Form 3160-3
(August 2007)

RECEIVED
JUL 03 2012
Farmington Field Office
Bureau of Land Management

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. BIA ~~14G~~ Jicarilla Contract 149	
6. If Indian, Allotee or Tribe Name JICARILLA APACHE NATION	
1a. Type of work: ☑ DRILL ☐ REENTER	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☑ Multiple Zone	8. Lease Name and Well No. JICARILLA APACHE F 22
2. Name of Operator ELM RIDGE EXPLORATION COMPANY, LLC	9. API Well No. 30-039-31128
3a. Address P O. BOX 156 BLOOMFIELD, NM 87413	3b. Phone No. *(include area code)* 505 632 3476
	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 1774' FSL & 807' FWL At proposed prod. zone SAME	11. Sec., T. R. M. or Blk.and Survey or Area NWSW (L) 17-25N-5W NMPM
14. Distance in miles and direction from nearest town or post office* 13 AIR MILES NE OF COUNSELOR, 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 drlg. unit line, if any) 1,774'	16. No. of acres in lease 2,559.40 / 17. Spacing Unit dedicated to this well SW4 (= 160 acres)
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,610' (F 4)	19. Proposed Depth 7,500' / 20. BLM/BIA Bond No. on file BIA nationwide OKC 606114
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,563' GRADED	22. Approximate date work will start* 09/01/2012 / 23. Estimated duration 5 WEEKS

RCVD AUG 28 '12
OIL CONS. DIV.
DIST. 3

24. Attachments

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

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. 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 06/11/2012
Title CONSULTANT	(FAX 505 466-9682)	
Approved by *(Signature)*	Name *(Printed/Typed)*	Date 8/22/12
Title 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 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.

Hold C-104 for 5.9 Compliance

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 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOCD

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

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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Farmington Field Office
Bureau of Land Management

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039- 31138	39189	LINDRITH GALLUP-DAKOTA, WEST

[4] Property Code	[5] Property Name	[6] Well Number
~~000113~~ 19029	JICARILLA APACHE F	22

[7] OGRID No	[8] Operator Name	[9] Elevation
149052	ELM RIDGE EXPLORATION COMPANY, LLC	6563

[10] Surface Location

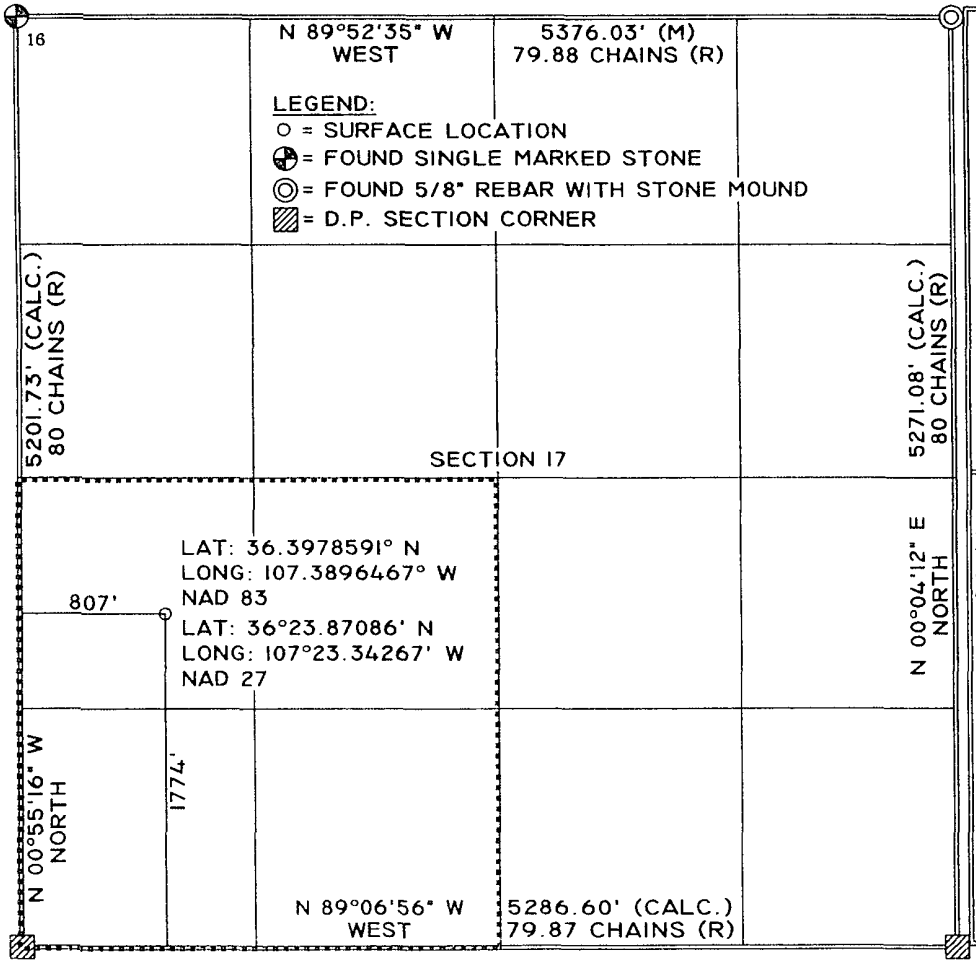
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	17	25 N	5 W		1774	SOUTH	807	WEST	RIO ARRIBA

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160			

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, 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.

6-11-12
Signature Date

BRIAN WOOD

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.

11/18/11
Date of Survey

Signature and Seal of Professional Surveyor

GUY A. VALENCIA
NEW MEXICO
14831
REGISTERED PROFESSIONAL SURVEYOR

14831 2-9-2012
Certificate Number

Elm Ridge Exploration Company, LLC
Jicarilla Apache F 22
1774' FSL & 807' FWL
Sec. 17, T. 25 N., R. 5 W.
Rio Arriba County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	KB Depth	Elevation
San Jose	0'	10'	+6,563'
Fruitland	2,313'	2,323'	+4,250'
Pictured Cliffs Ss	2,693'	2,703'	+3,870'
Chacra Ss	3,583'	3,593'	+2,980'
Mesa Verde Ss	4,368'	4,378'	+2,195'
Mancos Shale	5,143'	5,153'	+1,420'
Gallup Ss	6,063'	6,073'	+500'
Graneros	6,933'	6,943'	-370'
Dakota Ss	7,063'	7,073'	-500'
Burro Canyon	7,463'	7,473'	-900'
Total Depth (TD)*	7,500'	7,510'	-937'

* all elevations reflect the ungraded ground level of 6,908'

2. NOTABLE ZONES

Oil & Gas Zones	Water Zones	Coal Zone
Ojo Alamo	San Jose	Fruitland
Pictured Cliffs	Ojo Alamo	
Chacra	Fruitland	
Gallup		
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.

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 PAGE 3. The ≥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 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.

4. CASING & CEMENT

Hole Size	O. D.	Weight (lb/ft)	Grade	Type	Age	GL Setting Depth
12-1/4"	8-5/8"	24	J-55	S T & C	New	360'
7-7/8"	5-1/2"	15.5	J-55	L T & C	New	7,500'

	Drift inch	Torque feet-pounds	Burst psi	Collapse psi	Tension 1000 psi	Pressure Test psi
Surface	7.972	3070	2950	1370	381	1000
Production	4.653	2020	4810	4040	248	3500

Surface casing will be cemented to the surface with ≈310 cubic feet (≈262 sacks) Class B with 1/4 pound per sack cellophane + 2% $CaCl_2$. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Use API casing dope. Will test to ≈800 psi for ≈30 minutes.

Production casing will be cemented to the surface in two stages with ≥75% excess. A DV tool will be set at ≈4,900' (≈200' above the Mancos). Will pressure test to ≈2,000 psi for ≈30 minutes.

First stage volume will be ≈1,536 cubic feet. First stage will consist of 380 sacks (≈710 cubic feet) Halliburton light with 65/35 poz mix + 1/4 pound per sack Flocele + 2% $CaCl_2$ mixed at a yield of 1.87 cubic feet per sack and a weight of 12.7 pounds per gallon. That will be followed by 700 sacks (826 cubic feet) Class B + 2% $CaCl_2$ mixed at a yield of 1.18 cubic feet per sack and a weight of 15.2 pounds per gallon.

Second stage volume will be ≈1,555 cubic feet. Second stage will consist of ≈800 sacks (1,496 cubic feet) of Halliburton light with 65/35 poz mix + 1/4 pound per sack Flocele + 2% $CaCl_2$ mixed at a yield of 1.87 cubic feet per sack and a weight of 12.7 pounds per gallon. That will be followed by ≈50 sacks (59 cubic feet) Class B + 2% $CaCl_2$ mixed at a yield of 1.18 cubic feet per sack and a weight of 15.2 pounds per gallon.

5. MUD PROGRAM

Depth	Type	ppg	Viscosity	Fluid Loss	pH
0' - 360'	Fresh water gel	9.0	50	NC	9
360' - TD'	Fresh water gel	9.0	38-50	6.0	9

Sufficient material to maintain mud properties, control lost circulation, and

contain a blowout will be available at the well site while drilling. Mud will be checked hourly by rig personnel. Material to soak up possible oil or fuel spills will be on site.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. Spectral density, high resolution induction, and cement bond logs will be run the base of the surface casing to TD. Samples will be collected every ≈10' from ≈200' above the Point Lookout to and through the Gallup and Dakota.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum bottom hole pressure will be ≤3,225 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.

Surface Use Plan

1. DIRECTIONS & EXISTING ROADS (See PAGES 10 - 13)

From the junction of US 550 and NM 537 ...
Go N 17.2 miles on NM 537
Then turn left and go SW 7.9 miles on dirt J-18 to a 5 way junction
Then turn right and go North 3.5 miles on J-6
Then turn left and go west 0.15 mile across an Elm Ridge pad
Then turn left and go Southwest 0.2 mile on a dirt road.
Then bear right and go West 0.85 mile on a dirt road
Then turn right and go Northeast 0.2 mile on a dirt road to Elm Ridge's F 4 well
Then turn right and go East ≈2,087' cross country to the well site

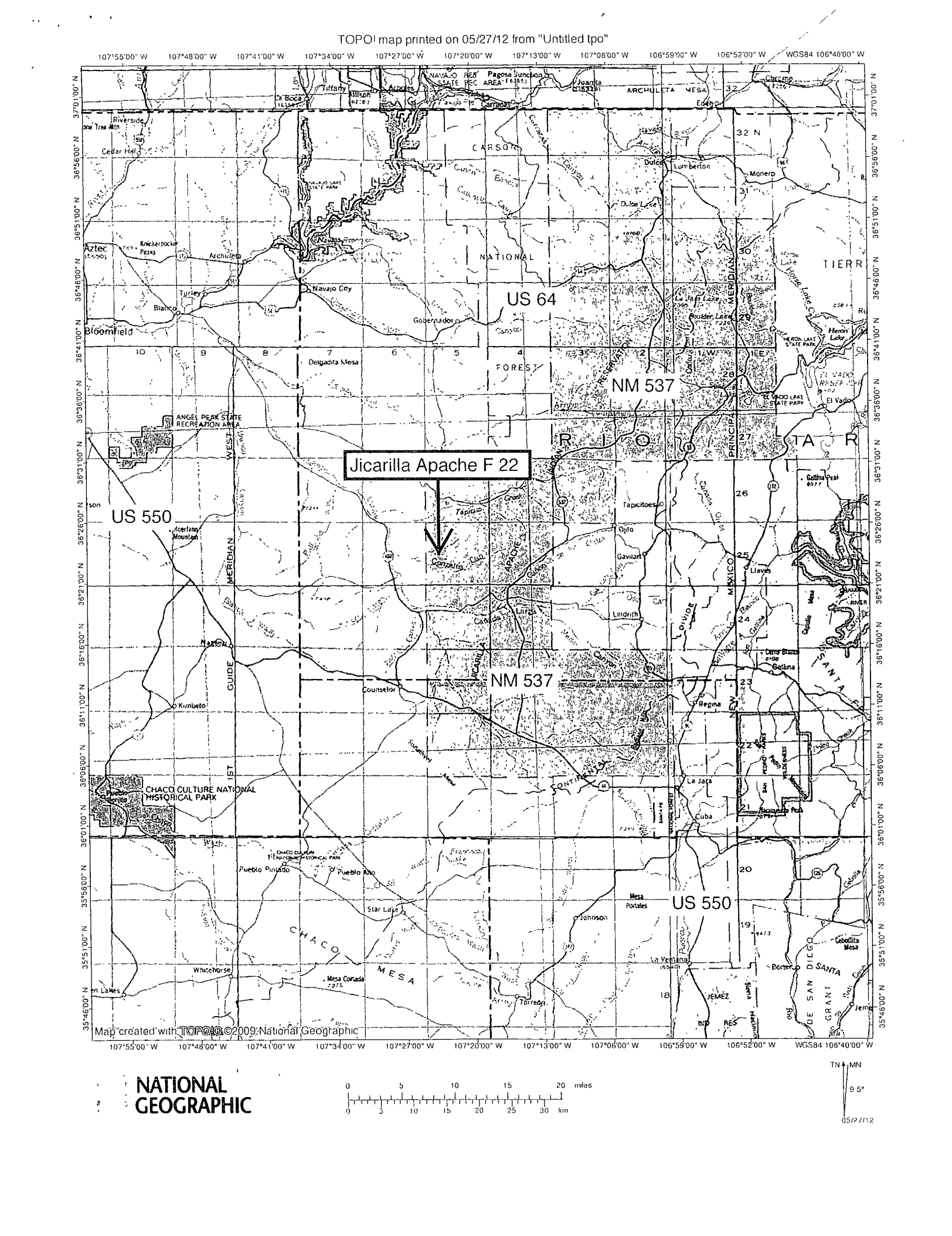
Roads will be maintained to at least equal to their present condition.

2. ROAD TO BE BUILT OR UPGRADED (See PAGES 12 & 13)

Upgrades will consist of repairing potholes on the F 4 road. The ≈2,087' of new road will be built to BLM Gold Book standards. Road will be crowned and ditched, have a ≈14' wide running surface, and will be rocked where needed. Borrow ditches will be turned out in at least 3 places. Turnouts will be feathered out. Culverts will be installed where needed. Maximum disturbed width will be 20'. Maximum cut or fill = 3'. Maximum grade = 5%. No cattle guard is needed.

3. EXISTING WELLS (See PAGE 14)

Oil Conservation Division and State Engineer records show 12 gas or oil wells and 2 plugged and abandoned wells within a one mile radius. There are no injection or water wells within a mile.


TOPO! map printed on 05/27/12 from "Untitled tpo"
Jicarilla Apache F 22
US 64
NM 537
US 550
NM 537
US 550
Map created with TOPO!® ©2009 National Geographic
NATIONAL GEOGRAPHIC
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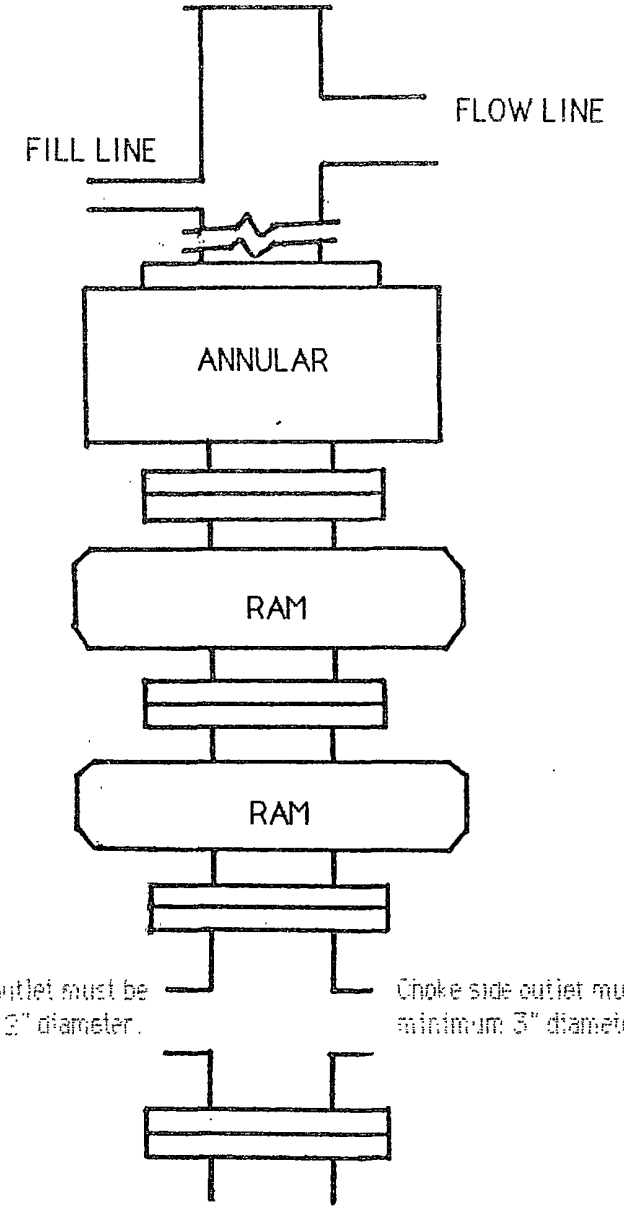
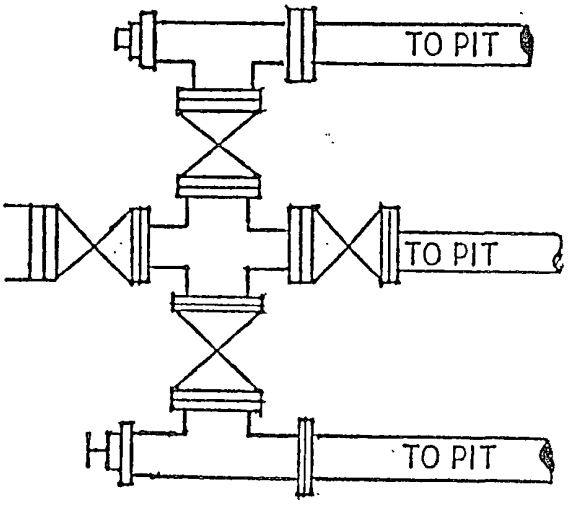
TN MN
9.5°
05/27/12



TYPICAL BOP STACK & CHOKE 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



Fill side outlet must be minimum 2" diameter.

Choke side outlet must be minimum 3" diameter.

Fill 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 with full opening connections in use
All BOPE connections subjected to well pressure will be flanged, welded, or clamped