NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

September 25, 1997

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

Administrative Order NSL-3878

Dear Ms. Bradfield:

Reference is made to your application dated September 4, 1997 for an unorthodox gas well location for both the Blanco-Mesaverde and Basin-Dakota Pools for the proposed Allison Unit Well No. 52-A to be drilled 650 feet from the North line and 2165 feet from the West line (Unit C) of Section 28, Township 32 North, Range 6 West, NMPM, San Juan County, New Mexico.

The existing standard 320-acre gas spacing and proration unit in the Blanco-Mesaverde Pool comprising the W/2 of said Section 28, which is presently dedicated to the applicant's Allison Unit Well No. 52 (**API No. 30-045-24077**), located at a standard gas well location 890 feet from the South line and 1760 feet from the West line (Unit N) of said Section 28, and the W/2 of said Section 28 being a standard 320-acre gas spacing and proration unit for the Basin Dakota Pool, are to be dedicated to said well.

By the authority granted me under the provisions of Rule **2(d)** of the "*General Rules for the Prorated Gas Pools of New Mexico/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-8170, as amended, the above-described unorthodox gas well location for the Allison Unit Well No. 52-A is hereby approved.

Sincerely,

William J. LeMay
Director

WJL/MES/kv

cc: New Mexico Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
U. S. Bureau of Reclamation - Durango, Colorado

BURLINGTON RESOURCES

SAN JUAN DIVISION

September 4, 1997

Sent Federal Express

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Allison Unit #52A
650'FNL, 2165'FWL Section 28, T-32-N, R-6-W, San Juan County, New Mexico
API # 30-045-(not yet assigned)

Dear Mr. LeMay:

Burlington Resources is applying for administrative approval of a non-standard location for the above location in both the Mesa Verde and Dakota formations. This application for the referenced location is due to the top of the mesa being covered with archaeology, and at the request of the Bureau of Land Management to minimize surface disturbance.

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 showing the orthodox windows, and enlargement of the map to define topographic features.

A copy of this application is being submitted to all offset owners/ operators by certified mail with a request that they furnish you with a Waiver of Objection, and return one copy to this office.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield
Regulatory/Compliance Administrator

xc: Bureau of Land Management
NMOCD - Aztec District Office

WAIVER

_____ hereby waives objection to Burlington Resources' application for a non-standard location for their Allison Unit #52A as proposed above.

By: _____ Date: _____

xc: Williams Production
Amoco Production

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-081155
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**
Allison Unit

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

(505) 326-9700

8. **Farm or Lease Name**
Allison Unit

9. **Well Number**
52A

4. **Location of Well**
650'FNL, 2165'FWL

Latitude 36° 57.6, Longitude 107° 27.9

10. **Field, Pool, Wildcat**
Blanco Mesa Verde/
Basin Dakota

11. **Sec., Twn, Rge, Mer. (NMPM)**
Sec 28,T-32-N,R-6-W

API # 30-039-

14. **Distance in Miles from Nearest Town**
4 miles to Allison

12. **County**
Rio Arriba

13. **State**
NM

15. **Distance from Proposed Location to Nearest Property or Lease Line**
650'

16. **Acres in Lease**

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

18. **Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease**
500'

19. **Proposed Depth**
8180'

20. **Rotary or Cable Tools**
Rotary

21. **Elevations (DF, FT, GR, Etc.)**
6478'GR

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

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

24. **Authorized by:** _____ Regulatory/Compliance Administrator — 8-18-97 Date

PERMIT NO. _____ **APPROVAL DATE** _____

APPROVED BY _____ **TITLE** _____ **DATE** _____

Archaeological Report submitted
Threatened and Endangered Species Report submitted by Ecosphere
NOTE: Notice of Staking 8-4-97

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
Revised February 2
Instructions
Submit to Appropriate District
State Lease - 4
Fee Lease - 3

☐ AMENDED RE

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-	72319/71599	Blanco Mesaverde/Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Numb
6784	ALLISON UNIT	52A

[7] OGRID No.	[8] Operator Name	[9] Elevatior
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6478'

[10] Surface Location

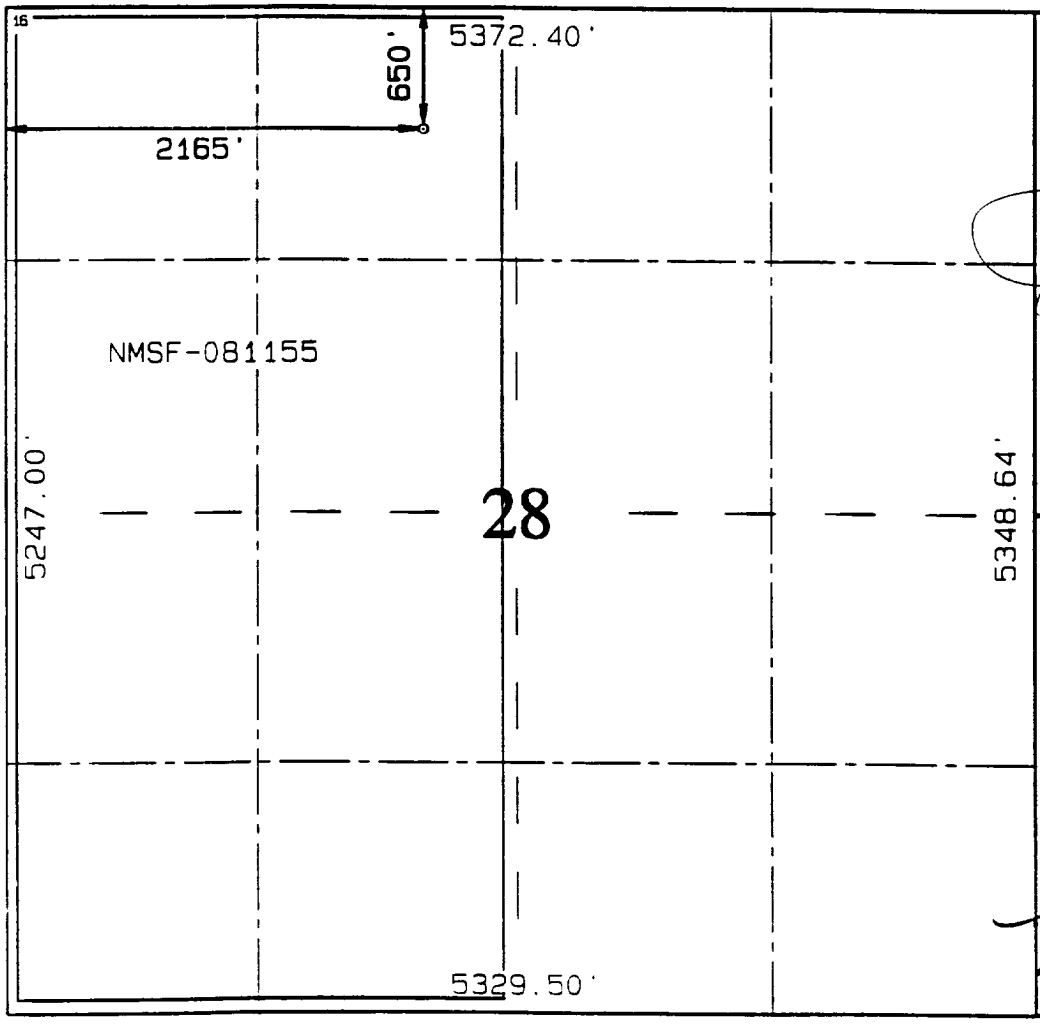
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	Co
C	28	32	6		650	North	2165	West	SAN

[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	Co

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

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



[17] OPERATOR CERTIFICA

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

Signature

Peggy Bradfield
Printed Name

Regulatory Administ
Title

8-18-97
Date

[18] SURVEYOR CERTIFICA

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

JULY 9, 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: Allison Unit #52A
Location: 650'FNL, 2165'FWL Sec 28, T-32-N, R-6-W
Rio Arriba County, NM
Latitude 36° 57.6, Longitude 107° 27.9
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6478'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2363'	
Ojo Alamo	2363'	2878'	aquifer
Fruitland	2878'	3185'	gas
Pictured Cliffs	3185'	3553'	gas
Lewis	3553'	4245'	gas
Intermediate TD	**3653'**		
Mesa Verde	4245'	4340'	gas
Chacra	4340'	5445'	
Massive Cliff House	5445'	5498'	gas
Menefee	5498'	5720'	gas
Massive Point Lookout	5720'	7065'	gas
Gallup	7065'	7800'	gas
Greenhorn	7800'	7900'	gas
Graneros	7900'	7985'	gas
Dakota	7985'		gas
TD (4 1/2"liner)	**8180'**		

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
200-3653'	LSND	8.4-9.0	30-60	no control
3653-8180'	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' - 3653'	7"	20.0#	J-55
6 1/4"	3553' - 6855'	4 1/2"	10.5#	J-55
6 1/4"	6855' - 8180'	4 1/2"	11.6#	J-55

Tubing Program:

0' - 8180'	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 12 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/276 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 (961 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 12 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 2878'. Two turbolating centralizers at the base of the Ojo Alamo at 2878'. 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 134 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 295 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (641 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.

- 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.
- 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 Dakota in this well.
- This gas is dedicated.

Drilling Engineer

8/19/97
Date

BURLINGTON RESOURCES

Allison Unit #52A

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 Field Service.

5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from Faverino Ditch located in NE/4 Section 12, T-32-N, R-7-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.

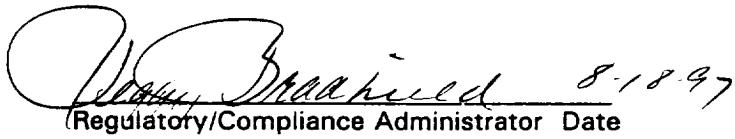
9. Wellsite Layout - Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

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.

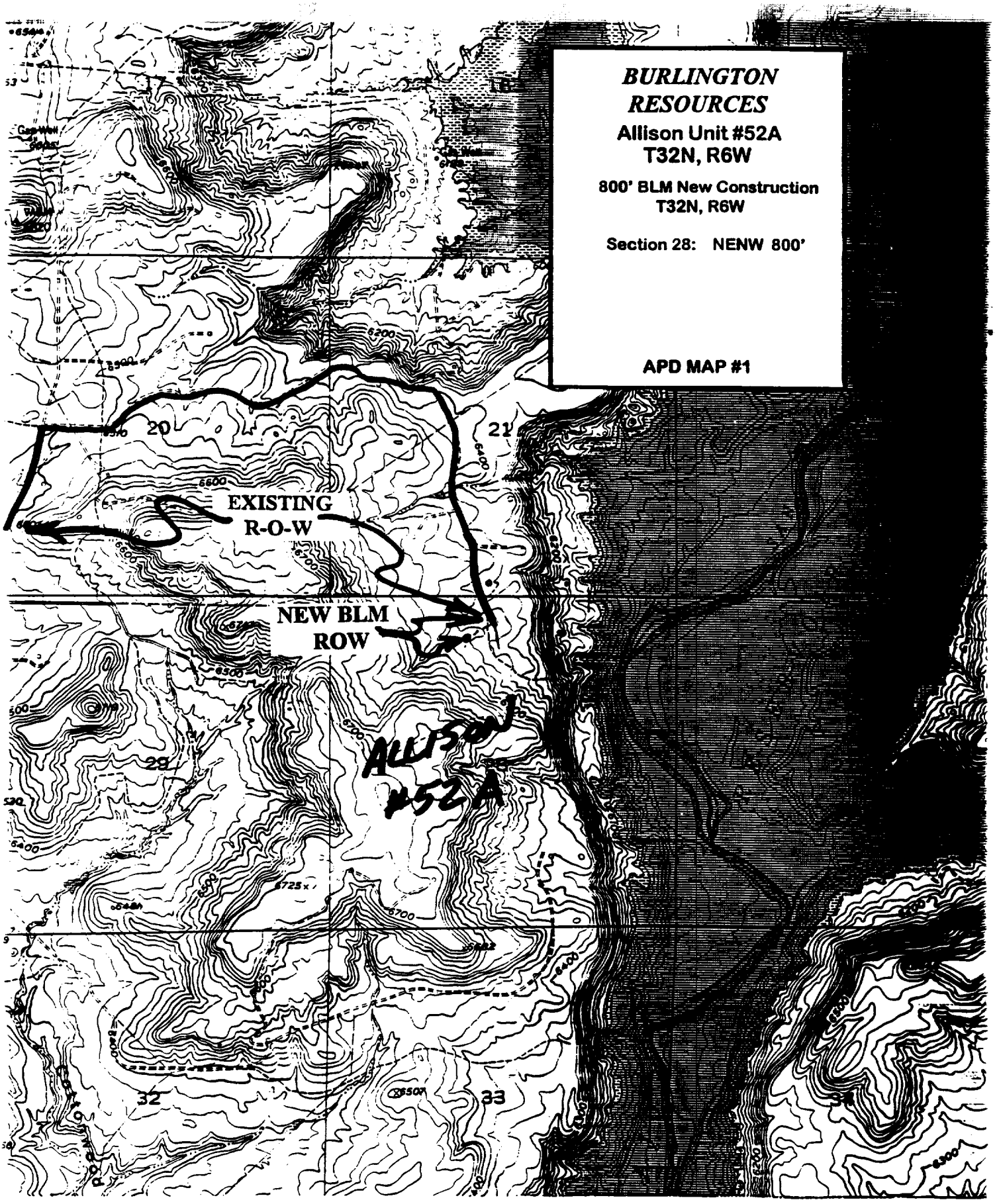
13. Operator's Representative and Certification - Burlington Resources Oil & Gas Company Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access 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.

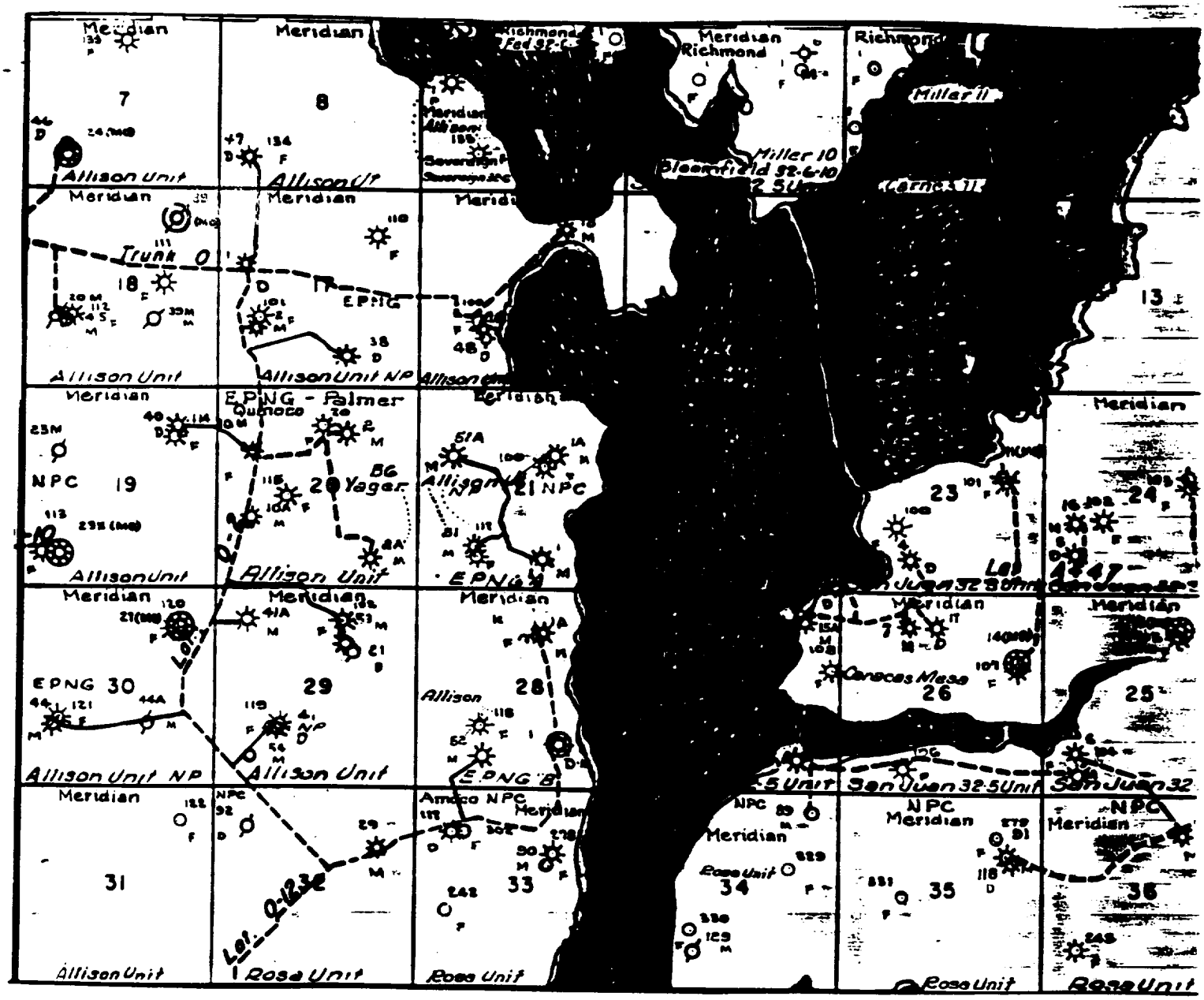


8-18-97

(Regulatory/Compliance Administrator Date

pb


BURLINGTON
RESOURCES
Allison Unit #52A
T32N, R6W
800' BLM New Construction
T32N, R6W
Section 28: NENW 800'
APD MAP #1
EXISTING
R-O-W
NEW BLM
ROW
ALLISON
#52A
20
21
28
32
33

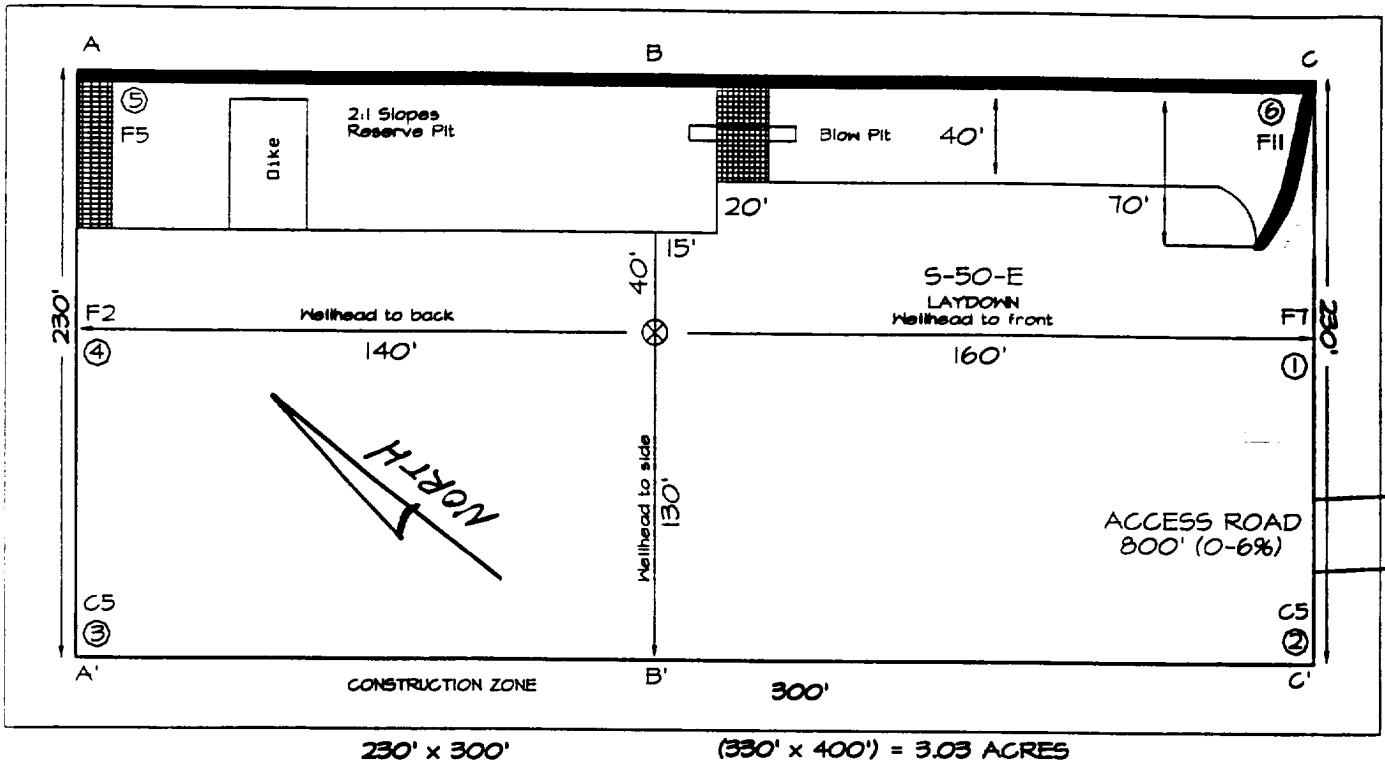


MERIDIAN OIL INC.
Pipeline Map
T-32-N, R-06-W
San Juan County, New Mexico
Allison Unit 52A
Map 1A

3/91 adw/mjb

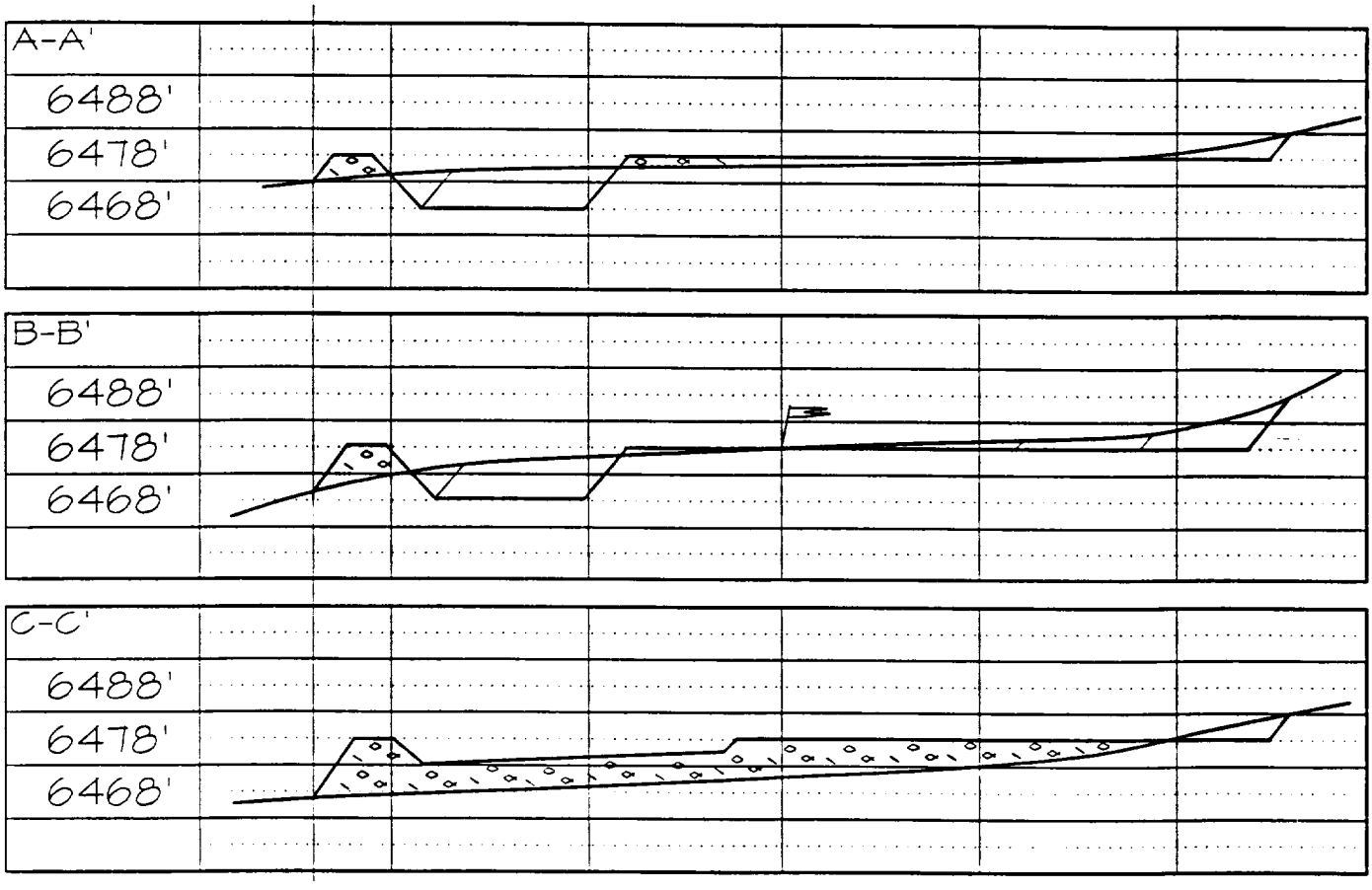
PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY
ALLISON UNIT #52A, 650' FNL & 2165' FWL
SECTION 28, T32N, R6W, NMPM, SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6478' DATE: JULY 9, 1997



230' x 300' (330' x 400') = 3.03 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 p

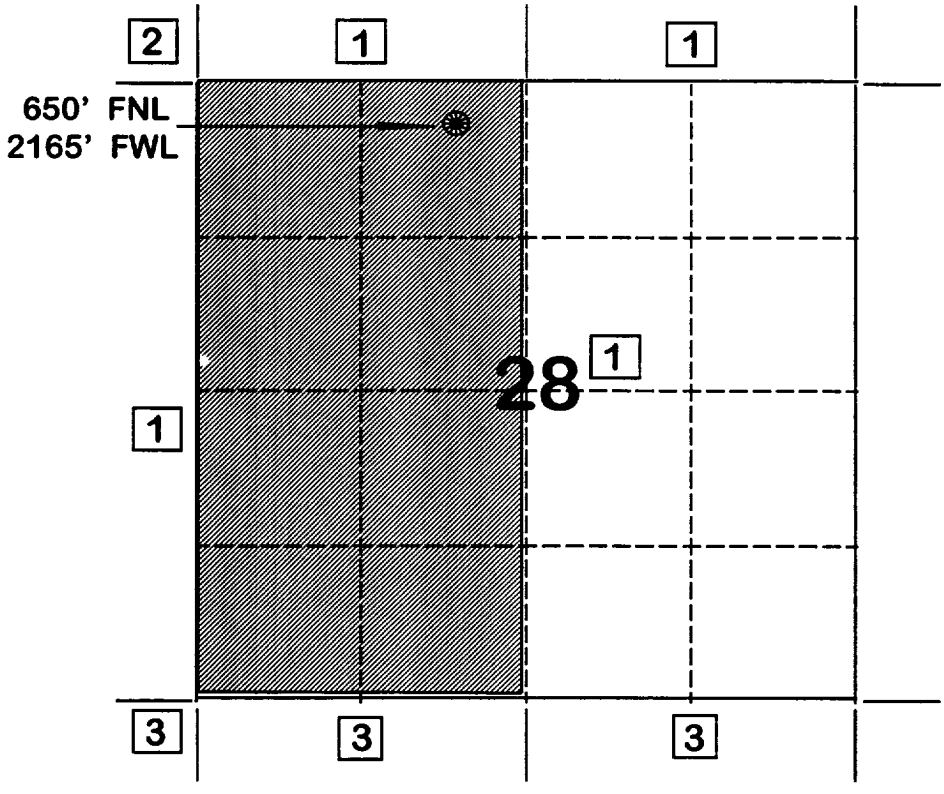


Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cat on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

Allison Unit #52A
OFFSET OPERATOR \ OWNER PLAT
Nonstandard Location
Mesaverde/Dakota Formations Well

Township 32 North, Range 6 West



1) Burlington Resources Oil and Gas Company
2) Amoco Production Company
   Attn: Bruce Zimney
   P.O. Box 800
   Denver, CO 80201
3) Williams Production Company
   One Williams Center
   P.O. Box 3102
   Tulsa, OK 74101

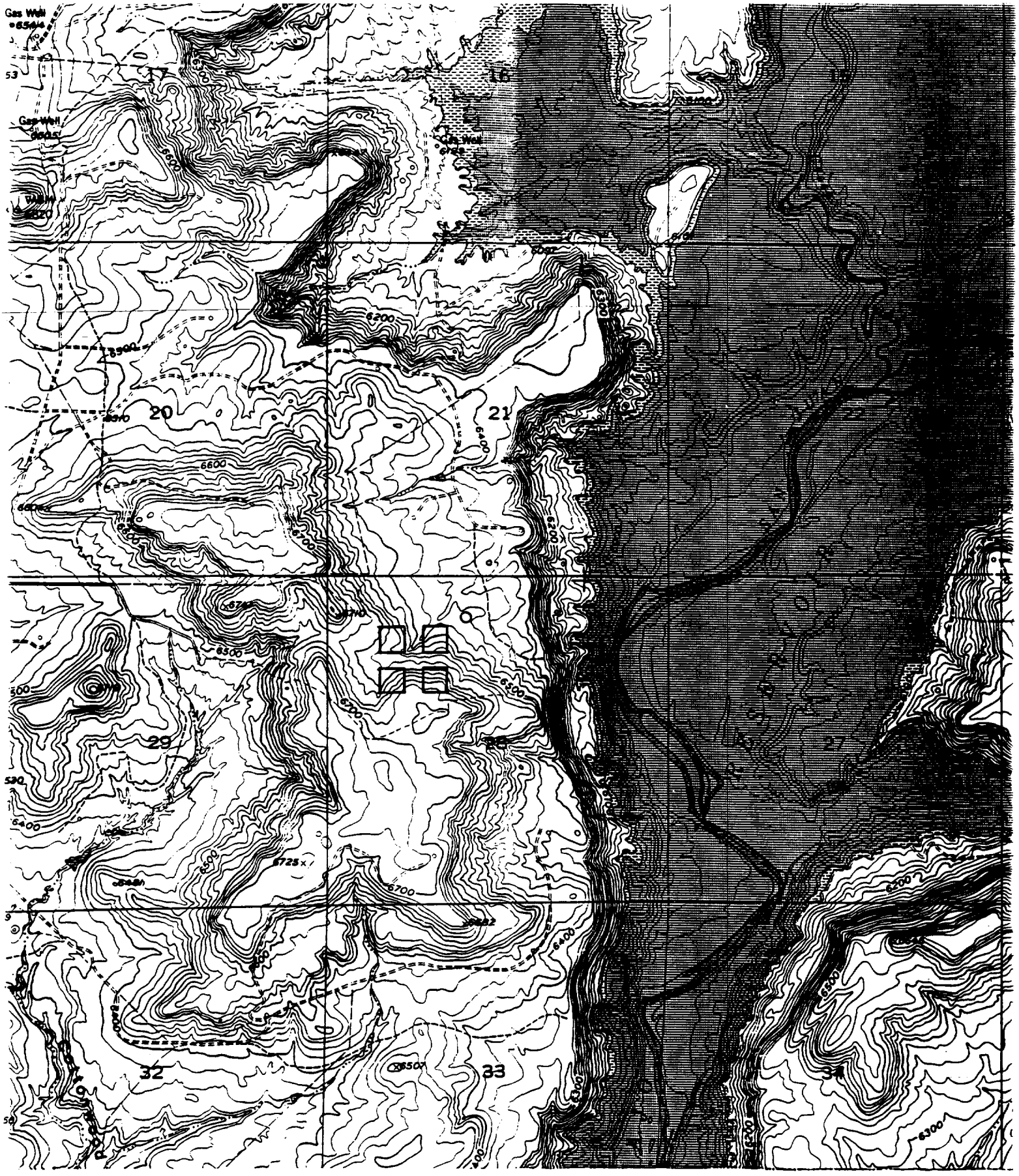
Re: Allison Unit #52A
650'FNL, 2165'FWL Section 28, T-32-N, R-6-W, San Juan County, New Mexico
API # 30-045-(not yet assigned)

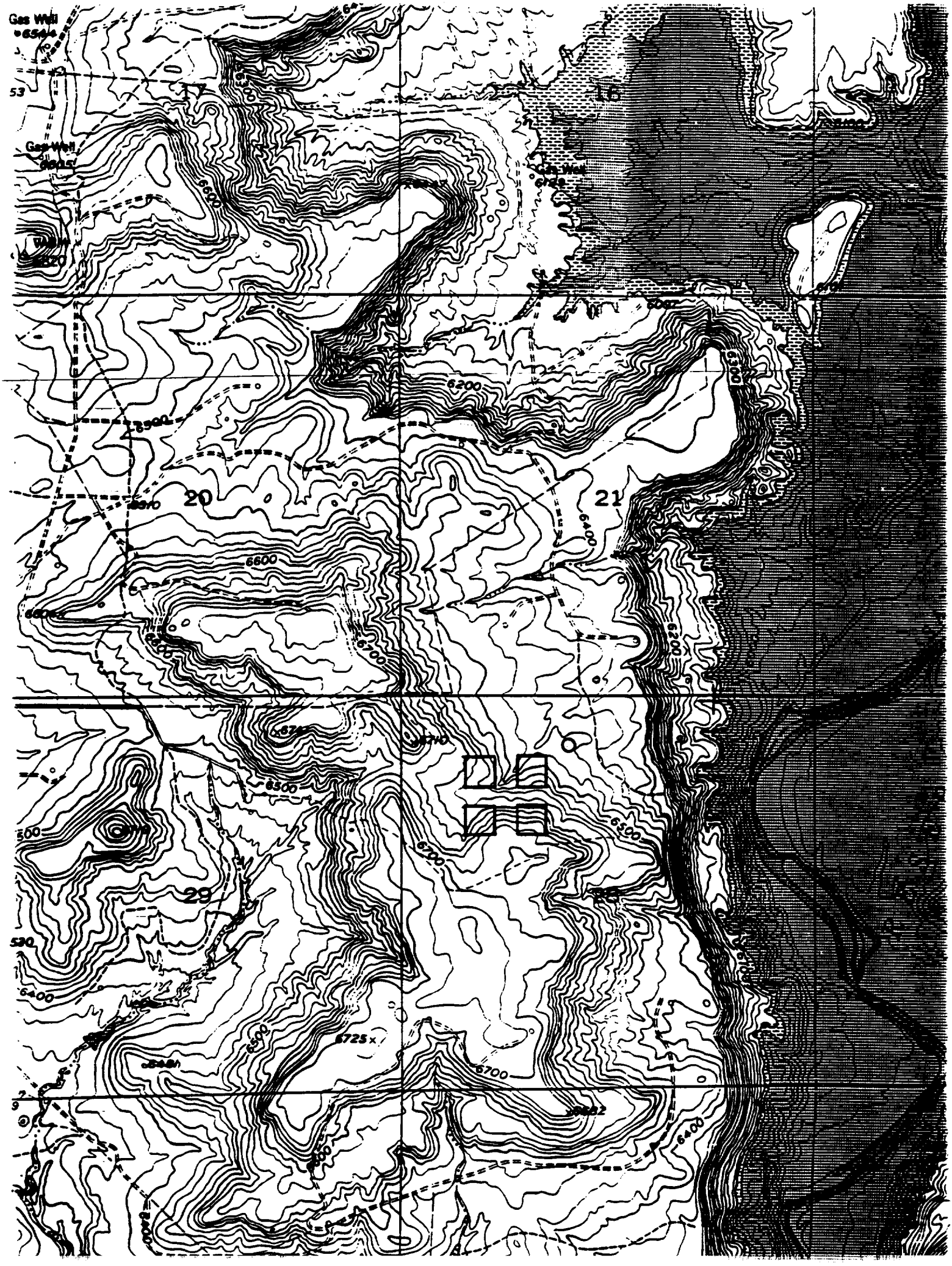
I hereby certify that the following offset operators/owners have been mailed notification of our application for non-standard location to drill the referenced well.

Amoco Production Company
Att: Bruce Zimney
PO Box 800
Denver, CO 80201

Williams Production Company
One Williams Center
PO Box 3102
Tulsa, OK 74101

Peggy Bradfield
Regulatory/Compliance Administrator


Gas Well
Gas Well
Gas Well
16
17
20
21
29
32
33
34
6200
6300
6400
6500
6600
6700
6800
6900


Gas Well
Gas Well
Gas Well
16
20
21
29
6600
6500
6400
6700
6200
6300
6725