

EC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

DEC 28 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC063622
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator LYNX PETROLEUM CONSULTANTS INC		7. If Unit or CA Agreement, Name and No.
Contact: MARC WISE E-Mail: lynxpet@leaco.net		8. Lease Name and Well No. MALIBU 21 FEDERAL 1
3a. Address P O BOX 1708 HOBBS, NM 88241	3b. Phone No. (include area code) Ph: 505.392.6950 Fx: 505.392.7886	9. API Well No. 30-015-33897
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWSE 1980FSL 1980FEL 32.64399 N Lat, 103.87161 W Lon At proposed prod. zone NWSE 1980FSL 1980FEL 32.64399 N Lat, 103.87161 W Lon		10. Field and Pool, or Exploratory LUSK LUSK MORROW WEST (GAS)
14. Distance in miles and direction from nearest town or post office* 15.5 MILES SOUTH-SOUTHWEST OF MALJAMAR, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T19S R31E Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660	16. No. of Acres in Lease	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 467	19. Proposed Depth 12500 MD 12500 TVD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3515 GL	22. Approximate date work will start 08/01/2004	17. Spacing Unit dedicated to this well 320.00
		20. BLM/BIA Bond No. on file
		23. Estimated duration 35 DAYS

24. Attachments

CAPITAN CONTROLLED WATER BASIN

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

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) MARC WISE	Date 05/25/2004
Title REPORT AUTHORIZER		
Approved by (Signature) /s/ Maria Ketson	Name (Printed/Typed) /s/ Maria Ketson	Date 23 DEC 2004
Title FOR FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify 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.

APPROVAL FOR 1 YEAR

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.

Additional Operator Remarks (see next page)

Electronic Submission #31109 verified by the BLM Well Information System
For LYNX PETROLEUM CONSULTANTS INC, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 06/01/2004 (04AL0191AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED* BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Witness Surface Casing

Additional Operator Remarks:

The operator proposes to drill to a depth sufficient to test the Morrow formation for gas. If productive, 5 1/2" casing will be cemented at T.D. If non-productive, the well will be plugged in a manner consistent with federal regulations. An archaeological survey of the access road, location, and pipeline will be provided by Archaeological Survey Consultants, Roswell. All other programs, plans, maps, and information as per Onshore Oil and Gas Order #1 are attached.

LYNX PETROLEUM CONSULTANTS, INC.
HYDROGEN SULFIDE DRILLING OPERATIONS
MALIBU 21 FEDERAL #1

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

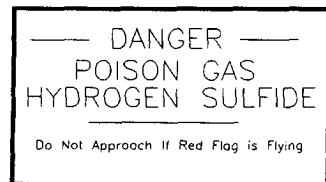
There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site.

II. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note : All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S .

1. Well Control Equipment :
 - A. Flare line with electronic igniter or continuous pilot.
 - B. Choke manifold with a minimum of one remote choke.
 - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - D. Auxiliary equipment to include : annular preventer, mud-gas separator, and flare gun with flares.
2. Protective equipment for essential personnel :
 - A. 30-minute air units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H₂S detection and monitoring equipment :
 - A. 2 – portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
 - B. 1 – portable SO₂ monitor positioned near flare line.
4. Visual warning systems :
 - A. Wind direction indicators as shown on well site diagram.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate. See example on page 3.
5. Mud program :
 - A. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.
 - B. A mud-gas separator will be utilized if needed.

6. Metallurgy :
 - A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
 - B. All elastomers used for packing and seals shall be H₂S trim.
7. Communication :
 - A. Communications in company vehicles are provided by cellular telephones.
 - B. Land line (telephone) communications at Hobbs office.
8. Well testing :
 - A. Drill stem testing will be preformed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.



STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Application for Permit to Drill
Malibu 21 Federal No. 1
1980' FSL & 1980' FEL
Section 21, T-19S, R-31E
Eddy County, New Mexico

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No. : NM 063622

Legal Description : NW/4 SE/4 Section 21, T-19S, R-31E
Eddy County, New Mexico

Formation : Surface to Base of Morrow

Bond Coverage : \$25,000 Statewide

BLM Bond File No. : BO2099

Operator : LYNX PETROLEUM CONSULTANTS, INC.

Authorized Signature : Marc Wise

Title : President

Date : 5/10/04

DISTRICT I
P.O. Box 1890, Hobbs, NM 88240-1890

DISTRICT II
P.O. Drawer 22, Artesia, NM 88210-0712

DISTRICT III
1000 Rio Grande Rd., Artesia, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 80840	Pool Name LUSK;MORROW, WEST (GAS)
Property Code	Property Name MALIBU "21" FEDERAL	Well Number 1
GRID No. 013645	Operator Name LYNX PETROLEUM CONSULTANTS, INC.	Elevation 3515'

Surface Location


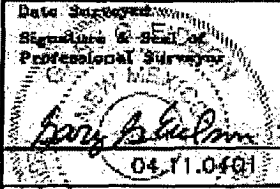
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	21	19-S	31-E		1980	SOUTH	1980	EAST	EDDY

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

Dedicated Acres	Joint or InCL	Consolidation Code	Order No.
320	N	C	Pending

**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>GEODETIC COORDINATES NAD 27 NME Y = 598302.9 N X = 642121.5 E LAT. 32°38'38.36"N LONG. 103°52'17.81"W</p>	<p>NM034657 (80ac.)</p>	<p>NM028500 (80ac.)</p>	<p>OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief:  Signature Marc Wise Printed Name President Title 5/12/04 Date</p>	
	<p>3505.7' 3512.5'</p>	<p>LC0063622 (160ac.)</p>		<p>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. April 07, 2004 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. GARY EDSON 12061</p>
	<p>600' 1980'</p>			
	<p>3507.8' 3511.1'</p>			

DRILLING PROGRAM

Lynx Petroleum Consultants, Inc.
Malibu 21 Federal #1

Section 21, T-19S, R-31E
Eddy County, NM

The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil and Gas Orders #1 and #2, and all other applicable federal and state regulations.

1. SURFACE FORMATION : Sandy Soil of Quaternary Age

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS :

Rustler	-	620'
Yates	-	2250'
Bone Spring	-	6865'
Wolfcamp	-	10250'
Strawn	-	11100'
Morrow	-	11500'

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATIONS :

Fresh Water	-	130'- 200'
Oil, Gas, & Water	-	Delaware, Wolfcamp, Strawn, Morrow

* Productive horizons to be protected by 5 1/2" casing and cement.

4. PROPOSED CASING PROGRAM : * Set 25' into top of Rustler *AWAY*.

13 3/8"	0' -	^{500'} 680'	48.0#	J-55	ST&C	WITNESS
8 5/8"	0' -	4450'	32.0#	J-55	Buttress	
5 1/2"	0' -	2000'	17.0#	P-110	LT&C	
	2000' -	10600'	17.0#	N-80	LT&C	
	10600' -	12500'	17.0#	P-110	LT&C	

5. PROPOSED CEMENT PROGRAM :

20" Conductor - Cemented with ready mix to surface.

13 3/8" Surface - 300 sxs Class "C" + 4% Gel + 2% CaCl₂
followed by 300 sxs Class "C" + 2% CaCl₂.
T.O.C. @ surface.

DRILLING PROGRAM
PACER 28 FEDERAL #1

8 5/8" Intermediate - Stage collar at 2500'. First stage 400 sxs Class "C" Poz followed by 200 sxs Class "C". Second stage 500 sxs Class "C" Poz followed by 200 sxs Class "C". TOC @ surface.

5 1/2" Production - Stage collar at 9500'. First stage 500 sxs Super "H" modified. Second stage 750 sxs Class "C" Poz followed by 350 sxs Class "H". T.O.C. @ 4350'.

6. PRESSURE CONTROL EQUIPMENT : A blowout preventer stack for the intermediate hole will consist of at least an annular preventer rated to 3000 psi working pressure. The blowout preventer stack for the production hole will consist of at least a double-ram blowout preventer and an annular preventer rated to 5000 psi working pressure. A sketch of the B.O.P.'s and Choke Manifold are attached.

7. CIRCULATING MEDIUMS : Fresh water spud mud 0' – 680'. Brine water 680' – 4450'. Cut brine mud system 9.0 – 9.3 ppg with 29 viscosity will be used 4450' – 12500'.

8. AUXILIARY EQUIPMENT : Full opening Kelly cock valve to fit the drill string in use, will be kept on the rig floor at all times.

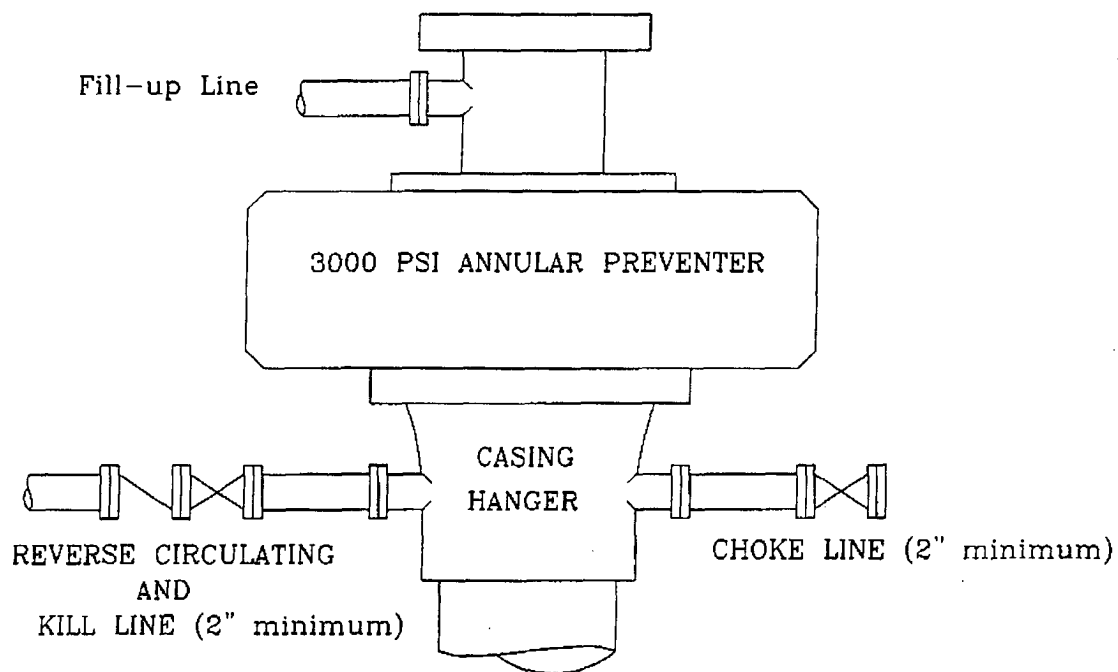
9. TESTING, LOGGING, AND CORING PROGRAM :

Samples	- 4450' – 12500'
D.S.T.'s	- Morrow Possible
Logging	- Gamma Ray – CNL – FDC – DLL
Coring	- No coring is planned

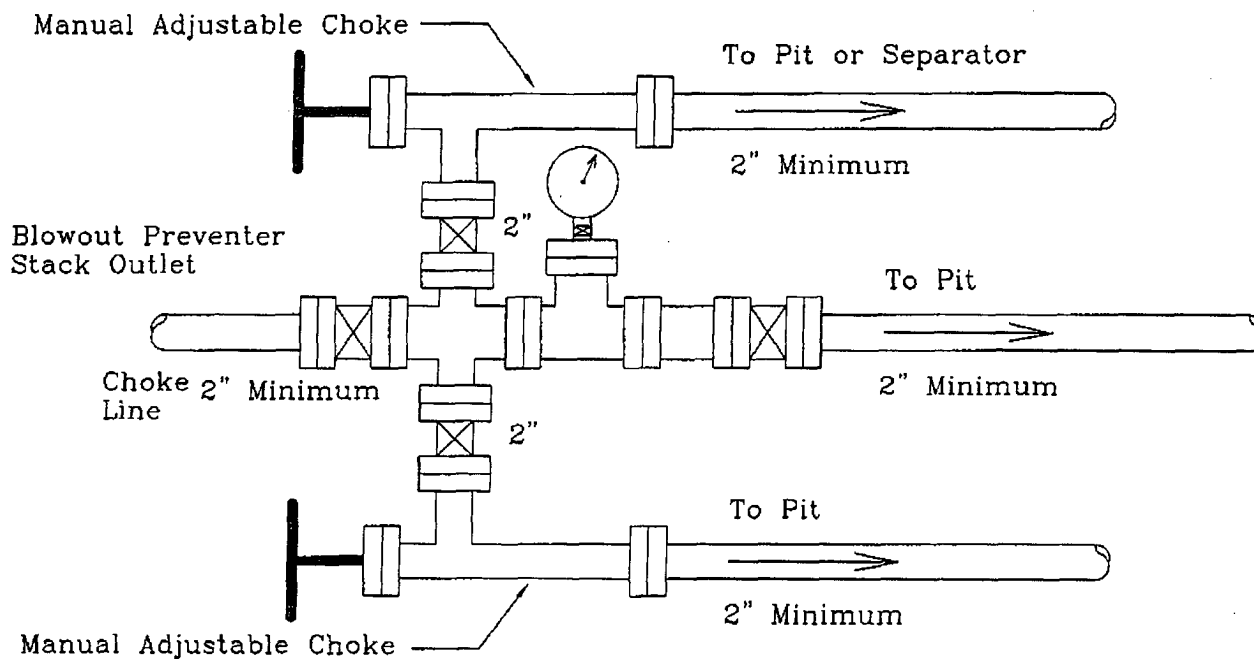
10. ABNORMAL PRESSURES AND TEMPERATURES : None anticipated. Maximum bottom hole pressure should not exceed 5395 psi.

11. ANTICIPATED STARTING DATE : Drilling will commence about August 1, 2004. Drilling should be complete within 35 days. Completion operations (perforations and stimulation) will follow drilling operations.

INTERMEDIATE HOLE SECTION



3000 PSI WORKING PRESSURE



3000 PSI WORKING PRESSURE

TEST CASING AND ANNULAR PREVENTOR TO $(0.70 \times 1730 = 1211 \text{ psig})$

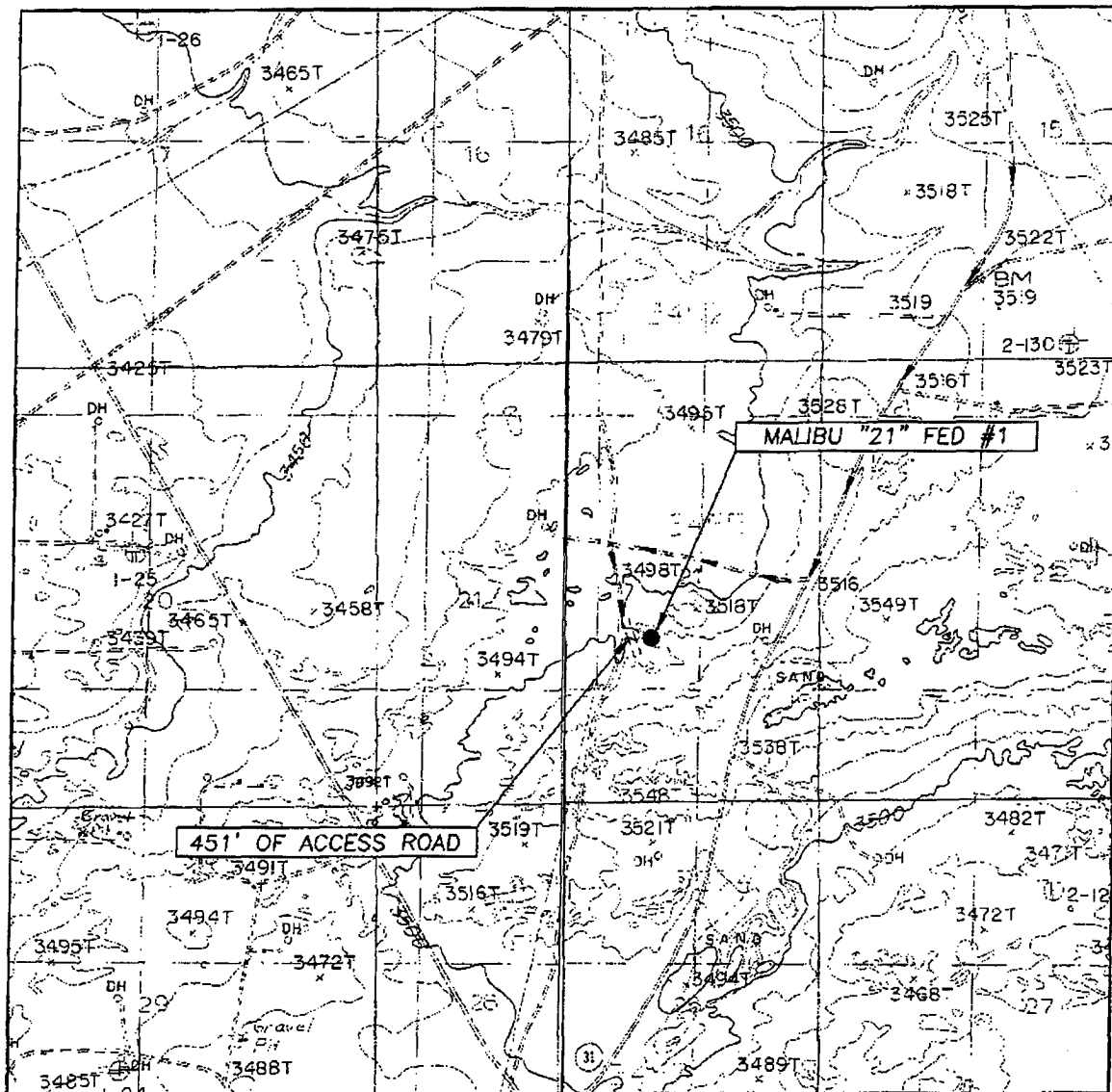
Location: NW/4 SE/4
Sec. 21, T-19S, R-31E
Eddy County, NM

MALIBU 21 FEDERAL NO. 1
BLOWOUT PREVENTER AND CHOKE MANIFOLD

Scale: None

5/10/04

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
GREENWOOD LAKE, N.M.

SEC. 21 TWP. 19-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 1980 FEL

ELEVATION 3515'

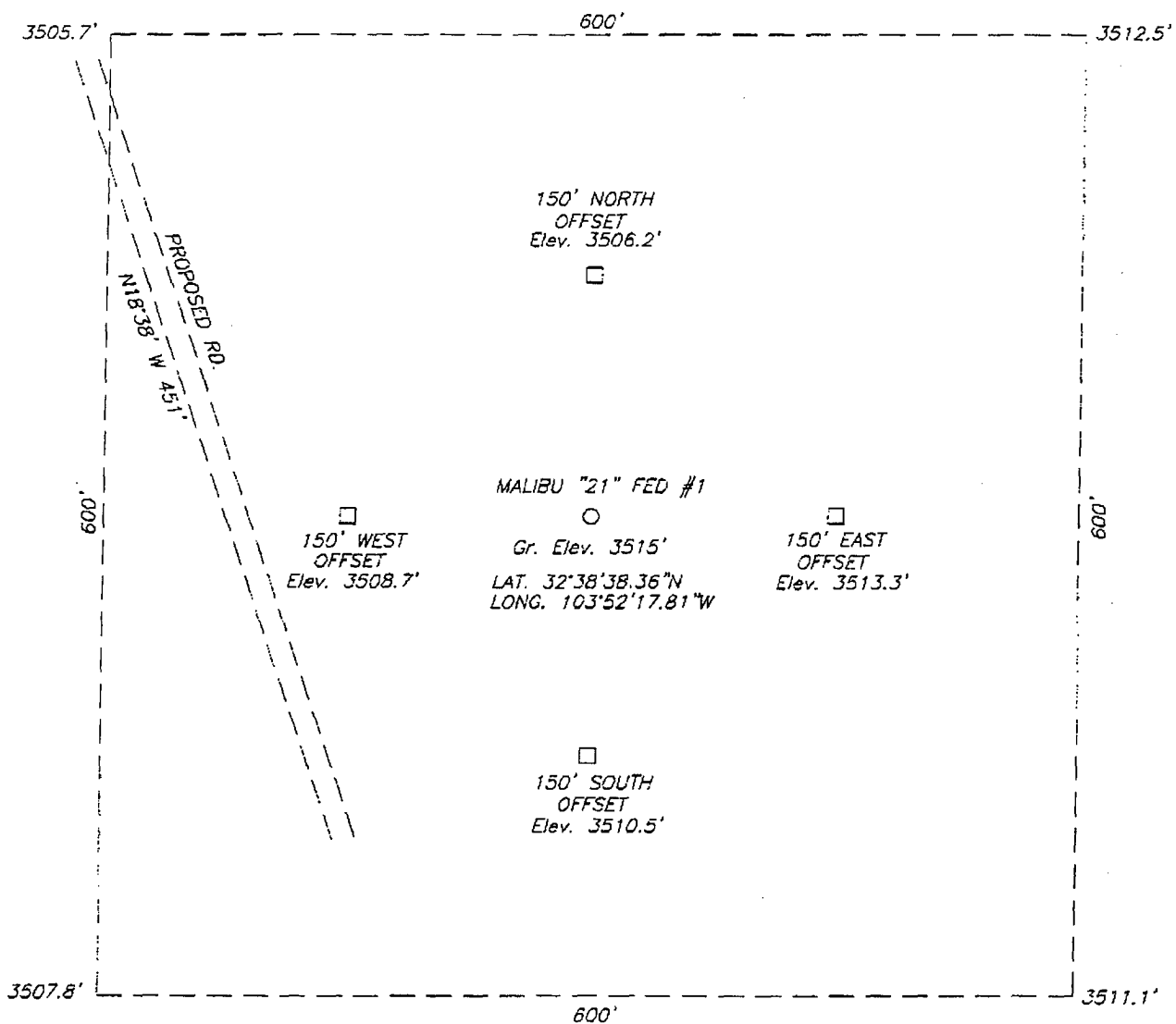
OPERATOR LYNX PETROLEUM CONSULTANTS, INC.

LEASE MALIBU "21" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
GREENWOOD LAKE, N.M.

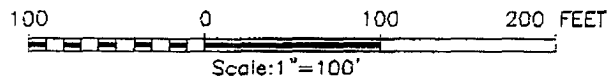
JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

SECTION 21, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF EDDY CO. RD. #222 (SHUGART) AND EDDY CO. RD. #248 (LUSK PLANT). GO SOUTH-SOUTHWEST ON EDDY CO. RD. #222 FOR 1.6 MILES TO A GOOD CALICHE RD. ON THE RIGHT. TURN RIGHT (WEST) AND GO 0.4 MILES. TURN LEFT ON CALICHE RD. (SOUTH) AND GO 0.2 MILES TO EXISTING WELL PAD. FOLLOW PROPOSED STAKED RD. 450' SOUTHEAST TO THIS LOCATION.



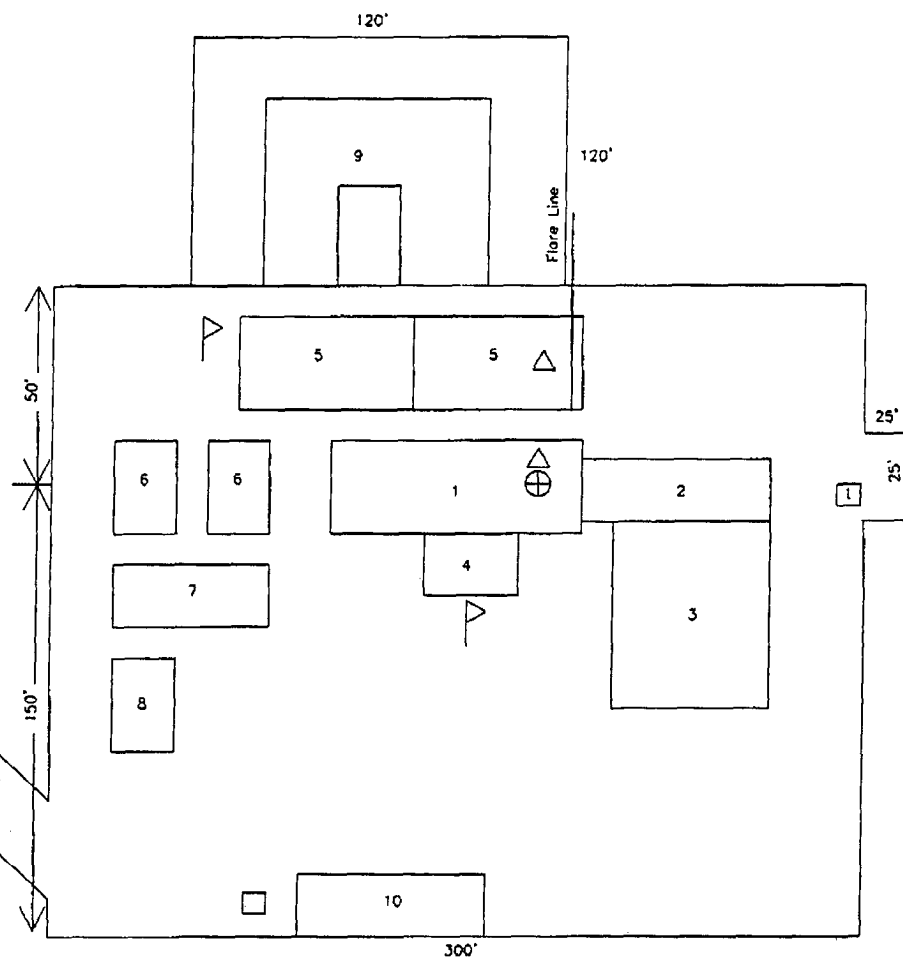
PROVIDING SURVEYING SERVICES
 SINCE 1948
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 383-3117

LYNX PETROLEUM CONSULTANTS, INC.

MALIBU "21" FED #1 WELL LOCATED
 1980' FROM THE SOUTH LINE AND 1980'
 FROM THE EAST LINE OF SECTION 21,
 TOWNSHIP 19 SOUTH, RANGE 31 EAST,
 N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 04/07/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0401	DRAWN BY: A.W.B
Date: 04/13/04	DISK: CD#10
04.11.0401	Scale: 1"=100'

Prevailing Wind



- 1. SUBSTRUCTURE
- 2. CATWALK
- 3. PIPE RACKS
- 4. DOGHOUSE
- 5. MUD PITS

- 6. MUD PUMPS
- 7. WATER TANK
- 8. LIGHT PLANT
- 9. RESERVE PIT
- 10. TRAILER HOUSE

- H2S Monitor with alarm
- Wind Direction Indicator
- Safe Briefing Area. 1=Primary Area

Location: NW/4 SE/4
 Sec. 21, T-19S, R-31E
 Eddy County, NM

MALIBU 21 FEDERAL NO. 1 RIG LAYOUT

5/10/04

Scale: None



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

January 19, 2005
LYNX Petroleum, Inc.
P.O. Box 1708
Hobbs, NM 88241
Attn: Mr. Marc Wise

**RE: Lynx Petroleum, Inc.,: Malibu '21' Federal #1, located in Unit J (1980' FSL & 1980' FEL)
of Section 21, Township 19 South Range 31 East Eddy County, New Mexico.
API # 30-015-33897**

Dear Mr. Wolf,

In regards to conditions of approval for the above captioned well, I would like to recap the New Mexico Oil Conservation Divisions' (NMOCD) requirement to drill for the above captioned well.

This is for Lynx Petroleum, Inc. to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from a depth of @ 800' down to the intermediate casing point, which is estimated to be @ 4450'.

In addition for the condition of approval of said well, please be aware that the NMOCD will require the added of conditions of approval from the BLM that the Capitan Reef is to be drilled with a fresh water mud.

Please give our office a call if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant

PES

CC: Tim Gum-District Supervisor-Artesia
Bureau of Land Management-Roswell



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

IN REPLY REFER TO:
NMLC-063622
3160 (513)

Lynx Petroleum Consultants, Inc.
P.O. Box 1708
Hobbs, New Mexico

RECEIVED

JAN 18 2005

OFFICE OF ARTESIA

Gentlemen:

Pursuant to our telephone conversation on January 13, 2004, we issued the application for permit to drill the Malibu 21 Federal No. 1 well located 1980' FSL and 1980' FEL, sec. 21., T. 19 S., R. 31 E., NMPM, Eddy County, New Mexico. A review by the NMOCD called attention to a deficiency in the conditions of approval. The deficiency concerns the drilling of O&G wells through the Capitan Reef. This office inadvertently omitted the following requirement:

When drilling the Capitan Reef, the operator will switch from brine water to fresh water when and if 100% lost circulation occurs. The operator will then proceed in this manner until the intermediate depth is reached and casing is set.

This office asks that a copy of this letter be attached to the conditions of approval in order that all personnel involved with drilling the well will be aware of this requirement.

If you have any questions please call John S. Simitz at (505) 627-0288 or the Division of Lands and Minerals at (505) 627-0272.

Sincerely,

(ORIG. SGD.) ARMANDO A. LOPEZ

Larry D. Bray
FOR Assistant Field Manager,
Lands and Minerals

cc:

NMOCD, Artesia ✓
NM (522, Jim Amos)
NM (513, well file)