District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised March 17, 1999

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
Fasken Oil and Ranch, Ltd. 303 W. Wall Ave., Suite ~~1800~~ 1900 Midland, TX 79701-5116	151416
	[3] API Number 30-025-36437

[3] Property Code	[5] Property Name	[6] Well No.
32342	Laguna "16" State	1

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	16	20S	32E		660	South	660	East	Lea

[8] Proposed 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

[9] Proposed Pool 1	[10] Proposed Pool 2
Wildcat (Morrow)	

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	S	3512'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	13,400'	Morrow	Gray Wolf	10/15/03

SEP 2003 RECEIVED Hobbs OCD

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	133#	920'	1350 sx C	Surface
17 ½"	13 3/8"	54.5/61#	2600'	2200 sx C	Surface
12 ¼"	9 5/8"	47#	4500'	1300 sx C/Lite	
8 ½"	5 ½"	17/20#	13,400'	1400 sx C/Lite	TOC 4000'

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Please see the attachments for the procedure, casing program and BOP schematic.

This permit was authorized under Hearing Order R-12031.

Permit Expires 1 Year From Approval Date Unless Drilling Underway

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION
Signature: Jimmy D Carlile	Approved by:
Printed name: Jimmy D Carlile	Title: PETROLEUM ENGINEER
Title: Regulatory Affairs Coordinator	Approval Date: OCT 02 2003 / Expiration Date:
Date: 9/29/03 / Phone: (432) 687-1777	Conditions of Approval: / Attached ☐

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State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-36437	—	Wildcat (Morrow)

Property Code	Property Name	Well Number
32342	LAGUNA "16" STATE	1

OGRID No.	Operator Name	Elevation
151416	FASKEN OIL & RANCH, LTD.	3512'

Surface Location

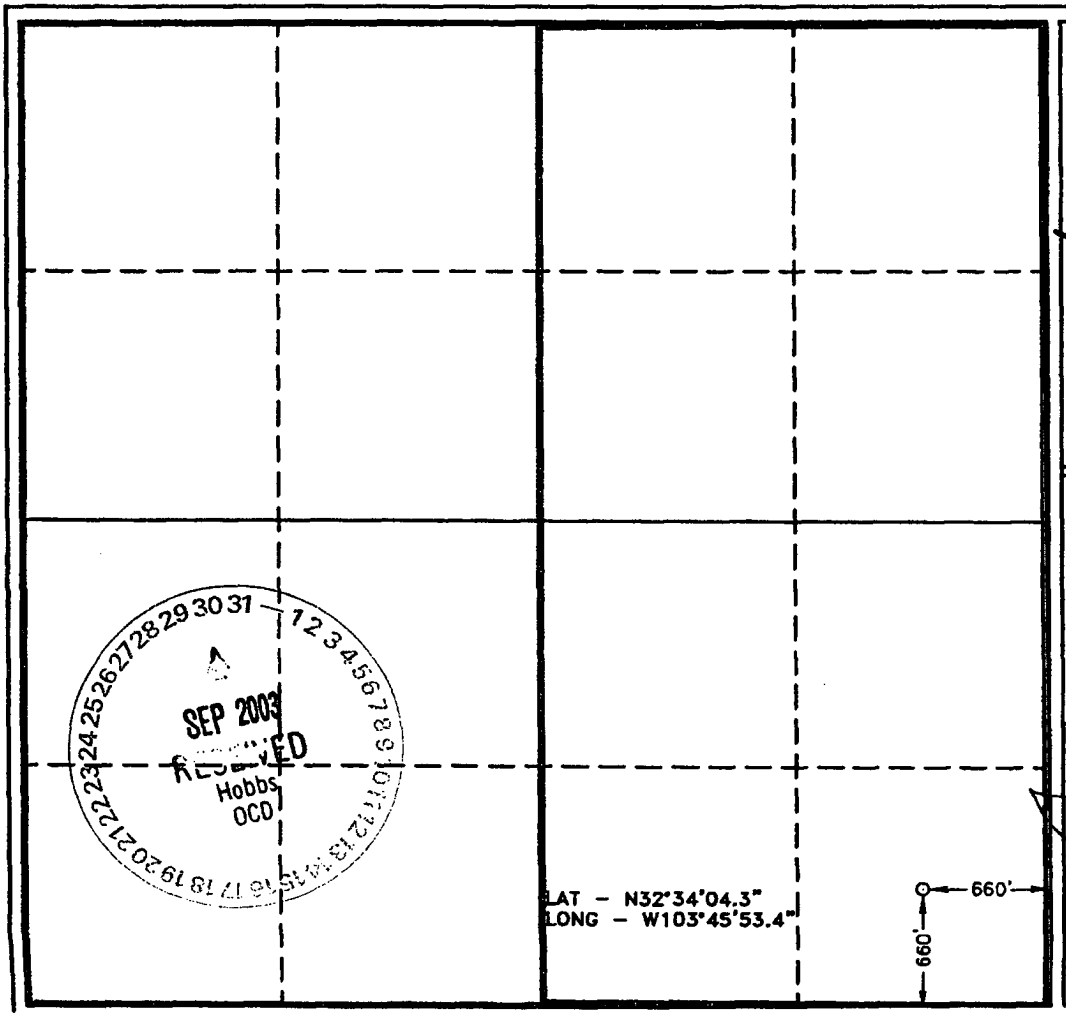
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	16	20 S	32 E		660	SOUTH	660	EAST	LEA

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 Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Jimmy D. Carlile
Printed Name

Regulatory Affairs Coor.
Title

May 13, 2003
Date

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 supervison, and that the same is true and correct to the best of my belief.

APRIL 24, 2003
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL SURVEYOR

W.O. No. 32314

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

Recommended Procedure

Laguna "16" State No. 1 ——— A.F.E. No. 646 ———Wildcat - Morrow
660' FSL & 660' FEL
Sec. 16, T20S, R32E
Lea County, NM

1. Set and cement 30" conductor at 40'. MIRU rotary tools.

2. Drill 26" hole to 920' with spud mud. Set and cement 20" casing at 920'. Use inter-string cementing collar cementing casing through 4-1/2" drill pipe. Mix and pump 850 sx Class "C" with 4% gel and 2% $CaCl_2$, (s.w. 13.50 ppg, yield 1.74 ft^3/sx) and an estimated 500 sx Class "C" cement with 2% $CaCl_2$ (s.w. 14.8 ppg, yield 1.32 ft^3/sx). Continue mixing tail slurry until circulation of cement is established. WOC for 6 hrs. Cut-off casing and weld on 20-3/4" 3000# SOW bradenhead and NU 21-1/4" 2000# annuluar preventor with double studded adapter. WOC 12 hrs. before drilling out shoe joint.

3. Drill 17-1/2" hole to 2600' with 10 ppg brine water water. Control seepage with paper. Sweep hole with salt gel and paper to improve hole cleaning.

4. Set and cement 13-3/8" casing at 2600' with estimated 1600 sx BJ Lite with 12# salt and ¼# celloseal (s.w. 12.4 ppg, yield 2.0 ft^3/sx), 400 sx Class "C" with 4% gel and 2% $CaCl_2$ (s.w. 13.5 ppg, yield 1.74 ft^3/sx) plus 200 sx Class "C" with 2% $CaCl_2$ (s.w. 14.8 ppg, yield 1.34 ft^3/sx). Set slips, cut-off casing, ND 20" annular and NU 20-3/4" 3000 psi x 13-5/8" 5000 psi intermediate spool and 13-5/8" 10,000 psi BOP stack with rotating head. WOC 12 hrs. before drilling out shoe joint. Set up DST test line complete with test tank. Install H_2S monitor equipment, escape packs, briefing stations and PVT equipment. Hook up mud gas separator. RU and begin mud logging at drill out of 13-3/8" shoe.

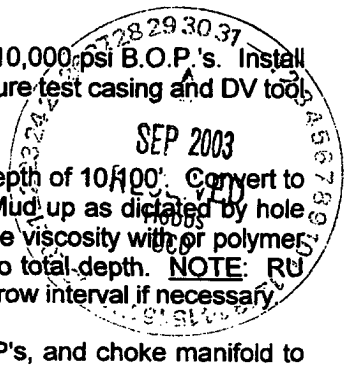
5. Drill 12-1/4" hole to 4500' with 9.0 ppg cut brine. Control seepage with paper. Sweep hole with salt gel/polymer and paper to improve hole cleaning. Partial or full returns may be lost in the Capitan Reef interval from 3000' through 4000'. Control losses with 75-100 bbl mud/LCM pills as necessary.

6. Set and cement 9-5/8" casing at 4500' with DV tool at 3000' as follows;

   First stage: 350 sx BJ Lite "C" with 8# salt, 5# gilsonite and ¼# celloflake (s.w. 12.4 ppg, yield 2.00 ft^3/sx) plus 200 sx Class"C" neat (s.w. 14.8 ppg, yield 1.33 ft^3/sx).

   Second stage: 550 sx BJ Lite "C" with 8# salt and ¼# celloflake (s.w. 12.4 ppg, yield 2.00 ft^3/sx) plus 200 sx Class "C" neat (s.w. 14.8 ppg, yield 1.33 ft^3/sx).

7. Install 13-5/8" 5000 psi x 11" 10,000 psi intermediate spool. NU 13-5/8" 10,000 psi B.O.P.'s. Install hydraulic Super Choke. WOC 12 hours. TIH and drill out DV tool. Pressure test casing and DV tool with rig pump to 1500 psig.



8. Drill 8-1/2" hole to total depth of 13,400'. Drill out using fresh water to a depth of 10,100'. Convert to 10.0 ppg brine water at 10,100' just above the 3rd Bone Springs sand. Mud up as dictated by hole conditions or by 11,500' with XCD, starch and PAC mud system. Increase viscosity with gel or polymers as needed to clean hole. Maintain 10.0-11.0 ppg and 10 cc water loss to total depth. NOTE: RU barite bin and be prepared to raise mud weight to 12 ppg in the Atoka-Morrow interval if necessary.

9. Hydrostatically test 200' of 9-5/8" casing to 5000 psig, casing spool, BOP's, and choke manifold to 300-7500 psig, and hydril to 3000 psig on first bit trip or prior to reaching 9,000'.

10. DST all shows.

11. Log well with DLL-MSFL and CNL-LDT using Schlumberger Platform Express.

12. Install 5-1/2" BOP rams, run and cement 5-1/2" production casing (resin coated and centralized through pay zones) with DV tool at 10,300' as follows;

    First Stage: 10 bfw + 500 gallons Mud Clean II + 10 bfw and 700 sx Super "C" Modified (15 #/sx Poz A and 11 #/sx CSE), 1% Salt, 1.4% FL-25 and 0.2% CD-32 (s.w. 14.0 ppg, yield 1.34 ft^3/sx). Batch mix first stage slurry. Circulate 6 hrs. between stages.

    Second Stage: 500 sx BJ Lite "C" with 6% gel (s.w. 12.4 ppg, yield 2.01 ft^3/sx) plus 200 sx Class "H" neat (s.w. 15.6 ppg, yield 1.18 ft^3/sx). Calculate second stage cement volume for TOC at 4000'.

13. Set slips, nipple down BOP's and install 11"-10,000 psi x 7-1/16"- 10,000 psi tubinghead and flow tree.

14. Run temperature survey to locate cement top.

15. Rig down and move out rotary tools.

16. Level location, set mast anchors, move in and rig up completion unit.

17. Install BOP, RIW with 4-3/4" bit, casing scraper, 6 3-1/2" drill collars and 2-7/8" tubing. Drill out DV tool. Reciprocate scraper through DV 10 times. Pressure test casing to 3000 psig. RIW and drill out cement to float collar, circulate hole clean with 3% KCL water containing oxygen scavenger and corrosion inhibitor. Pressure test casing to 5000 psig. POW with tubing and lay down tools.

18. RIW with packer, T.O.S.S.D. with "F" profile nipple and 2-7/8" tubing. Set packer, install flow tree, swab down tubing and perforate pay interval.

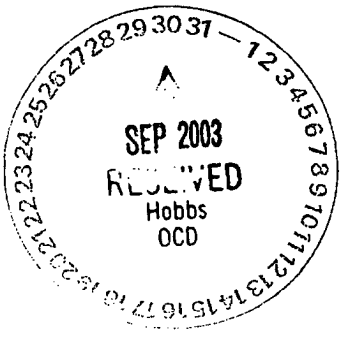
19. Flow test well , evaluate, and stimulate if necessary.

20. RDPU. Clean and level location.

21. Run C.A.O.F.P. and pressure build up.

22. Connect surface equipment.

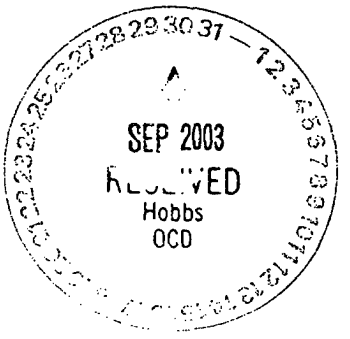
TET
(Laguna16State1drlgprc)



Recommended Casing Program
A.F.E. No. 646

Fasken Oil and Ranch, Ltd.——————Laguna "16" State No. 1——————Wildcat-Morrow Field
Lea County, NM

String	Footage	Size	Weight	Grade	Thread
Surface	920'	20"	133.00#	K-55	ST&C
Intermediate (Salt)	900'	13-3/8"	54.50#	K-55	BT&C
	1,500'	13-3/8"	61.00#	K-55	BT&C
	2,600'				
Intermediate	4,500'	9-5/8"	47.00#	L-80	LT&C
Production	2,700'	5-1/2"	17.00#	N-80	BT&C
	5,900'	5-1/2"	17.00#	N-80	LT&C
	4,600'	5-1/2"	20.00#	N-80	LT&C
	13,200'				
Tubing	13,200'	2-7/8"	6.50#	N-80	EUE 8rd



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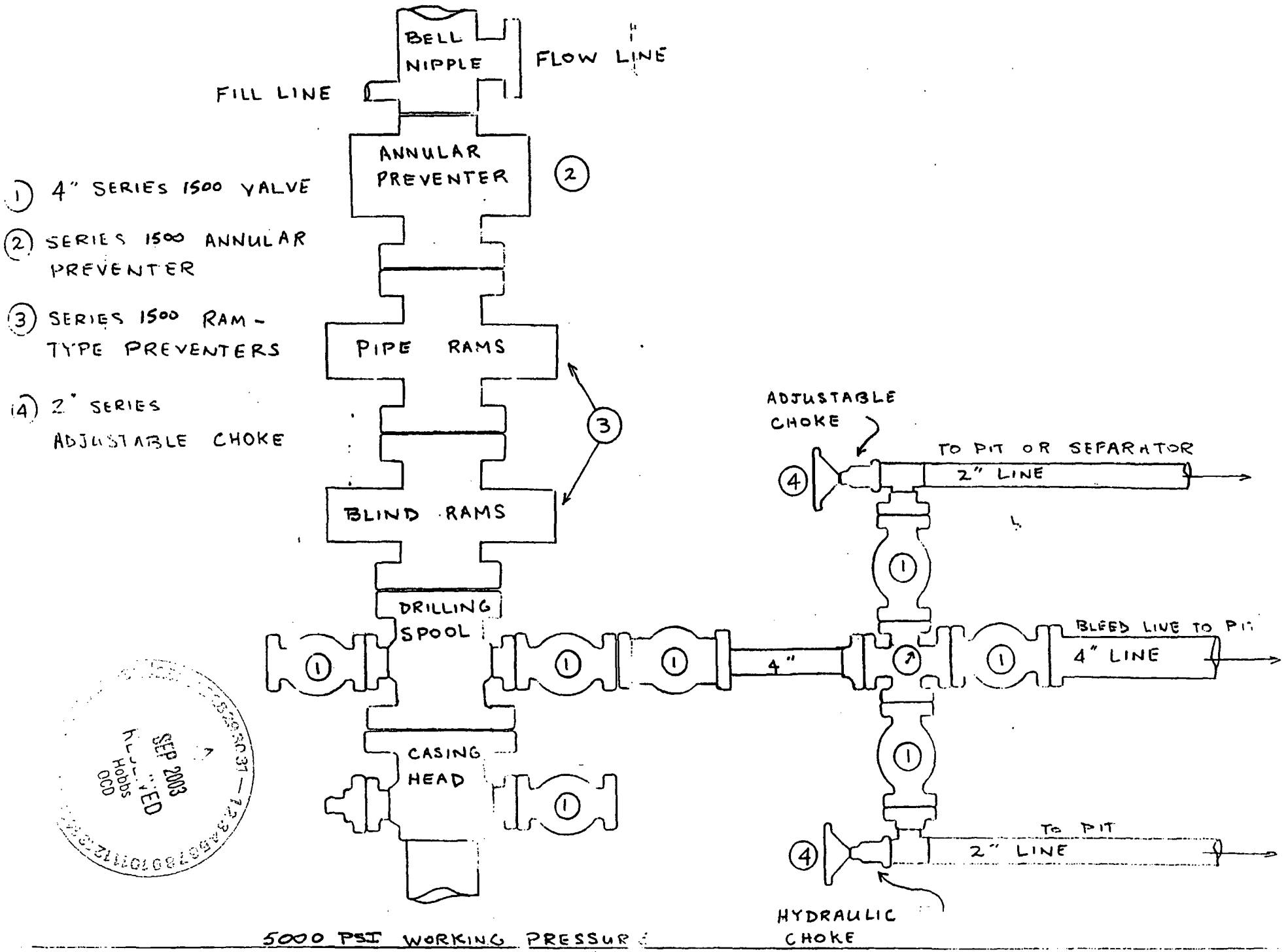
(Laguna16State1csg)



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

30-025-36437

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

BUREAU OF LAND MANAGEMENT
P.O. Box 1778
Carlsbad, NM 88221

STATE LAND OFFICE
Attn: Joe Mraz
P.O. Box 1148
Santa Fe, NM 87504

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR Fasken Oil and Ranch, Ltd. 151416

LEASE NAME Laguna "16" State #1 32-342

PROPOSED LOCATION 16-20s-32e (Unit P) 660/S & 660/E

PROPOSED DEPTH 13,400'

Gentlemen:

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuant to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether the location is within an established Life-of-Mine-Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by the order.

Thank you for your assistance. Please return as soon as possible.

Very truly yours,

OIL CONSERVATION DIVISION

Chris Williams
Supervisor, District I

RESPONSE:

10-2-03

The above-referenced location is in LMR ---------- Yes ___ No X

The above-referenced location is within the buffer zone----- Yes ___ No X

Signed _____ Date 10/3/03

Representing SLO

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

BUREAU OF LAND MANAGEMENT
P.O. Box 1778
Carlsbad, NM 88221

STATE LAND OFFICE
Attn: Joe Mraz
P.O. Box 1148
Santa Fe, NM 87504

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR Fasken Oil and Ranch, Ltd.

LEASE NAME Laguna "16" State #1

PROPOSED LOCATION 16-20s-32e (Unit P) 660/S & 660/E

PROPOSED DEPTH 13,400'

Gentlemen:

The application for permit to drill identified above has been filled with this office of the New Mexico Oil Conservation Division. Pursuant to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether the location is within an established Life-of-Mine-Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by the order.

Thank you for your assistance. Please return as soon as possible.

Very truly yours,

OIL CONSERVATION DIVISION

Chris Williams
Supervisor, District I

RESPONSE: THIS LOCATION IS IN IMC POTASH'S LMR

The above-referenced location is in LMR ---------- Yes X No ___

The above-referenced location is within the buffer zone----- Yes ___ No ___

Signed [signature] Date 10-2-03

Representing BLM