submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

Sundry Notices and Reports on Wells

97 APR 14 PM 3:58

070 FARMINGTON, NM

1. **Type of Well**
GAS

5. **Lease Number**
SF-079521A

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

7. **Unit Agreement Name**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

San Juan 28-5 Unit

8. **Well Name & Number**
San Juan 28-5 U #66M

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-039- 25681

4. **Location of Well, Footage, Sec., T, R, M**
1650'FSL, 790'FEL, Sec.29, T-28-N, R-5-W, NMPM
I

10. **Field and Pool**
Blanco MV/Basin DK

11. **County and State**
Rio Arriba Co, NM

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission	Type of Action	
_X_ Notice of Intent	___ Abandonment	_X_ Change of Plans
	___ Recompletion	_X_ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	___ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	___ Other -	

13. **Describe Proposed or Completed Operations**

Please find attached the amended pipeline and road plat for the subject well.

RECEIVED
APR 25 1997
OIL CON. DIV.
DIST. 3

14. ~~I hereby certify~~ **that the foregoing is true and correct.**

Signed [signature] (CDS) Title Regulatory Administrator Date 4/11/97

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

NMOCD

WILLIAMS GAS PROCESSING
ONE OF THE WILLIAMS COMPANIES

SAN JUAN GATHERING SYSTEM

LINE: BURLINGTON RESOURCES - SJ 28-5 #66M

FROM: 0+00 = 2+12.1 ON SJ 28-5 #50

(REF. DWG. L765.0-48-1)

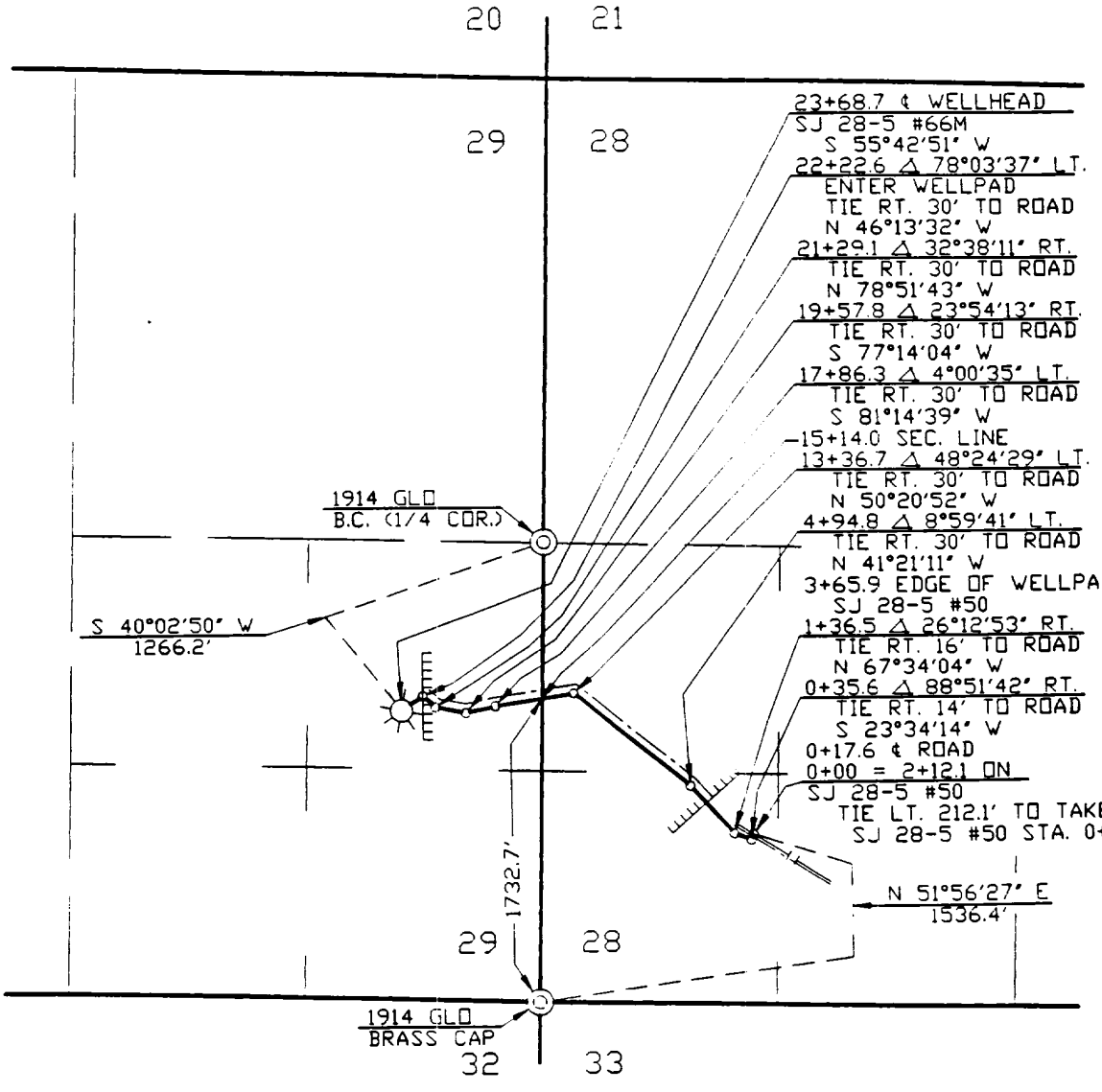
COUNTY: RIO ARRIBA STATE: NEW MEXICO

SECTION: 28 & 29 TOWNSHIP: 28-N RANGE: 5-W

SCALE: 1"=1000' DRAWN BY: PB CHECKED BY: DJF APPROVED: WB APPROVED: CK

DWG. NO. L765.0-82-1 DATE: 12/2/96 SURVEYED: 11/23/96 W.O. NO. 12966 R/W NO.

NOTE: BEARINGS ARE BASED ON A GRID BEARING ALONG THE WEST LINE OF THE SW 1/4 OF SECTION 28, T-28 N, R-5-W, NM PM BEARS: N 1°23'31" E



APPLICATION DWG. _____ DATE _____ METER NO. _____ FORMATION _____ METER NO. _____ FORMATION _____

AS-BUILT PIPE DATA

OWNERSHIP

SUBDIVISION	OWNER	LEASE	FEET	MILES	ACRES	ROD
0+00 TO 23+68.7	BUREAU OF LAND MANAGEMENT		2368.7	0.449	2.719	143.5

NO.	DATE	BY	REVISION DESCRIPTION	APP.
2	12/31/97	JDB	REVISED PER LINE CHANGE 3/25/97	
1	12/2/96	PB	ISSUED FOR REVIEW	RR

NO.	DATE	BY	REVISION DESCRIPTION

F:\MAPPING\765\00\000004G\

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

97 JAN 27 AM 9:51

070 FARMINGTON, NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. **Type of Work**
DRILL

5. **Lease Number**
SF-079521A
Unit Reporting Number
8910000949A-Dk
89100009490-MV

1b. **Type of Well**
GAS

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

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

7. **Unit Agreement Name**
San Juan 28-5 Unit

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

(505) 326-9700

8. **Farm or Lease Name**
San Juan 28-5 Unit

9. **Well Number**
66M

4. **Location of Well**
1650'FSL, 790'FEL

Latitude 36° 37' 47", Longitude 107° 22' 34"

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

11. **Sec., Twn, Rge, Mer. (NMPM)**
Sec 29,T-28N,R-5-W

API # 30-039-

14. **Distance in Miles from Nearest Town**
5 miles to Gobernador

12. **County** Rio Arriba

13. **State** NM

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

16. **Acres in Lease**

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

18. **Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease**
2000'

19. **Proposed Depth**
7895'

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

20. **Rotary or Cable Tools**
Rotary

21. **Elevations (DF, FT, GR, Etc.)**
6618'GR

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

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

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

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

1-21-97
Date

PERMIT NO. _____ **APPROVAL DATE** APR 2 [illegible]

APPROVED BY /S/ Duane W. Spencer **TITLE** _____ **DATE** APR 2 [illegible]

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

OPERATOR

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

RECEIVED
97 JAN 27 PM 2:51
070 FARMINGTON, NM

Form C-10
Revised February 21, 199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie
☐ AMENDED REPOR

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

Property Code	Property Name	Well Number
7460	San Juan 28-5 Unit	66M

OGRID No.	Operator Name	Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6618'

Surface Location

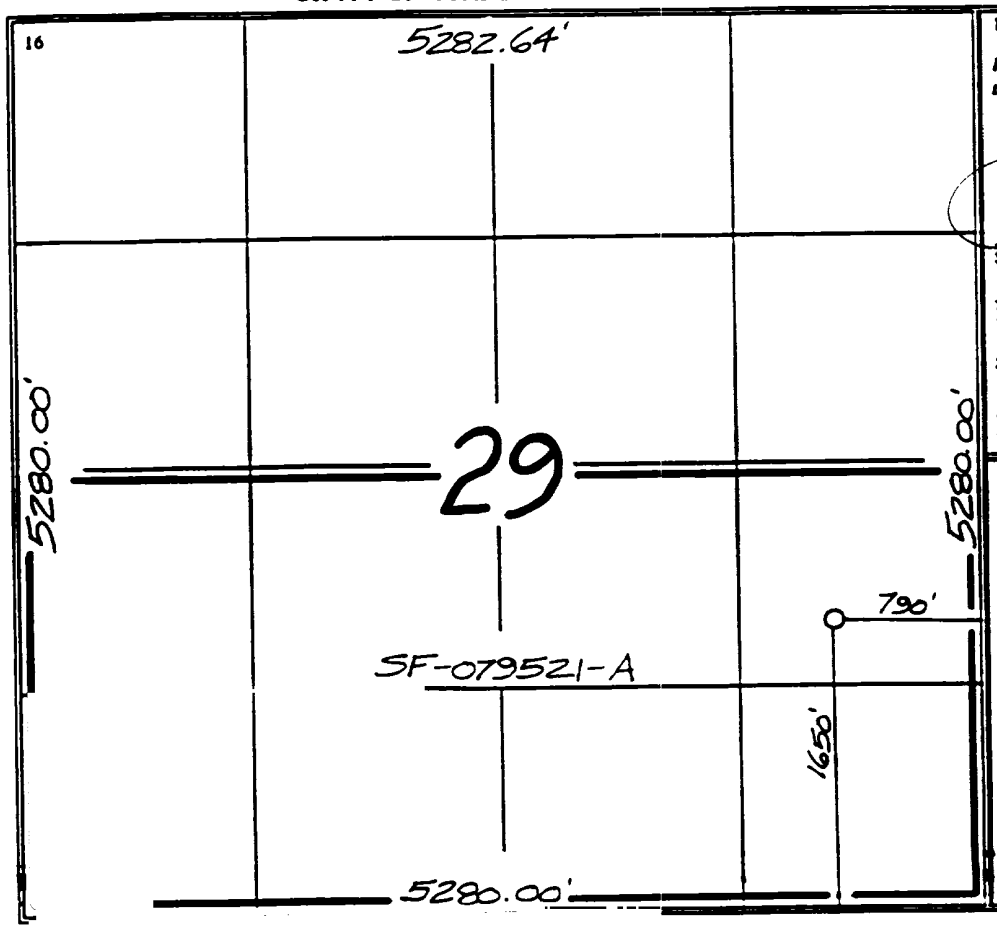
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	29	28-N	5-W		1650	South	790	East	R.A.

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
MV-S/320 DK-S/320			

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



17 OPERATOR CERTIFICATION

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

Peggy Bradfield

Signature

Peggy Bradfield

Printed Name

Regulatory Administrator

Title

1-21-97

Date

18 SURVEYOR CERTIFICATION

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

11/02/96

Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857

Certificate Number

January 21, 1997

OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #66M
Location: 1650'FSL, 790'FEL Sec 29, T-28-N, R-5-W
Rio Arriba County, NM
Latitude 36° 37' 47", Longitude 107° 22' 34"
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6618'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	2780'	
Ojo Alamo	2780'	3020'	aquifer
Fruitland	3020'	3445'	gas
Pictured Cliffs	3445'	3580'	gas
Lewis	3580'	4030'	gas
Intermediate TD	**3630'**		
Mesa Verde	4030'	4405'	gas
Chacra	4405'	5130'	
Massive Cliff House	5130'	5290'	gas
Menefee	5290'	5620'	gas
Massive Point Lookout	5620'	6805'	gas
Gallup	6805'	7550'	gas
Greenhorn	7550'	7658'	gas
Graneros	7658'	7754'	gas
Dakota	7754'		gas
TD	**7895'**		

Logging Program:
Cased hole -Gamma Ray/Neutron

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3630'	LSND	8.4-9.0	30-60	no control
3630-7895'	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#	H-40
8 3/4"	0' - 3630'	7"	20.0#	J-55
6 1/4"	3530' - 6855'	4 1/2"	10.5#	J-55
6 1/4"	6855' - 7895'	4 1/2"	11.6#	J-55

Tubing Program:

0' - 7895'	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/341 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 (1092 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 3020'. Two turbolating centralizers at the base of the Ojo Alamo at 3020'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 113 sx 65/35 Class "B" poz with 6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 299 sx 50/50 Class "B" Poz with 1/4# flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive (607 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

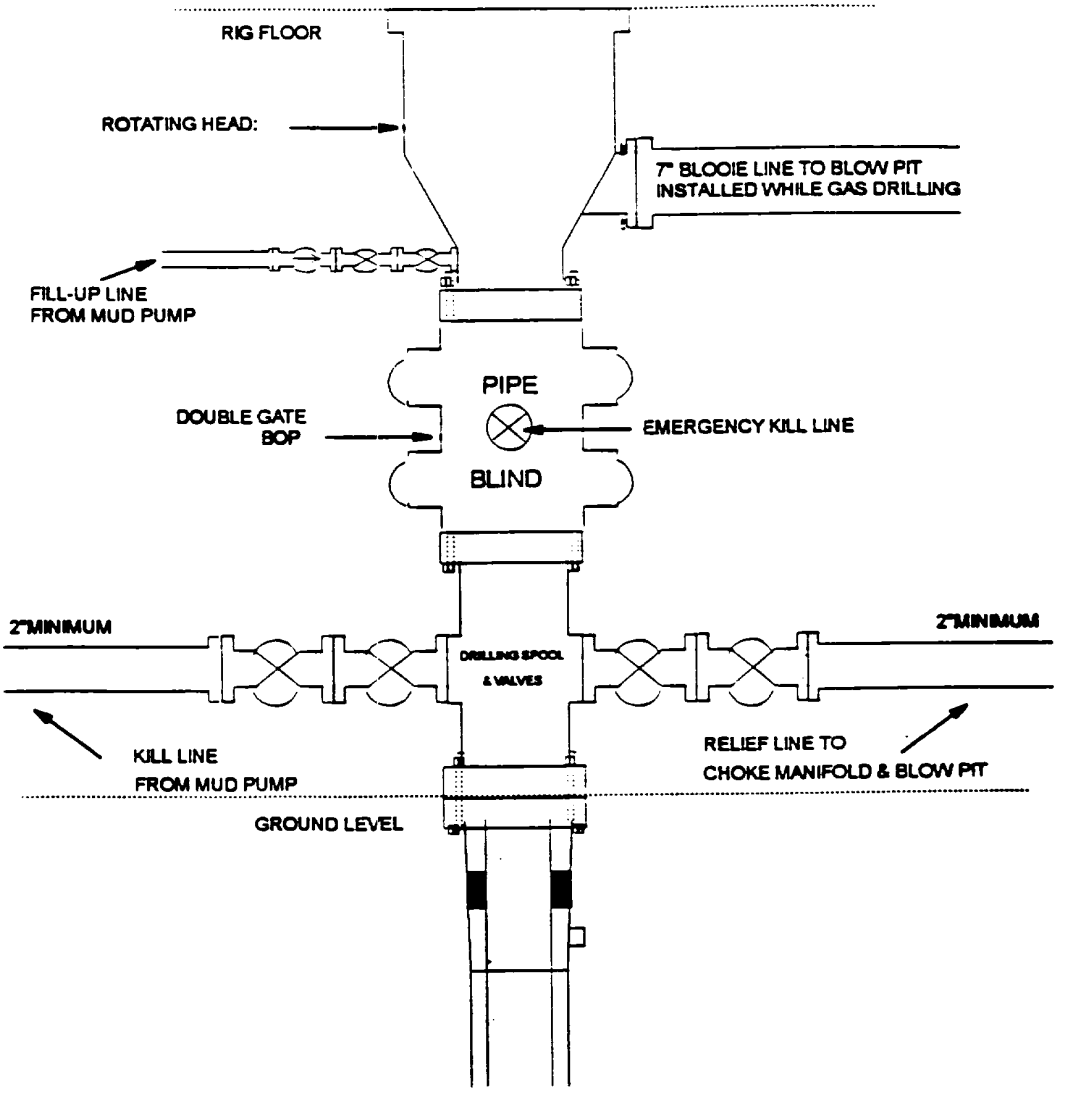
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The dedication to the Mesa Verde and Dakota in this well is as shown on the C102 plat attached.
- This gas is dedicated.

Drilling Engineer

1/21/97
Date

BURLINGTON RESOURCES

BOP Configuration
2M psi System

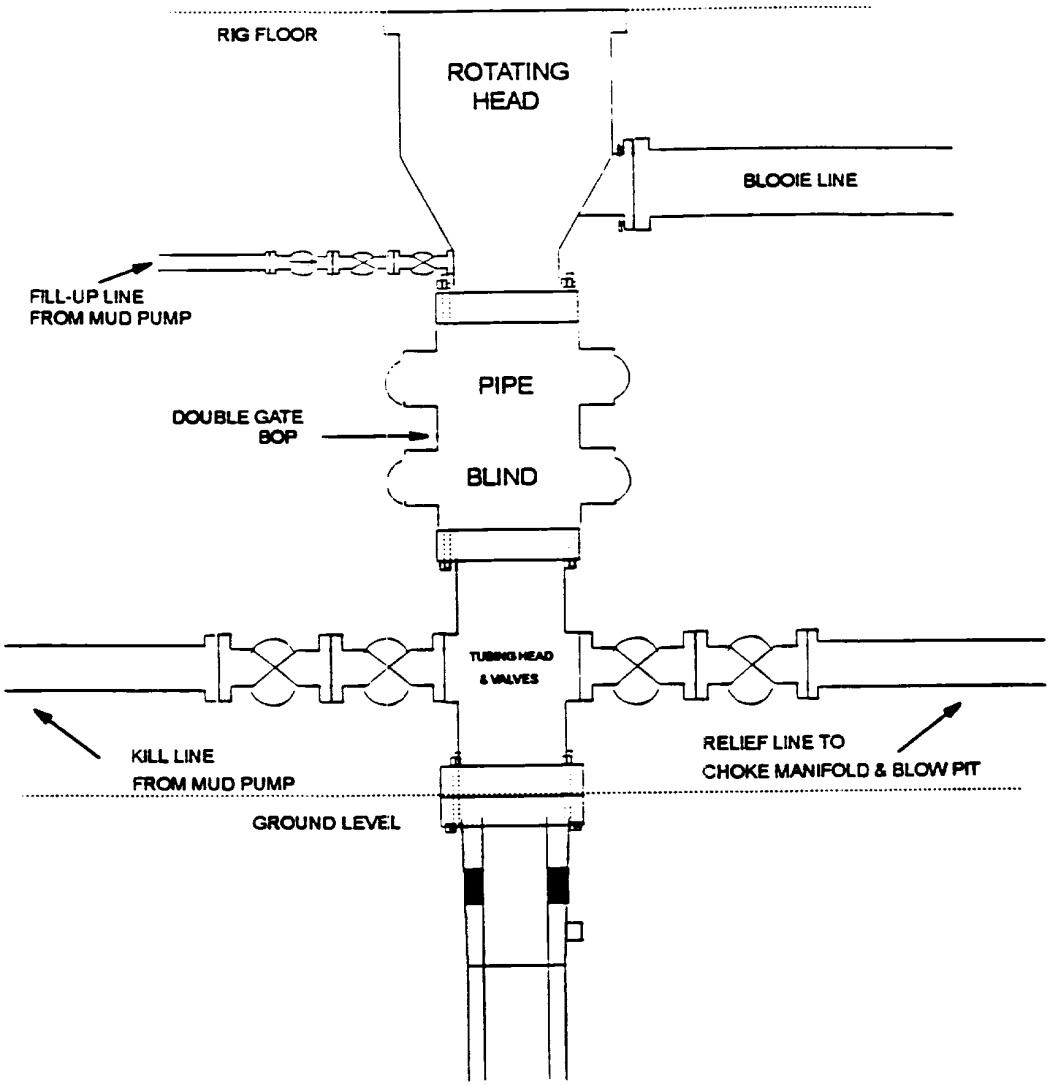


11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

FIGURE #1

BURLINGTON RESOURCES

BOP Configuration
2M psi System

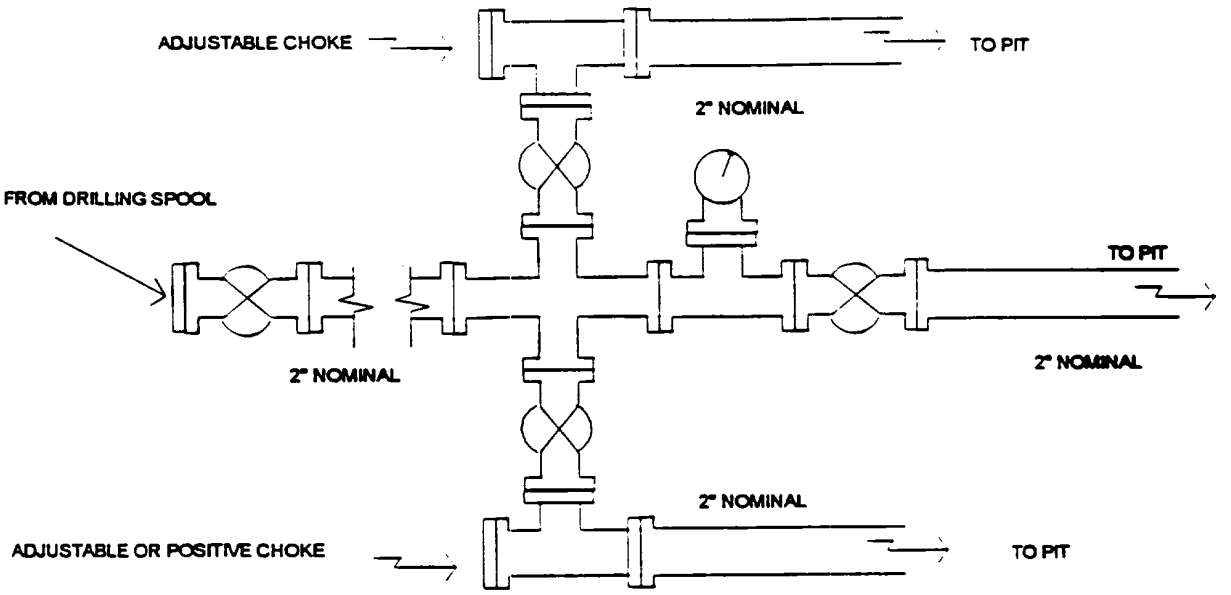


Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 2,000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams.

FIGURE #2

BURLINGTON RESOURCES

Choke Manifold Configuration
2M System



Minimum choke manifold installation from surface to Total Depth.
2" minimum, 2000psi working pressure equipment with two chokes.

Figure #3

BURLINGTON RESOURCES

San Juan 28-5 Unit #66M
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 2100' 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 Services.

5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from San Juan 28-6 Water Well located SW/4 Section 23, T-28-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.

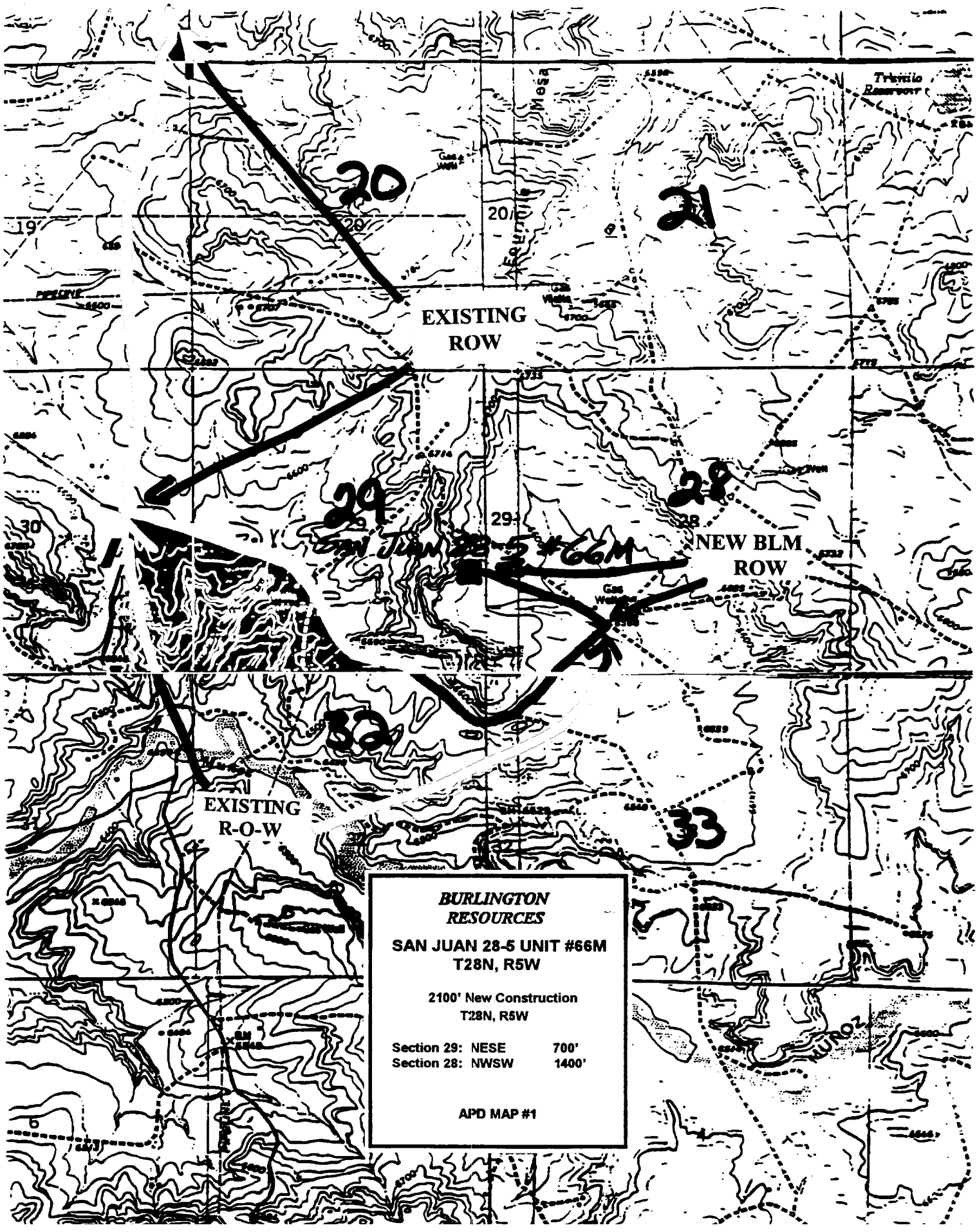
11. Surface Ownership - Bureau of Land Management

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 1-21-97
Date

pb


EXISTING
ROW
NEW BLM
ROW
EXISTING
R-O-W
20
21
29
28
30
33
BURLINGTON
RESOURCES
SAN JUAN 28-5 UNIT #66M
T28N, R5W
2100' New Construction
T28N, R5W
Section 29: NESE 700'
Section 28: NWSW 1400'
APD MAP #1

WILLIAMS GAS PROCESSING

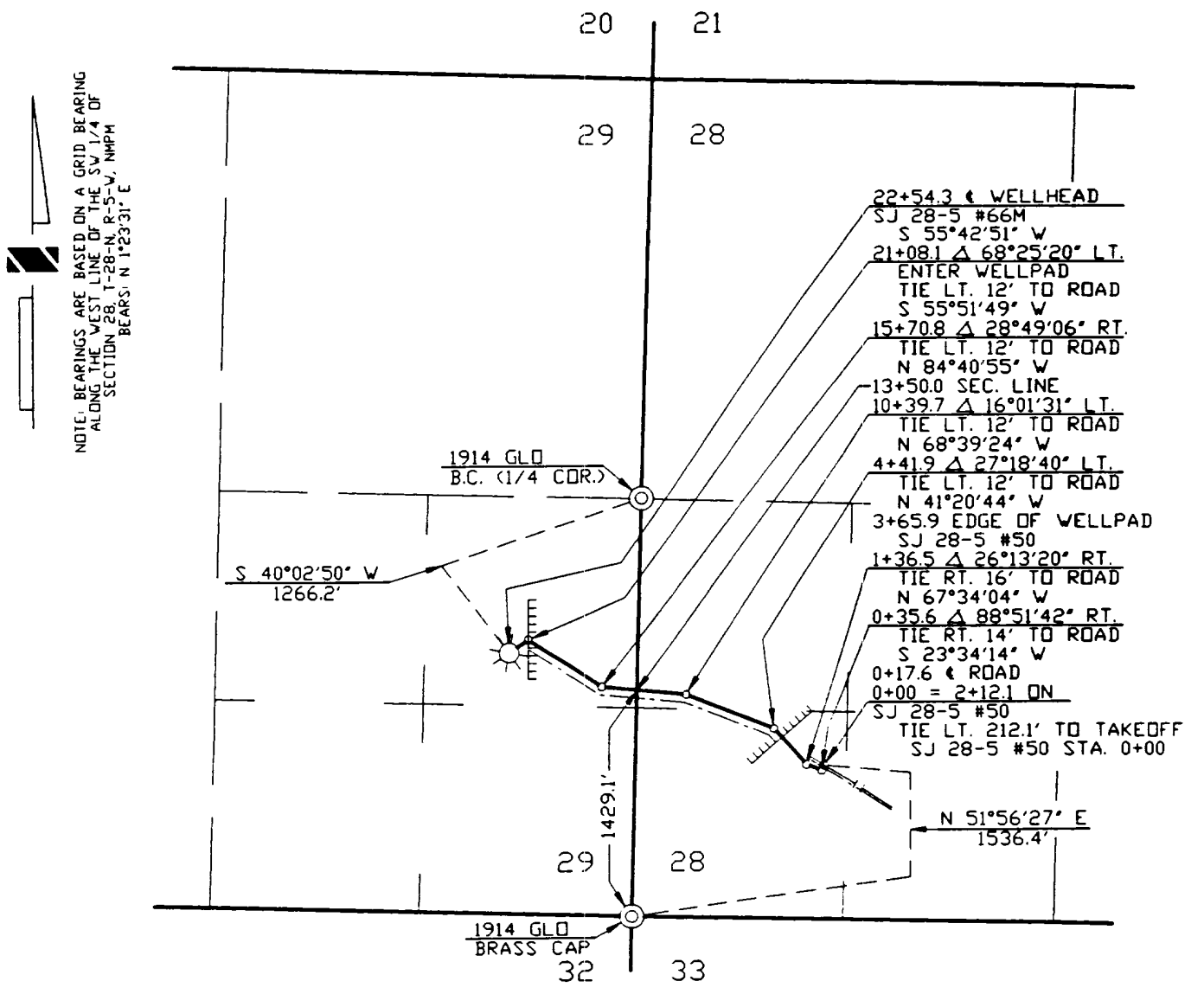
SAN JUAN GATHERING SYSTEM

LINE: BURLINGTON RESOURCES - SJ 28-5 #66M
FROM: 0+00 = 2+12.1 ON SJ 28-5 #50
(REF. DWG. L765.0-48-1)

COUNTY: RIO ARRIBA STATE: NEW MEXICO
SECTION: 28 & 29 TOWNSHIP: 28-N RANGE: 5-W

SCALE: 1"=1000'
DRAWN BY: PB
CHECKED BY: CJF
APPROVED:
APPROVED: CK

DWG. NO. L765.0-82-1
DATE: 12/2/96
SURVEYED: 11/23/96
W.O. NO. 12966
R/W NO.



APPLICATION DWG. _____ DATE _____ METER NO. _____ FORMATION _____ METER NO. _____ FORMATION _____

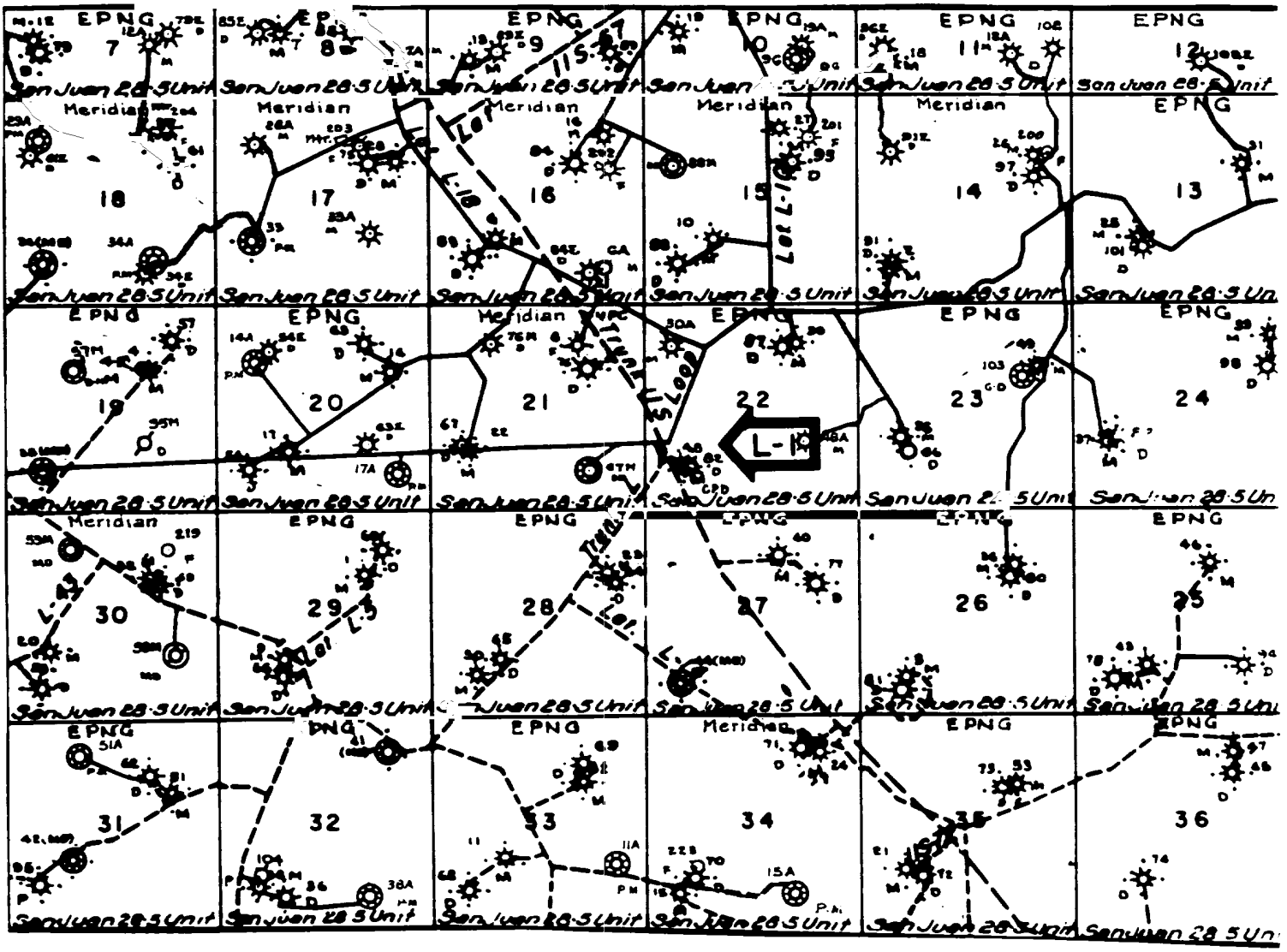
AS-BUILT PIPE DATA

OWNERSHIP

SUBDIVISION	OWNER	LEASE	FEET	MILES	ACRES	RODS
0+00 TO 22+54.3	BUREAU OF LAND MANAGEMENT		2254.3	0.427	2.588	136.624

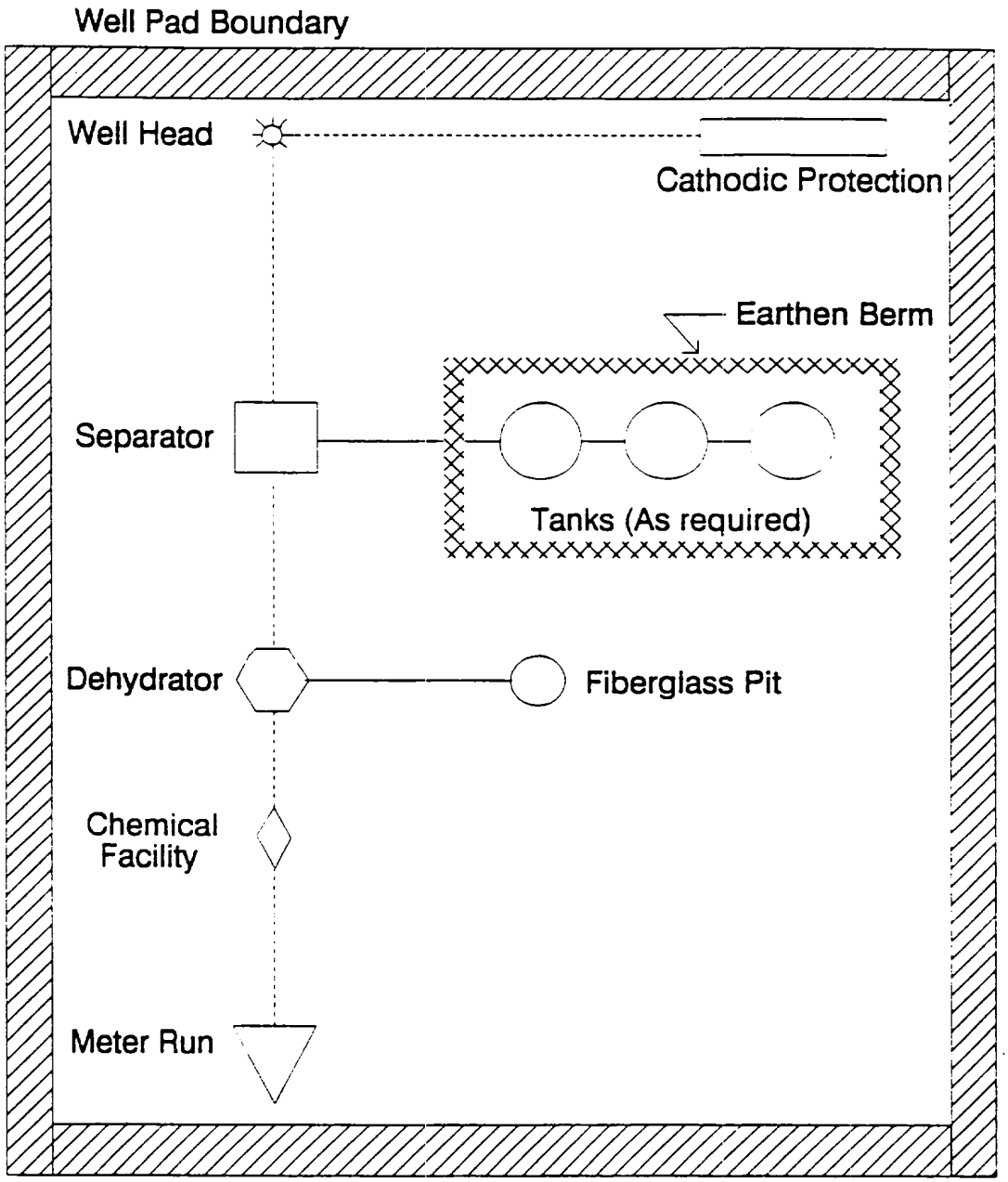
NO.	DATE	BY	REVISION DESCRIPTION	APP.
1	12/2/96	PB	ISSUED FOR REVIEW	RR

NO.	DATE	BY	REVISION DESCRIPTION	APP.



MERIDIAN OIL INC.
Pipeline Map
T-28-N, R-05-W
San Juan County, New Mexico
San Juan 28-5 Unit #66M
Map 1A

3/91 adw/mjb



PLAT #1

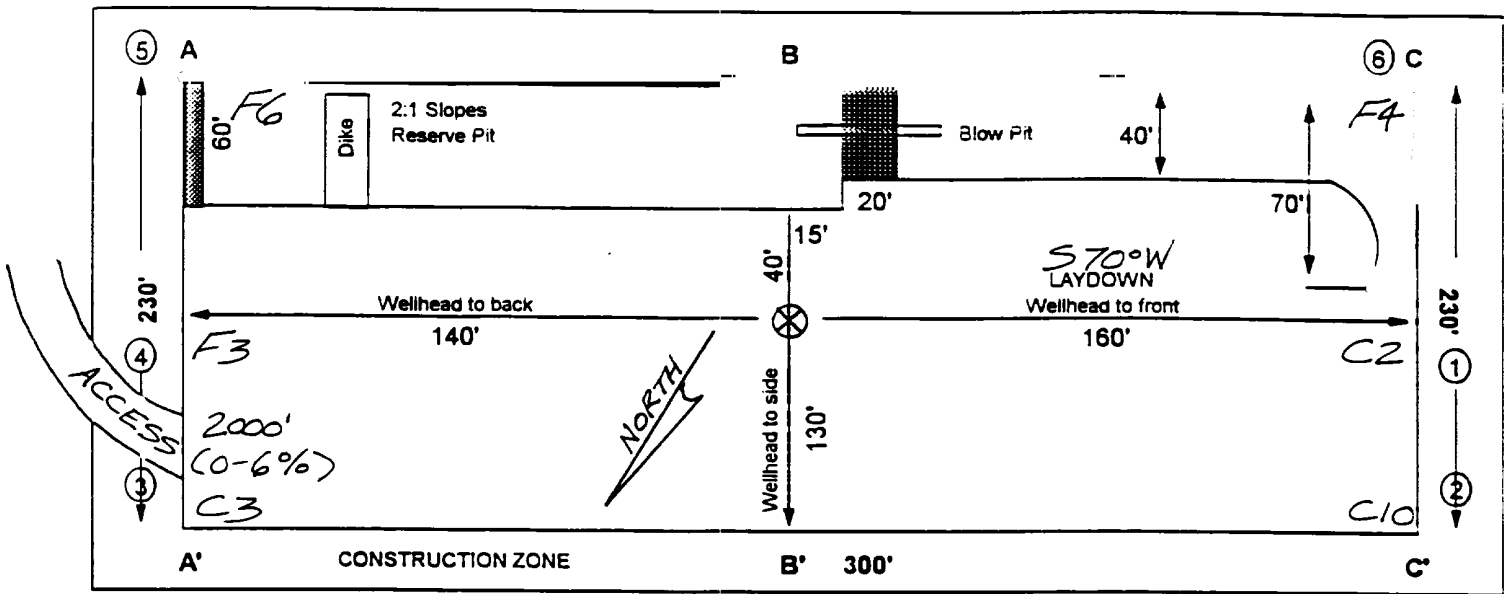
ANTICIPATED PRODUCTION FACILITIES FOR A DAKOTA WELL

SRF 8/91

BURLINGTON RESOURCES

PLAT #1

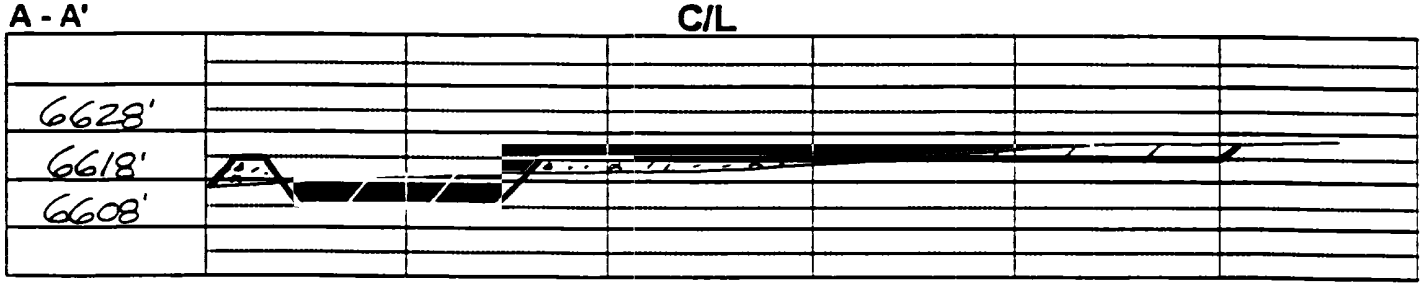
NAME: SAN JUAN 28-5 UNIT #66M
FOOTAGE: 1650' FSL 790' FEL
SEC 29 TWN 28 N.R 5 W NMPM
CO: RIO ARRIBA ST: NEW MEXICO
ELEVATION: 6618' DATE: 11/02/96



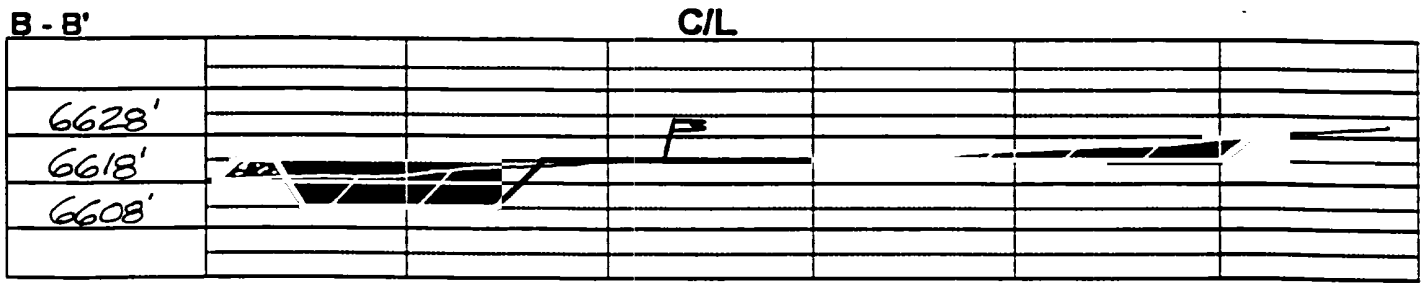
230' x 300' (330' x 400') = 3.03 ACRES

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.

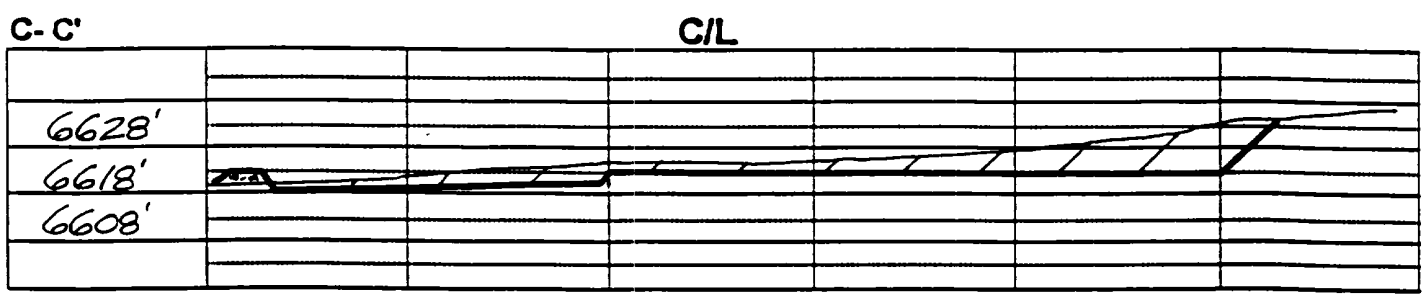
A - A'



B - B'



C- C'



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables