL & 1645' FWL  
SECTION 30, T32N, R9W, NMPM, SAN JUAN COUNTY, NEW MEXICO  
GROUND ELEVATION: 6609' DATE: MARCH 17, 1998**



Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side).  
Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

***BURLINGTON RESOURCES OIL AND GAS COMPANY***

**San Juan 32-9 Unit #40A**

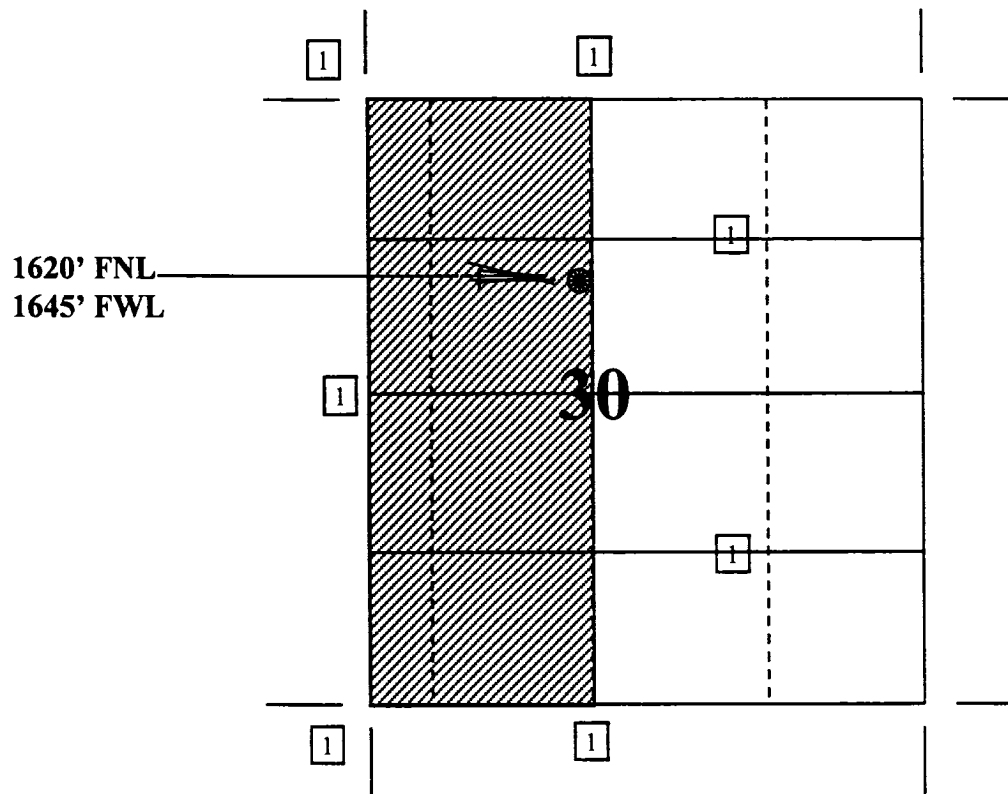
**OFFSET OPERATOR/OWNER PLAT**

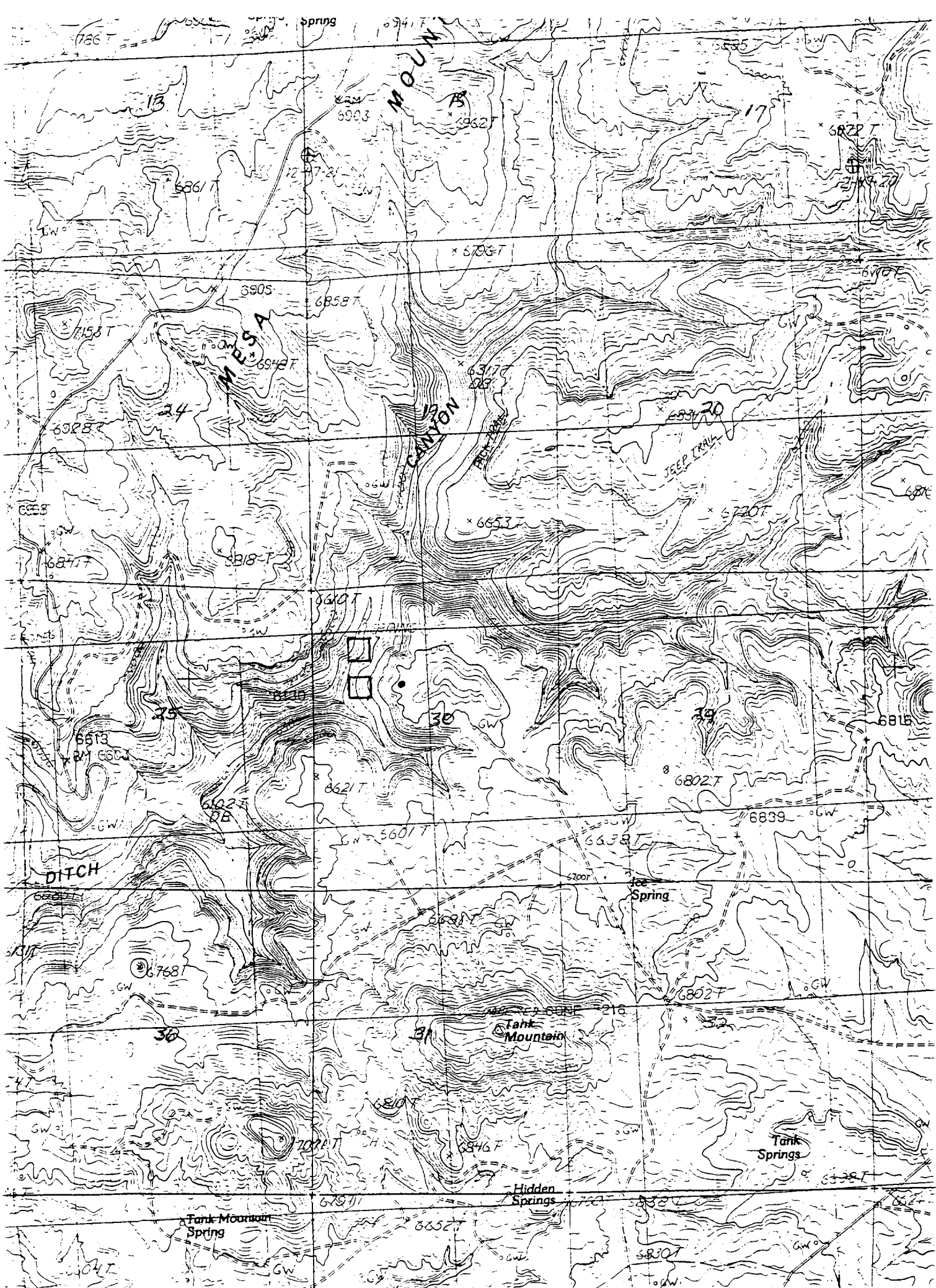
**Nonstandard Location**

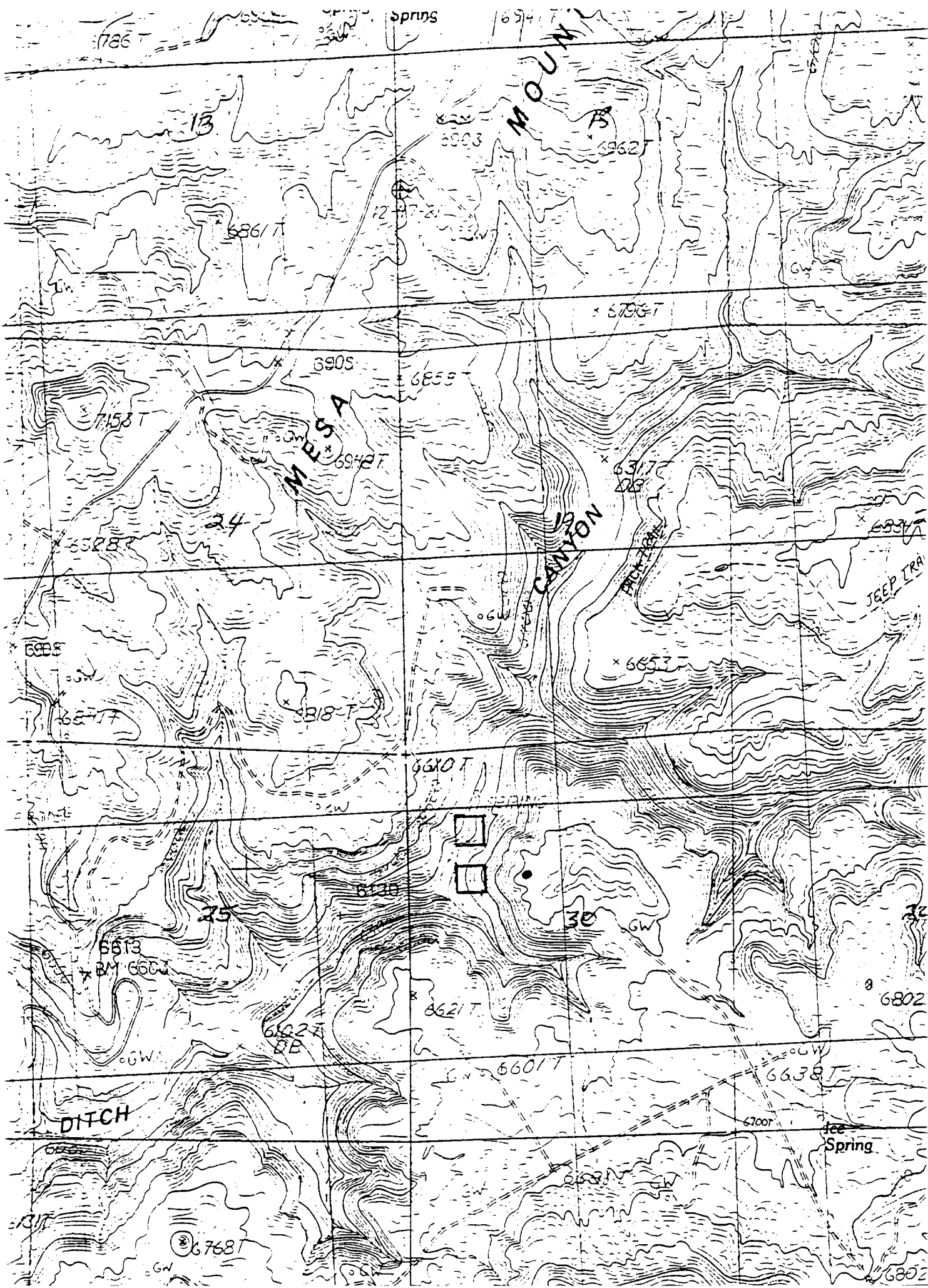
**(Section 30 is a Nonstandard Section)**

**Mesaverde Formation Well**

**Township 32 North, Range 9 West**









September 2, 1955

Pacific Northwest Pipeline Company  
Simms Building  
Albuquerque, New Mexico

Gentlemen:

Reference is made to the formation of non-standard gas proration units within the defined limits of approved unit agreements in the Blanco Mesaverde Gas Pool, in which the drilling blocks were specified, outlined and defined in said unit agreement.

It is the opinion of the Commission that the question of proration units, both standard and non-standard, was taken up at the time that the unit agreement in which the drilling blocks were specifically defined was heard by the Commission, and that the proration units within such unit agreement were formed and approved at the time that the unit agreement was approved and therefore require no further approval by the Commission. In addition, the plan of development submitted by each unit operator to the Commission each year further defines the area which may be dedicated to a well for proration purposes and the approval of such plan of development by the Commission in our opinion grants approval to any proration unit formed as a result of such drilling.

Effective the 1st of September, all that will be required for proration units formed in the defined areas of a unit agreement in which the drilling blocks have been specified and outlined is the submittal of the Form C-104 and the official Commission Gas Well Plat to the Oil Conservation Commission district office at Aztec, New Mexico. The

-2-



following statement should be included on both C-104 and the Gas Well Plat when the proration unit is other than the standard 320 acre unit for the Blanco-Mesaverde Pool: "Irregular size of this proration unit within the \_\_\_\_\_ unit agreement was made necessary by variations in the legal sub-division."

There is attached to this letter a list of the unit agreements in which the drilling blocks are specified and which would qualify for the exception outlined above.

Very truly yours,

W. B. MACEY,  
Secretary-Director

WBM/it

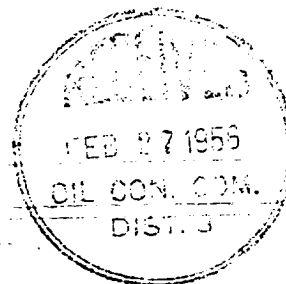
Attachment

*note - an original of this letter was also sent to Phillips Petroleum and El Paso Natural*



# UNIT

Rosa	No drilling blocks specified
Lindrith	" " " "
Huerfano	" " " "
Allison	" " " "
Callegos Canyon	" " " "
Huerfanito	" " " "
Rincon	" " " "
NE Blanco	" " " "
Cox Canyon	" " " "
Chaco Unit	" " " "



SJ 30-5

No drilling blocks specified below base of Mesaverde  
E/2 & W/2 320-acre drilling blocks for Mesaverde & shallower.

" 29-5	Same as SJ 30-5
" 29-6	Same as SJ 30-5
" 32-7	Same as SJ 30-5
" 32-8	Same as SJ 30-5
" 31-6	Same as SJ 30-5
" 32-5	Same as SJ 30-5
" 30-6	Same as SJ 30-5
" 32-9	Same as SJ 30-5
" 27-5	Same as SJ 30-5
" 29-4	Same as SJ 30-5
" 30-4	Same as SJ 30-5
" 27-4	Same as SJ 30-5
" 29-4	Same as SJ 30-5
" 29-7	" " " "

SJ 28-4

No drilling blocks specified below base of Mesaverde  
N/2 & S/2 320-acre drilling blocks for Mesaverde & shallower.  
Same as SJ 28-4

" 28-5

" 28-6

E/2 & W/2 320-acre drilling blocks for Mesaverde & shallower.  
Provided further that Secs. 7 through 12, T 28N, R 6W shall  
each constitute complete drilling blocks.

SJ 28-7

No drilling blocks specified below base of Mesaverde.  
E/2 & W/2 320-acre drilling blocks Mesaverde and shallower.  
Amendment to unit agreement approved GGC 7-25-55 provides:  
Secs. 7 through 12, T 28N, R 7W and N/2 Sec. 27, T 27N, R 7W,  
each shall be considered complete drilling blocks for the Mesa-  
verde and shallower, and NW/4 Sec. 27, T 27N, R 7W shall be  
considered Pictured Cliffs drilling block.

Canyon Largo E/2 & W/2 320-acre drilling blocks - no formations specified.