

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

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

¹ Operator Name and Address Fasken Oil and Ranch, Ltd. 303 West Wall, Ste 1800 Midland, TX 79701		² OGRID Number 151416
³ Property Code 32562	⁴ Property Name Buckeye "1" State	⁵ Well No. 2
⁹ Proposed Pool 1 North Vacuum Lower Wolfcamp (62380)		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. F	Section 1	Township 17S	Range 34E	Lot Idn	Feet from the 1830	North/South line North	Feet from the 1830	East/West line West	County Lea
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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
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Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4039'
¹⁶ Multiple No	¹⁷ Proposed Depth 10800'	¹⁸ Formation Wolfcamp	¹⁹ Contractor NA	²⁰ Spud Date 9/27/04
Depth to Groundwater 71'		Distance from nearest fresh water well > 1/4 mile		Distance from nearest surface water > 1 mile
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 22,000 bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

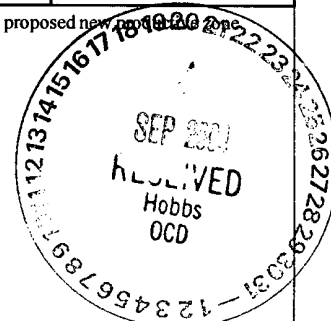
21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	500'	550 sx	surface
12 1/4"	9 5/8"	36/40#	5000'	1400 sx	surface
8 3/4"	5 1/2"	17#	10800'	1300 sx	4500'

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 zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See attached for procedure, casing program, and BOP schematic.

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. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Printed name: Jimmy D. Carlile
Title: Regulatory Affairs Coordinator
E-mail Address: jimmyc@for1.com
Date: 9/17/04 Phone: 432 687-1777

OIL CONSERVATION DIVISION	
Approved by:	
Title: PETROLEUM ENGINEER	
Approval Date:	Expiration Date:
SEP 29 2004	
Conditions of Approval Attached <input checked="" type="checkbox"/>	

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
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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 and Natural Resources Department

Form C-102
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 36889	Pool Code 62380	Pool Name North Vacuum Lower Wolfcamp
Property Code 32562	Property Name BUCKEYE "1" STATE	Well Number 2
OGRID No. 151416	Operator Name FASKEN OIL & RANCH, LTD.	Elevation 4039'

Surface Location

UL or lot No. F	Section 1	Township 17 S	Range 34 E	Lot Idn	Feet from the 1830	North/South line NORTH	Feet from the 1830	East/West line WEST	County LEA
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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 80	Joint or Infill	Consolidation Code	Order No.						

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>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jimmy D. Carlile</i> Signature</p> <p>Jimmy D. Carlile Printed Name</p> <p>Regulatory Affairs Coord. Title</p> <p>9/27/04 jimmyc@for1.com Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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>SEPTEMBER 10, 2004 Date Surveyed</p> <p><i>Gary L. Jones</i> Signature & Seal of Professional Surveyor</p> <p>No. 4637 Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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Recommended Procedure

Buckeye "1" State No. 2 ————— A.F.E. No. 869 ————— North Vacuum Wolfcamp Field
1980' FNL and 1980' FWL
Sec. 1, T17S, R34E
Lea County, NM

1. Drilling contractor to set 20" conductor if necessary. MIRU rotary tools.
2. Drill 17-1/2" hole to 500' with spud mud. Set and cement 13-3/8" casing with 550 sx Class "C" with 2% CaCl₂ (s.w. 14.8 ppg, yield 1.32 ft³/sx). WOC 18 hrs.
3. Drill 12-1/4" hole to 5000' with 10 ppg brine water. Control seepage with paper.
4. Set and cement 9-5/8" casing at 5000' with estimated 1200 sx Halliburton Interfill "C" with 8# salt and 1/4# Flocele (s.w. 11.9 ppg, yield 2.46 ft³/sx) plus 200 sx Class "C" neat (s.w. 14.8 ppg, 1.32 ft³/sx). Run temperature survey and locate TOC if cement is not circulated.
5. Install 11" x 5000 psi intermediate spool. NU 11" 5000 psi B.O.P.'s, hydril and choke manifold complete with hydraulic choke. WOC 12 hours. Set up DST test line complete with test tank. Install H₂S monitor equipment, escape packs and briefing stations.
6. Hydrostatically test 200' of 9-5/8" casing to 2800 psig, casing spool, BOP's, and choke manifold to 3000 psig, and hydril to 1500 psig. Install PVT equipment
8. Drill 8-3/4" hole to total depth of 10,800'. Drill out using fresh water to a depth of 9600'. Convert to 9.0 ppg cut brine water at 9600' just above the Wolfcamp shales. Mud up as dictated by hole conditions or by 10,000' with starch and PAC mud system. Increase viscosity with salt gel or polymer as needed to clean hole. Maintain 9.0-9.5 ppg and 10 cc water loss to total depth.
9. DST all shows.
10. Log well with DLL-MSFL and CNL-LDT using Schlumberger Platform Express.
11. Run and cement 5-1/2" production casing (resin coated and centralized through pay zones) with 10 bfw + 500 gallons Mud Clean + 10 bfw and estimated 1000 sx Halliburton Lite "C" with 6% gel (s.w. 12.6 ppg, yield 2.01 ft³/sx) plus 300 sx Halliburton Super "H" with 1# salt, 0.4% CFR-3, 0.5% Halad-344, 0.1% HR-7 and 5# Gilsonite (s.w. 13.0 ppg, yield 1.67 ft³/sx). Batch mix tail slurry. Wash up lines to pit leaving no cement on top of plug. Displace with 3% KCl water containing packer fluid. Calculate cement volume for TOC at 4500'.
12. Set slips, nipple down BOP's and run temperature survey to locate cement top.
13. Install 11"-5000 psi x 7-1/16"-5000 psi tubinghead and flow tree.
14. Rig down and move out rotary tools.
15. Level location, set mast anchors, move in and rig up completion unit.
16. Pressure test casing to 1500 psig.
17. RIW with packer, T.O.S.S.D. with "F" profile nipple and 2-3/8" tubing. Set packer, install flow tree, swab down tubing and perforate pay interval.
18. Flow test well, evaluate, and stimulate if necessary.

Buckeye "1" State No. 2 Recommended Procedure
Page 2

19. RDPU. Clean and level location.
20. Run C.A.O.F.P. and pressure build up.
21. Connect surface equipment.

TET
(Buckeye1State2drlgprc)

Recommended Casing Program
A.F.E. No. 869

Fasken Oil and Ranch, Ltd.-----Buckeye "1" State No. 2-----North Vacuum Wolfcamp Field
Lea County, NM

String	Footage	Size	Weight	Grade	Thread
Surface	500'	13-3/8"	48.00#	H-40	ST&C
Intermediate	2700'	9-5/8"	36.00#	K-55	ST&C
	1500'	9-5/8"	40.00#	K-55	ST&C
	800'	9-5/8"	40.00#	HCK-55	ST&C
	<u>5000'</u>				
Production	10,800'	5-1/2"	17.00#	N-80	LT&C
Tubing	10,700'	2-3/8"	4.70#	N-80	EUE 8rd

