NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

July 22, 1998

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

Administrative Order NSL-4102

Dear Ms. Bradfield:

Reference is made to your application dated July 15, 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 "28-6" Unit Well No. 171-M to be drilled at an unorthodox infill gas well location in both the Blanco-Mesaverde and Basin-Dakota Pools 1390 feet from the South line and 2060 feet from the East line (Unit J) of Section 24, Township 27 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

Gas production attributed to the well from both pools is to be included in the existing standard 320-acre stand-up gas spacing and proration unit comprising the E/2 of Section 24. Blanco-Mesaverde gas production is currently dedicated to Burlington's San Juan "28-6" Unit Well No. 86 (**API No. 30-039-06997**), located at a standard gas well location 1500 feet from the North line and 1750 feet from the East line (Unit G) of Section 24. Basin-Dakota gas production is currently dedicated to Burlington's San Juan "28-6" Unit Well No. 171 (**API No. 30-039-20476**), located at a standard gas well location 1840 feet from the North line and 1825 feet from the East line (Unit G) of Section 24.

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 "28-6" Unit Well No. 171-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 /MES

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

July 15, 1998

Sent Federal Express

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

Re: San Juan 28-6 Unit #171M
1390'FSL, 2060'FEL, Section 24, T-27-N, R-6-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.

Production from the Blanco Mesa Verde pool is to be included in a standard 320 acre gas spacing and proration unit comprising of the east half (E/2) of Section 24 which is currently dedicated to the San Juan 28-6 Unit #86 (30-039-06997) located at 1500'FNL, 1750'FEL of Section 24. Production from the Basin Dakota is to be included in a standard 320 acre gas spacing and proration unit comprising of the east half (E/2) of Section 24 which is currently dedicated to the San Juan 28-6 Unit #171 (30-039-20476) located at 1840'FNL, 1825'FEL.

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 – Burlington is the unit operator.
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

RECEIVED
JUL 16 1998
OIL CON. DIV.
DIST. 3

3535 East 30th St., 87402-8801, P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700, Fax 505-326-9833

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-079365 **Unit Reporting Number**
1b.	**Type of Well** GAS	**6. If Indian, All. or Tribe**
2.	**Operator** BURLINGTON RESOURCES Oil & Gas Company	**7. Unit Agreement Name** San Juan 28-6 Unit
3.	**Address & Phone No. of Operator** PO Box 4289, Farmington, NM 87499 (505) 326-9700	**8. Farm or Lease Name** San Juan 28-6 Unit **9. Well Number** 171M
4.	**Location of Well** 1390'FSL, 2060'FEL Latitude 36° 33.4, Longitude 107° 24.9	**10. Field, Pool, Wildcat** Blanco MV/Basin Dk **11. Sec., Twn, Rge, Mer. (NMPM)** Sec 24,T-27-N,R-6-W **API # 30-039-**
14.	**Distance in Miles from Nearest Town** 7 miles to Gobernador	**12. County** Rio Arriba **13. State** NM
15.	**Distance from Proposed Location to Nearest Property or Lease Line** 1390'	
16.	**Acres in Lease**	**17. Acres Assigned to Well** 320 E/2
18.	**Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease** 300'	
19.	**Proposed Depth** 7709	**20. Rotary or Cable Tools** Rotary
21.	**Elevations (DF, FT, GR, Etc.)** 6582'	**22. Approx. Date Work will Start**
23.	**Proposed Casing and Cementing Program** See Operations Plan attached	

24. **Authorized by:** _____ (Regulatory/Compliance Administrator) _____ Date

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

Archaeological Report submitted by Arboles – Technical Report #1145 dated 10-09-97
Threatened and Endangered Species Report submitted
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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

Form C-
Revised February 21, 1
Instructions on b
Submit to Appropriate District Off
State Lease - 4 Cop
Fee Lease - 3 Cop

☐ AMENDED REPOR

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

4 Property Code	5 Property Name	6 Well Number
7460	SAN JUAN 28-6 UNIT	171M

7 OGRID No.	8 Operator Name	9 Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6582'

10 Surface Location

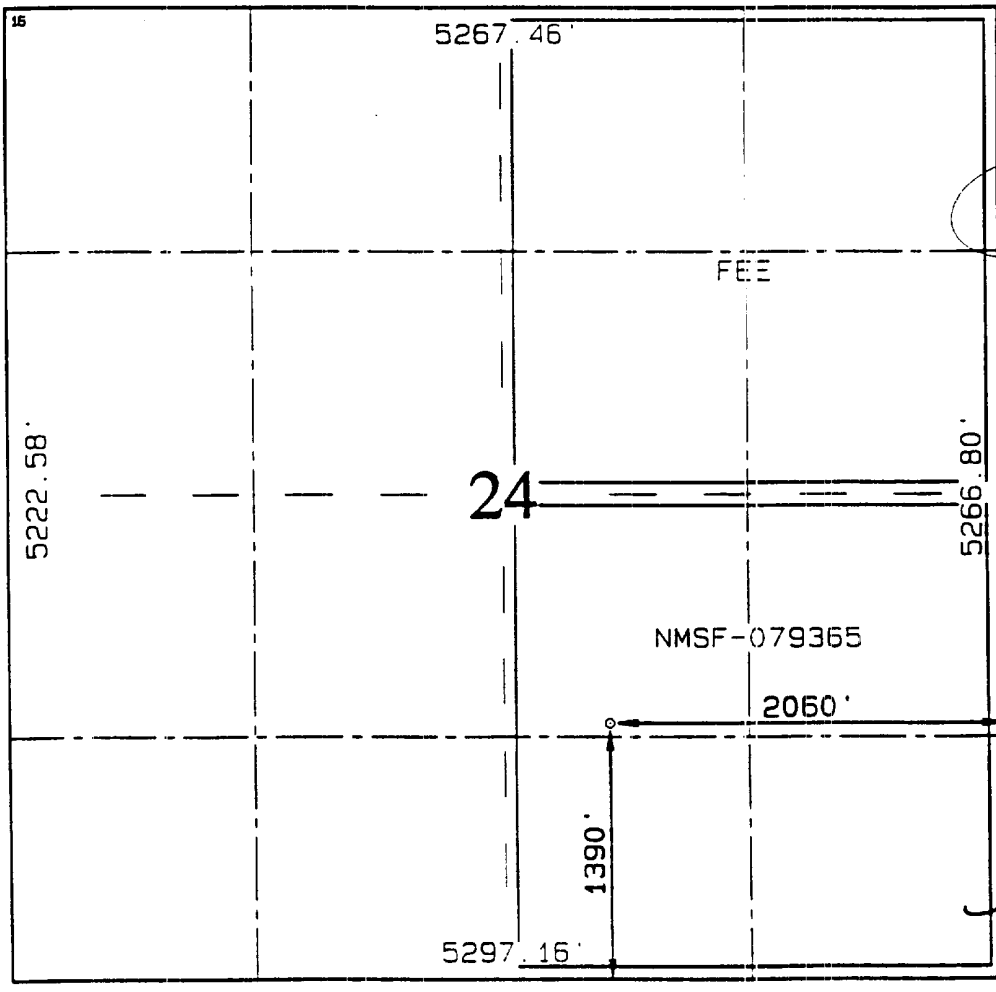
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	24	27N	6W		1390	South	2060	East	RIO ARRIB

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

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

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



17 OPERATOR CERTIFICATIC

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

Signature

Peggy Bradfield

Printed Name

Regulatory Administra

Title

1/5/98

Date

18 SURVEYOR CERTIFICATIC

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

NOVEMBER 6, 1997

Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857

Certificate Number

OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #171M
Location: 1390'FSL, 2060'FEL Sec 24, T-27-N, R-6-W
Rio Arriba County, NM
Latitude 36° 33.4, Longitude 107° 24.9
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6582'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2479'	
Ojo Alamo	2594'	2944'	aquifer
Fruitland	2944'	3279'	gas
Pictured Cliffs	3279'	3379'	gas
Lewis	3379'	3744'	gas
Intermediate TD	**3479'**		
Huerfanito Bentonite	3744'	3771'	gas
Chacra	4244'	4914'	
Massive Cliff House	4914'	5064'	gas
Menefee	5064'	5454'	gas
Massive Point Lookout	5454'	5904'	gas
Mancos	5904'	6954'	
Gallup	6954'	7374'	gas
Greenhorn	7374'	7674'	gas
Dakota	7674'		gas
TD (4 1/2"liner)	**7709'**		

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
200-3479'	LSND	8.4-9.0	30-60	no control
3479-7709'	Gas	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' - 3479'	7"	20.0#	J-55
6 1/4"	3379' - 6855'	4 1/2"	10.5#	J-55
6 1/4"	6855' - 7709'	4 1/2"	11.6#	J-55

Tubing Program:

0' - 7709'	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/280 sx Class "B" w/3% medisilicate, 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 (915 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 2944'. Two turbolating centralizers at the base of the Ojo Alamo at 2944'. 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. Lead with 119 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 302 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (622 cu.ft., 35% 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. In its place, 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" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The liner top can then be pressure tested to ensure a seal between the liner top and the 7" casing has been achieved. The test pressure shall be the maximum anticipated pressure to which the seal will be exposed (700 psi for the Mesa Verde and 2500 psi for the Dakota). The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

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 east half is dedicated to the Mesa Verde and Dakota in this well.
- This gas is dedicated.

Drilling Engineer

1/19/98
Date

BURLINGTON RESOURCES

San Juan 28-6 Unit #171M
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. None required.

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 Lobato Water Hole located NE Section 9, T-27-N, R-6-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

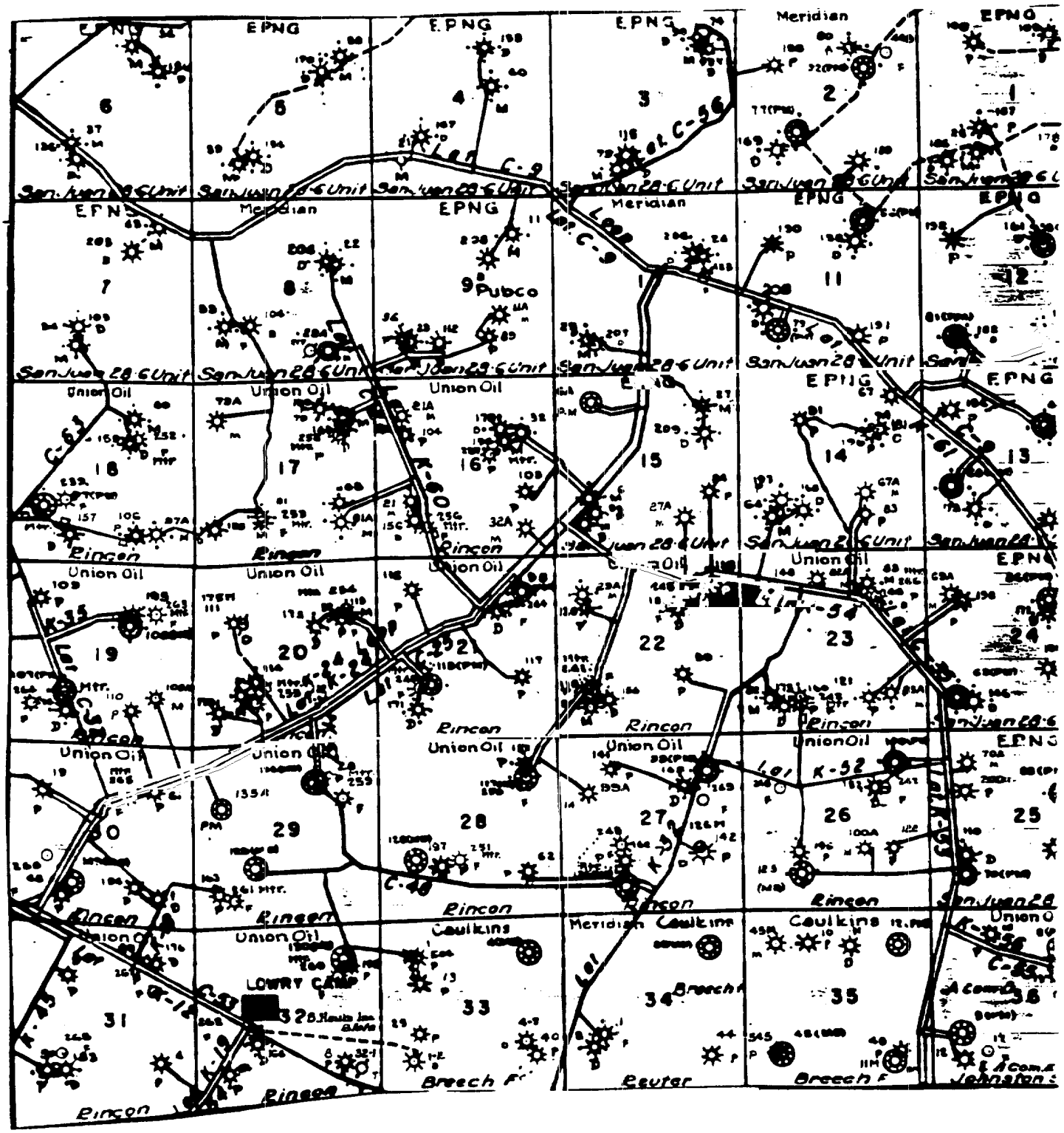
12. Other Information - Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

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 1/5/98

Regulatory/Compliance Administrator Date

pb



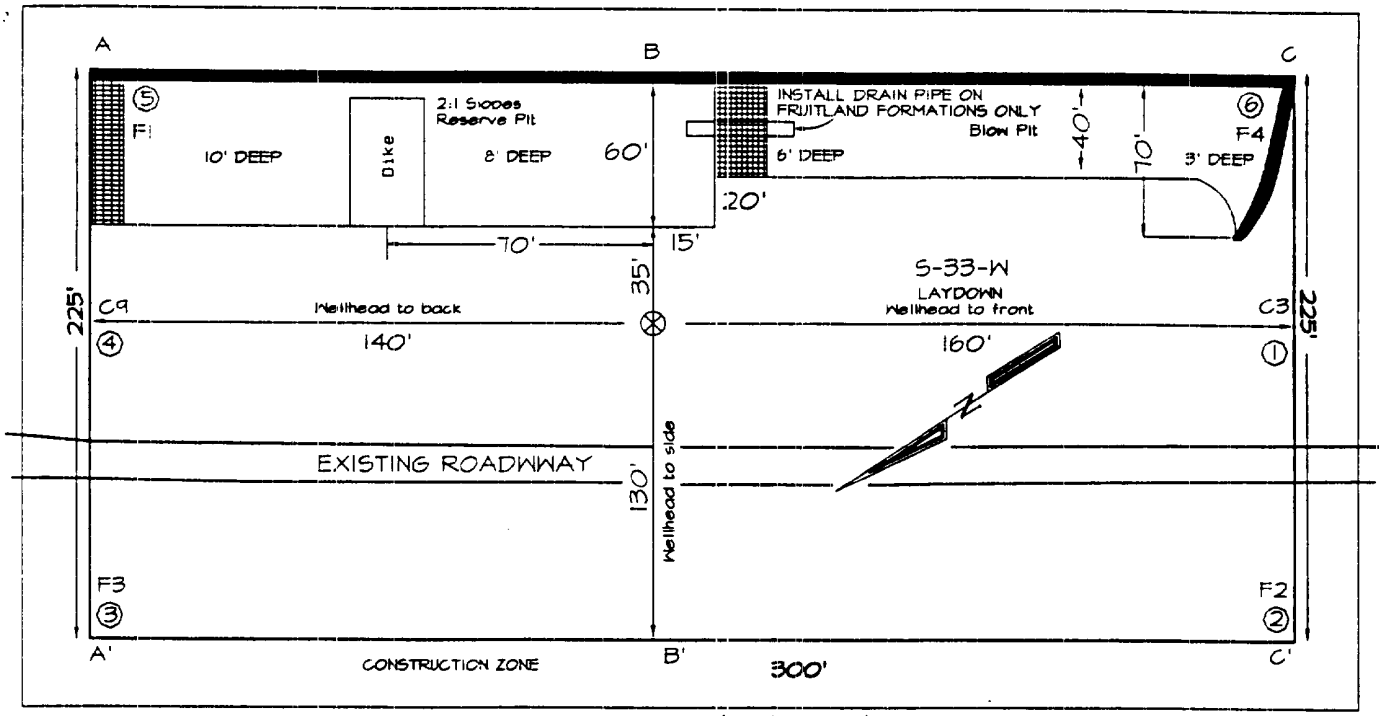
MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-06-W
Rio Arriba County, New Mexico

San Juan 28-6 Unit #171M
Map 1A

3/91 adw/mjb

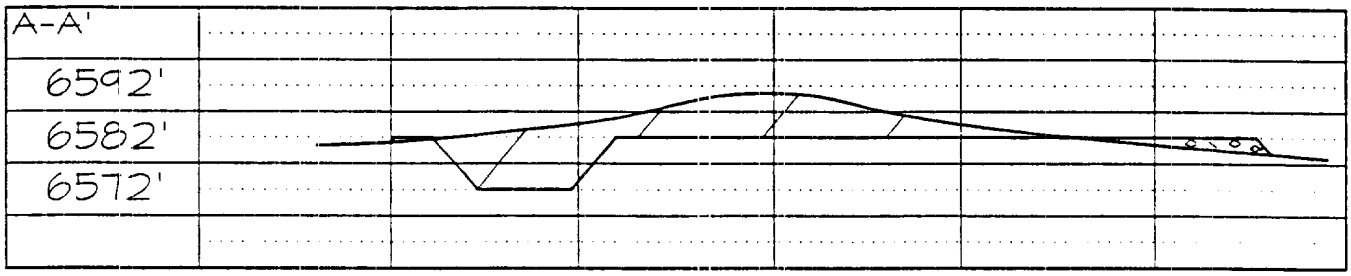
PLAT #1

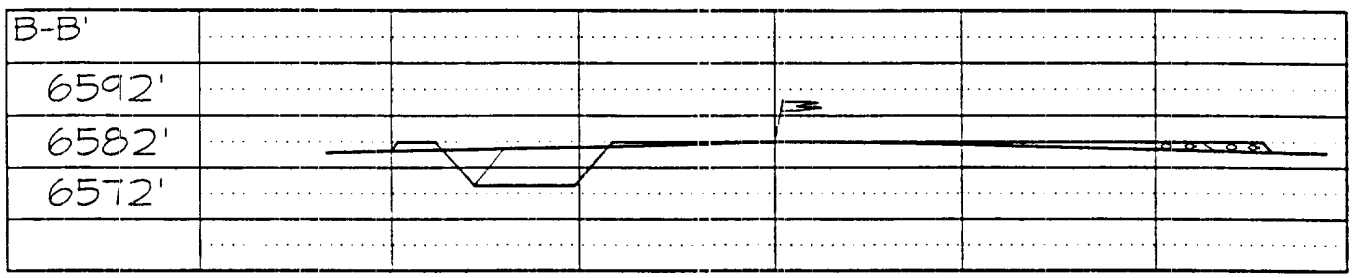
BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 28-6 UNIT #171M, 1390' FSL & 2060' FEL
SECTION 24, T27N, R6W, NMPM, RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 6582' DATE: NOVEMBER 6, 1997

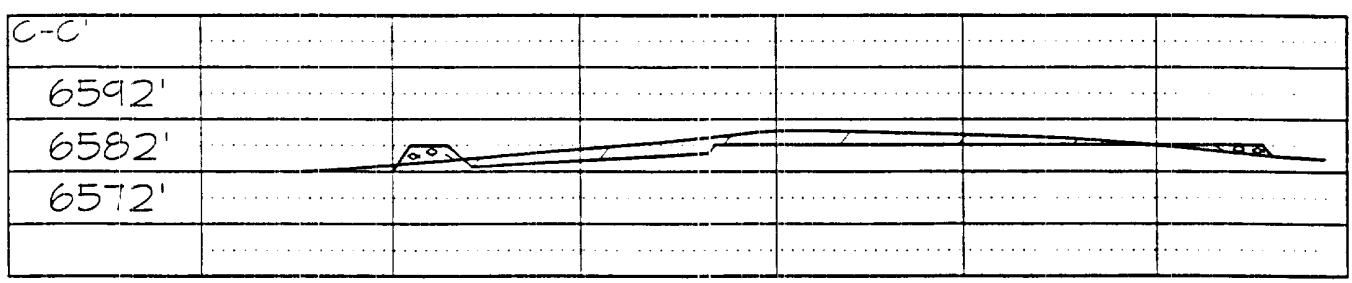


225' x 300' (325' x 400') = 2.98 ACRES

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 pi







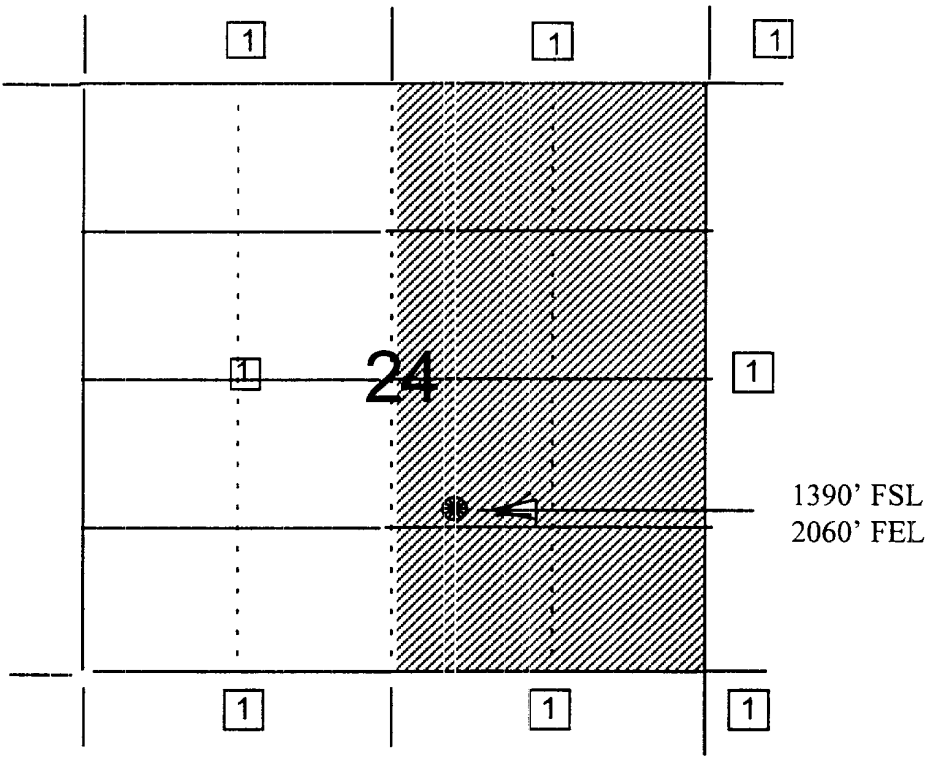
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cabl on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 28-6 Unit #171M
OFFSET OPERATOR \ OWNER PLAT
Non Standard Location

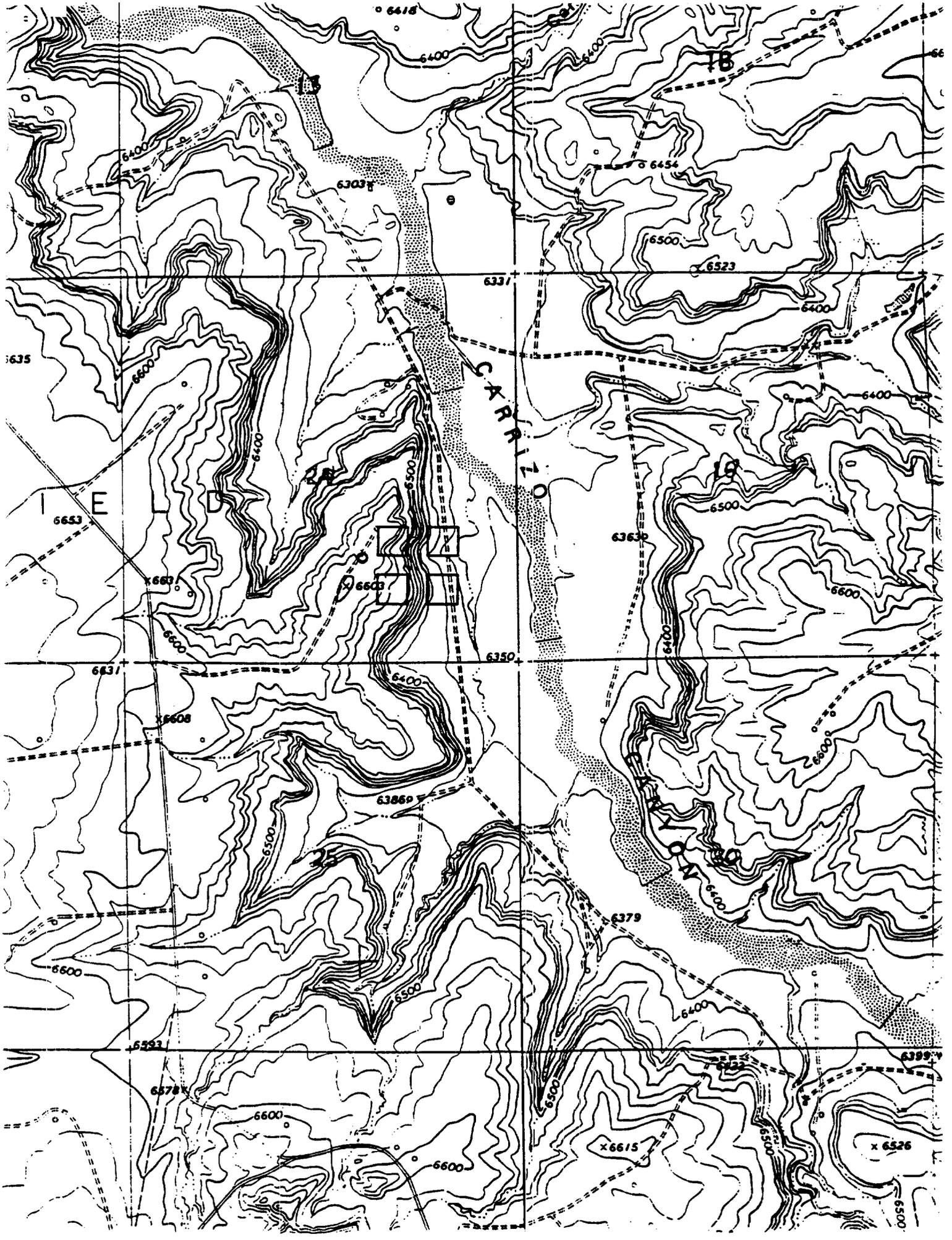
Mesaverde/Dakota Formations Well

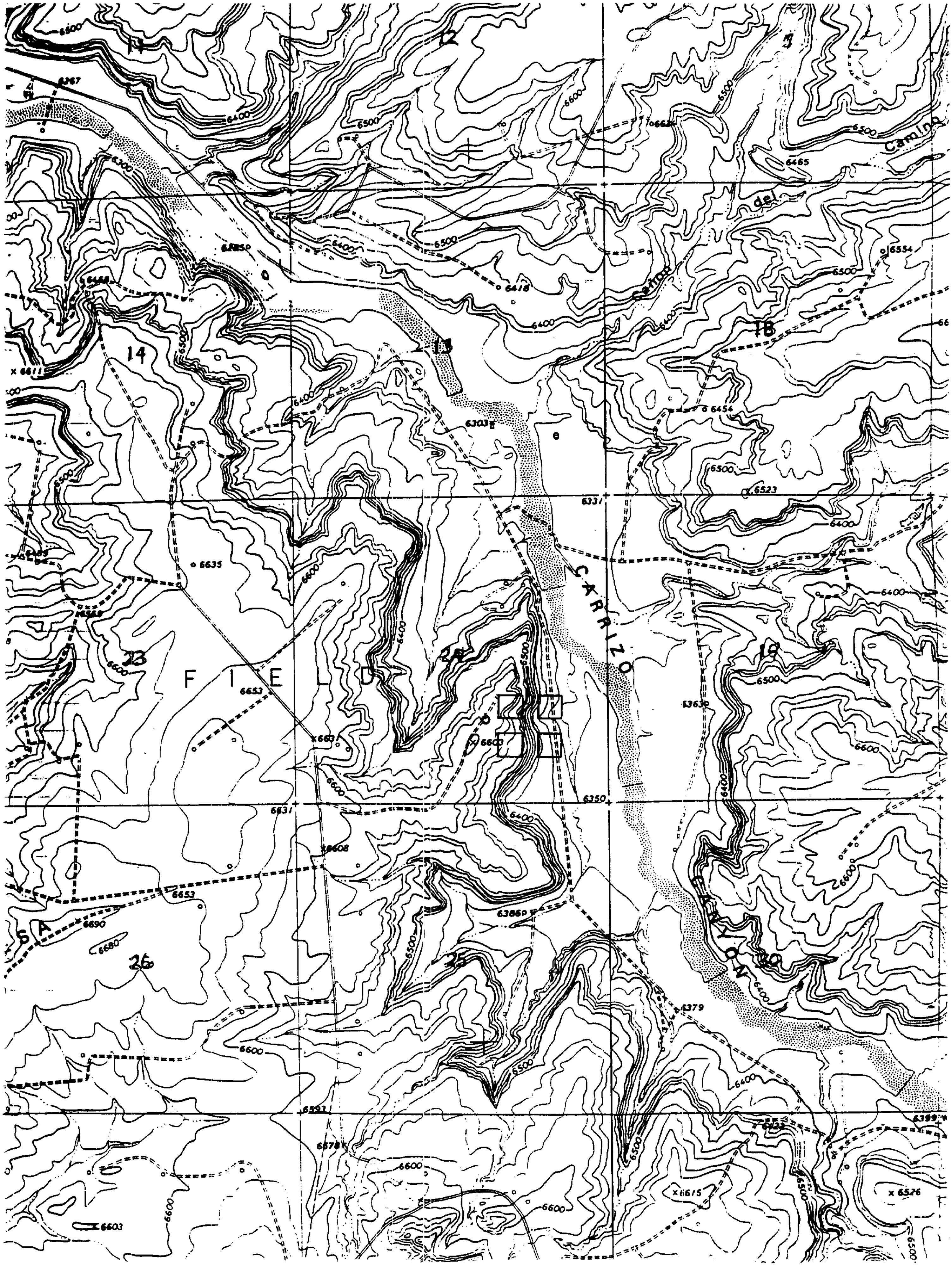
Township 27 North, Range 6 West



1) Burlington Resources

vkh 7-13-98


6418
6400
T8
T8
6454
6303
6500
6523
6331
6400
6635
6600
CARRIZO
6400
6500
I E L D
6653
6603
6603
6600
6400
6350
6631
6400
6608
6600
6386
6500
25
6379
6600
6500
6400
6593
6399
6378
6500
6600
6615
6526
6500



CARRIZO
CANYON
FIELD
Camino del Cañon