submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
NMSF-078161

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

7. **Unit Agreement Name**

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

8. **Well Name & Number**
Shults Federal #1E

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

9. **API Well No.**
30-045-30778

4. **Location of Well, Footage, Sec., T, R, M**
1450'FSL, 950'FWL, Sec.1, T-29-N, R-11-W, NMPM

10. **Field and Pool**
Otero Cha/Blanco MV/
Basin Dakota

11. **County and State**
San Juan 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	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	___ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other -	

13. **Describe Proposed or Completed Operations**

It is intended to add the Mesaverde and Chacra formations to the subject well. The operations plan will be altered according to the attached. A revised C-102 plat is attached.

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

Signed Peggy Cole Title Regulatory Supervisor Date 10/29/01
TLW

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date 11/8/01
CONDITION OF APPROVAL, if any:

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 representations as to any matter within its jurisdiction.

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-30778	82329/72319/71599	Otero Chacra/Blanco Mesaverde/Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
	SHULTS FEDERAL	1E

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	Burlington Resources Oil & Gas Company, LP	5887'

[10] Surface Location

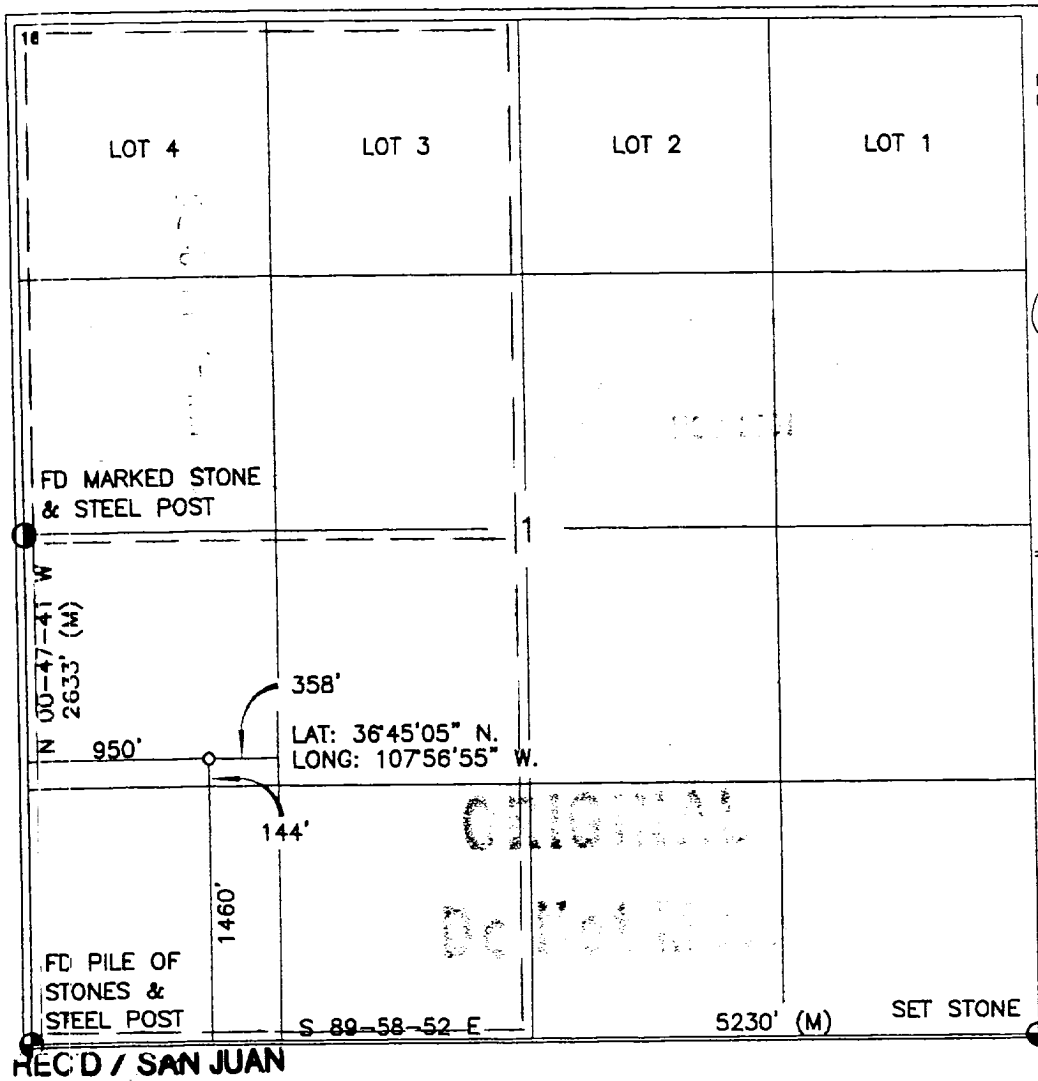
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	29-N	11-W		1460'	SOUTH	950'	WEST	SAN JUAN

[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.
Chacra: SW/160 MV/DK: W/305.02			

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

Signature: Peggy Cole

Peggy Cole
Printed Name

Regulatory Supervisor
Title

11-06-01
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.

3-26-
Date of Survey

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR

Signature and Seal of Professional Surveyor:

8894
Certificate Number

ORIGINAL

REC'D / SAN JUAN

OPERATIONS PLAN

Well Name: Shults Federal #1E
Location: 1460'FSL, 950'FWL, Sec 1, T-29-N, R-11-W
San Juan County, NM
Latitude 36° 45.05, Longitude 107° 56.55
Formation: Otero Chacra/Blanco Mesaverde/Basin Dakota
Elevation: 5887'GL

Formation Tops:	***Top***	***Bottom***	***Contents***
Surface	San Jose	929'	
Ojo Alamo	929'	1044'	aquifer
Kirtland	1044'	1639'	gas
Fruitland	1639'	2224'	gas
Pictured Cliffs	2224'	2339'	gas
Lewis	2339'	2859'	gas
Intermediate TD	**2439'**		
Mesa Verde	2859'	3234'	gas
Chacra	3234'	3899'	gas
Massive Cliff House	3899'	3944'	gas
Menefee	3944'	4549'	gas
Massive Point Lookout	4549'	4919'	gas
Mancos	4919'	5769'	gas
Gallup	5769'	6511'	gas
Greenhorn	6511'	6570'	gas
Graneros	6570'	6635'	gas
Dakota	6635'	7005'	gas
Morrison	7005'		gas
TD	**7050'**		

Logging Program:
Cased hole - CBL-CCL-GR - TD to surface
Open hole - Platform Express: DIL/GR from TD to surface, Density and Neutron Porosity w/RT merged from TD to 2700', Bulk Density/Correction, Microlog from TD to 2700'
Mudlog - 6000' to TD
Cores - none

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200- 2439'	LSND	8.4-9.0	30-60	no control
2439- 6585'	Air/N2	n/a	n/a	n/a
6585- 7050'	LSND	8.4-9.0	30-60	no control

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' - 2439'	7"	20.0#	J-55
6 1/4"	2339' - 7050'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 7050'	2 3/8"	4.7#	J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -
11" 3000 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" 3000 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, 3000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -
7 1/16" 3000 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 159 sx Class "B" cement with 1/4# celloflake/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/275 sx 50/50 Class G/TXI lightweight w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# celloflake/sx. Tail w/90 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps celloflake, 5 pps gilsonite, 0.1% antifoam agent (825 cu.ft. of slurry, 100% 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.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar at 1539'. First stage: cement with 238 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps celloflake, 5 pps gilsonite, 0.1% antifoam agent. Second stage: 202 sx 50/50 Class G/TXI lightweight w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# celloflake/sx (824 cu.ft., 100% excess to circulate to surface).

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 1044'. Two turbolating centralizers at the base of the Ojo Alamo at 1044'. 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 460 sx 50/50 Class "G" Poz with 5% gel, 0.25# celloflake/sx, 5# gilsonite/sx, 0.1% retardant and 0.25% fluid loss additive, 0.15% dispersant, 0.1% antifoam agent (677 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

4 1/2" production casing alternative: Lead w/188 sx 9.5 PPG Litecrete Blend w/0.11% dispersant, 0.5% fluid loss. Tail w/174 sx Class G 50/50 poz w/5% gel, 0.25 pps celloflake, 5 pps gilsonite, 0.25% fluid loss, 0.15% dispersant, 0.1% retarder, 0.1% antifoam (725 cu.ft., 50% excess to cement 4 ½" x 7" overlap).

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

Cement float shoe on bottom with float collar spaced on top of float shoe.

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 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.

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, Chacra, and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	300 psi
Pictured Cliffs	600 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 southwest quarter of Section 1 is dedicated to the Chacra, the west half of Section 1 is dedicated to the Mesa Verde and Dakota in this well.
- This gas is dedicated.

Drilling Engineer

Nov. 2, 2001
Date

Alternative Intermediate Lead Slurry

Dowell-
Class G: D49(50:50) w/ 2.5% D79, 2% S1, 10pps D24, .5pps D29, .2%D46

where: D49-TXI Light weight Cement
D79-Sodium Metasilicate
S1-Calcium Chloride
D24-Gilsonite
D46-Antifoam Agent

Properties-
Density:11.4 lb/gal
Yield:2.58 cu ft./sk
Water:14.55 gal/sk
Thick Time 70 b.c.(deg F): 4:06(101)
Free Water:0
Fluid Loss:462ml/30 min
CS(crush)@24hr:394
CS(crush)@48hr:550

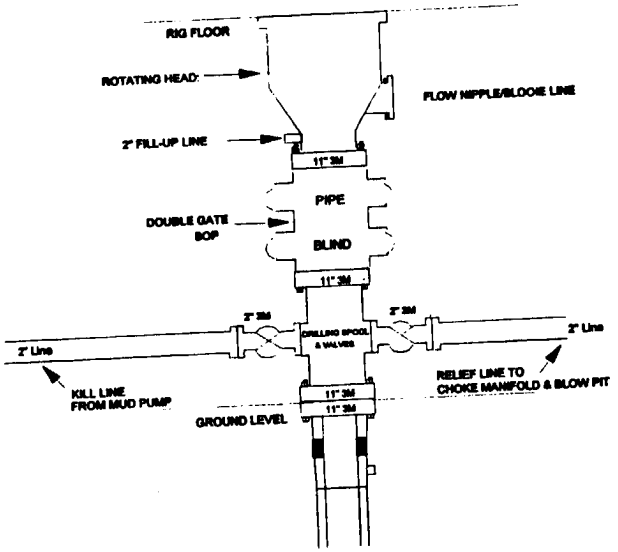
Halliburton-

Class H 47#/sk, 37#/sk Blended Silicalite, 3% Bentonite, 4% Calcium Chloride

Properties-
Density:11.4 lb/gal
Yield:2.42 cu.ft./sk
Water:14.02 gal/sk
Thick Time(70 bc): 11:00+
Fluid Loss: 702 cc/30min
Free Water: 0%
Compressive Strength (@25:19) :500
Compressive Strength (@48:00) :630

Burlington Resources

Drilling Rig
3000 psi System



BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 3000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 3,000 psi working pressure

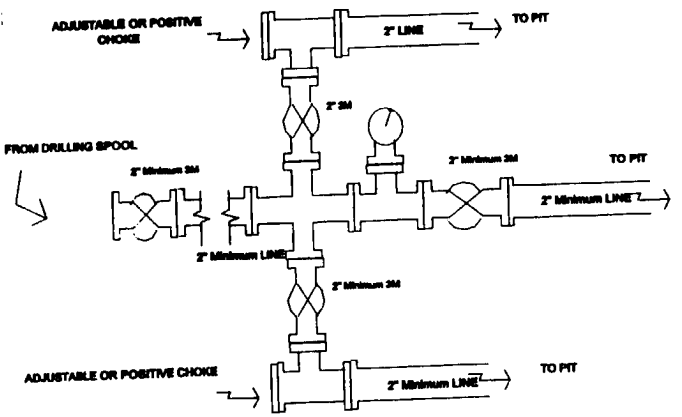
Figure #1

0-01

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
3000 psi System



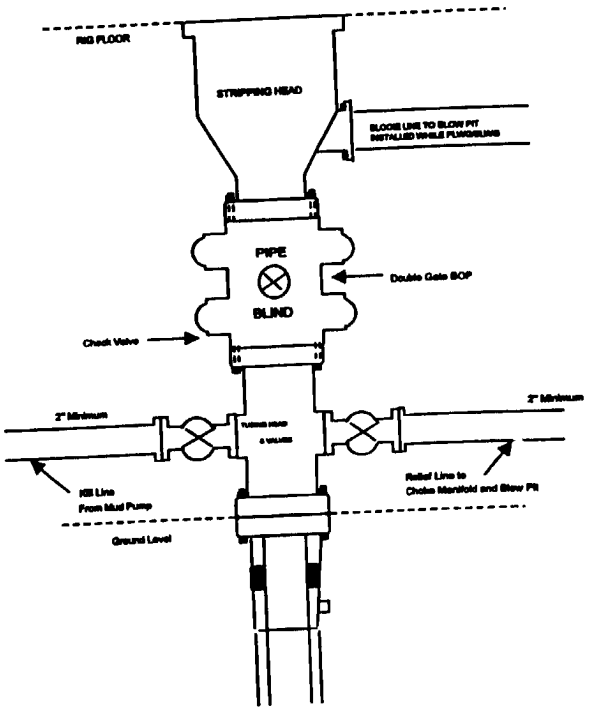
Choke manifold installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

Figure #2

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
3,000 psi System



Minimum BOP installation for all Completion/Workover Operations. 7-1/16" bore, 3000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 3000 psi working pressure or greater excluding 500 psi stripping head.

Figure #3