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

## State of New Mexico Energy Minerals and Natural Resources

Form C-101 Revised March 17, 1999

Oil Conservation Division 2040 South Pacheco

Submit to appropriate District Office

State Lease - 6 Copies
Fee Lease - 5 Copies

District IV 2040 South Pacheco, Santa Fe, NM 87505 Santa						Santa	Fe, NM 87505				ree Lease - 5 Copies			
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Faske	en Oil and I	Ranch, I		trator marrie ar	na Audiess			<sup>2</sup> OGRID Number 151416					,	
	V. Wall Ave nd, TX 797										<sup>3</sup> API Number 30-0 25 — 3 6 3 0 6 6 Well No.			
<sup>3</sup> Property Code Series Property N												<sup>6</sup> Well N	lo.	
J& 7	504					Dirt Devil "23						1		
	1					<sup>7</sup> Surface L	ocation							
UL or lot no.	Section	Townsh	hip	Range	Lot I	dn Feet fro	om the	North/S	South line	Feet from the	East/West line County		County	
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UL or lot no.	Section	Townsh	hip	Range	Lot I	dn Feet fro	om the	North/S	South line	Feet from the	East/West line County		County	
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<sup>9</sup> Proposed Pool 1 log Proposed Pool 2 North Vacuum Atoka Moπow (86800)														
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11 Work Type Code 12 Well Type Cod				de	le/Rotary	ury 14		Lease Type Code		15 Ground Level Elevation				
N  16 Multiple				<u>G</u>		R			ļ	S		4030'		
	ultiple 10		<sup>17</sup> Proposed Depth <b>12000</b> '			<sup>18</sup> Formation Atoka Morro		<sup>19</sup> Contractor Not available		"Contractor Not available		<sup>20</sup> Spud Date 8/1/03		
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Hole Si		T	Casing				1			Sacks of Ce		T	stimated TOC	
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12 1/2		+				36/40#		5000'		1300 sx C		Surface		
8 3/4				5 ½"		17/20#		12000'		2100 sx C/H		4500'		
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								he data	on the pre	esent productive zor	ie and pro	posed nev	w productive zone.	
Describe the b	lowout prev	vention p	rogram,	, if any. Use a	additional s	sheets if necessar	ry.			617	819.20	-1-65		
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Please see	the atta	ached	proce	dure, cas	ing pro	gram, and l	BOP so	chema	atic.	416	11 11 to			
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	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 attached procedure, casing program, and BOP schematic.  Permit Expires 1 Year From Approval  Date Unless Drilling Underway											į.		
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<sup>23</sup> I hereby cert	ify that the	informat	tion give	en above is tru	ie and com	plete to the			OIL C	ONSERVAT	ON D	ÍVISIC	ON	
best of my kno	wledge and	belief.		$\langle \cap \rangle$				1.1					,	
Signature:	M	un	yct	3 (au	lee		Approv	ed by:		mel 9	2	They		
Printed name: Jimmy D. Carlile EMAIL: jimmyc@forl.com								Title: UN OFTROLEUM ENGLIS						
Title: Regulatory Affairs Coordinator								Approval Date: Expiration Date:						
Date: June 17, 2003 Phone: (915)				5) 687-17	777	Condition	ons of A	pproval:						
					Attache	Attached								

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 District III

## State of New Mexico **Energy Minerals and Natural Resources**

Submit to appropriate District Office

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505

Fee Lease - 5 Copies

Form C-101

Revised March 17, 1999

State Lease - 6 Copies 1000 Rio Brazos Road, Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE Operator Name and Address OGRID Number Fasken Oil and Ranch, Ltd. 151416 303 W. Wall Ave., Suite 1800 API Number 30-025-36306 Midland, TX 79701-5116 <sup>5</sup> Property Name Well No. Property Code Dirt Devil "23" State 2504 <sup>7</sup> Surface Location Lot Idn Feet from the North/South line Feet from the East/West line UL or lot no Township County Section Range 660 South 1310 West 23 **17S** 34E Lea М <sup>8</sup> Proposed Bottom Hole Location If Different From Surface North/South line East/West line UL or lot no. Section Township Range Lot Idn Feet from the Feet from the County 10 Proposed Pool 2 9 Proposed Pool 1 North Vacuum Atoka Morrow (86800) 11 Work Type Code 12 Well Type Code 13 Cable/Rotary <sup>4</sup> Lease Type Code 15 Ground Level Elevation S 4030' Ν G R 20 Spud Date 19 Contractor 16 Multiple Proposed Depth 18 Formation Atoka Morrow Not available 12000 8/1/03 No Proposed Casing and Cement Program Casing weight/foot Casing Size Setting Depth Sacks of Cement Estimated TOC Hole Size 500 sx C 17 1/2" 13 3/8" 48# 500' Surface 1300 sx C Surface 12 1/4" 9 5/8" 36/40# 5000' 8 3/4" 5 1/2" 17/20# 12000' 2100 sx C/H 4500' <sup>22</sup> 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 attached procedure, casing program, and BOP schematic. Permit Expires 1 Year From Approval Date Unless Drilling Underway <sup>23</sup> I hereby certify that the information given above is true and complete to the OIL CONSERVATION DIVISION best of my knowledge and belief. Approved by Signature: EMAIL: jimmyc@forl.com Printed name: Jimmy D. Carlile Title: Title: Regulatory Affairs Coordinator Approval Date: Date: June 17, 2003 Phone: (915) 687-1777 Conditions of Approval:

Attached 🔲

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

### 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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. New Mexico 87504-2088

DISTRICT IV 2040 South Pacheco		Santa F	□ AMENDED REPORT								
WELL LOCATION AND ACREAGE DEDICATION PLAT											
API	20/		Pool Code		,	T1- TT					
30-025-36306 Property Code				86800	Prop	erty Nam	North Vacuum . ne	Atoka Morro	Well Number		
3250				DIRT			STATE		1		
OGRID No. 151416				FASKE	- •	ator Nam			Elevation 4030'		
L	FASKEN OIL & RANCH, LTD. 4030' Surface Location										
UL or lot No.	Section	Township	Range	Lot ldn	Feet fr	om the	North/South line	Feet from the	East/West line	County	
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			Bottom	Hole Loc	cation 1	f Diffe	rent From Sur	face	_		
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	om the	North/South line	Feet from the	East/West line	County	
Dedicated Acre	B Joint o	r Infill Co	nsolidation (	Code Or	der No.		<u>l</u>		<u> </u>	L	
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# Recommended Casing Program A.F.E. No. 687

Fasken Oil and Ranch, Ltd.-----Dirt Devil "23" State No. 1-----North Vacuum Atoka-Morrow Field Lea County, NM

String	Footage_	Size	Weight	Grade	Thread
Surface	500'	13-3/8"	48.00#	H-40	ST&C
Intermediate	2700' 1500' <u>800'</u> 5000'	9-5/8" 9-5/8" 9-5/8"	36.00# 40.00# 40.00#	K-55 K-55 HCK-55	ST&C ST&C ST&C
Production	800' 10,000' <u>1,200'</u> 12,000'	5-1/2" 5-1/2" 5-1/2"	17.00# 17.00# 20.00#	N-80 N-80 N-80	BT&C LT&C LT&C
Tubing	11,700'	2-3/8"	4.70#	N-80	EUE 8rd

### **Recommended Procedure**

Dirt Devil "23" State No. 1 ------ A.F.E. No. 687 -----North Vacuum Atoka-Morrow Field 660' FSL and 1310' FWL Sec. 23, T17S, R34E Lea County, NM

- 1. Drilling contractor to set 30" conductor if necessary. MIRU rotary tools.
- 2. Drill 17-1/2" hole to 500' with spud mud. Set and cement 13-3/8" casing 500 sx Class "C" with 2%  $CaCl_2$  (s.w. 14.8 ppg, yield 1.32 ft<sup>3</sup>/sx). WOC 12 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 1100 sx Halliburton Interfill "C" with 8# salt and 1/4# Flocele (s.w. 11.9 ppg, yield 2.46 ft<sup>3</sup>/sx) plus 200 sx Class "C" neat (s.w. 14.8 ppg, 1.32 ft<sup>3</sup>/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. WOC 12 hours. Set up DST test line complete with test tank. RU mud gas separator with flare ignitor. Install H<sub>2</sub>S 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 12,000'. Drill out using fresh water to a depth of 9100'. Convert to 9.5 ppg cut brine water at 9100' just above the Wolfcamp shales. Mud up by 10,800' with starch and PAC mud system. Increase viscosity with salt gel or polymer as needed to clean hole. Maintain 9.5-10.0 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.
- DST all shows.
- Log well with DLL-MSFL and CNL-LDT using Schlumberger Platform Express.
- 11. 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 base of Abo (estimate 9500') as follows;

First Stage: Note, batch mix lead slurry. 10 bfw + 500 gallons Mud Clean + 10 bfw and estimated 800 sx Halliburton Super "H" with 1# salt, 0.4% CFR-3, 0.5% Halad-344, 0.25% HR-7 and 3% Gilsonite (s.w. 13.0 ppg, yield 1.69 ft³/sx). Open DV tool and circulate 6 hours.

Second stage: 1100 sx Halliburton Lite "C" with 6% gel (s.w. 12.6 ppg, yield 2.01 ft<sup>3</sup>/sx) plus 200 sx Class "H" neat (s.w. 15.6 ppg, yield 1.18 ft<sup>3</sup>/sx). Calculate second stage 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.

# Dirt Devil "23" State No. 1 Recommended Procedure Page 2

- 16. RIW with 4-5/8" bit, 5-1/2" casing scraper, 6 3-½" drill collars and 2-3/8" 4.7# N-80 EUE 8<sup>rd</sup> tubing. Drill out DV tool and reciprocate scraper through DV tool several times. Pressure test casing to 1500 psig. RIW and clean out to float collar. Circulate well clean and pressure test casing to 1500 psig. POW and LD tools.
- 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.
- 19. RDPU. Clean and level location.
- 20. Run C.A.O.F.P. and pressure build up.
- 21. Connect surface equipment.

TET (DirtDevil23State1drlgprc)

MATIONAL 12:389 200, SHEETS S SQUARE