

Drilling operations authorized are
subject to compliance with attached
"General Requirements".

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1 a. Type of Work DRILL -	5. Lease Number NO-G-9811-1313 Unit Reporting Number
1 B. TYPE OF WELL GAS -	6. If Indian, All. or Tribe INDIAN ALLOTTED
2. Operator ELM RIDGE RESOURCES, INC. 505-632-3476	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 189 Farmington, NM 87499	8. Farm or Lease Name KELLY IND. 27508
4. Location of Well 660' FWL, 2480' FNL 670 2485	9. Well Number #1E
10. Field, Pool Wildcat BASIN DAKOTA -	11. Sec., Twn, Rge, Mer. (NMPM) SW NW SEC. 12, T27N, R13W API # 30045-30471
14. Distance In Miles from Nearest Town 13 MILES SOUTH OF FARMINGTON	12. County 13. State SAN JUAN, N.M.
15. Distance from Proposed Location to Nearest Property or Lease Line 660'	17. Acres Assigned to Well 320 1/2
16. Acres In Lease 160	20. Rotary or Cable Tools ROTARY
18. Distance from Proposed Location to Nearest Well, Drig, Compl or Applied for on this Lease 1300'	22. Approx. Date Work will Start LATE FEBRUARY
19. Proposed Depth 6070'	
21. Elevations (DF, FT, GR, Etc.) 5824' GL	
23. Proposed Casing and Cementing Program SEE OPERATIONS PLAN ATTACHED	
24. Authorized by: <u>Patrick Hegarty</u> PATRICK HEGARTY, Agent	Date <u>12-20-00</u>

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____

Jim Lovato

TITLE _____

DATE _____

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

Title 1 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 presentations as to any matter within its jurisdiction.

AMUCD

Form 3160-5
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ELM RIDGE RESOURCES, INC.

3a. Address

PO Box 189 Farmington, NM 87499

3b. Phone No. (include area code)

632-3476

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2485' FNL, and 670' FWL, (SW NW)
Section 12, T27N, R13W

5. Lease Serial No.

NO-G--9811-1313

6. If Indian, Allottee or Tribe Name

Indian Allotted

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

8. Well Name and No.

Kelly IND. #1E

9. API Well No.

10. Field and Pool, or Exploratory Area

Basin Dakota

11. County or Parish, State

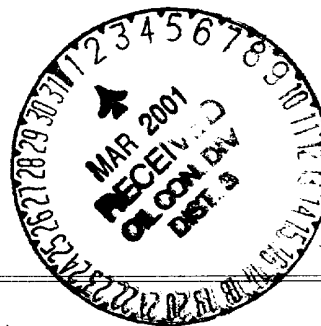
San Juan, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>revise well location</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Reissued Form C-102 to show revised location. Location was moved due to Powerlines and to improve access to existing road



14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Patrick Hegarty

Title Agent

Signature

Date 01-29-01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title Acting Team Lead

Date 2/21/01

Conditions of approval, if any, are attached. Approval of this notice 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.

NMOCD

Office

FFO

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.

District I
P.O. Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 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 APN Number 30-045-30471		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 27508	⁵ Property Name KELLY IND		⁶ Well Number 1E
⁷ OGRID No. 149052	⁸ Operator Name ELM RIDGE RESOURCES, INC.		⁹ Elevation 5840'

¹⁰ Surface Location

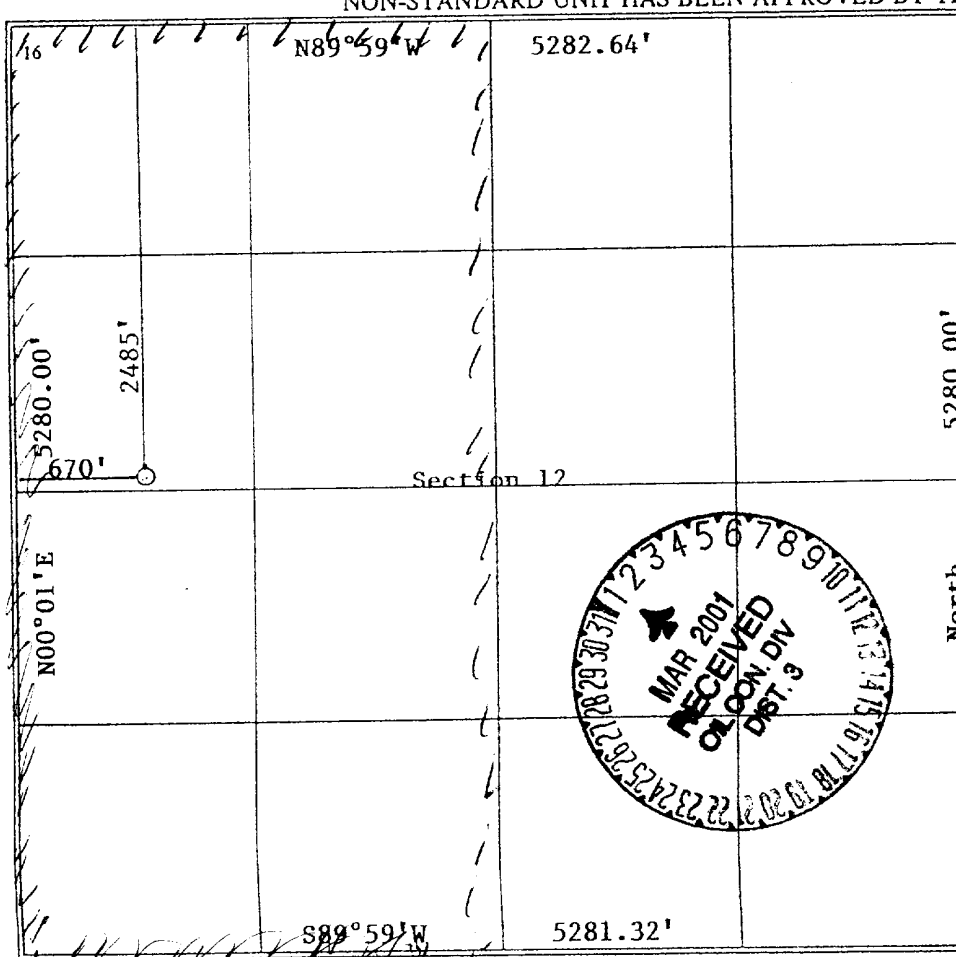
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	27N	13W		2485'	NORTH	670'	WEST	SAN JUAN

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 1/2 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. NSL 4557 - 3-2-01
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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

	<p>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature: <u>Patrick Hegarty</u> Printed Name: <u>PATRICK HEGARTY</u> Title: <u>AGENT</u> Date: <u>1-6-01</u></p>
	<p>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.</p> <p>Date of Survey: <u>01/04/01</u> Signature and Seal of Professional Surveyor: <u>Henry R. Broadhurst, Jr.</u> Certificate Number: <u>1393</u></p>

ELM RIDGE RESOURCES, INC.

KELLY IND. #1E

2485' FNL, 670' FWL

NW/4 SEC.12, T-27-N, R-13-W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

GROUND LEVEL ELEVATION: 5840

Well

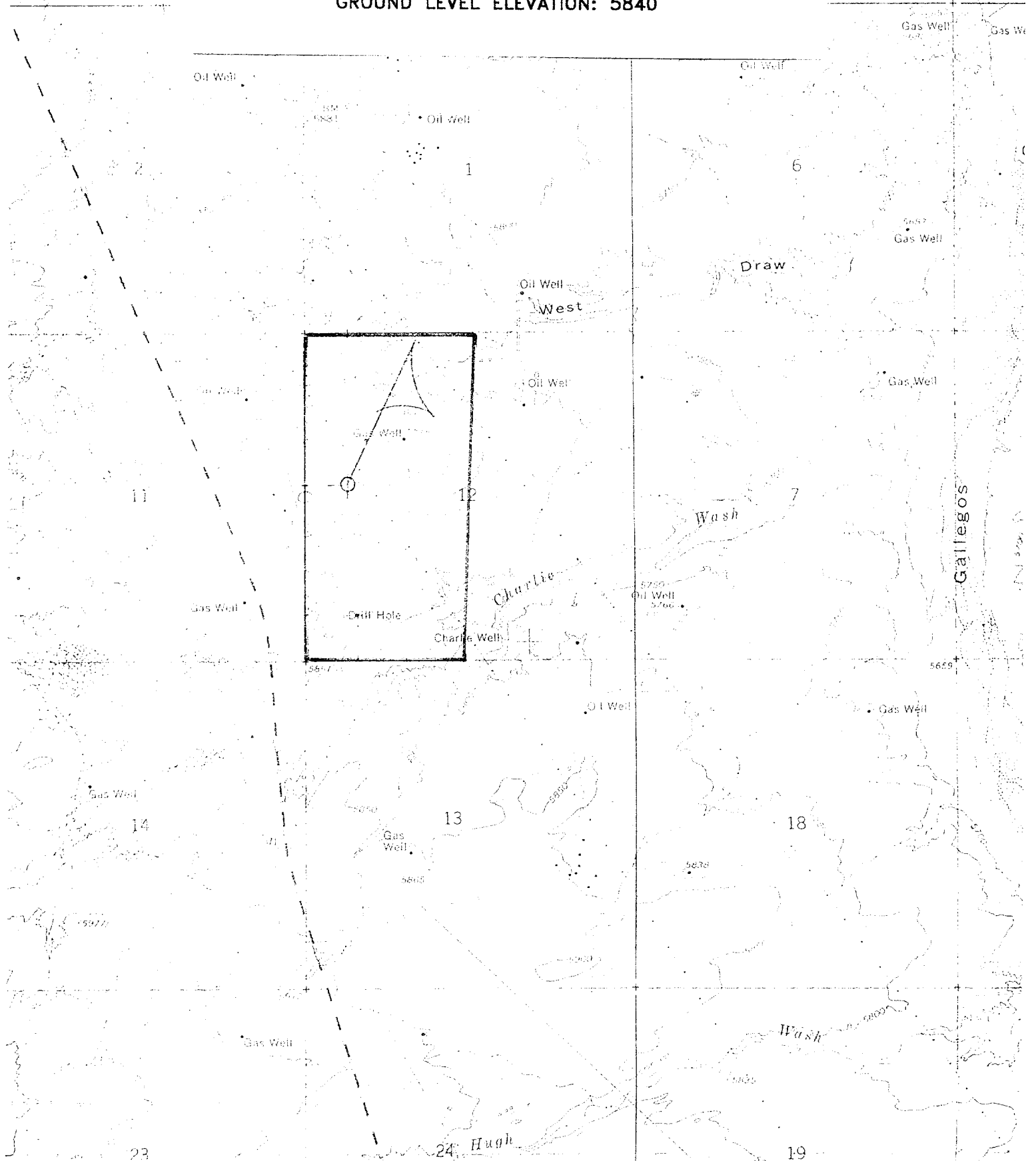


EXHIBIT "B"
OPERATIONS PLAN
Kelly IND. #1E

APPROXIMATE FORMATION TOPS:

Farmington	412'
Fruitland	1008'
Pictured Cliffs	1272'
Lewis	1392'
Cliff House	2180'
Menefee	2255'
Point Lookout	3810'
Mancos	4035'
Base Gallup	5340'
Sanastee	5390'
Greenhorn	5765'
Graneros	5816'
Dakota	5845'

Total Depth 6070'

LOGGING PROGRAM: Run DIL/GR logs. CNL/FDC logs maybe run over selected segments.

Catch samples every 10 feet through Fruitland Gallup and Dakota. Samples will be collected every 30' elsewhere.

CASING PROGRAM:

Must be at least 320'

Hole Size	Casing Size	Wt./Ft.	Setting Depth	Grade and Condition
12-1/4"	8-5/8"	24#	<u>+200'</u>	K-55
7-7/8"	4-1/2"	10.5#	6070'	J-55

The hole size is not smaller than 1-1/2" larger diameter than the casing O.D. across usable water zones.

Plan to drill a 12-1/4" hole and set 200' of 8-5/8" OD, 20#, K-55 surface casing; then plan to drill a 7-7/8" hole to total depth with gel-water-mud program to test Dakota Formation. Plan to run DIL/GR logs. CNL/FDC logs maybe run over selected segments. If determined productive, will run 4-1/2". 10.5#, J-55 casing, selectively perforate, frac, clean out after frac and complete well.

CEMENTING PROGRAM: All volumes are contingent upon Caliper logs.

Surface- Cement with 15 sx (177 cu. ft.) Class "B" with 1/4#/sk Flocele + 2% CaCl₂. Bowspring Centralizers will be run in accordance with Onshore Order #2. Circulate to surface.

Production Stage- Cement in two stages with a stage tool set at about 4500'. First stage will consist of 460 sx (650 cu.ft.) Class "B" with 2% gel and 1/4#/sk Flocele to cover the Gallup and Dakota. The second stage will consist of 870 sx(1538 cu ft.) Haliburton Light Standard with 2% gel + Floscele to cover certain zones. Bowspring Centralizers will be run in accordance with Onshore Order #2. Circulate to surface.

An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizes will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizes will be determined based on API standards. Centralizes to impart a swirling action around the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

Kelly IND. #1E
Page 1 - Exh. B

KELLY IND #1 E
EXHIBIT "B"-OPERATIONS PLAN

WELLHEAD EQUIPMENT - PRESSURE CONTROL: See Exhibit "D"

A typical 3M psi BOP model is shown on Exhibit "D" entitled Pressure Control Equipment. A minimum 3000 psi BOP and choke manifold system will be installed and tested to 2,000 psi before drilling surface casing plug. It will remain in use until the well is completed. 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 which are set and cemented in place.

No abnormal pressures or hazardous zones are anticipated.

Annual preventer, double ram, or 2 rams with one being blind and one being a pipe ram

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string connections in use

Pressure gauge on choke manifold

2" minimum choke line

Fill-up line above the uppermost preventer

BOP equipment will be tested as required in Section III A.1 of Onshore Order 2, plus a 30% safety factor.

The average mud weight is anticipated to be in the range of 8.6 to 9.5 lb/gal.

ATTACHMENTS

Exhibit "A" - Development Plan

Exhibit "B" - Operations Plan

Figure #1 - Anticipated Production Facilities

Figure #2 - Cut & Fill Diagram

Exhibit "C" - Typical Location Plat

Exhibit "D" - Pressure Control Equipment

Exhibit "E" - Existing & Planned Access Roads

Exhibit "F" - Location of Existing Wells & Facilities

Exhibit "G" - Vicinity Map

ENVIRONMENTAL ASSESSMENT

BIA - FONSI Letter