

DATE IN 7/14/98	SUSPENSE 8/3/98	ENGINEER MS	LOGGED BY MW	TYPE NSL
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505



### ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

**[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]**  
**[DD-Directional Drilling] [SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production-Response]**

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

☒ NSL ☐ NSP ☐ DD ☐ SD

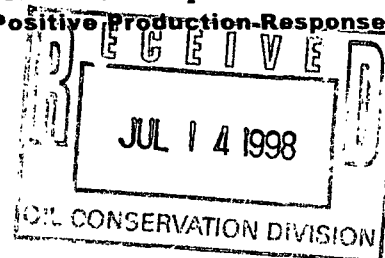
Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

#### [3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

Date

# BURLINGTON RESOURCES

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SAN JUAN DIVISION

Sent Federal Express

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

Re: San Juan 27-4 Unit #98A  
1160'FNL, 1240'FWL, Section 10, T-27-N, R-4-W, Rio Arriba County, NM  
30-039-not assigned

Dear Ms. Wrotenberg:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Mesa Verde pool. This application for the referenced location is for topographic reasons, archaeology, and at the request of the Carson National Forest Service.

Production from the Blanco Mesa Verde pool is to be included in a standard 320 acre gas spacing and proration unit comprising of the west half (W/2) of Section 10 which is currently dedicated to Burlington's San Juan 27-4 Unit #98 (API 30-039-20834), located at 1180'ESL, 1840'FWL of Section 10. The Dakota formation in the San Juan 27-4 Unit #98 was plugged and abandoned in November 1980.

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 operator of the unit.
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

<b>1a. Type of Work</b> DRILL	<b>5. Lease Number</b> SF-080668 <b>Unit Reporting Number</b> 891001054A
<b>1b. Type of Well</b> GAS	<b>6. If Indian, All. or Tribe</b>
<b>2. Operator</b> <i>BURLINGTON RESOURCES</i> Oil & Gas Company	<b>7. Unit Agreement Name</b> San Juan 27-4 Unit
<b>3. Address &amp; Phone No. of Operator</b> PO Box 4289, Farmington, NM 87499  (505) 326-9700	<b>8. Farm or Lease Name</b> San Juan 27-4 Unit <b>9. Well Number</b> 98A
<b>4. Location of Well</b> 1240' FNL, 1160' FWL  Latitude 36° 35' 29", Longitude 107° 14' 37"	<b>10. Field, Pool, Wildcat</b> Blanco MV <b>11. Sec., Twn, Rge, Mer. (NMPM)</b> Sec 10, T-27-N, R-4-W <b>API #</b> 30-039-
<b>14. Distance in Miles from Nearest Town</b> 60 miles to Bloomfield	<b>12. County</b> RA <b>13. State</b> NM
<b>15. Distance from Proposed Location to Nearest Property or Lease Line</b> 1160'	
<b>16. Acres in Lease</b>	<b>17. Acres Assigned to Well</b> 320
<b>18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease</b> 2000'	
<b>19. Proposed Depth</b> 6212	<b>20. Rotary or Cable Tools</b> Rotary
<b>21. Elevations (DF, FT, GR, Etc.)</b> 6783'	<b>22. Approx. Date Work will Start</b>
<b>23. Proposed Casing and Cementing Program</b> See Operations Plan attached	
<b>24. Authorized by:</b>  Regulatory/Compliance Administrator	<b>6-4-98</b> 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, Aramis, NM 88211-0719  
District III  
1000 Rio Huerfano 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  
Revised February 21  
Instructions o  
Submit to Appropriate District  
State Lease - 4  
Fee Lease - 3

☐ AMENDED RE

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-	Pool Code 72319/71599	Pool Name Blanco Mesaverde
Property Code 7452	Property Name SAN JUAN 27-4 UNIT	Well Number # 98A
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	Elevation 6783

10 Surface Location

UL or lot no. D	Section 10	Township 27 N	Range 4 W	Lot Ida	Feet from the 1240	North/South line NORTH	Feet from the 1160	East/West line WEST	County RIO AR
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres MV-W7320	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  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

(R) - GLO Record	5280' (R)	1240'	5285' (R)	17 OPERATOR CERTIFICATE I hereby certify that the information contained here is true and complete to the best of my knowledge and belief.  Signature Peggy Bradfield Printed Name Regulatory Administrator Title 5-30-98 Date
	NMSF-080668	10	5280' (R)	18 SURVEYOR CERTIFICATE 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 correct to the best of my belief. February 13, 1998 Date of Survey Signature and Seal of Professional Surveyor: GARY D. VAUGHN NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016 Certificate Number
	5280' (R)		5280' (R)	

## OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #98A  
Location: 1240'FNL, 1160'FWL Section 10, T-27-N, R-4-W  
Rio Arriba County, New Mexico  
Latitude 36° 35'29", Longitude 107° 14'37"  
Formation: Blanco Mesa Verde  
Elevation: 6783'GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3077'	aquifer
Ojo Alamo	3077'	3250'	aquifer
Kirtland	3250'	3276'	
Fruitland	3276'	3624'	
Pictured Cliffs	3624'	3763'	gas
Lewis	3763'	4195'	gas
<b>Intermediate TD</b>	<b>3863'</b>		
Huerfanito Bentonite	4195'	4635'	
Chacra	4635'	5428'	
Massive Cliff House	5428'	5507'	gas
Menefee	5507'	5812'	gas
Massive Point Lookout	5812'		gas
<b>Total Depth</b>	<b>6212'</b>		

### 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
200-3863'	LSND	8.4-9.0	30-60	no control
3863-6212'	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' - 3863'	7"	20.0#	J-55
6 1/4"	3763' - 6212'	4 1/2"	10.5#	J-55

### Tubing Program:

0' - 6212'	2 3/8"	4.7#	J-55
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### 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/315 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 (1016 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 3250'. Two turbolating centralizers at the base of the Ojo Alamo at 3250'. 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. Cement with 264 sx 50/50 Class "B" Poz w/2% gel, 1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (352 cu.ft., 40% 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):

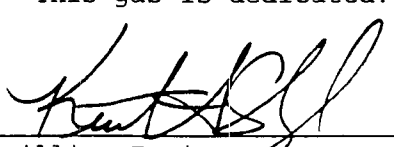
The following equipment will be operational while gas/mist drilling:

- 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	800 psi
Pictured Cliffs	800 psi
Mesa Verde	700 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 east half of the section is dedicated to the Mesa Verde.
- This gas is dedicated.

  
Drilling EngineerDate 5/8/98

# ***BURLINGTON RESOURCES***

San Juan 27-4 Unit #98A  
Multi-Point Surface Use Plan

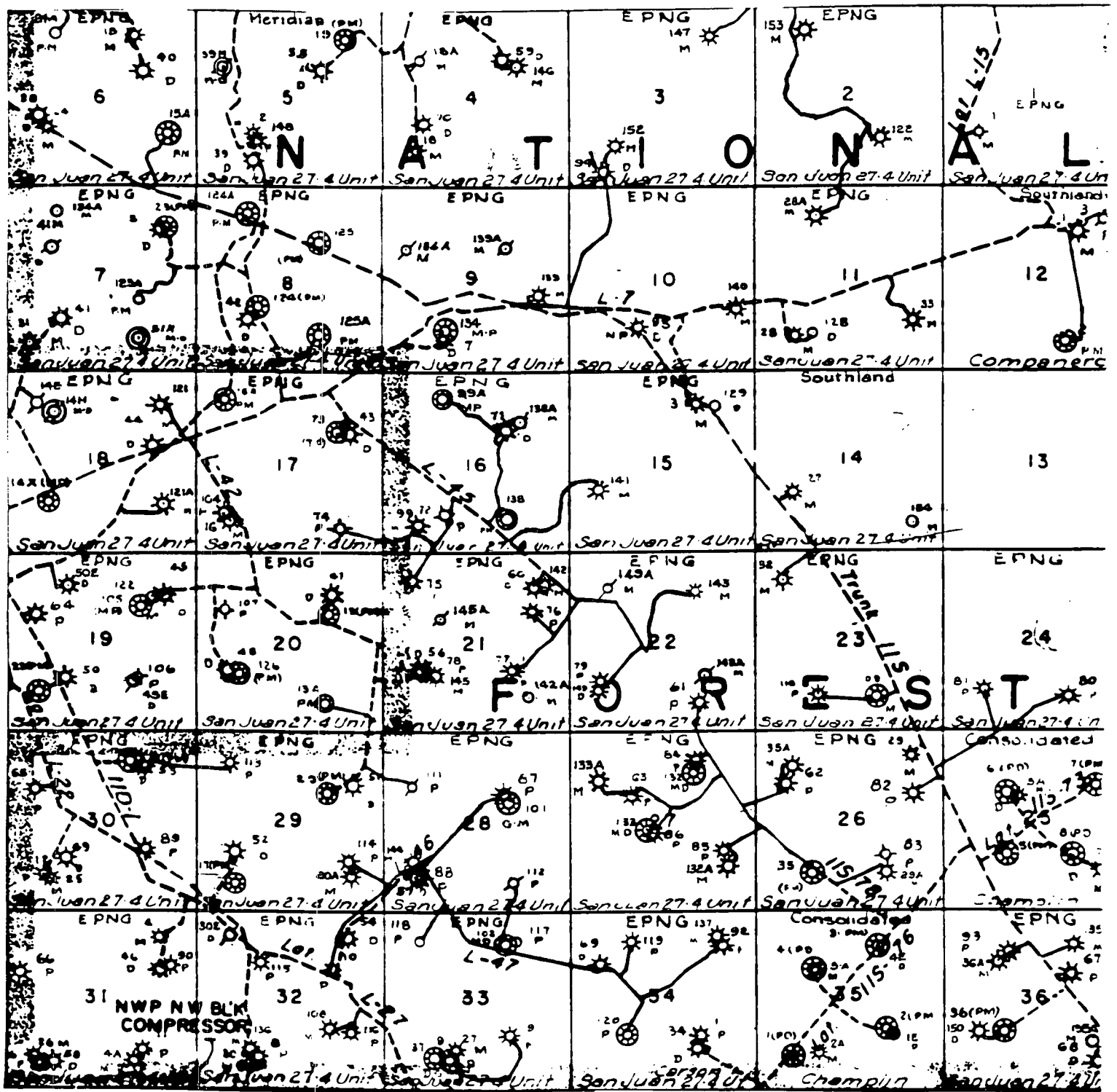
1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
2. Planned Access Road - Refer to Map No. 1. The required new access 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 800' 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 Williams.
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

5-30-98  
Date



MERIDIAN OIL INC.

Pipeline Map

T-27-N, R-04-W

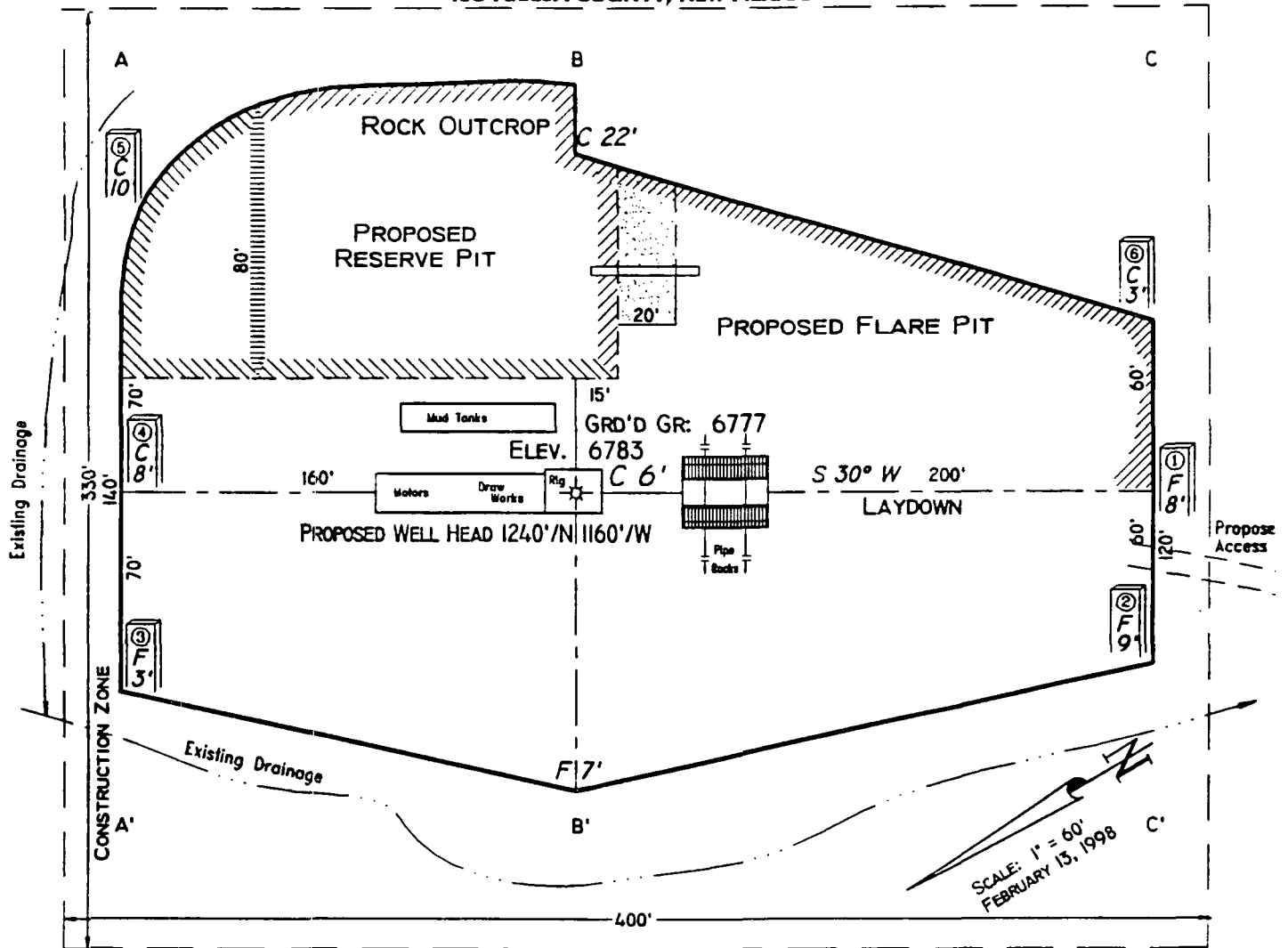
Rio Arriba County, New Mexico

San Juan 27-4 Unit #

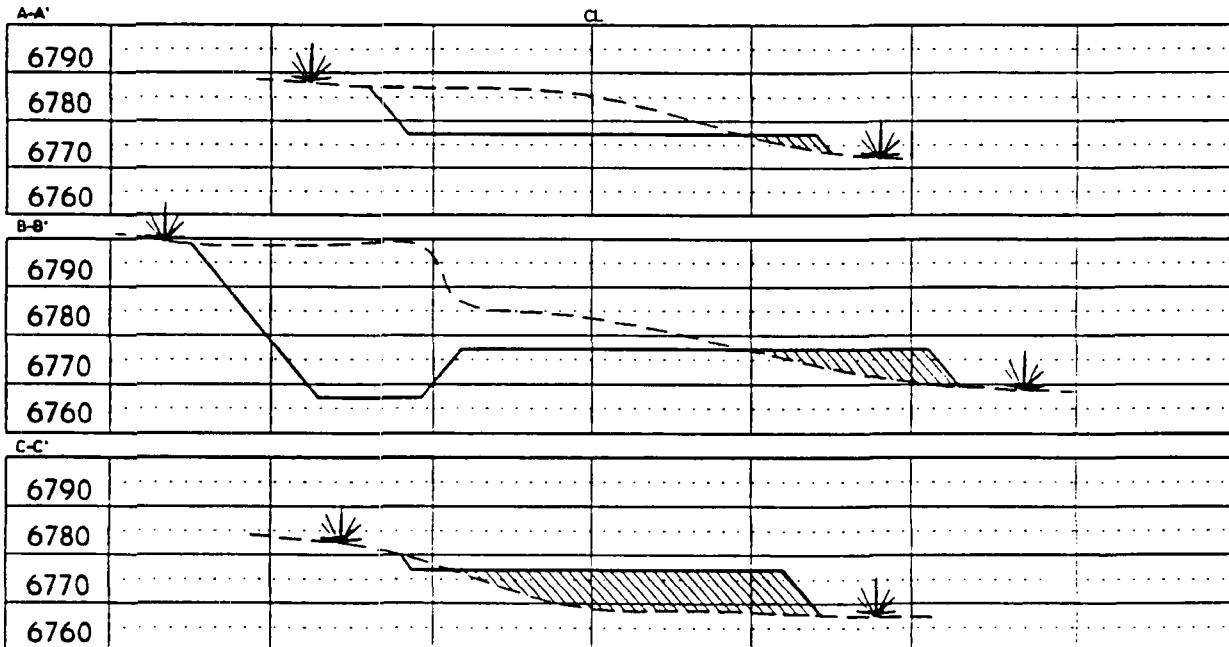
Map 1A 48A

3/91 adw/mjb

**PAD LAYOUT PLAN & PROFILE**  
**BURLINGTON RESOURCES OIL & GAS COMPANY**  
**SAN JUAN 27-4 UNIT 98A**  
**1240' F/NL 1160' F/WL**  
**SEC. 10, T27N, R4W, N.M.P.M.**  
**RIO ARriba COUNTY, NEW MEXICO**



NOTES: Reserve Pit Dike - Should be 8" above deep side (overflow - 3" wide & 1" above shallow side)  
 Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit.



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

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

VANN SURVEYS  
 304 N. Locke  
 Farmington, N.J.

**BURLINGTON RESOURCES OIL AND GAS COMPANY**

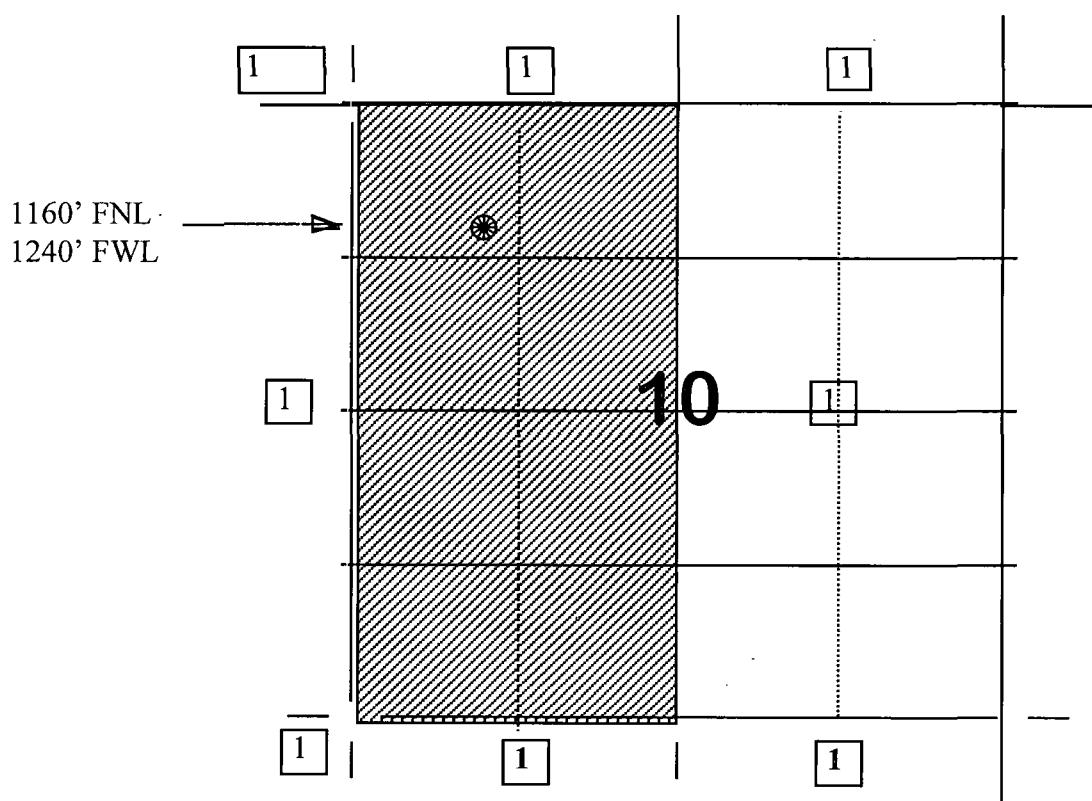
**San Juan 27-4 Unit #98A**

**OFFSET OPERATOR/OWNER PLAT**

**Mesaverde Formation**

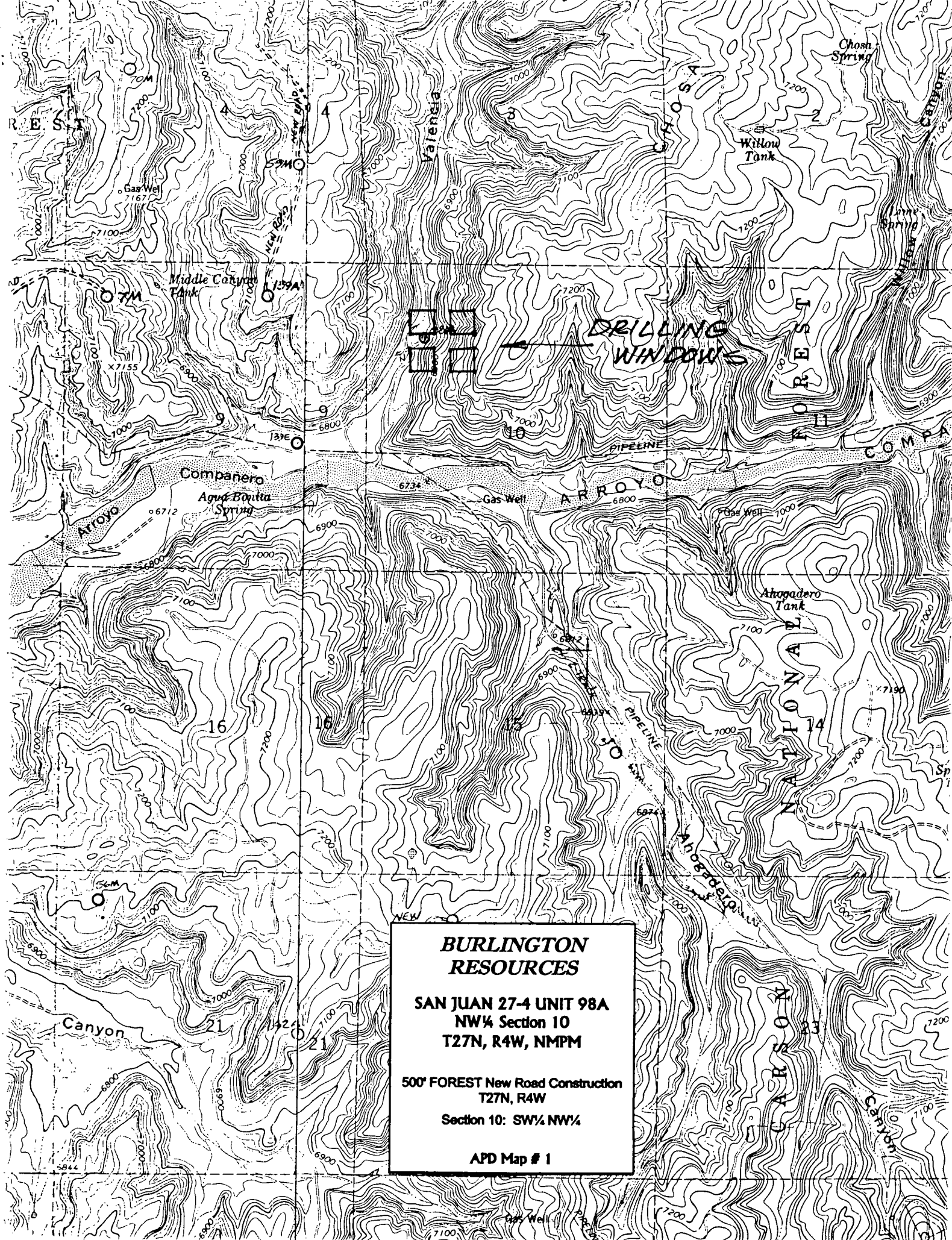
**Nonstandard Location**

**Township 27 North, Range 4 West**



1) Burlington Resources

No 6-98



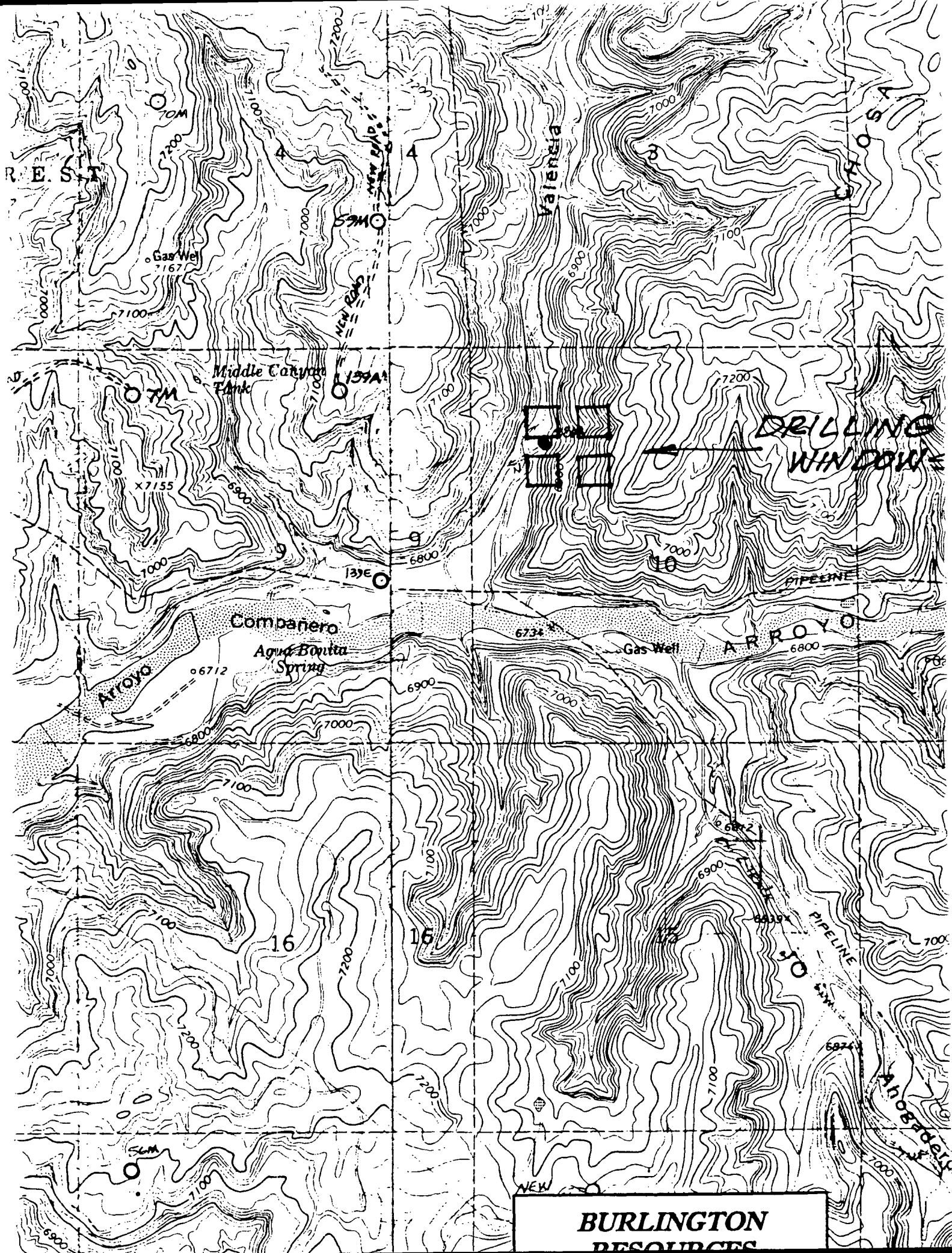
**BURLINGTON  
RESOURCES**

**SAN JUAN 27-4 UNIT 98A  
NW¼ Section 10  
T27N, R4W, NMPM**

**500' FOREST New Road Construction  
T27N, R4W**

**Section 10: SW¼ NW¼**

**APD Map # 1**



**BURLINGTON  
RESOURCES**