NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

June 26, 1998

#49M
30-27-4

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

RECEIVED
JUL 1998
OIL CON. DIV.
DIST. 3

Administrative Order NSL-4078

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/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 "27-4" Unit Well No. 49-M to be drilled at an unorthodox "infill" gas well location in both the Blanco-Mesaverde and Basin-Dakota Pools 1880 feet from the North line and 790 feet from the West line (Lot 2/Unit E) of Section 30, Township 27 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

Gas production attributed to the well from both pools is to be included in the existing standard 321.56-acre stand-up gas spacing and proration unit comprising Lots 1 through 4 and the E/2 W/2 (W/2 equivalent) of Section 30. Blanco-Mesaverde gas production is currently dedicated to Burlington's San Juan "27-4" Unit Well No. 25 (**API No. 30-039-06862**), located at a standard gas well location 890 feet from the South line and 1180 feet from the West line (Lot 4/Unit M) of Section 30. Basin-Dakota gas production is currently dedicated to Burlington's San Juan "27-4" Unit Well No. 49 (**API No. 30-039-20835**), located at a standard gas well location 1550 feet from the South line and 1720 feet from the West line (Unit K) 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 above-described unorthodox Basin-Dakota/Blanco-Mesaverde "infill" gas well location for the San Juan "27-4" Unit Well No. 49-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 22, 1998

Sent Federal Express

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

Re: San Juan 27-4 Unit #49M
1880'FNL, 790'FWL, Section 30, T-27-N, R-4-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, and especially at the request of the U.S. Forest Service that is the surface owner.

Production from the Blanco Mesa Verde pool is to be included in a standard 321.55 acre gas spacing and proration unit comprising of the west half (W/2) of Section 30 which is currently dedicated to the San Juan 27-4 Unit #25 (30-039-07206) located at 890'FSL, 1180'FWL of Section 30. Production from the Basin Dakota is to be included in a standard 321.55 acre gas spacing and proration unit comprising of the west half (W/2) of Section 30 which is currently dedicated to the San Juan 27-4 Unit #49 (30-039-20835) located at 1550'FSL, 1720'FWL of Section 30.

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

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

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. **Type of Work**
DRILL

5. **Lease Number**
SF-080670

Unit Reporting Number
891001054A-MV
8910010540-Dk

1b. **Type of Well**
GAS

6. **If Indian, All. or Tribe**

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JUN 2 3 '09

2. **Operator**
BURLINGTON RESOURCES Oil & Gas Company

7. **Unit Agreement Name**
San Juan 27-4 Unit

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

(505) 326-9700

8. **Farm or Lease Name**
San Juan 27-4 Unit

9. **Well Number**
49M

4. **Location of Well**
1880'FNL, 790'FWL

Latitude 36° 32' 47", Longitude 107° 17' 52"

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

11. **Sec., Twn, Rge, Mer. (NMPM)**
Sec 30,T-27-N,R-4-W

API # 30-039-

14. **Distance in Miles from Nearest Town**
60 miles to Bloomfield

12. **County**
RA

13. **State**
NM

15. **Distance from Proposed Location to Nearest Property or Lease Line**
790'

16. **Acres in Lease**

17. **Acres Assigned to Well**
321.56 W/2

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

19. **Proposed Depth**
7983

20. **Rotary or Cable Tools**
Rotary

21. **Elevations (DF, FT, GR, Etc.)**
6698'GR

22. **Approx. Date Work will Start**

23. **Proposed Casing and Cementing Program**
See Operations Plan attached

24. **Authorized by:** Peggy Bradfield
Regulatory/Compliance Administrator

6-20-98
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 KK, Artesia, NM 87211-0719
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 Distri
State Lease -
Fee Lease -

☐ AMENDED I

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 Num
7452	SAN JUAN 27-4 UNIT	# 49

7 OGRID No.	8 Operator Name	9 Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	669

10 Surface Location

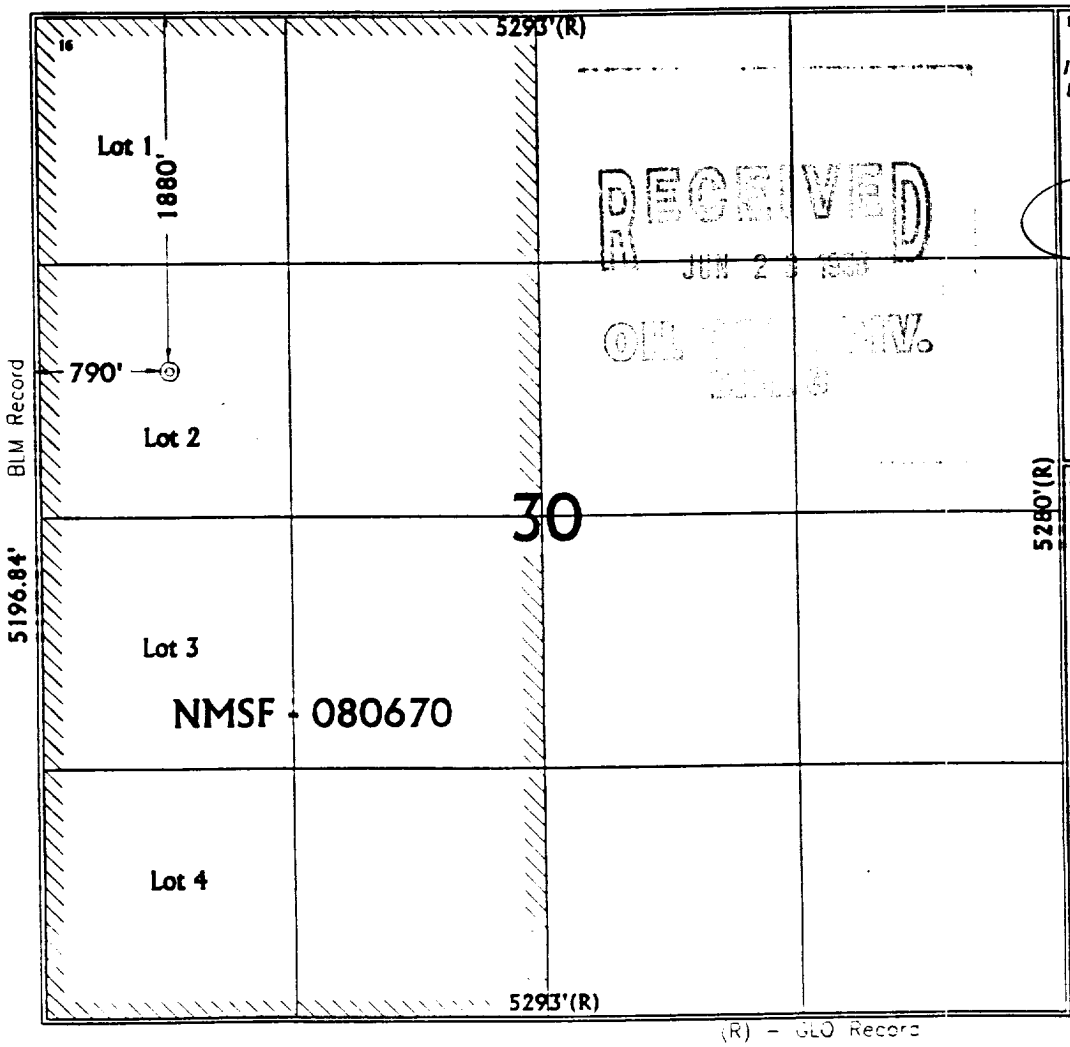
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	30	27 N	4 W		1880	NORTH	790	WEST	RIO A

11 Bottom Hole Location If Different From Surface

7 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-W/321.56 DK-W/321.56			

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



(R) - GLO Record

17 OPERATOR CERTIFIC

I hereby certify that the information contai
true and complete to the best of my knowled

Signature

Peggy Bradfield
Printed Name

Regulatory Adminis
Title

6-20-98
Date

18 SURVEYOR CERTIFIC

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

February 11, 1998
Date of Survey

Signature and Seal of Professional Surve

GARY L. JONES
NEW MEXICO
REGISTERED PROFESSIONAL
7016

7016
Certificate Number

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #49M
Location: 1880'FNL, 790'FWL Sec 30, T-27-N, R-4-W
Rio Arriba County, NM
Latitude 36° 32' 47", Longitude 107° 17' 52"
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6698'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2930'	
Ojo Alamo	2930'	3063'	aquifer
Kirtland	3063'	3145	
Fruitland	3145'	3519'	gas
Pictured Cliffs	3519'	3620'	gas
Lewis	3620'	3993'	gas
Intermediate TD	**3720'**		
Huerfanito Bentonite	3993'	4504'	gas
Chacra	4504'	5212'	
Massive Cliff House	5212'	5340'	gas
Menefee	5340'	5691'	gas
Massive Point Lookout	5691'	6196'	gas
Mancos Shale	6196'	6851'	
Gallup	6851'	7643'	gas
Greenhorn	7643'	7703'	gas
Dakota	7703'		gas
TD (4 1/2"liner)	**7983'**		

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
200-3720'	LSND	8.4-9.0	30-60	no control
3720-7983'	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' - 3720'	7"	20.0#	J-55
6 1/4"	3620' - 7983'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 7983'	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/301 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 (978 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 3063'. Two turbolating centralizers at the base of the Ojo Alamo at 3063'. 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 502 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (612 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 tubing will be run for 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 Mesa Verde and the Dakota in this well.
- This gas is dedicated.

Frank A. Sidel — 5/22/98

Drilling Engineer — Date

BURLINGTON RESOURCES

San Juan 27-4 Unit #49M
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 Williams 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.

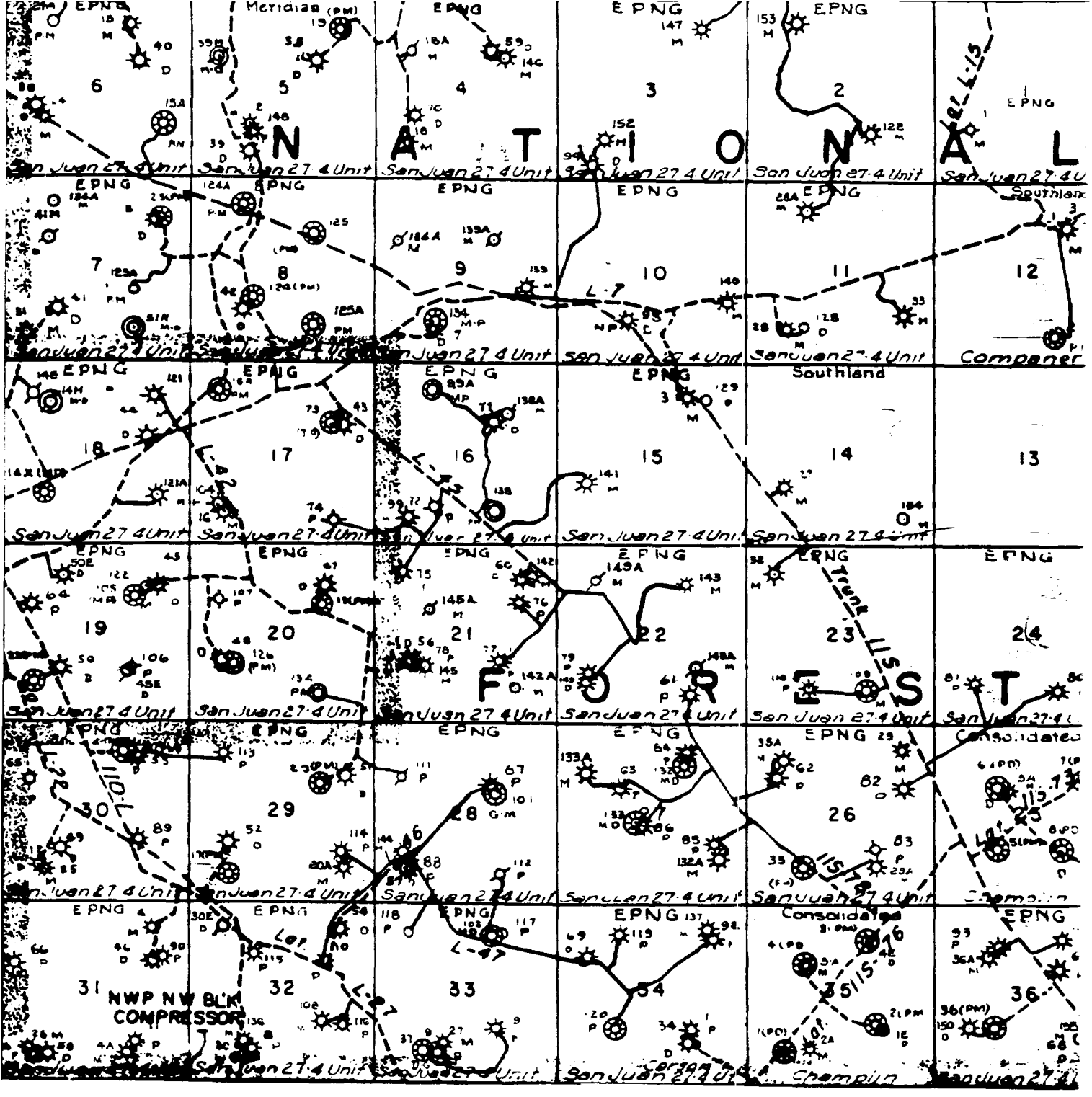
11. Surface Ownership – Carson National Forest

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 5-20-98
Date

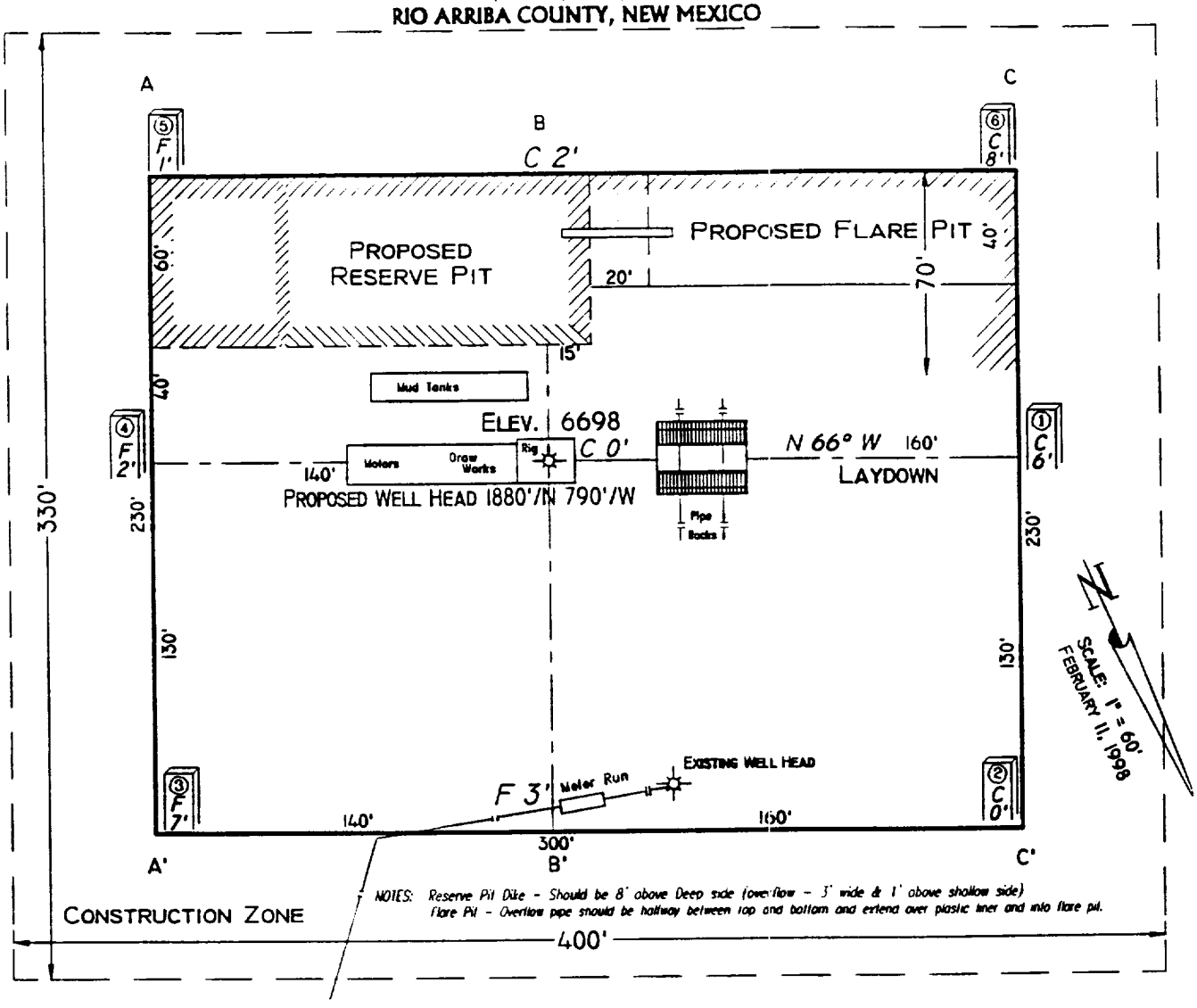
pb

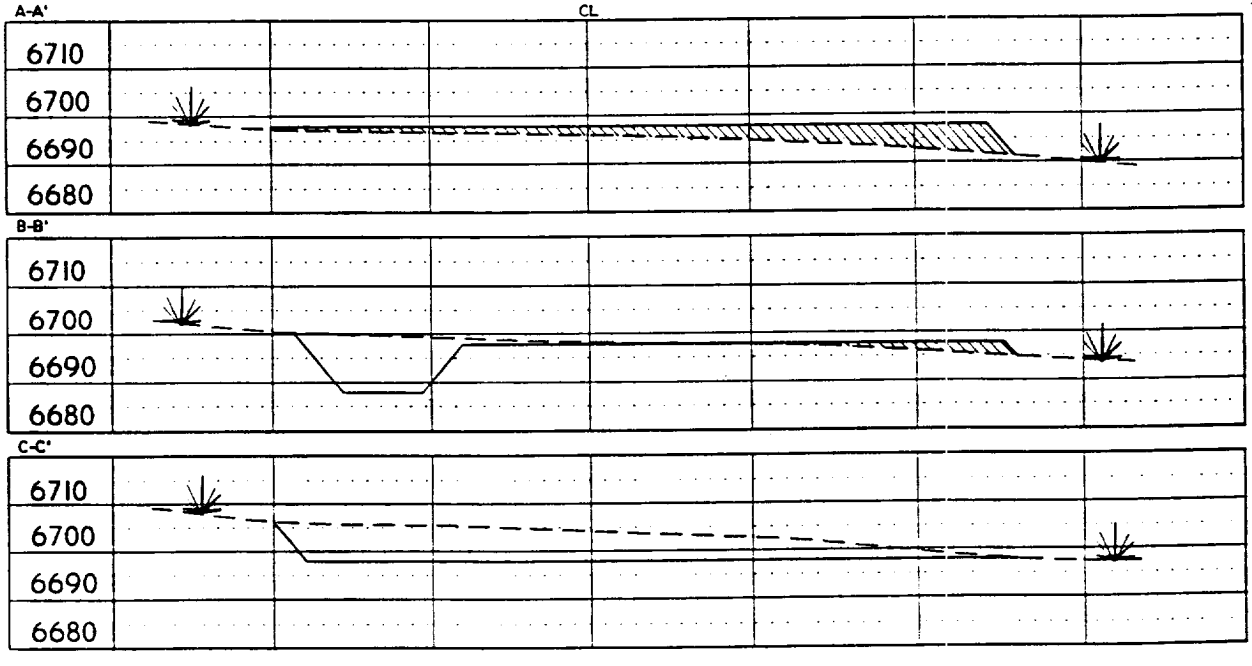


MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-04-W
Rio Arriba County, New Mexico

3/91 adw/mjb

PAD LAYOUT PLAN & PROFILE
BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 27-4 UNIT 49M
1880' F/NL 790' F/WL
SEC. 30, T27N, R4W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO





SCALE: 1"=60'-HORIZ.
1"=40'-VERT.

NOTE: Contractor
call One-Call for
of any marked or u
buried pipelines or c
well pad and/or acce
at least two (2) work
prior to construction

VANN SUI
304 N. L
Farmingto

BURLINGTON RESOURCES OIL AND GAS COMPANY

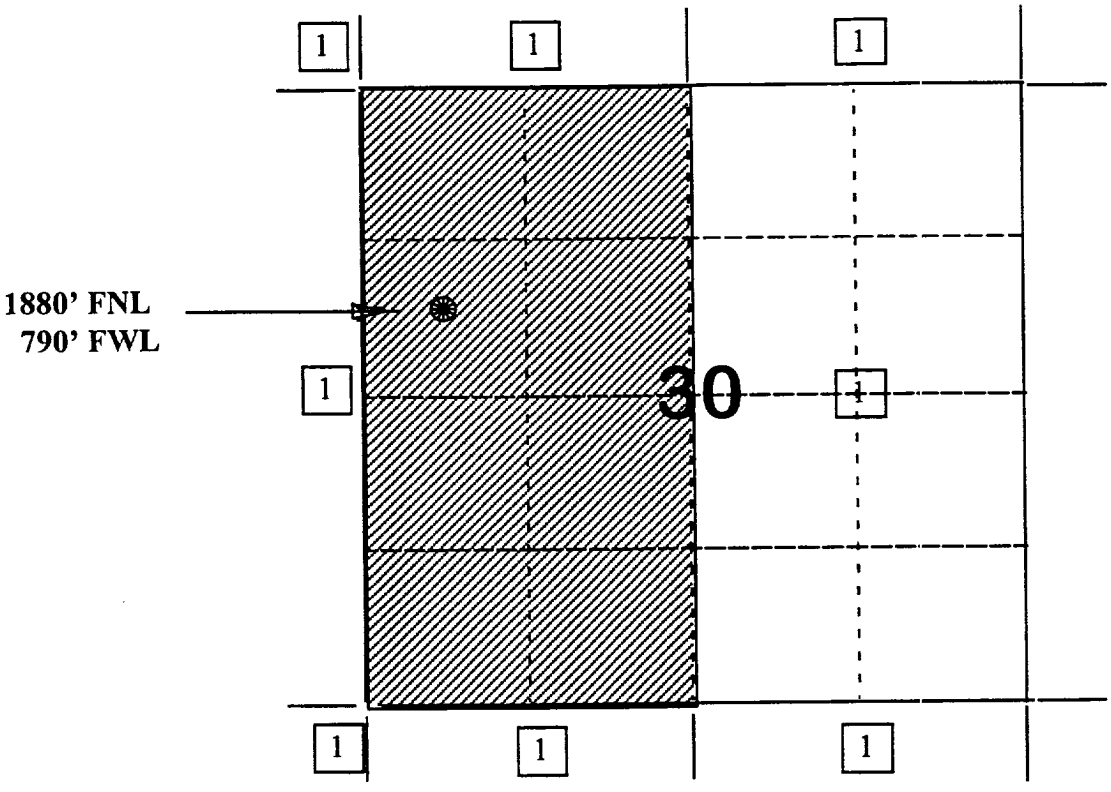
San Juan 27-4 Unit #49M

OFFSET OPERATOR/OWNER PLAT

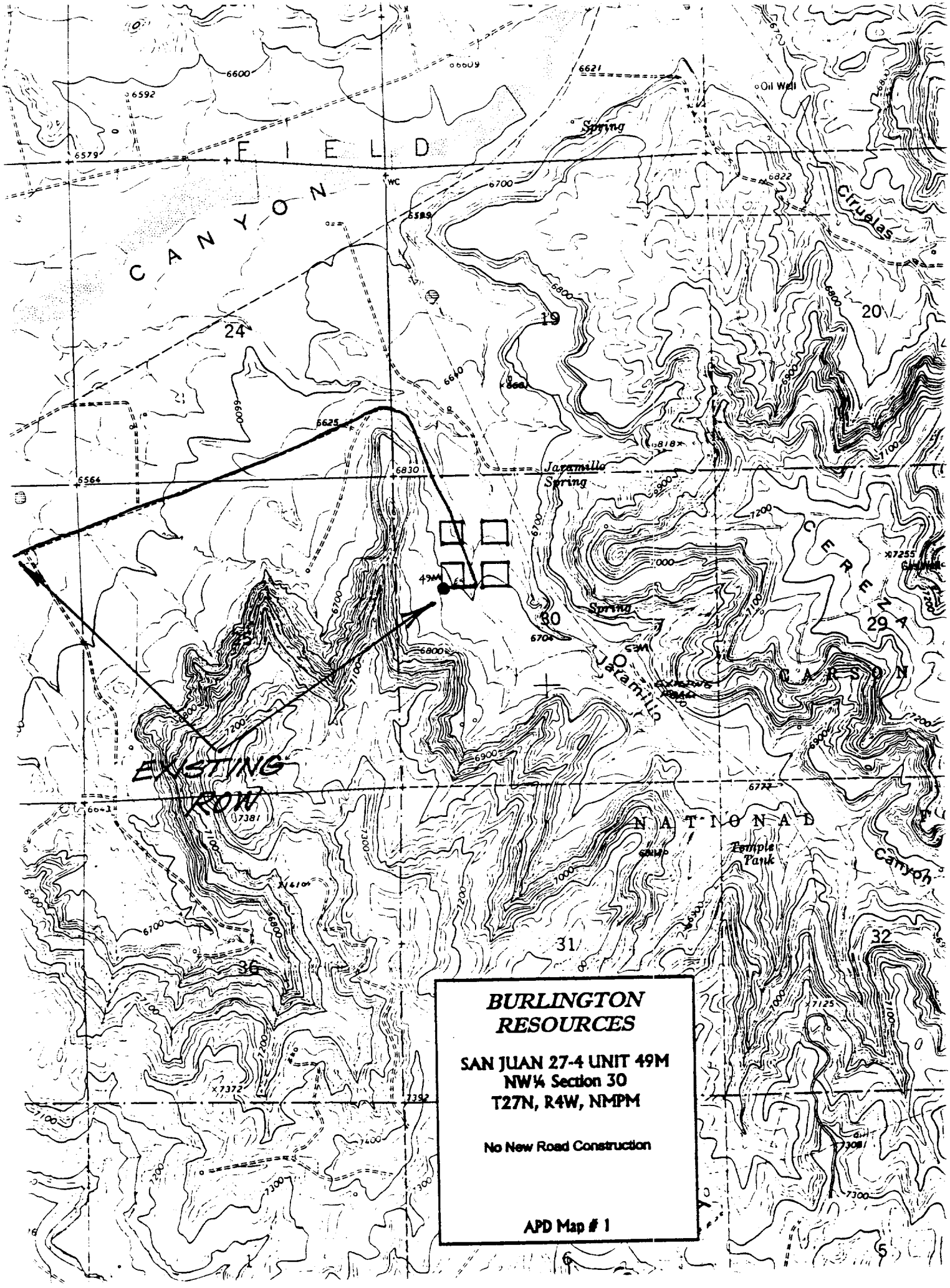
Nonstandard Location

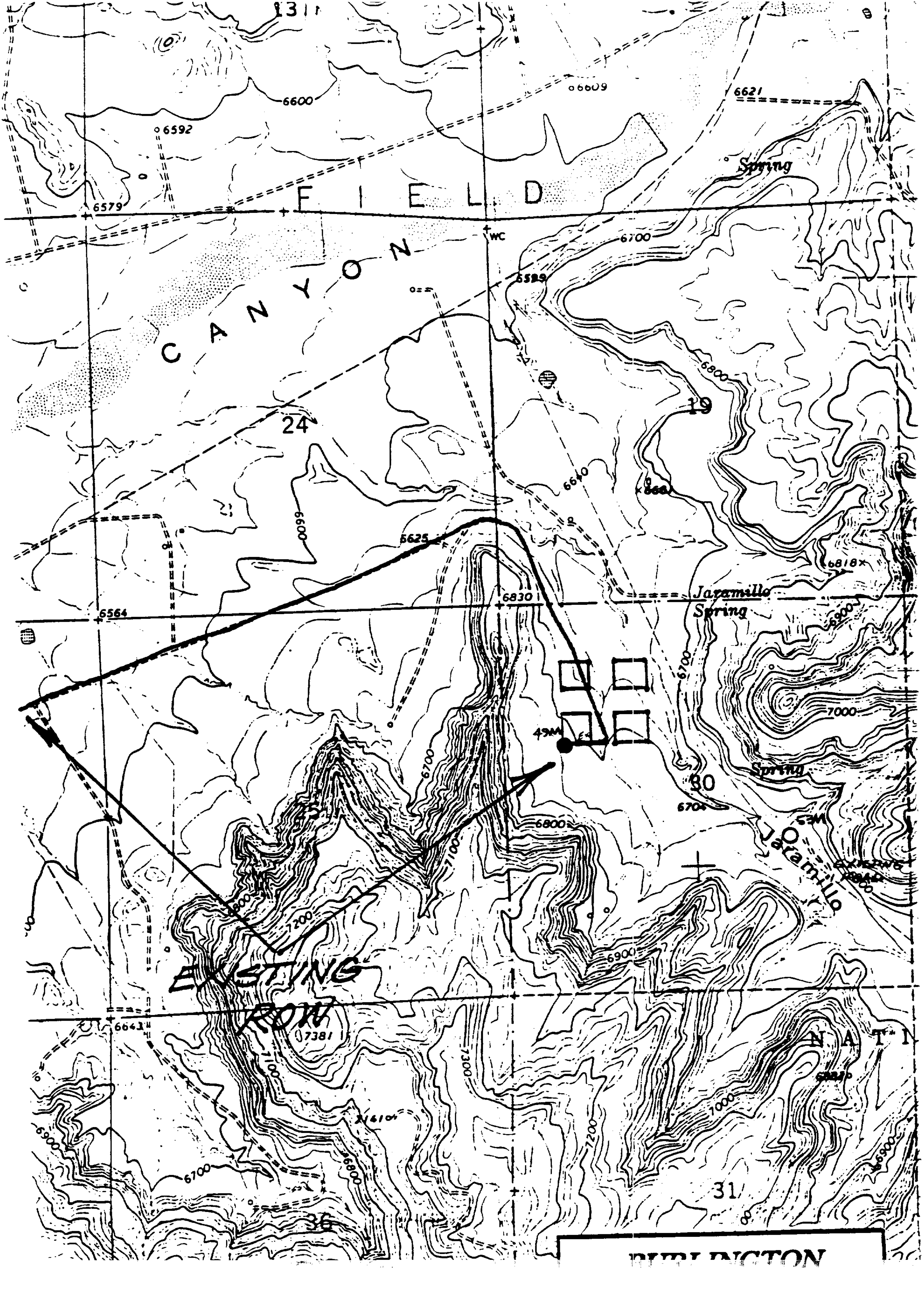
Mesaverde / Dakota Formations Well

Township 27 North, Range 4 West:



1) Burlington Resources


FIELD
CANYON
Oil Well
Spring
Circulas
Jaramillo
Spring
CEREZA
CARSON
Spring
Jaramillo
EXISTING
ROW
NATIONAL
Temple
Park
Canyon
24
19
20
30
29
31
32
36
BURLINGTON
RESOURCES
SAN JUAN 27-4 UNIT 49M
NW¼ Section 30
T27N, R4W, NMPM
No New Road Construction
APD Map # 1


FIELD
CANYON
6600
6609
6621
6592
Spring
6579
WC
6700
6599
6800
19
24
6640
6600
6625
6818
Jaramillo
Spring
6830
6564
6900
6700
7000
Spring
30
6704
Jaramillo
6700
6800
7100
7200
6900
EXISTING
ROW
6643
7381
7100
7300
7200
7000
6900
6700
6800
36
31
BURLINGTON