NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

June 25, 1998

10/M
13-28-5

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

RECEIVED
JUL 1 1998
OIL CON. DIV.
DIST. 3

Administrative Order NSL-4065

Dear Ms. Bradfield:

Reference is made to your application dated June 9, 1998 for an exception to the well location requirements provided within the "*Special Rules and Regulations for the Blanco-Mesaverde Pool/Special Rules and Regulations for the Basin-Dakota Pool,*" as promulgated by Division Order No. R-10987, for Burlington Resources Oil & Gas Company's ("Burlington") proposed San Juan "28-5" Unit Well No. 101-M to be drilled at an unorthodox "infill" gas well location in both the Blanco-Mesaverde and Basin-Dakota Pools 920 feet from the North line and 25 feet from the West line (Unit D) of Section 13, Township 28 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

Gas production from the Blanco-Mesaverde Pool is to be included in an existing standard 343.07-acre lay-down gas spacing and proration unit comprising Lots 1 and 2, the W/2 NE/4, and the NW/4 (N/2 equivalent) of Section 13 which is currently dedicated to Burlington's San Juan "28-5" Unit Well No. 31 (**API No. 30-039-07432**), located 1750 feet from the North line and 1500 feet from the East line (Unit G) of Section 13. Gas production from the Basin-Dakota Pool is to be included in an existing standard 320-acre stand-up gas spacing and proration unit comprising the W/2 of Section 13, which is currently dedicated to Burlington's San Juan "28-5" Unit Well No. 101 (**API No. 30-039-21804**), located at a standard gas well location 1470 feet from the South line and 1840 feet from the West line (Unit K) of Section 13.

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 above-described unorthodox Basin-Dakota/Blanco-Mesaverde "infill" gas well location for the San Juan "28-5" Unit Well No. 101-M is hereby approved. All of the aforementioned wells and both spacing units will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest, New Mexico.

Sincerely,

Lori Wrotenbery

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 9, 1998

HAND DELIVERED

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

Re: San Juan 28-5 Unit #101M
920'FNl, 25'FWL, Section 13, T-28-N, R-5-W, Rio Arriba County, NM
30-039-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Blanco Mesa Verde and Basin Dakota pools. This application for the referenced location is for topographic and archaeological reasons. It is also at the request of the Bureau of Land Management to minimize surface disturbance and to avoid a wildlife surface management area.

Production from the Blanco Mesa Verde pool is to be included in a standard 343.07 acre gas spacing and proration unit comprising of the north half (N/2) of Section 13 which is currently dedicated to the San Juan 28-5 Unit #31 (30-039-07432) located at 1750'FNL, 1500'FEL of Section 13. Production from the Basin Dakota is to be included in a standard 320 acre gas spacing and proration unit comprising of the west half (W/2) of Section 13 which is currently dedicated to the San Juan 28-5 Unit #101 (30-039-21804) located at 1470'FSL, 1840'FWL of Section 13.

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

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

RECEIVED
JUN 5 1998
OIL CON. DIV.
DIST. 3

1a. Type of Work
DRILL

1b. Type of Well
GAS

5. Lease Number
SF-079250
Unit Reporting Number

6. If Indian, All. or Tribe

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

7. Unit Agreement Name
San Juan 28-5 Unit

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

(505) 326-9700

8. Farm or Lease Name
San Juan 28-5 Unit

9. Well Number
101M

4. Location of Well
920'FNL, 25'FWL

Latitude 36° 40.0, Longitude 107° 19.3

10. Field, Pool, Wildcat
Blanco MV/Basin Dk

11. Sec., Twn, Rge, Mer. (NMPM)
Sec 13,T-28-N,R-5-W

API # 30-039-

14. Distance in Miles from Nearest Town
6 miles to Gobernador

12. County
RA

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
25'

16. Acres in Lease

17. Acres Assigned to Well
320 Dk; 343.07 MV

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
1200'

19. Proposed Depth
8819'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
7390'GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: _____ 5-9-98
Regulatory/Compliance Administrator — 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 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

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

For
Revised February
Instructions
Submit to Appropriate District
State Lease -
Fee Lease -

☐ AMENDED R

WELL LOCATION AND ACREAGE DEDICATION PLAT

1API Number	2Pool Code	3Pool Name
30-039-	72319/71599	Blanco Mesaverde/Basin Dakota

4Property Code	5Property Name	6Well Num
7460	SAN JUAN 28-5 UNIT	101M

7OGRID No.	8Operator Name	9Elevati
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	7390

10 Surface Location

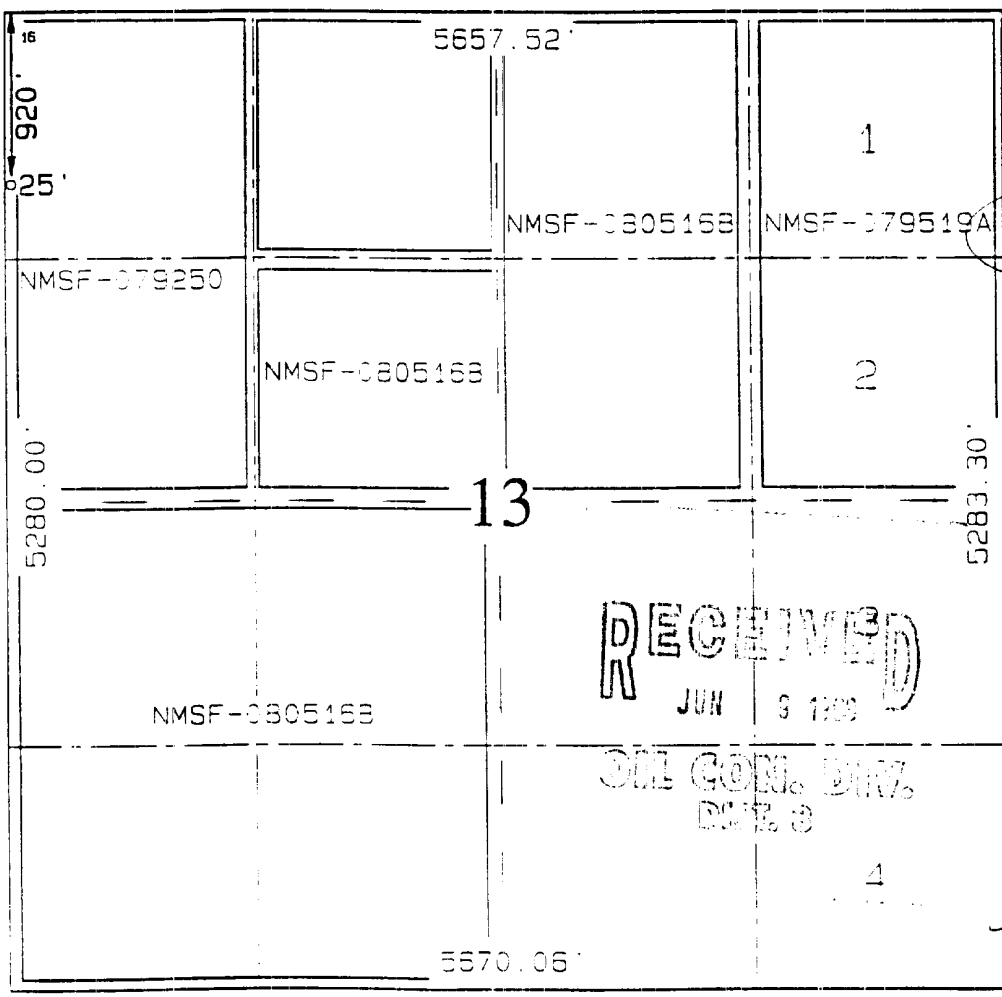
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	F AR
D	13	28N	5W		920	NORTH	25	WEST	

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
MV-N/343.07 DK-W/320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLI.
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



RECEIVED
JUN 3 1998
OIL CON. DIV.
DIST. 3

17 OPERATOR CERTIFIC

I hereby certify that the information containe true and complete to the best of my knowledge

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Adminis
Title

5-9-98
Date

18 SURVEYOR CERTIFIC

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

FEBRUARY 18, 199
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number

OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #101M
Location: 920'FNL, 25'FWL Sec 13, T-28-N, R-5-W
Rio Arriba County, NM
Latitude 36° 40.0, Longitude 107° 19.3
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7390'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	3656'	
Ojo Alamo	3656'	3848'	aquifer
Kirtland	3848'	3934'	
Fruitland	3934'	4372'	gas
Pictured Cliffs	4372'	4453'	gas
Lewis	4453'	5073'	gas
Intermediate TD	**4553'**		
Huerfanito Bentonite	5073'	5346'	gas
Chacra	5346'	6177'	
Massive Cliff House	6177'	6227'	gas
Menefee	6227'	6525'	gas
Massive Point Lookout	6525'	7013'	gas
Mancos Shale	7013'	7750'	
Gallup	7750'	8499'	gas
Greenhorn	8499'	8649'	gas
Dakota	8649'		gas
TD (4 1/2"liner)	**8819'**		

Logging Program:
Cased hole - CBL - TD to 200' above TOC, GR/CNL across MV/Dk

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-4553'	LSND	8.4-9.0	30-60	no control
4553-8819'	Gas/Air	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):

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4553'	7"	20.0#	J-55
6 1/4"	4495' - 8819'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8819'	2 3/8"	4.70#	EUE

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.

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 3000 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 drilling crew.
- All BOP tests and 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 2% 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/378 sx Class "B" w/3% metasilicate, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel, 1/2# flocele/sx, 10# gilsonite/sx (1209 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 during completion operations 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 3848'. Two turbolating centralizers at the base of the Ojo Alamo at 3848'. 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 cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 470 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (625 cu.ft., 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. Instead, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" CIBP will be set above the last fracturing job to cut and pull the 4 1/2" casing above the 7" casing shoe. The 4 1/2" bridge plug will then be milled and the two strings of tubing will be run for a dual completion.

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.
- Deduster equipment will be utilized.
- 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 Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	800 psi
Pictured Cliffs	800 psi
Mesa Verde	700 psi
Dakota	2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half is dedicated to the Dakota and and the north half is dedicated to this Mesa Verde in this well.
- This gas is dedicated.

_____ _____

Drilling Engineer Date

BURLINGTON RESOURCES

San Juan 28-5 Unit #101M
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 400' 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 Service.

5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from 44 Crossing Water Hole located NE Section 18, T-27-N, R-4-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

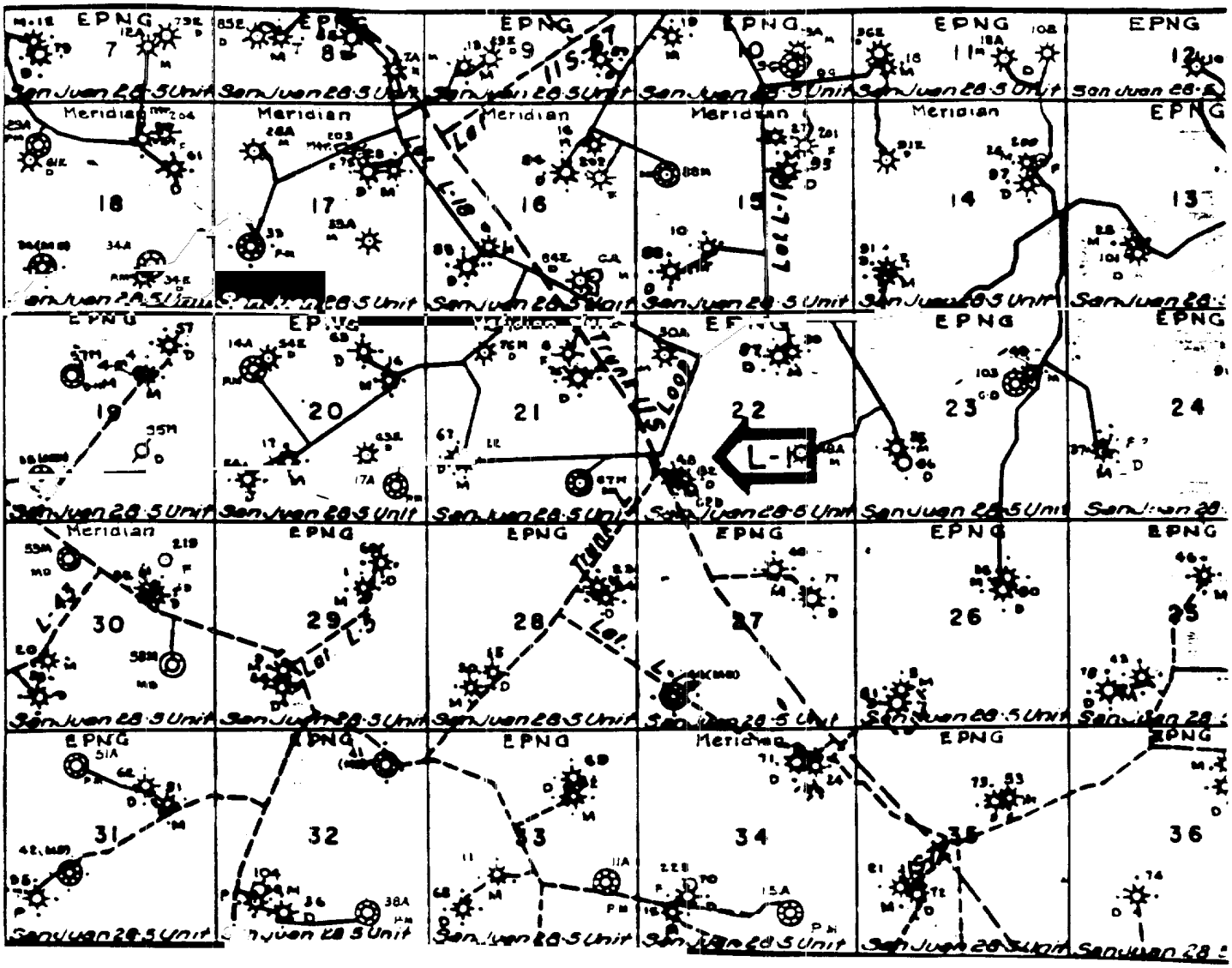
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

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.

Peggy Bradfield 5-9-98

Regulatory/Compliance Administrator Date

pb

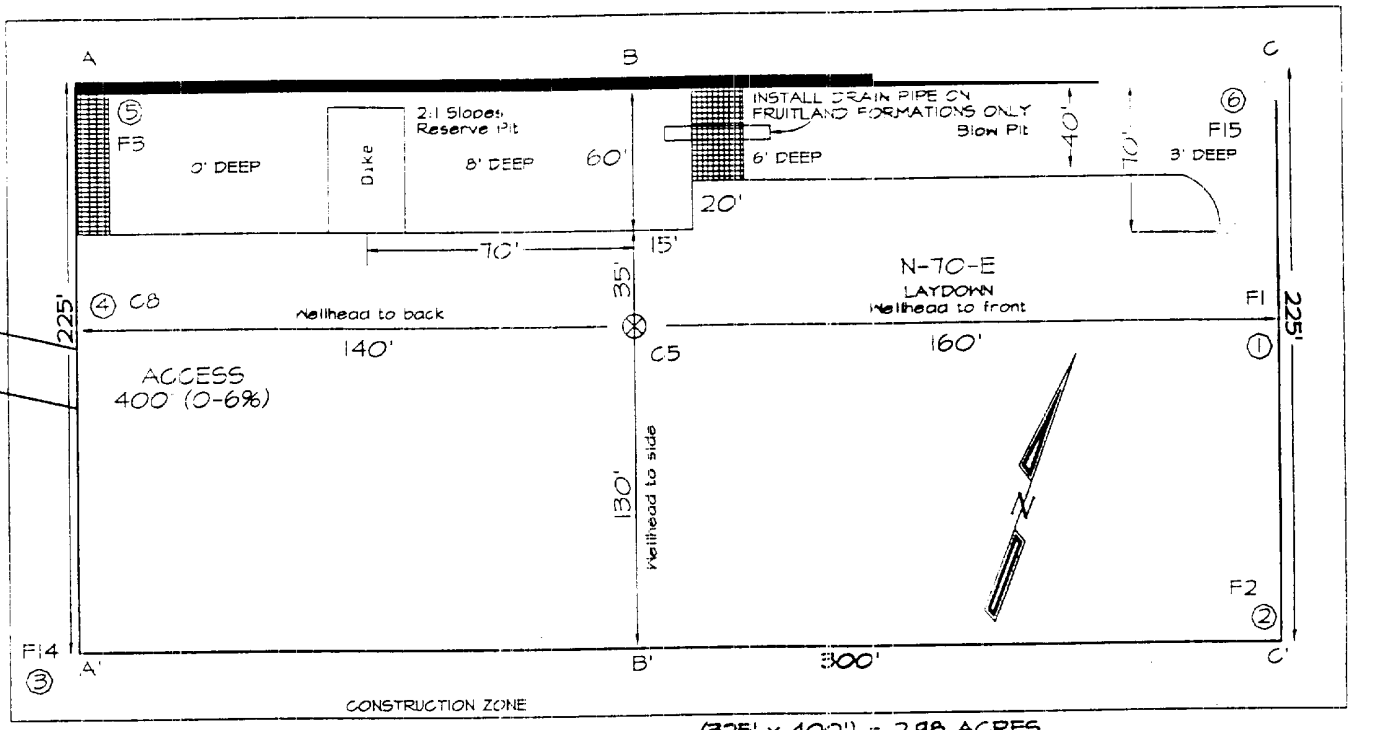


MERIDIAN OIL INC.
Pipeline Map
T-28-N, R-05-W
Rio Arriba County, New Mexico
San Juan 28-5 Unit #101M
Map 1A

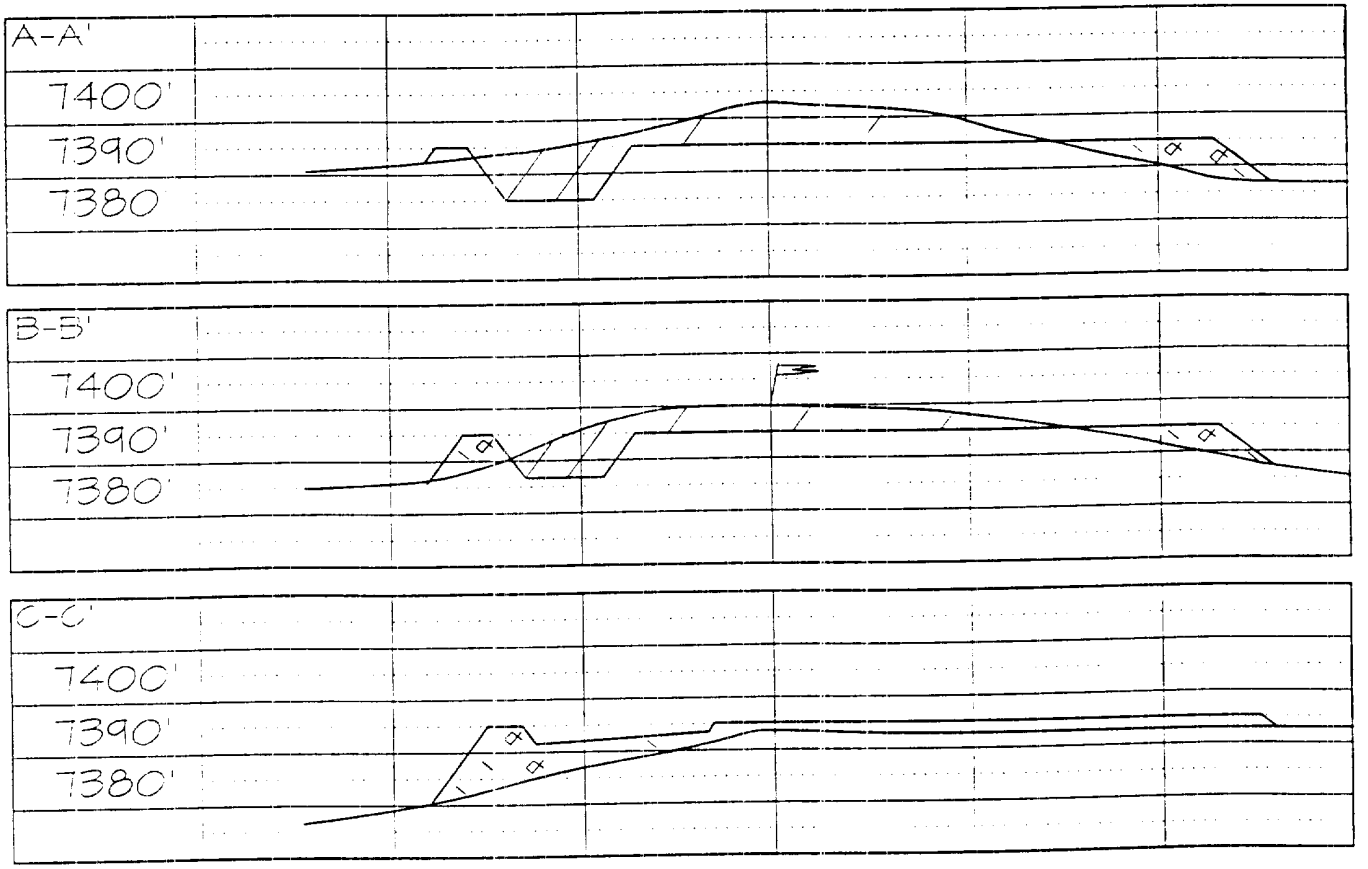
3/91 adw/mjb

PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 28-5 UNIT #101M, 920' FNL & 25' FWL
SECTION 13, T28N, R5W, NMPM, RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 7390' DATE: FEBRUARY 18, 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 p



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

BURLINGTON RESOURCES OIL AND GAS COMPANY

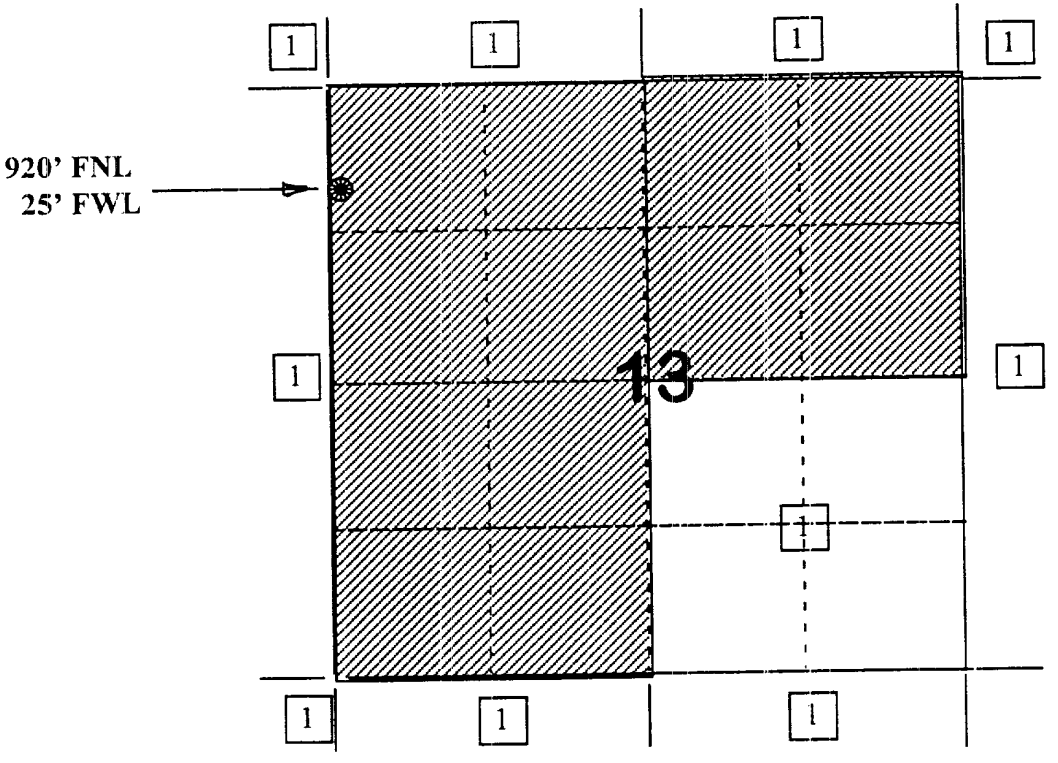
San Juan 28-5 Unit #101M

OFFSET OPERATOR/OWNER PLAT

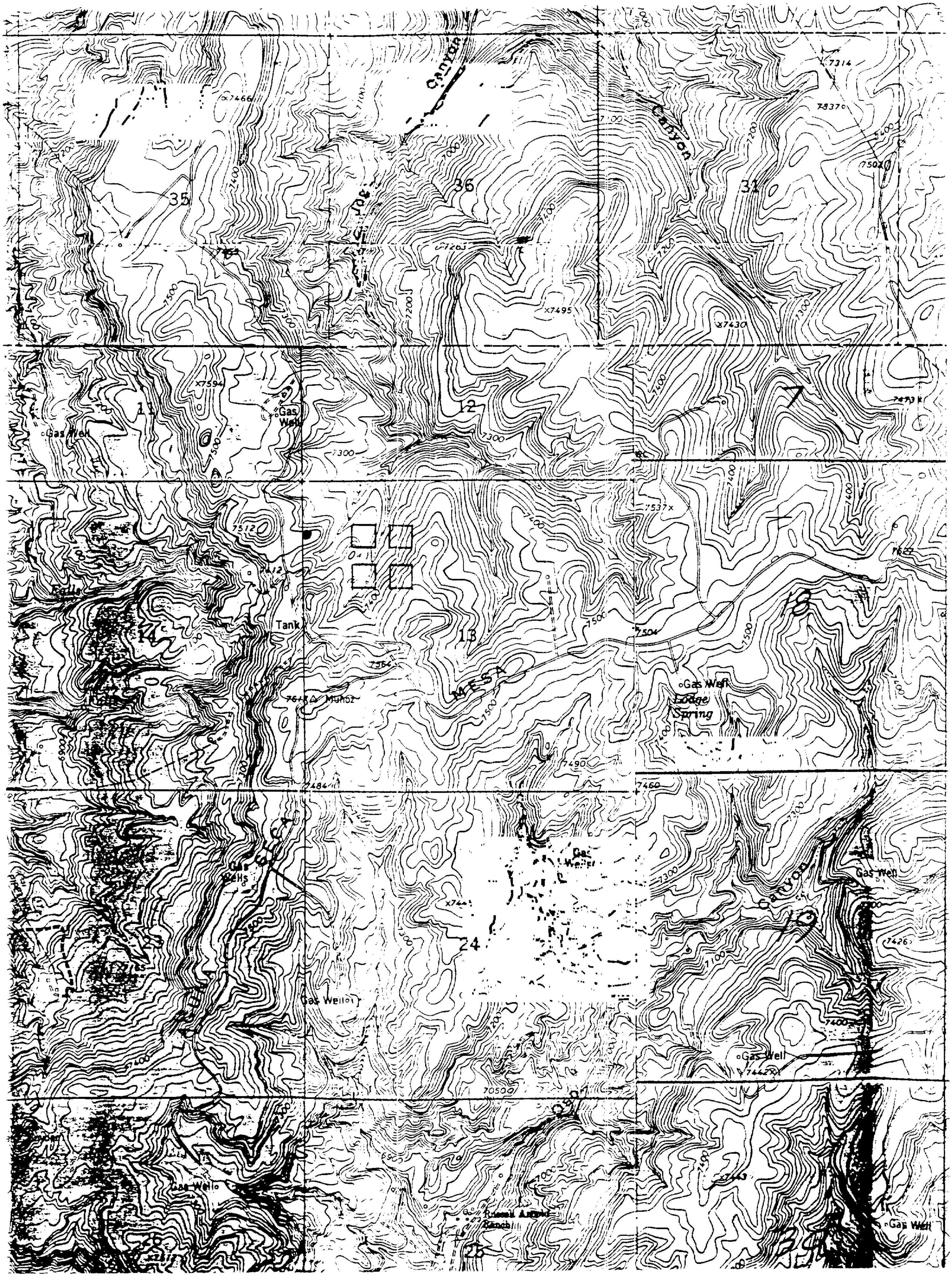
Nonstandard Location

Mesaverde (N/2) / Dakota (W/2) Formations Well

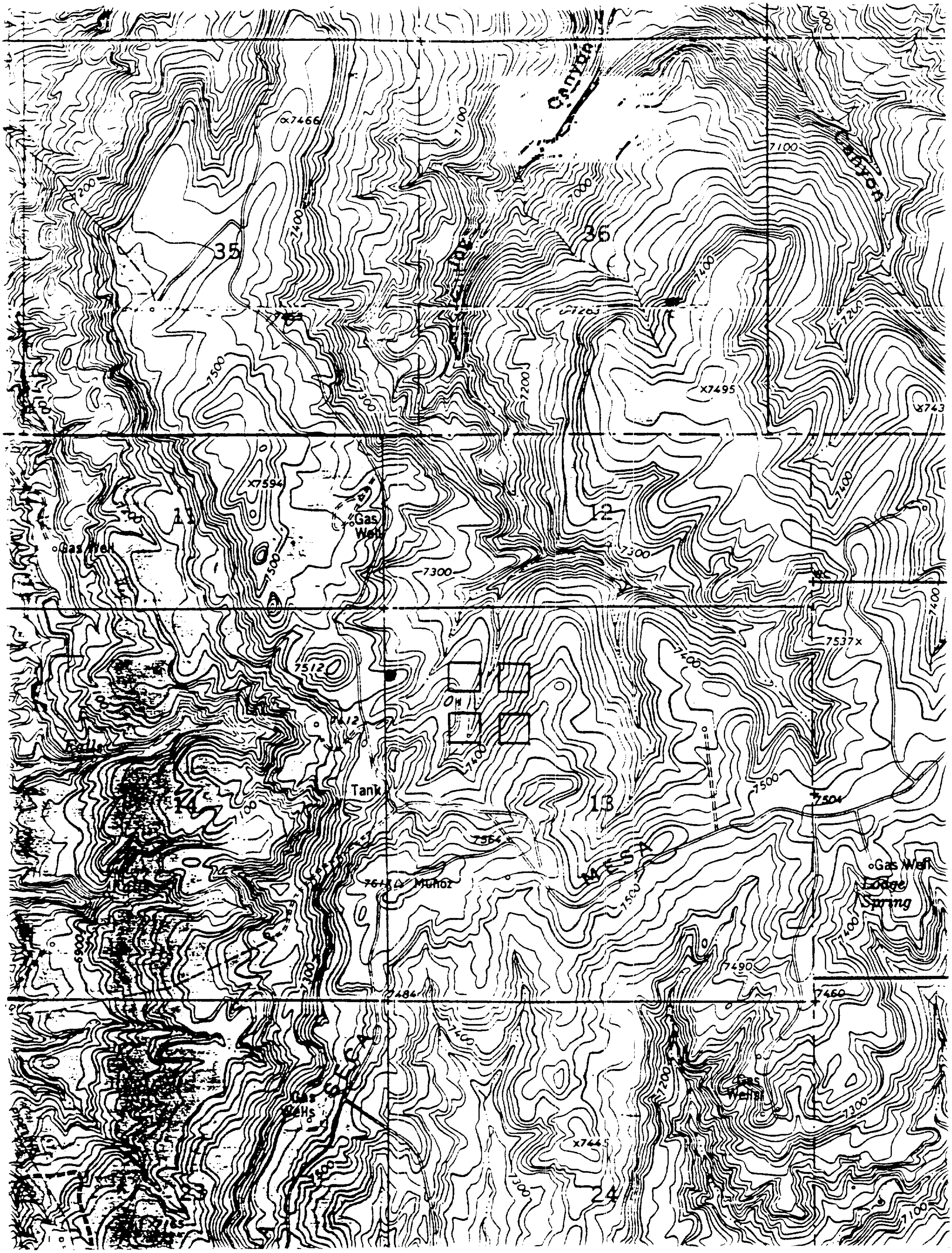
Township 28 North, Range 5 West



1) Burlington Resources



Canyon
Joe
Canyon
35
36
31
11
Gas Well
Gas Well
12
7
7512
Tank
14
13
MESA
7594
7495
7430
7537
7484
7490
7460
Muñoz
Gas Well
Lodge
Spring
18
Gas Wells
24
19
Gas Well
Gas Well
Gas Well
7050
25
Gas Well


Canyon
Canyon
x7466
7100
7200
7400
7000
35
36
x7495
7500
x7594
11
12
Gas Well
Gas Well
7300
7300
7512
7537x
Tank
13
14
7564
Muñoz
MESA
7500
7504
Gas Well
Lodge Spring
7490
7484
7460
Gas Wells
Gas Wells
x7445
24
7300
7100