

RECEIVED

Form 3160-3
(August 2007)

JUN 25 2012

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Farmington Field Office
Bureau of Land Management

Lease Serial No.
NMM-003011

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6 If Indian, Allottee or Tribe Name N/A
1b Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		7 If Unit or CA Agreement, Name and No N/A
2 Name of Operator SAN JUAN RESOURCES, INC		8 Lease Name and Well No. CLARK 16
3a Address 1499 BLAKE ST., SUITE 10C DENVER, CO 80202	3b Phone No. (include area code) 303 573 6333	9 API Well No. 30-039-31125
4 Location of Well (Report location clearly and in accordance with any State requirements*) At surface 1633' FSL & 809' FEL At proposed prod zone SAME		10 Field and Pool, or Exploratory LINDRITH GALLUP-DAKOTA, WEST
14 Distance in miles and direction from nearest town or post office* 8 AIR MILES WNW OF LINDRITH, NM		11 Sec, T R M or Blk and Survey or Area NESE (I) 6-24N-3W NMPM
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 1,633'	16 No of acres in lease 1,068 27	12 County or Parish RIO ARRIBA
17 Spacing Unit dedicated to this well Lots 5 & 6 and SE4 (= 191 23 acres)	13 State NM	
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 667' (Clark 1, a PC well)	19 Proposed Depth 7,818'	20 BLM/BIA Bond No on file NMB000199
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 7,018' GRADED	22 Approximate date work will start* 08/10/2012	23 Estimated duration 5 WEEKS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

- Well plat certified by a registered surveyor
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM

25 Signature	Name (Printed/Typed) BRIAN WOOD (505 466-8120)	Date 06/17/2012
Title CONSULTANT (FAX 505 466-9682)		
Approved by (Signature)	Name (Printed/Typed) Wayne Townsend	Date 10/3/12
Title Acting AFM	Office FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 USC Section 1212, make 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

(Continued on page 2)

*(Instructions on page 2)

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

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

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

NMOCD

OCT 23 2012

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
611 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102

Revised August 1, 2011

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, N.M. 87505

JUN 25 2012

Submit one copy to appropriate

District Office

Farmington Field Office
Bureau of Land Management

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039- 31125	² Pool Code 39189	³ Pool Name LINDRITH GALLUP-DAKOTA, WEST
⁴ Property Code 309593	⁵ Property Name CLARK	⁶ Well Number 16
⁷ OGRID No. 20208	⁸ Operator Name SAN JUAN RESOURCES, INC.	⁹ Elevation 7018

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
I	6	24 N	3 W		1633	SOUTH	809	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

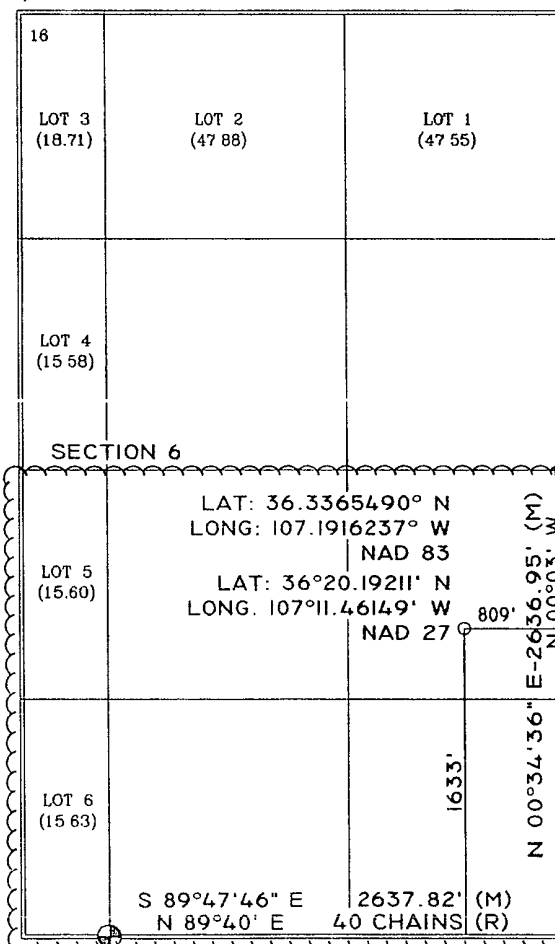
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 191.23	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No R - 4314
---	-------------------------------	----------------------------------	---

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

LEGEND:

- = SURFACE LOCATION
- ⊕ = FOUND 1915 U.S.G.L.O. BRASS CAP



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

15 June 2012
Date

Signature **Brian Wood**

Printed Name
brian@permitswest.com

E-mail Address

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.

11/16/11
Date of Survey

Signature and Seal of Registered Professional Surveyor.

JOHN A. VUKONICH
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
14831

Certificate Number

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
San Jose	0'	10'	+7,018'
Ojo Alamo Ss	2,753'	2,765'	+4,265'
Fruitland	3,100'	3,112'	+3,918'
Pictured Cliffs Ss	3,233'	3,245'	+3,785'
Mesa Verde	4,911'	4,923'	+2,107'
Point Lookout	5,368'	5,380'	+1,650'
Niobrara A	6,533'	6,545'	+485'
Niobrara B	6,596'	6,608'	+422'
Niobrara C	6,698'	6,710'	+320'
Dakota Ss	7,466'	7,478'	-448'
Dakota D	7,668'	7,680'	-650'
Total Depth (TD)*	7,818'	7,830'	-800'

* all elevations reflect the ungraded ground level of 7,018'

2. NOTABLE ZONES

Oil & Gas Zones

Ojo Alamo
Pictured Cliffs
Niobrara
Dakota

Water Zones

San Jose
Ojo Alamo
Fruitland

Coal Zone

Fruitland

Water zones will be protected with casing, cement, and weighted mud. Fresh water will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

RECEIVED

JUL - 2 2012

Bureau of Land Management
Farmington Field Office

PAGE 3

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3,000 psi model is on the preceding page. The $\geq 3,000$ psi BOP and choke manifold system will be installed and tested to 2,000 psi before drilling the surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when the kelly is not in use.

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings that are set and cemented in place.

BOP and casing will be tested as follows:

- a. Flush all vales and lines with fresh water.
- b. Open the casing valve and set the test plug.
- c. Wait on cement 8 hours. Test pipe rams and choke manifold to 200 to 300 psi for 2-3 minutes and to 3,000 psi for 30 minutes.
- d. Bleed off pressure and remove test plug.
- e. Close the casing valve and test the blind rams and casing to 200 to 300 psi for 2-3 minutes and to 3,000 psi for 30 minutes.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O. D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>GL Setting Depth</u>
12-1/4"	9-5/8"	36	J-55	S T & C	New	500'
7-7/8"	5-1/2"	17	N-80	L T & C	New	7,818'

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

PAGE 4

	Drift <u>inch</u>	Torque <u>feet-pounds</u>	Burst <u>psi</u>	Collapse <u>psi</u>	Tension <u>1000 psi</u>	Pressure Test <u>psi</u>
Surface	7.972	4530	3520	2020	244	1000
Production	4.767	3480	7740	6280	348	5000

Surface casing will have one centralizer on the first joint positioned 10' above the shoe (latched over a stop collar). In addition, one centralizer each will be installed at the top of the second, third, and fourth joints (latched over the casing collar).

Surface casing will be cemented to the surface with 290 sacks (339 cubic feet) Class G with 2% CaCl_2 + 1/4 pound per sack cellophane flakes mixed to yield 1.17 cubic feet per sack, weight of 15.8 pounds per gallon, and an excess of 100%.

Production casing will have a guide shoe, one float joint, one float collar, and stage tools at $\approx 3,000'$ and $\approx 6,000'$. One centralizer will be installed 10' above the shoe (latched over a stop ring). One centralizer each will be installed (latched over the casing collar) at the top of the second, fourth, sixth, eighth, and tenth joints. Five each turbolators total positioned as follows: 1 each centralizer (latched over the casing collar) at the first collar above the surface casing shoe and on the first 2 casing collars below the well head.

Production casing will be cemented to the surface with >50% excess. If cement does not circulate to the surface, then a temperature survey will be run to determine the TOC.

First stage will be cemented as follows. Lead with 225 sacks (441 cubic feet) premium light + 5 pounds per sack coal seal + 1/8 pound per sack poly flake + 0.3% HR-5 + 1 pound per sack pheno seal blend mixed to yield 1.96 cubic feet per sack and a weight of 12.3 pounds per gallon. Tail with 100 sacks (131 cubic feet) 50/50 poz + 5 pounds per sack coal seal + 1/8 pound per sack poly flake + 0.3% Halad R-9 + 0.3% Veraset mixed to yield 1.31 cubic feet per sack and a weight of 13.5 pounds per gallon. Twenty barrels each of water and mud flush

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

PAGE 5

will be used as spacers.

Second stage will be cemented as follows. Lead with 450 sacks (873 cubic feet) premium light + 5 pounds per sack coal seal + 1/8 pound per sack poly flake + 0.2% HR-5 + 0.1% Halad R-9 mixed to yield 1.94 cubic feet per sack and a weight of 12.3 pounds per gallon. Tail with 100 sacks (115 cubic feet) Class G + 0.1% Halad R-9 mixed to yield 1.15 cubic feet per sack and a weight of 15.8 pounds per gallon. Twenty barrels each of water and mud flush will be used as spacers.

Third stage will be cemented as follows. Lead with 450 sacks premium light + 5 pounds per sack coal seal + 1/8 pound per sack poly flake mixed to yield 1.94 cubic feet per sack and a weight of 12.3 pounds per gallon. Tail with 100 sacks (115 cubic feet) Class G + 0.1% Halad R-9 mixed to yield 1.15 cubic feet per sack and a weight of 15.8 pounds per gallon. Twenty barrels each of water and mud flush will be used as spacers.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>ppg</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>pH</u>
0' - 500'	Fresh water spud mud	8.8	50	NC	9
500' - TD'	LSND	9.2	45	10 cc	9

Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available on site while drilling. Mud will be checked hourly by rig personnel. Material to soak up oil or fuel spills will be on site.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Triple combo GR-caliper-SP-resistivity logs will be run the base of the surface casing to TD. Mud logger will be on site from 500' to TD.

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

PAGE 6

7. DOWN HOLE CONDITIONS

Abnormal pressures, temperatures, or hydrogen sulfide are not expected.
Maximum bottom hole pressure will be $\leq 3,385$ psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈ 2 weeks to drill and ≈ 3 weeks to complete the well.

San Juan Resources, Inc.
Clark 16
1633' FSL & 809' FEL
Sec. 6, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

PAGE 7

Surface Use Plan

1. DIRECTIONS & EXISTING ROADS (See PAGES 11 - 14)

From the junction of US 550 and NM 537 ...
Go North 13-1/2 miles on NM 537
Then turn right and go East 4-1/2 miles on dirt J-19/County Road 370
Then turn left and go Northeast 2/3 mile on a dirt road
Then turn left and go West 0.15 mile on a dirt road to the Clark 1 meter
Then turn right and go North 415' cross country to the well site

Roads will be maintained to at least equal to their present condition.

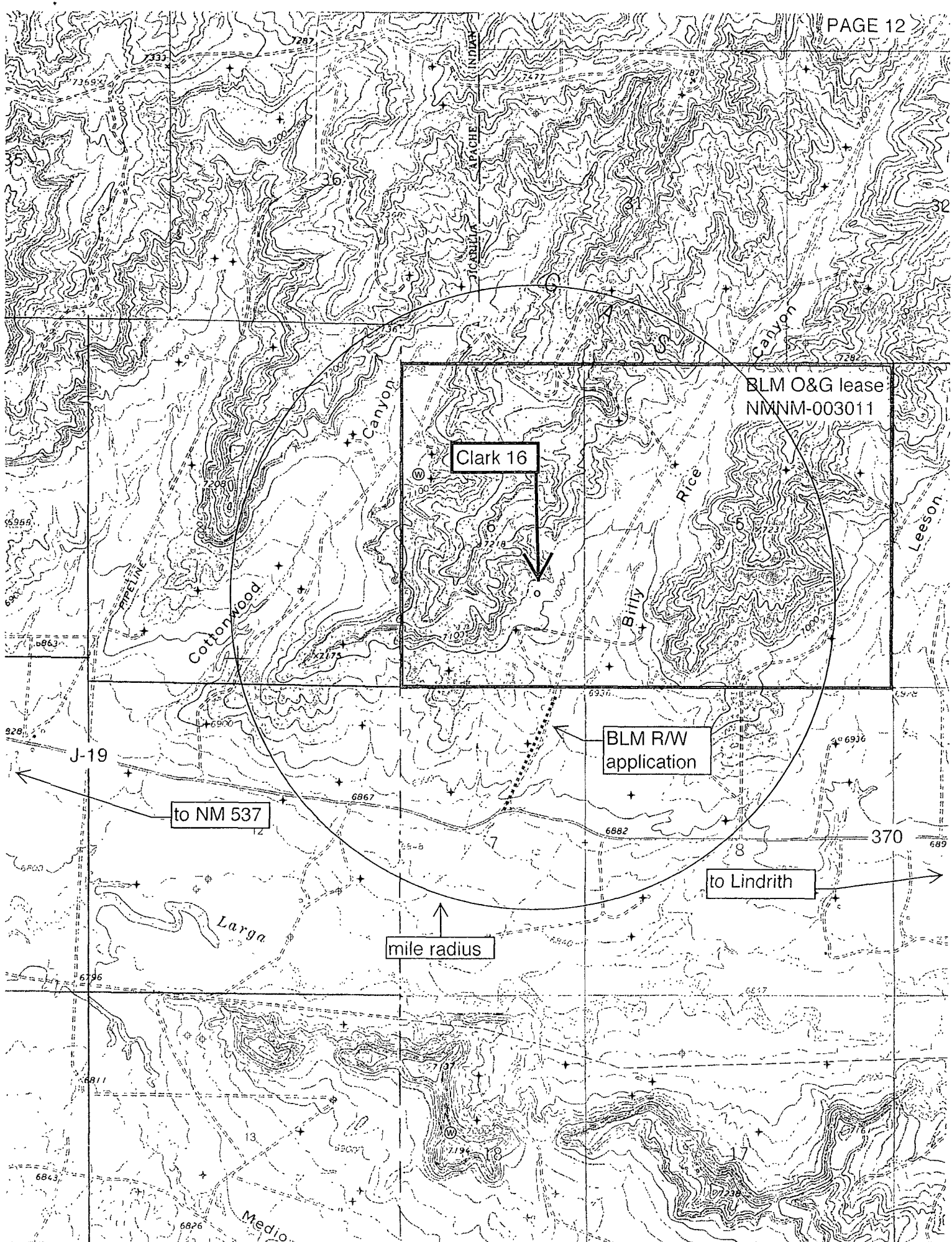
This APD is also doubling as a BLM road right-of-way application. Application is for a 20' x 2,500' (=1.15 acre) existing road in NENE & S2NE4 7-24n-3w.

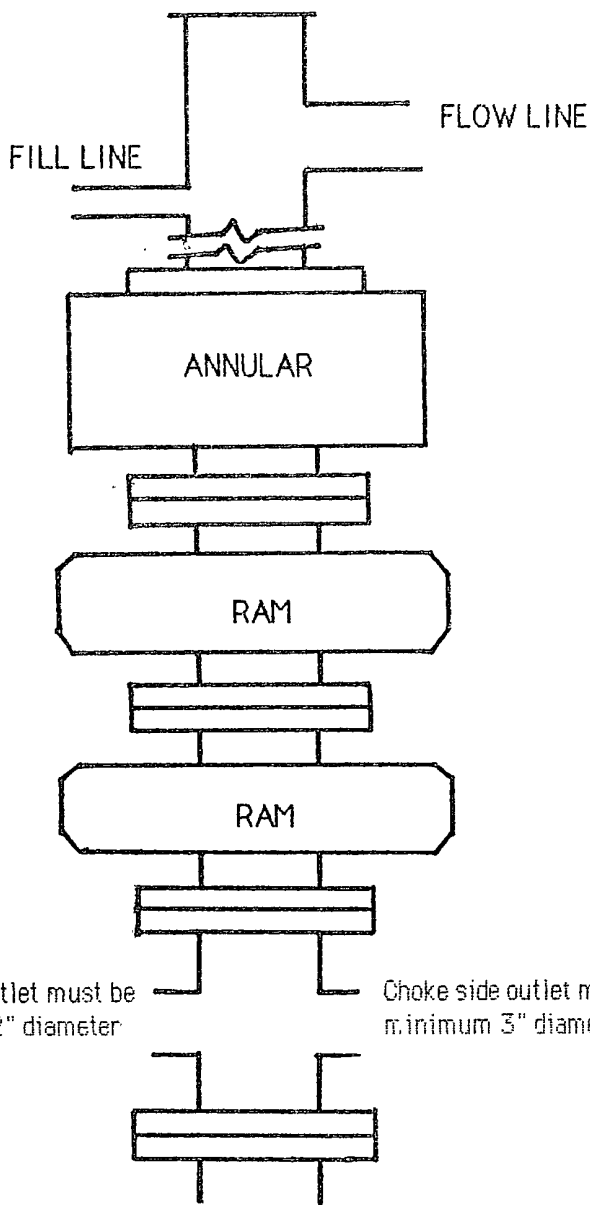
2. ROAD TO BE BUILT OR UPGRADED (See PAGE 13)

No upgrade is needed. The 415' of new road will be built to BLM Gold Book standards. Road will be crowned and ditched, have a $\approx 14'$ wide running surface, and will be rocked as needed. Maximum disturbed width will be 20'. Maximum cut or fill = 5'. Maximum grade = 8%. A 24" x 20' CMP culvert will be installed on the south side of the pad. No turn out or cattle guard is needed.

3. EXISTING WELLS (See PAGE 12)

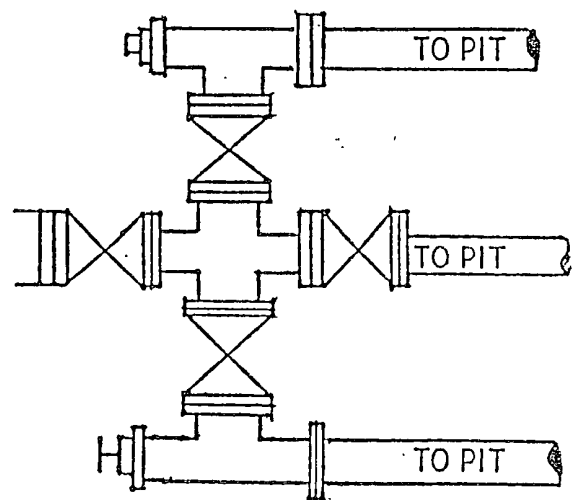
Oil Conservation Division and State Engineer records show 20 gas or oil wells, 2 plugged and abandoned wells, 1 salt water disposal well, and 1 water well within a one mile radius.





TYPICAL BOP STACK
& CHOKES MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold



Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.
Safety valve and subs will fit all drill string connections in use
All BOPE connections subjected to well pressure will be flanged, welded, or clamped