OCD-HOBBS

FORM APPROVED Form 3160-3 (February 2005) OMB No 1004-0137 Expires March 31, 2007 UNITED STATES Lease Serial No. DEPARTMENT OF THE INTERIOR NM 26692 BUREAU OF LAND MANAGEMENT A If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No. la. Type of work **✓** DRILL REENTER 8. Lease Name and Well No. lb. Type of Well ✓ Oil Well Gas Well ✓ Single Zone Multiple Zone Federal "26 A" No. 3 Name of Operator 9 API Well No. Fasken Oil and Ranch, Ltd. 3a Address 303 West Wall, Suite 1800 3b Phone No. (mchidi Midland, TX 79701 432 687-1777 Location of Well (Report location clearly and in accordance with any State requirements *) 510' FSL, 510' FEL At surfacè Sec. 29, T18S, R33E At proposed prod zone 14 Distance in miles and direction from nearest town or post office* 12 County or Parish 13 State 12 miles NNE of Halfway NMDistance from proposed 16 No of acres in lease 17 Spacing Unit dedicated to this well location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 510' 240 80 acres, S/2, SE/4 20 BLM/BIA Bond No. on file 18 Distance from proposed location* 19 Proposed Depth to nearest well, drilling, completed, applied for, on this lease, ft 2790 10,200 NM 2729 Statewide Bond Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23 Estimated duration 38231 06/15/2008 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form: 1. Well plat certified by a registered surveyor Bond to cover the operations unless covered by an existing bond on file (see 2 A Drilling Plan. Item 20 above). A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification SUPO must be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the BLM 25 Name (Printed/Typed) Signature Jimmy D. Carlile 08 Title Regulatory Affairs Coordinator Approved by (Signature) Name (Printed Typed) isi Don Peterson APR 16 Office Title **FIELD MANAGER** CARLSBAD FIELD OFFICE Application approval 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. APPROVAL FOR TWO YEARS Conditions of approval, if any, are attached. Title 18 USC Section 1001 and Title 43 USC 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 at

Carlsbad Controlled Water Basin

*(Instructions on page 2)

APR 1'8 2008

HOBBS OCD

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

DISTRICT III

DISTRICT IV

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number	. A	:	Pool Code		Pool Name				
30-02	5-3	9008	4	21650		EK:Bone Spring				
Property					Property Nan		1	Well No	umber	
222	13				FEDERAL 26	6-A		3		
OGRID N					Operator Nan	ne		Elevation		
1514	16			FASKEN	OIL AND F	AND RANCH, LTD 3823'				
Surface Location										
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Р	26 -	18 S	33 E		510	SOUTH	510	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	
		<u> </u>								
Dedicated Acre	s Joint o	r Infill Co	nsolidation (Code Ord	ier No.					
80 🗸										

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

_	ON A NON-STAI	DARD UNIT HAS BEEN	ATTROVED BY THE	E DIVISION
				OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature 1/16/08 Signature Date Jimmy D. Carlile Regulatory Affairs Coor.
				Printed Name jimmyc@forl.com 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
		Lat - N32°42'46.05" Long - W103°37'36.37" NMSPCE- N 623768.9 E 758655.1	3821.1' _3825.8'	JANUARY 2008 Date Survey Signature Son Maryor Professional Surveyor
	 	E 758655.1 (NAD-83)	3821.7' 51b' 3823.4	W.O. 180 Certificate No. Gary L. Jones 7977 BASIN SURVEYS

APPLICATION FOR PERMIT TO DRILL

Fasken Oil and Ranch, Ltd. Federal "26-A" No. 3 510' FSL & 510' FEL Sec. 26, T18S, R33E Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Fasken Oil and Ranch, Ltd. submits the following items of pertinent information in accordance with Onshore Oil & Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

- 1. The geologic surface formation is of Permian age. Ground elevation is 3823'.
- 2. Estimate tops of geologic markers are as follows:

1500'
3400'
4300'
4575'
5150'
5625'
7500'
8775'
9400'
10,200'

3. The estimated depths at which water, oil or gas formation are expected to be encountered;

Yates	3400'	Oil
San Andres	5150'	Oil
Bone Springs	7500'	Oil

- * Groundwater to be protected by 13-3/8" surface casing with cement circulated to the surface.
- ** Potentially productive horizons to be protected by 5-1/2" production casing with cement tied back to 2500'.
- 4. <u>Proposed Casing Program:</u> All casing strings will new pipe. Minimum design safety factors are 1.0 for burst, 1.125 for collapse and 1.8 for tension on 8rd threaded pipe.

	String	Footage	Hole Size	Casing Size	Weight	Grade	Thread	
1500' Total	- Surface Surface	1000 350 500	17-1/2"	13-3/8" <i>ຕ</i>	48.00# <i>5</i> 4.5	H-40 Jook-55	ST&C	- pero dor
	Intermediate	3700'- 5 3400 (C		8-5/8"	32.00#	J-55	LT&C	14/10/08
	Production	2000' 6900' <u>1300'</u> 10,200'	7-7/8" 7-7/8" 7-7/8"	5-1/2" 5-1/2" 5-1/2"	17.00# 17.00# 17.00#	N-80 K-55 N-80	LT&C LT&C LT&C	
	Tubing	10,100'		2-3/8"	4.60#	N-80	EUE 8 rd	

5. <u>Proposed Cementing Program:</u>

Cement 13-3/8" casing with 440 sx Class "C" with 2% CaCl₂ (s.w. 14.8 ppg, yield 1.32 ft³/sx). Circulate cement to surface.

Cement 8-5/8" casing with 900 sx Halliburton Lite "C" with 15# salt and 1/8# Poly-E-Flake (12.6 ppg, yield 2.0 ft³/sx) plus 300 sx Class "C" with 1% CaCl₂ (s.w. 14.8 ppg, yield 1.34 ft³/sx). Circulate cement to surface.

Cement 5-1/2" production casing (resin coated and centralized through pay zones) in two stages with DV tool at approximately 6500'.

1st stage: 10 bfw, 500 gallons Mud Clean II, 10 bfw, 300 sx Halliburton Light "H" with 6# salt, 1/8# Poly-E-Flake (s.w. 12.6 ppg, yield 2.0 ft³/sx) plus 400 sx Class "H" with 0.5% CFR-3 (s.w. 15.6 ppg, yield 1.18 ft³/sx). Open DV tool and circulate for 6 hrs.

 2^{nd} stage: 700 sx "H" 50/50 Poz with 0.5% Halad-9, 0.1% CFR-3 and 5% salt (s.w. 14.4 ppg, yield 1.27 ft³/sx) plus 100 sx Class "H" neat (s.w. 15.6 ppg, yield 1.18 ft³/sx). Calculate second stage cement volume for TOC @ 2500'.

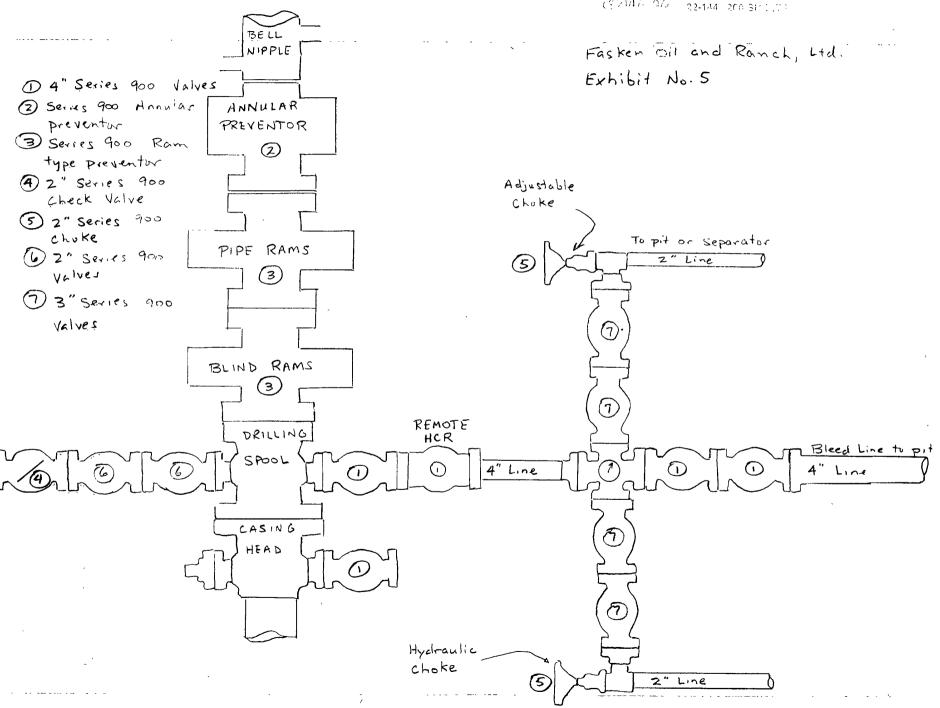
6. Pressure Control Equipment: See exhibit #5. Operator request variance and proposes to pressure test BOP stack with rig pump to 1000 psig prior to drilling out the 13-3/8" casing shoe. The 8-5/8" casing will be Hydrotested before drill out the shoe joint. Hydrotest will included testing the rams, choke line, choke manifold, upper and lower kelly valves and floor safety valves to 3000 psig high and 300 psig low. The annular preventor will be hydrotested to 3000 psig high and 300 psig low. Additional BOP Hydrotesting will be performed after any pressure seal is broken, following any BOP repair and at 30 day intervals.

7. Mud Program:

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Waterloss</u>
0-350'	Fresh Water	8.5	40	N.C.
350'-3700'	Brine Water	10.3	29	N.C.
3700'-8,600'	Fresh Water	8.5	28	N.C _;
8,600'-10,200'	Fresh Water	8.5-8.7	36	15 cc

- 8. <u>Auxiliary Equipment</u>: Upper Kelly Cock, Full Opening Stabbing Valve, PVT.
- 9. Testing Logging and Coring Programs:
 - DST's: None Expected
 - Logging: 2-man Mudlogging unit from 3700' to T.D.
 - Electric Logs: Platform Express with CNL-LDT, DIL-SFL, GR and Caliper.
 - Coring: None anticipated
- 10. <u>Abnormal Pressure, Temperatures or Other Hazards</u>: No lost circulate is anticipated. Maximum bottomhole pressure is estimated to be 4600 psig based on offset well information.
- 11. Anticipated Starting Date: June 15, 2008

Sel-COA-



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

EXHIBIT #3
Fasken Oil and Ranch, Ltd.
Federal "26-A" No. 3
510' FSL & 510' FEL
Sec. 26, T18S, R33E
Lea County, New Mexico

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 (H2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques of first aid and rescue procedures.

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

- 1. The effects of H2S 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 H2S Drilling Operations Plan.

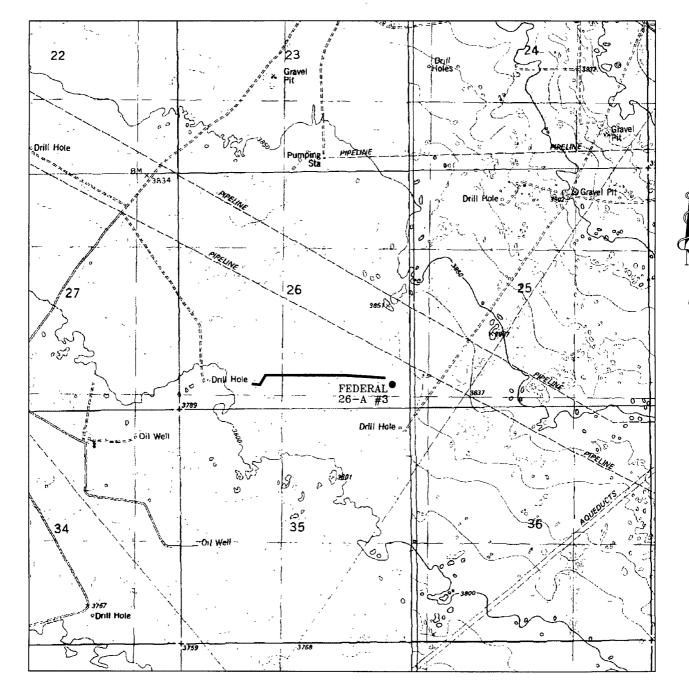
There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan. This plan shall be available at the will site. All personnel will be required to carry documentation that they have received the proper training.

II. H2S Safety Equipment and Systems.

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetration the first zone containing or reasonable expected to contain H2S.

- Well Control Equipment:
 - A. Flare line.
 - B. Choke manifold.
 - 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 (if necessary) and rotating head.
- 2. Protective equipment for essential personnel:
 - A. 5-minute escape units located in the dog house and 30-minute air units at briefing areas, as indicated on well site diagram.
- 3. H2S detection and monitoring equipment:
 - A. 3 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 during H2S flaring operations.
- 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 a readable distance from the immediate location.
- 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 when necessary will minimize hazards when penetrating H2S bearing zones.
 - B. A Mud-gas separator will be utilized.
- 6. Metallurgy:
 - A. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spools kill lines, choke manifold and lines valves shall be suitable for H2S service.
 - B. All elastomers used for packing and seals shall be H2S trimmed.
- 7. Communications:
 - A. Radio communications will be available in company vehicles and rig dog house.
- 8. Well testing:
 - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing of any known formation that contains H2S will be conducted during daylight hours.



FEDERAL 26-A #3 Located 510' FSL and 510' FEL Section 26, Township 18 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

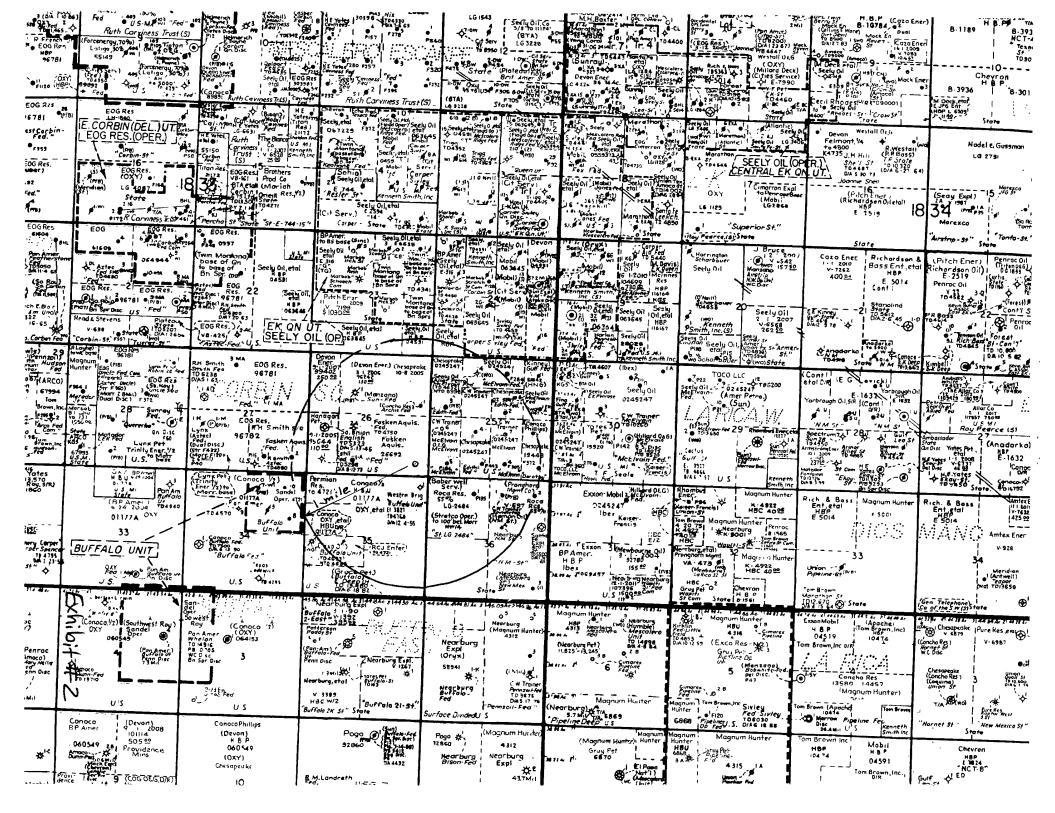
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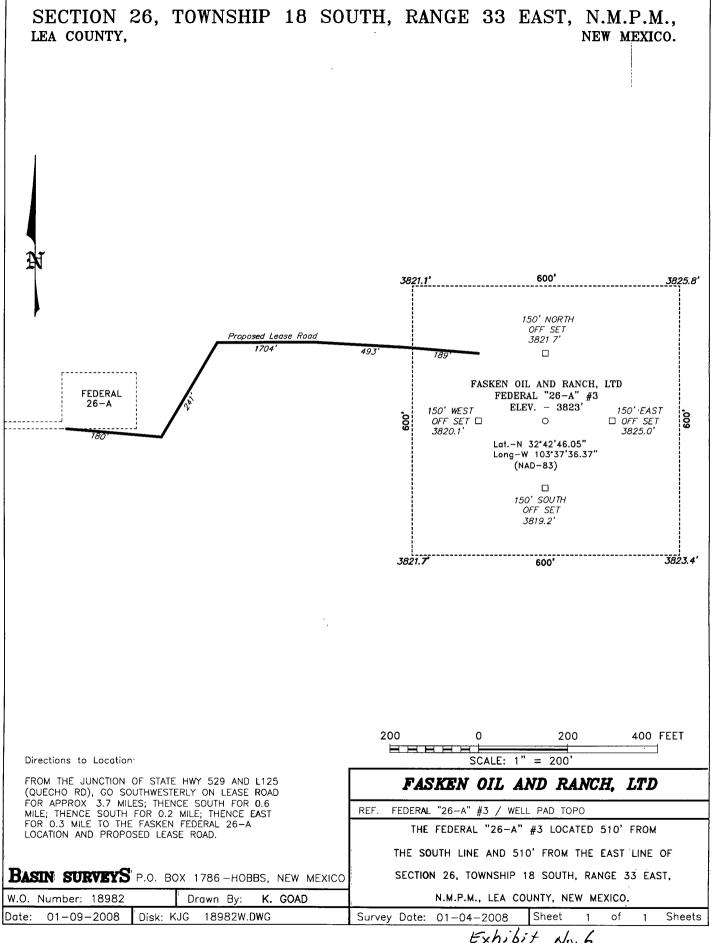


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

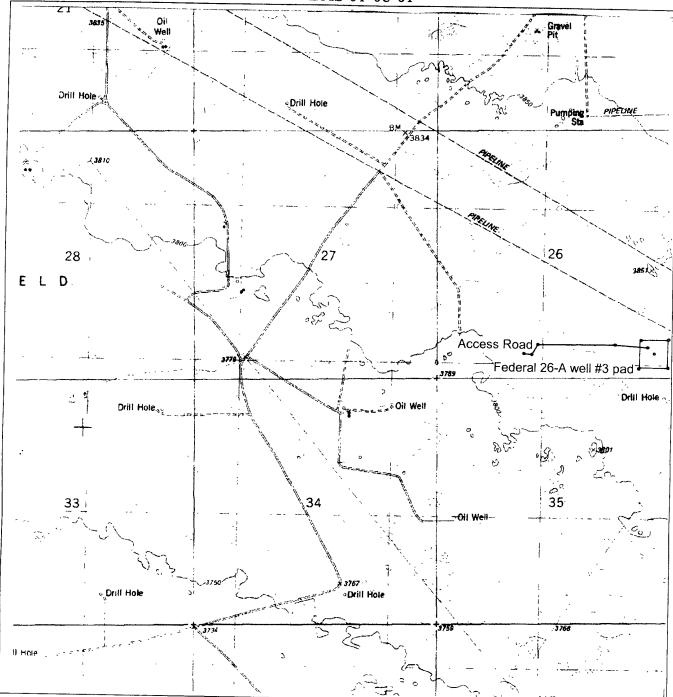
Jane 1	W O Number. KJG 18982T.DWG
-	Survey Date: 01-04-2008
	Scale 1" = 2000'
	Date. 01-08-2008

FASKEN OIL AND RANCH, LTD

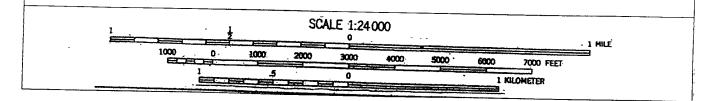








A location map for the proposed Federal 26-A well #3 pad and associated access road for Fasken Oil & Ranch. The project is located in section 26 T 18S R 33E: NMPM, Eddy County, New Mexico. Map reference: USGS 7.5' Series; Laguna Gatuna NW, NM (1984) 32103-F6



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Fasken Oil & Ranch Ltd
LEASE NO.:	NM-26692
WELL NAME & NO.:	3-Federal 26 A
SURFACE HOLE FOOTAGE:	510' FSL & 510' FEL /
BOTTOM HOLE FOOTAGE	'FL& 'FL
LOCATION:	Section 26, T. 18 S., R 33 E., NMPM
COUNTY:	Lea County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie Chicken
Construction
Notification
Topsoil
Reserve Pit
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
⊠ Drilling
Production (Post Drilling)
Well Structures & Facilities
Pipelines :
Electric Lines
Reserve Pit Closure/Interim Reclamation
Final Abandonment/Reclamation

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms. Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules. National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 15 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 300' X 210' on the East side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations. the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

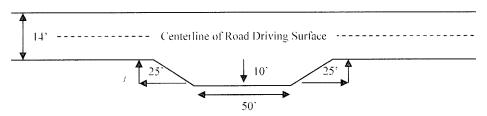
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout - Plan View

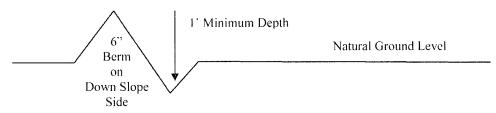


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\frac{400'}{4\%}$$
 + 1.00' = 200' lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

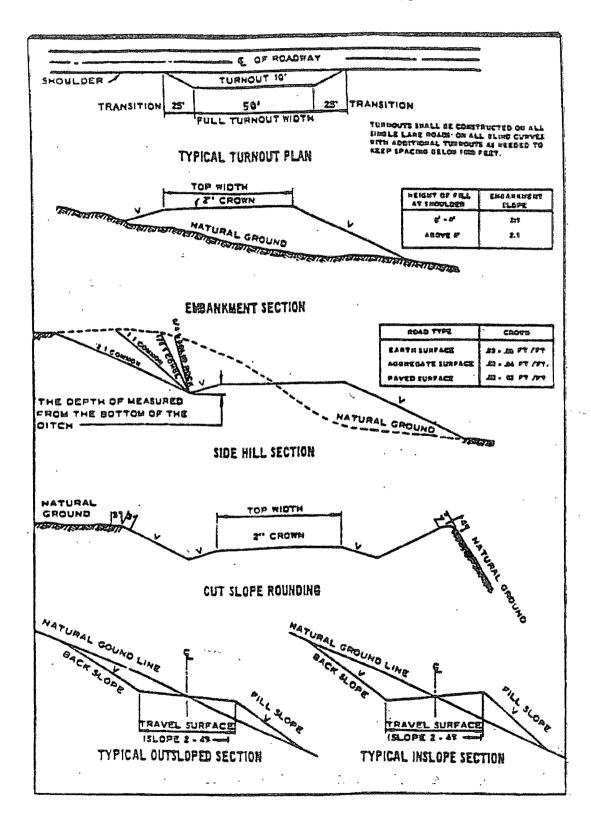
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 - Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a possible hazard. It has been reported within the Township in section 13. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table: the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Possible lost circulation in the Grayburg and San Andres formations. Possible water and brine flows in the Salada and Artesia groups. Slight chance of high pressure gas in 3rd Bone Spring formation.

Onshore Order II requires easing to be set across a competent bed and the Rustler Anhydrite is the first formation that meets that criteria.

1. The 13-3/8 inch surface casing shall be set at approximately 1500 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. Fresh water mud to be used to setting depth. Additional cement required for additional length.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength. whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing (set at approximately 3000' in Tansill formation) is:

$\overline{\nabla}$	10	to surface. I	C	4 4		D 1 . J .	. 1
\triangle	l Cement	to surface. I	i cemen	does not	circulate se	ee D.T.a-u a	above.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - Cement should tie-back at least 200 feet into previous casing string. **Operator** shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved. Note BOP/BOPE.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2

VRM Facility Requirement

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the

authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized right-of-way.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. Blading of all vegetation will be allowed. Blading is defined as the complete removal of brush and ground vegetation. Clearing of brush species will be allowed. Clearing defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface. In areas where blading and/or clearing is allowed, maximum width of these operations will not exceed 35 feet.
- 8. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

- 9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in row. piles, or berms, unless otherwise approved by the Authorized Officer. A berm will be left over the ditch line to allow for settling back to grade.
- 10. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 11. The holder will reseed. Seeding will be done according to the attached seeding requirements, using the following seed mix.

() seed mixture 1	() seed mixture 3
(X) seed mixture 2	() seed mixture 4

- 12. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

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IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	11bs/A
**Four-winged Saltbush	5lbs/A

^{*} This can be used around well pads and other areas where caliche cannot be removed.

Pounds of seed x percent purity x percent germination = pounds pure live seed

^{*}Pounds of pure live seed:

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.

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Fasken Oil and Ranch, Ltd. Exhibit #4 Scale 1" = 50'

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