STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 2, 1997

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

Administrative Order NSL-3819

Dear Ms. Bradfield:

Reference is made to your application dated June 18, 1997 for an unorthodox Blanco-Mesaverde "infill" gas well location on an existing standard 320-acre gas spacing and proration unit ("GPU") for said Blanco-Mesaverde Pool, comprising the E/2 of Section 22, Township 30 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. Said GPU is currently dedicated to the San Juan "30-6" Unit Well No. 102-R (**API No. 30-039-20519**) located at a standard gas well location 1720 feet from the North line and 1490 feet from the East line (Unit G) of said Section 22.

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*", as promulgated by Division Order No. R-8170, as amended, the following described well to be drilled at an unorthodox "infill" gas well location in the E/2 of said Section 22 is hereby approved:

San Juan "30-6" Unit Well No. 102-A
915' FSL - 2205' FEL (Unit O)

Further, both the San Juan "30-6" Unit Well Nos. 102-R and 102-A are to be dedicated to the subject GPU, further said wells and GPU will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest New Mexico.

Sincerely,

William J. LeMay
Director

WJL/MES/kv

cc: Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington

BURLINGTON RESOURCES

SAN JUAN DIVISION

June 18, 1997

Sent Federal Express

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

Re: San Juan 30-6 Unit #102A
915'FSL, 2205'FEL Section 22, T-30-N, R-6-W, Rio Arriba County, New Mexico
API # 30-039-(not yet assigned)

Dear Mr. LeMay:

Burlington Resources is applying for administrative approval of a non-standard location for the above location in the Mesa Verde formation. This application for the referenced location is due to terrain, the presence of archaeology and at the request of the Bureau of Land Management for minimum 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 - Burlington is the offset operator

4. 7.5 minute topographic map showing the orthodox windows, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield
Regulatory/Compliance Representative

xc: Bureau of Land Management
NMOCD - Aztec 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

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-080713A
Unit Reporting Number
8910005380

1b. Type of Well
GAS

6. If Indian, All. or Tribe

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

7. Unit Agreement Name
San Juan 30-6 Unit

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

(505) 326-9700

8. Farm or Lease Name
San Juan 30-6 Unit

9. Well Number
102A

4. Location of Well
915'FSL, 2205'FEL

Latitude 36° 47.6, Longitude 107° 26.9

10. Field, Pool, Wildcat
Blanco Mesa Verde

11. Sec., Twn, Rge, Mer. (NMPM)
Sec 22,T-30-N,R-6-W

API # 30-039-

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

12. County
Rio Arriba

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
915'

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
2000'

19. Proposed Depth
6005'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6463'GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: _____
Regulatory/Compliance Administrator

6/4/97
Date

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

Archaeological Report to be submitted by Arboles Contract Archaeology
Threatened and Endangered Species Report to be 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 Of
State Lease - 4 Co
Fee Lease - 3 Co

☐ AMENDED REPC

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name
30-039-	72319	Blanco Mesaverde

⁴ Property Code	⁵ Property Name	⁶ Well Number
7469	San Juan 30-6 Unit	102A

⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6463'

¹⁰ Surface Location

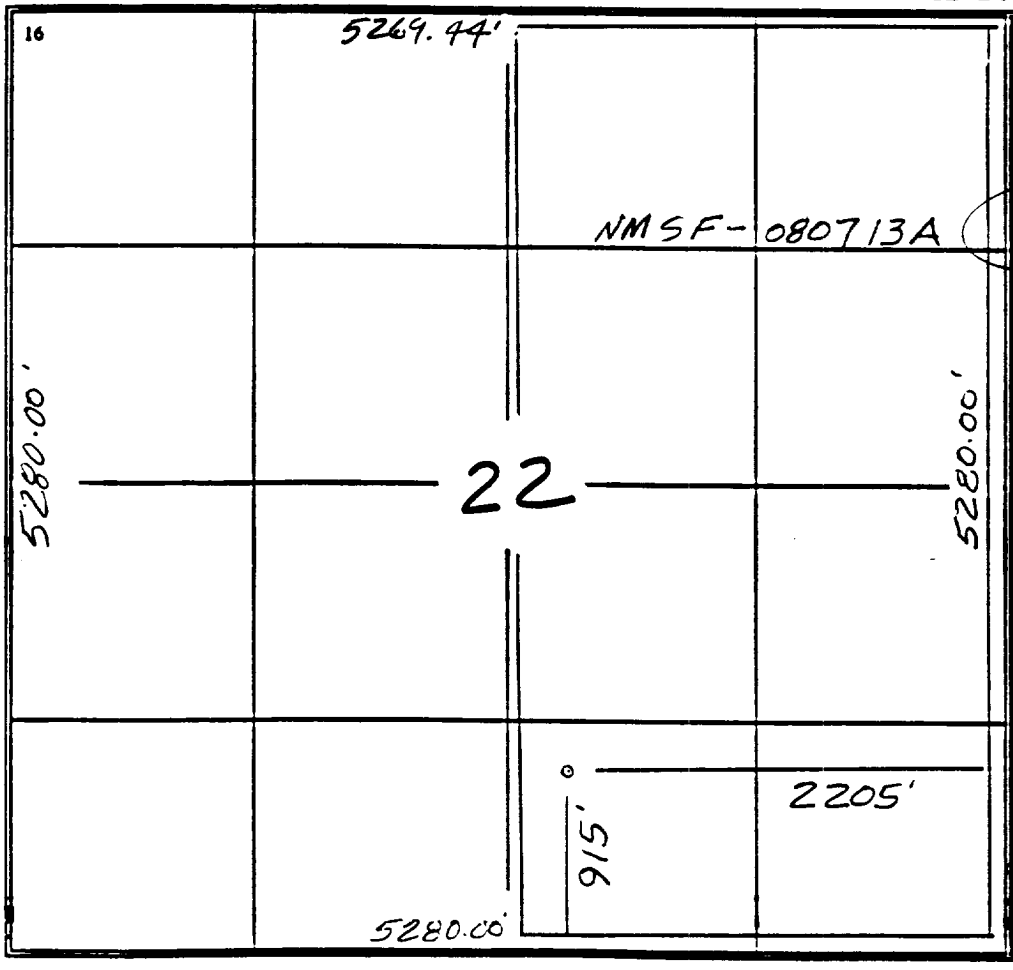
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	22	30-N	6-W		915	South	2205	East	R.A.

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.
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 CERTIFICATI

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

Signature
Peggy Bradfield
Printed Name
Regulatory Administrat
Title
6/9/97
Date

¹⁸ SURVEYOR CERTIFICATI

I hereby certify that the well location shown on this p 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.

5/13/97
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 30-6 Unit #102A
Location: 915'S, 2205'FEL Section 33, T-30-N, R-6-W
Rio Arriba County, New Mexico
Latitude 36° 47.6, Longitude 107° 26.9
Formation: Blanco Mesa Verde
Elevation: 6463'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2500'	aquifer
Ojo Alamo	2500'	2550'	aquifer
Kirtland	2550'	2940'	
Fruitland	2940'	3345'	gas
Pictured Cliffs	3345'	3495'	gas
Lewis	3495'	4103'	gas
Intermediate TD	**3595'**		
Mesa Verde	4103'	5290'	gas
Massive Cliff House	5290'	5324'	gas
Menefee	5324'	5605'	gas
Massive Point Lookout	5605'		gas
Total Depth	**6005'**		

Logging Program:
Cased hole logging - Gamma Ray Neutron
Coring/DST - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3595'	LSND	8.4-9.0	30-60	no control
3595-6005'	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):

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3595'	7"	20.0#	J-55
6 1/4"	3445' - 6005'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 6005'	2 3/8"	4.7#	J-55

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 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/290 sx Class "B" w/3% sodium metasilicate, 5# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, (946 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 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 2550'. Two turbolating centralizers at the base of the Ojo Alamo at 2550'. 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. Lead with 151 sx 65/35 Class "B" poz w/6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 118 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (460 cu.ft., 75% 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 is dedicated to the Mesa Verde.
- This gas is dedicated.

Drilling Engineer

6/10/97
Date

BURLINGTON RESOURCES

San Juan 30-6 Unit #102A
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 1000' 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 LaJara Water Hole located SW/4 Section 11, T-30-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.

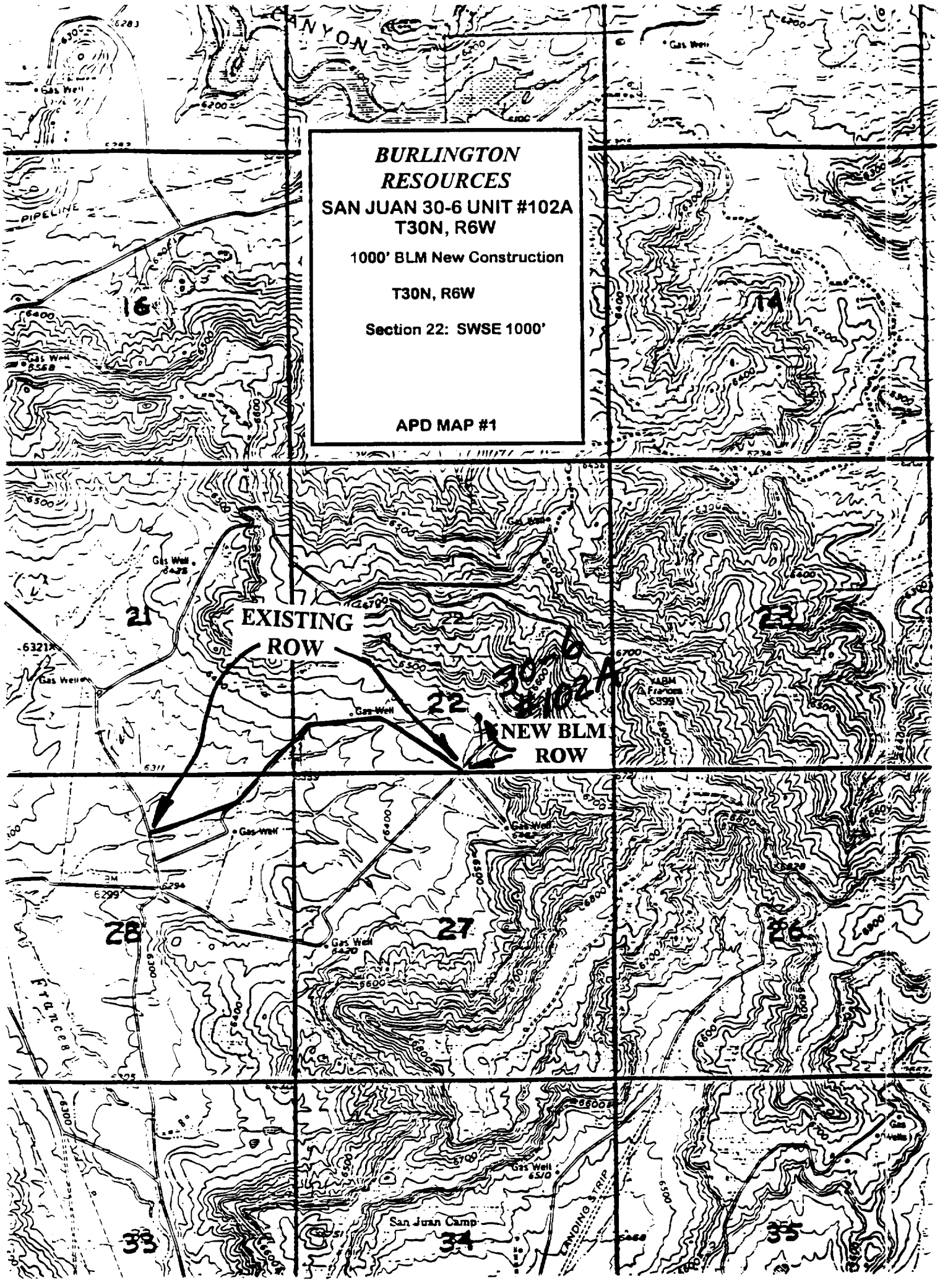
11. Surface Ownership - Bureau of Land Management

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.

Regulatory/Compliance Administrator Date

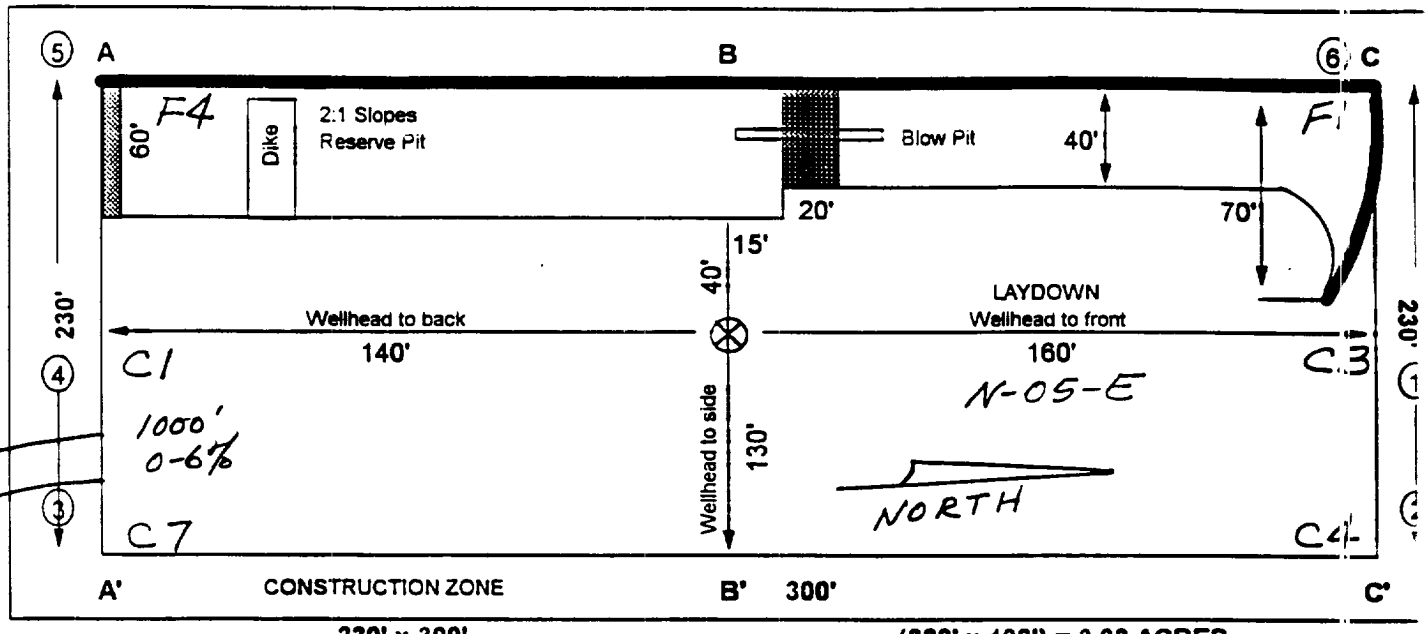
pb


BURLINGTON
RESOURCES
SAN JUAN 30-6 UNIT #102A
T30N, R6W
1000' BLM New Construction
T30N, R6W
Section 22: SWSE 1000'
APD MAP #1
EXISTING
ROW
NEW BLM
ROW
30-6
#102A
CANYON
PIPELINE
Gas Well
San Juan Camp
LANDING STRIP
16
21
22
23
27
28
26
33
34
35

BURLINGTON RESOURCES

PLAT #1

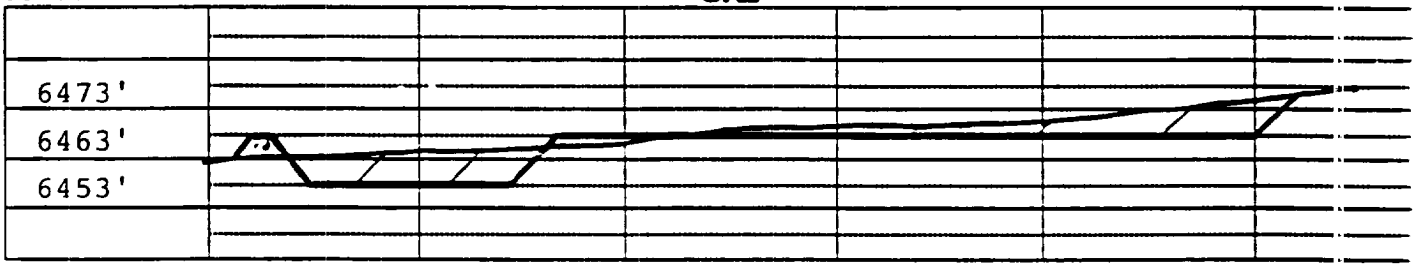
NAME: San Juan 30-6 Unit #102A
FOOTAGE: 915' FSL, 2205' FEL,
SEC 22 TWN 30 N.R 6 W NMPM
CO: Rio Arriba ST: New Mexico
ELEVATION: 6463' DATE: 5-13-97



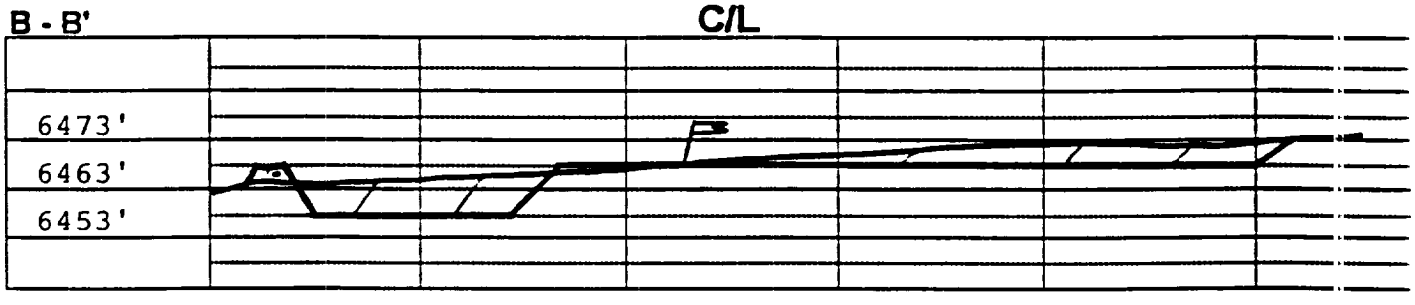
230' x 300' (330' x 400') = 3.03 ACRES

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 pit.

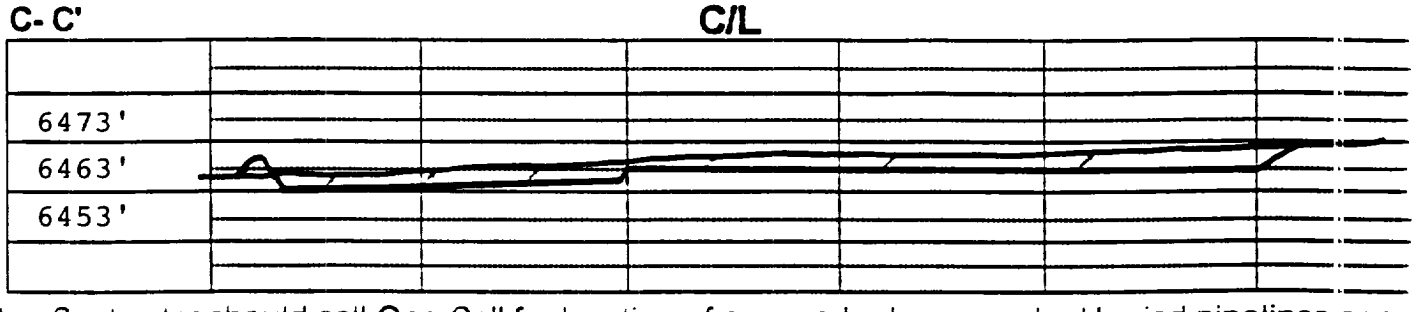
A - A'



B - B'



C- C'



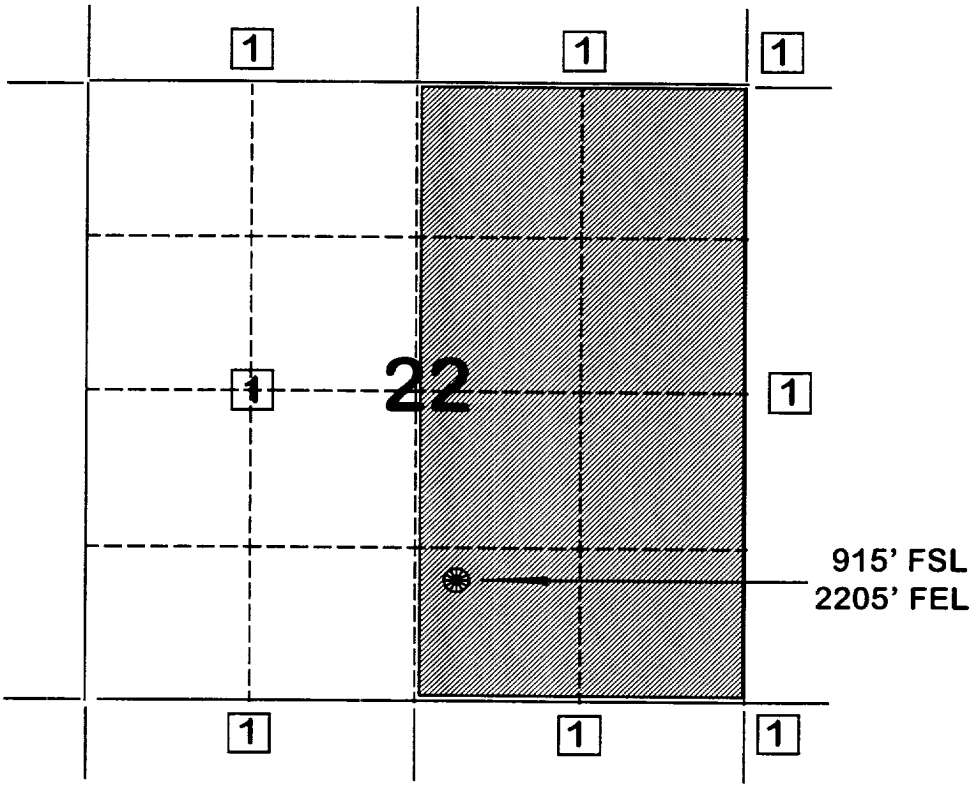
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or ca
on well pad and/or access road at least two (2) working days prior to construction.

BURLINGTON RESOURCES OIL AND GAS COMPANY

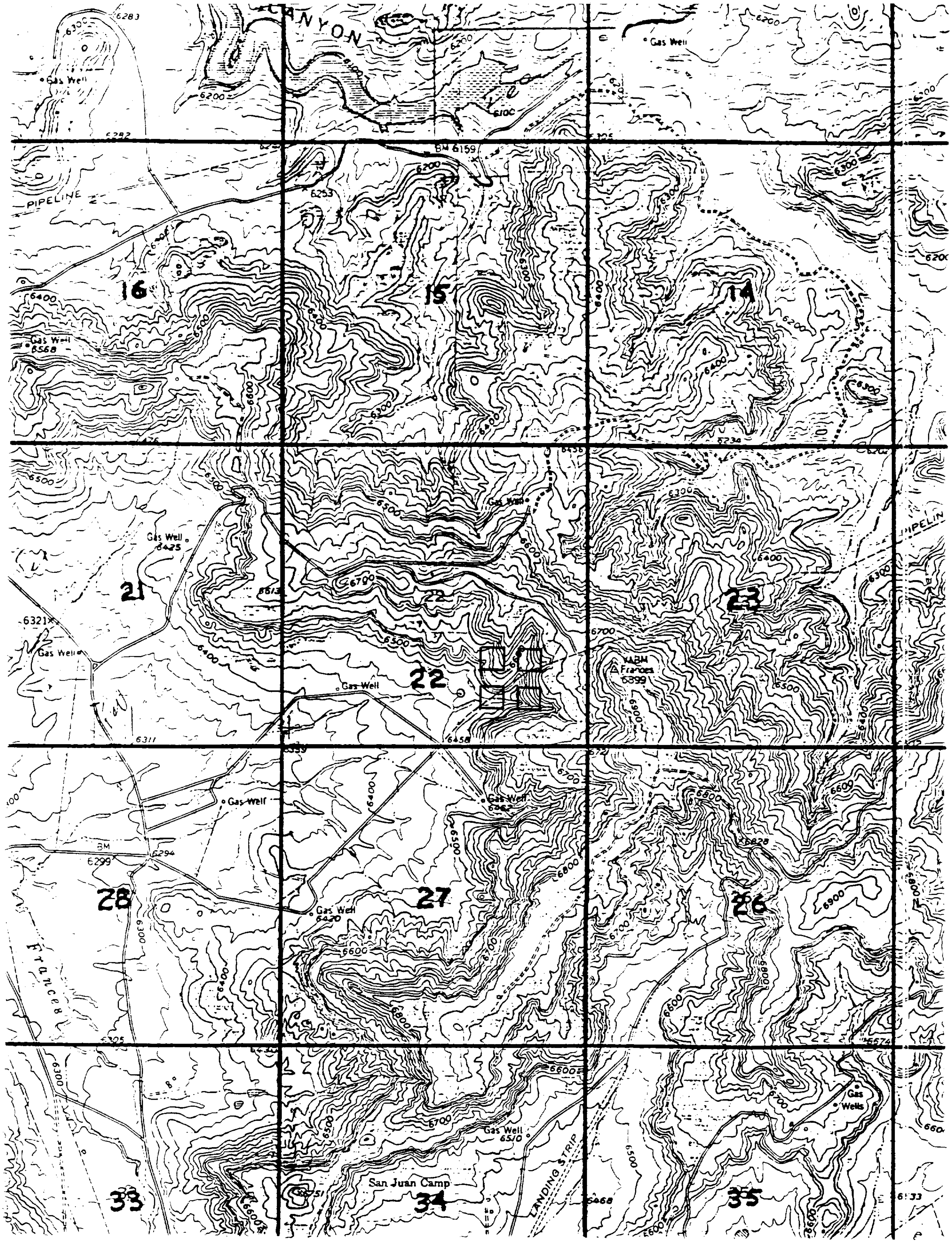
San Juan 30-6 Unit #102A
OFFSET OPERATOR \ OWNER PLAT
Nonstandard Location

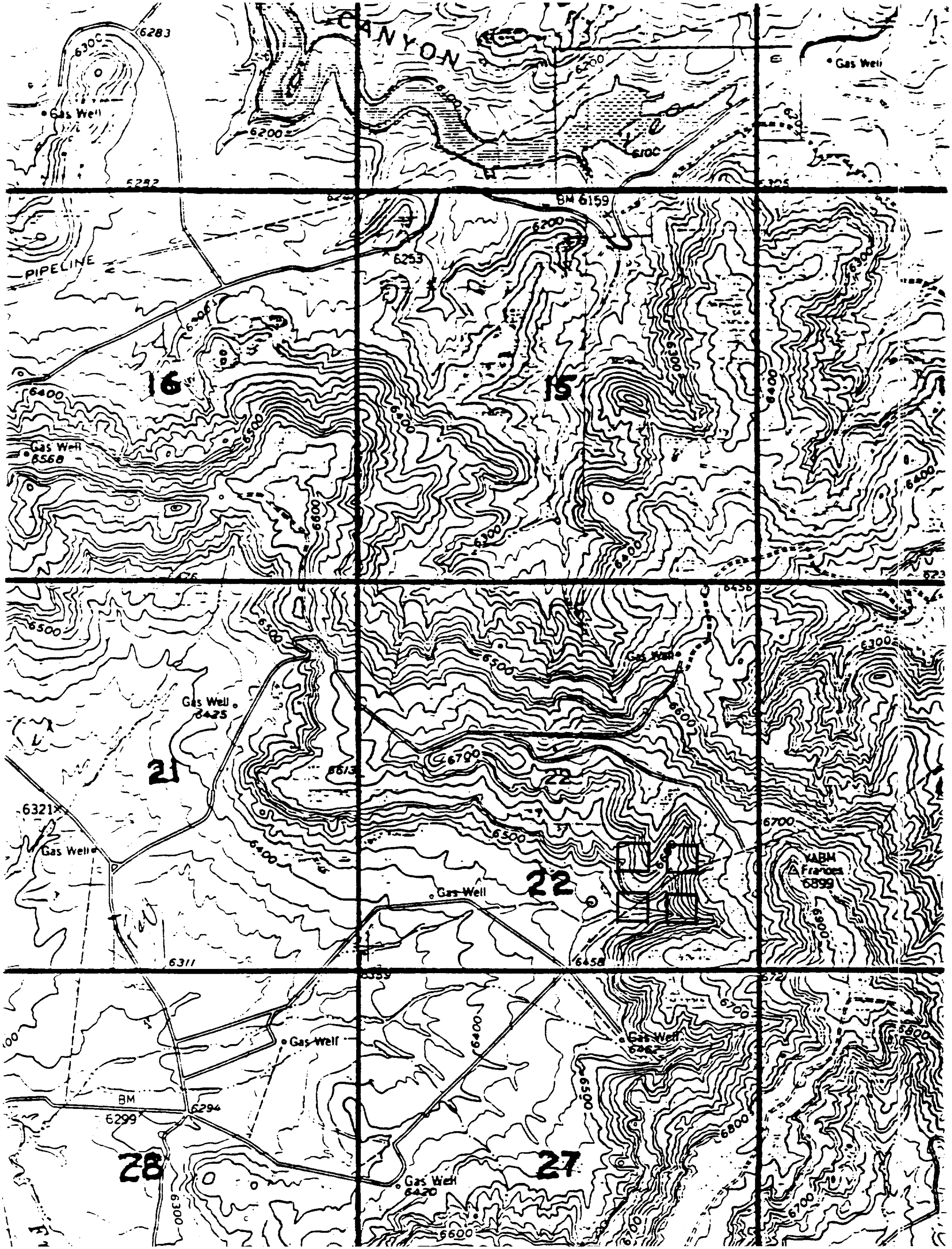
Mesaverde Formation Well

Township 30 North, Range 6 West



1) Burlington Resources Oil and Gas Company


CANYON
Gas Well
PIPELINE
BM 6159
16
15
14
Gas Well 6568
Gas Well 6425
21
22
23
PIPELINE
Gas Well
Frances 6399
Gas Well 6862
BM 6299
6294
28
27
26
Gas Well 6430
Frances
Gas Well 6510
Gas Wells
San Juan Camp
LANDING STRIP
33
34
35


CANYON
Gas Well
6283
6200
6282
PIPELINE
6253
BM 6159
16
15
6400
6500
6600
Gas Well
6568
6300
21
Gas Well
6425
6321
Gas Well
6700
6613
22
Gas Well
ABM
Frances
6899
6900
6311
6458
6359
6800
Gas Well
BM
6299
6294
28
27
Gas Well
6420