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Form 3160-3
(August 2007)

JUL 09 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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
03011
6. Indian, Allottee or Tribe Name
N/A

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
N/A

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

8. Lease Name and Well No.
CLARK 14

2. Name of Operator SAN JUAN RESOURCES, INC.

9. API Well No.
30-039- 31131

3a. Address 1499 BLAKE ST., SUITE 10C
DENVER, CO 80202

3b. Phone No. (include area code)
303 573 6333

10. Field and Pool, or Exploratory
LINDRITH GALLUP-DAKOTA, WEST

4. Location of Well (Report location clearly and in accordance with any State requirements *)

At surface 1819' FSL & 1939' FEL

At proposed prod. zone SAME

11. Sec., T. R. M. or Blk. and Survey or Area
NWSE (J) 5-24N-3W NMPM

14. Distance in miles and direction from nearest town or post office*
7 AIR MILES WNW OF LINDRITH, NM

12. County or Parish
RIO ARRIBA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
1,819'

16. No. of acres in lease
1,068.27

17. Spacing Unit dedicated to this well
SE4 (= 160 acres)

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
1,352' (Clark 2, a PC well)

19. Proposed Depth
7,918'

20. BLM/BIA Bond No. on file
NMB000199
RCVD OCT 9 '12
OIL CONS. DIV.

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
7,128' GRADED

22. Approximate date work will start*
08/10/2012

23. Estimated duration
5 WEEKS
DIST. 3

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

24. Attachments

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

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

Brian Wood

Name (Printed/Typed)
BRIAN WOOD (505 466-8120)

Date
07/03/2012

Title

CONSULTANT

(FAX 505 466-9682)

Approved by (Signature)

Wayne Townsend
Acting AFM

Name (Printed/Typed)

Wayne Townsend
FFO

Date

10/3/12

Title

Office

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 U.S.C. 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

NMOCD

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

OCT 16 2012

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

DISTRICT II
811 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

OIL CONSERVATION DIVISION

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

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JUL 09 2012

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

Farmington Field Office ☐ AMENDED REPORT
Bureau of Land Management

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31131	² Pool Code 39189	³ Pool Name LINDRITH GALLUP-DAKOTA, WEST
⁴ Property Code 309593	⁵ Property Name CLARK	⁶ Well Number 14
⁷ OGRID No. 20208	⁸ Operator Name SAN JUAN RESOURCES, INC.	⁹ Elevation 7128

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
J	5	24 N	3 W		1819	SOUTH	1939	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 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

16	LOT 4 (47.24)	LOT 3 (46.97)	LOT 2 (46.69)	LOT 1 (46.42)
LEGEND: O = SURFACE LOCATION ⊕ = FOUND 1915 U.S.G.L.O. BRASS CAP				
SECTION 5				
LAT: 36.3371233° N LONG: 107.1775308° W NAD 83 LAT: 36°20.22656' N LONG: 107°10.61592' W NAD 27				
1819'				
N 89°45'58" W S 89°42' W				
5284.06' (M) 79.97 CHAINS (R)				

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.

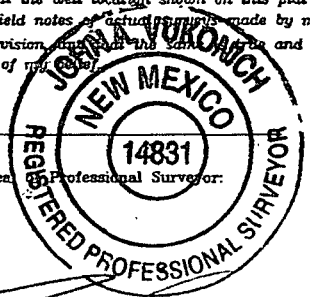
Signature Brian Wood Date 7-3-12
Printed brian@permitswest.com
E-mail Address

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 are true and correct to the best of my knowledge.

Date of Survey 11/17/11
Signature and Seal of Professional Surveyor

Certificate Number 14831



San Juan Resources, Inc.
Clark 14
1819' FSL & 1939' FEL
Sec. 5, T. 24 N., R. 3 W.
Rio Arriba County, New Mexico

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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'	+7,128'
Ojo Alamo Ss	2,898'	2,908'	+4,230'
Fruitland	3,178'	3,188'	+3,950'
Pictured Cliffs Ss	3,353'	3,363'	+3,775'
Mesa Verde	5,038'	5,048'	+2,090'
Point Lookout	5,463'	5,473'	+1,665'
Niobrara A	6,658'	6,668'	+470'
Niobrara B	6,723'	6,733'	+405'
Niobrara C	6,824'	6,834'	+304'
Dakota Ss	7,598'	7,608'	-470'
Dakota D	7,768'	7,778'	-640'
Total Depth	7,918'	7,928'	-790'

* all elevations reflect the ungraded ground level of 7,128'

2. NOTABLE ZONES

<u>Oil & Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Ojo Alamo	San Jose	Fruitland
Pictured Cliffs	Ojo Alamo	
Niobrara	Fruitland	
Dakota		

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.

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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 casingvalve 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	7,918'

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	Drift inch	Torque feet-pounds	Burst psi	Collapse psi	Tension 1000 psi	Pressure Test psi
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 240 sacks (470 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 will be used as spacers.

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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.

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7. DOWN HOLE CONDITIONS

Abnormal pressures, temperatures, or hydrogen sulfide are not expected. Maximum bottom hole pressure will be $\leq 3,428$ 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.

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Surface Use Plan

1. DIRECTIONS & EXISTING ROADS (See PAGES 12 - 15)

From the junction of US 550 and NM 537 ...
Go North 13-1/2 miles on NM 537
Then turn right and go East 5.3 miles on dirt J-19/County Road 370
Then turn left after a disposal well and go North 0.55 mile on a dirt road
Then bear right and go Northeast 3/4 mile on a dirt road
Then turn left and go Northwest 1/3 mile on a dirt road to the Clark 6
Then turn left and go South \approx 400' on a dirt road
Continue South \approx 1,060' cross country to the well site

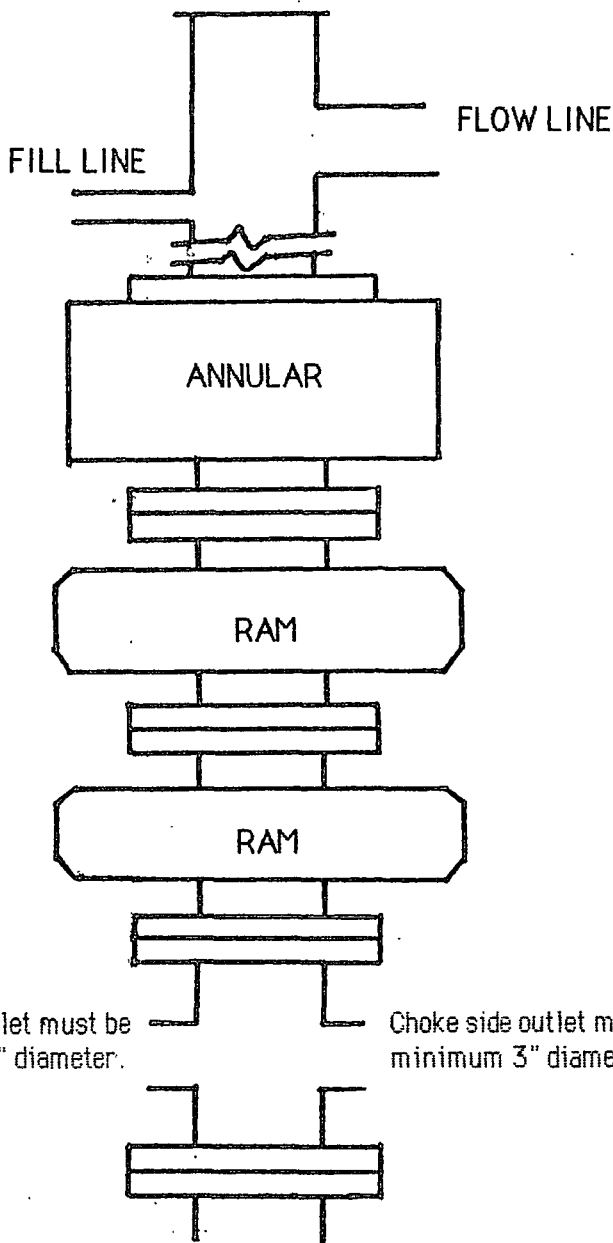
Roads will be maintained to at least equal to their present condition.

This APD is also doubling as a BLM road right-of-way application. Application is for a 20' x 2,640' (=1.21 acre) existing road in E2NW4 8-24n-3w.

2. ROAD TO BE BUILT OR UPGRADED (See PAGES 14 & 15)

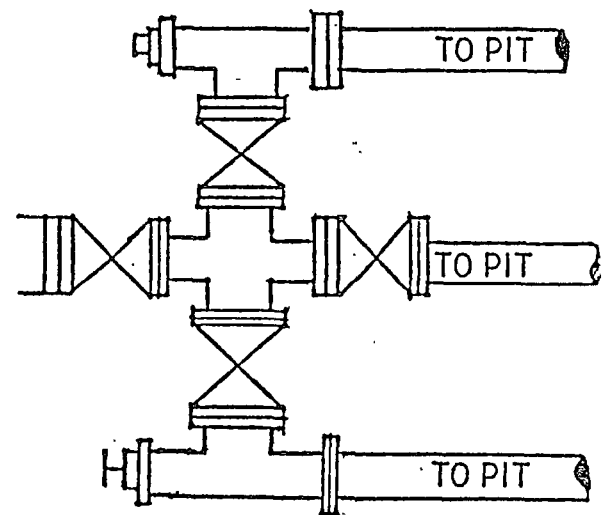
The final 1,460' of road will be upgraded and/or built to BLM Gold Book standards. Road will be crowned and ditched, have a \approx 14' wide running surface, and will be rocked as needed. Maximum disturbed width will be 40' (includes pipeline). Maximum cut or fill = 10'. Maximum grade = 9%. A 36" x 30' CMP culvert will be installed near Stations 12+00 and near Station 17+00. A silt trap will be built below the south culvert. A locked gate will be installed near Station 4+00 after the well is drilled and completed. No vehicle turn out is needed.

3. EXISTING WELLS (See PAGE 13)



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.