OCD-ARTESIA

Form 3160 -3 (February 2005)

AUG 27 2007 OCD-ARTESIA

HIGH CAVEKARST

FORM APPROVED OMB No 1004-0137 Expires March 31, 2007

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

5	Lease Serial No. NM 0247971	
6	lf Indian, Allotee or Tribe Name	

APPLICATION FOR PERMIT TO	DRILL OF	REENTER		6 II indian, Alloted	e or inde	Name	
la. Type of work			7 If Unit or CA Agi NMNM8851		lame and No		
b. Type of Well Oil Well X Gas Well Other X Single Zone Multiple Zone			8 Lease Name and Skelly F		al No.	4	
2 Name of Operator			 	9 API Well No			~
Fasken Oil and Ranch, Ltd. 3a Address 303 West Wall, Suite 1800	3b Phone No.	. (include area code)		10 Field and Pool, or		3 576	<u>ر</u>
Midland, TX 79701	1	687–1777		Cemetary	•	-	
4. Location of Well (Report location clearly and in accordance with a				11. Sec , T R M or I	 		
At surface 1350 FNL, 1135 FEL At proposed prod zone				Sec. 9,	T21S	, R24E	
4 Distance in miles and direction from nearest town or post office*				12 County or Parish		13 State	_
18 miles NW of Carlsbad, NM			· · · · · · · · · · · · · · · · · · ·	Eddy		NM	
5 Distance from proposed* location to nearest	16 No. of a	cres in lease	17 Spacin	g Unit dedicated to this	well		
property or lease line, ft (Also to nearest drig unit line, if any) 1135	440		320	acres, N/2 of Section		ection	9
8 Distance from proposed location*	19 Proposed	d Depth	20 BLM/I	M/BIA Bond No. on file			
to nearest well, drilling, completed, applied for, on this lease, ft	10,2	200'	NM 2	NM 2729 Statewide			
Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxii	nate date work will sta	c will start* 23 Estimated duration				
4100' GL	Sept	ember 1, 20	007	45 days			
	24. Attac	chments					
he following, completed in accordance with the requirements of Onsh	ore Oil and Gas	Order No 1, must be a	ttached to th	is form			_
Well plat certified by a registered surveyor A Drilling Plan		Bond to cover t Item 20 above)	he operatio	ns unless covered by a	n existing	bond on file (see
3 A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office)	n Lands, the	5 Operator certific 6 Such other site BLM.		ormation and/or plans a	s may be	required by th	e
25 Signature Carlin		(Printed/Typed) .mmy D. Car	lile		Date 7 / 1	8/07	
Regulatory Affairs Coordinato	r						
Approved by (Signature)		(Printed/Typed) TODhEn	10	OF EV	Date	AUG 2	2 20
FIELD MANAGER	Office	ĆARLS	BAD	FIELD OF	FICE		
application approval does not warrant or certify that the applicant hol	lds legal or equi	table title to those righ		•			
onduct operations thereon. Conditions of approval, if any, are attached.			APF	PROVAL FOR	TWO	YEAR	<u>s</u> _
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false, fictitious or fraudulent statements or representations as	crime for any post to any matter w	erson knowingly and vithin its jurisdiction	willfully to n	nake to any department	or agency	of the United	1

*(Instructions on page 2)

Carlsbad Controlled Water Basin

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

SEE ATTACHED FOR CONDITIONS OF APPROVAL APPROVAL SUBJECT TO **GENERAL REQUIREMENTS** AND SPECIAL STIPULATIONS **ATTACHED**

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

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 it to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505 27 2007 OCD-ARTESIA

☐ AMENDED REPORT

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Nam	ie .
	74640	Cemetary (Morrow)	
Property Code		Property Name	Well Number
36710	SKE	4	
OGRID No.		Elevation	
151416	FASKEN O	4100'	

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	9	21 S	24 E		1350	NORTH	1135	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 o	r Infill C	onsolidation (Code Or	der No.		<u> </u>		
320		<u> </u>							

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

		DARD UNIT HAS BEEN APPROVED BY THE 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 wokuntary pooling agreement or a compulsory pooling agreement or a compulsory pooling order heretofore entered by the division. Lat - N32*29'52.5" Long - W104'29'57.6 NMSPCE-N 544917.4 NMSPCE-N 544917.4 NMSPCE-N 544917.4 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. MAX 2007
,	 	Date Survey Professional Survey 1 Certificate No. Gary L. Jones 7977 Basin survey S

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Fasken Oil and Ranch, Ltd. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the land or portion thereof as described below:

Federal Lease No.

Land Description

-NM-0225234A

Section 9, T21S, R24E Eddy County, New Mexico

NM 0247971 CR 7/10/07

Formation:

All Depths

Bond Coverage:

\$25,000

BLM Bond File:

NM 2729

Mark B. Merritt

Oil and Gas Manager

APPLICATION FOR PERMIT TO DRILL FASKEN OIL AND RANCH, LTD. SKELLY FEDERAL NO. 4 1350' FNL AND 1135' FEL SEC. 9. T21S. R24E EDDY COUNTY, NM

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 4100'.
- 2. Estimate tops of geologic markers are as follows:

San Andres	750'
Glorietta	2450'
Bone Springs	3400'
3 rd Bone Spring Sand	6400'
Wolfcamp	6500'
Cisco	7300'
Canyon	7600'
Strawn	8100'
Atoka	8900'
Morrow	9300'

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

Cisco	7400'	Oil/Gas
Strawn	8100'	Gas
Atoka	8900'	Gas
Morrow	9300'	Gas

- * Groundwater to be protected by 13-3/8" surface casing with cement circulated to the surface.
- ** Potentially productive horizons to be protected by 4-1/2" production casing with cement tied back to 6000'.
- 4. Proposed Casing Program: 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	Size	Weight	Grade	Thread
175	Surface	400'	13-3/8"	48.00#	H-40	ST&C
124	Intermediate	3,000'	9-5/8"	36.00#	J-55	ST&C
83/4	Production	10,200'	4-1/2"	11.60#	N -80	LT&C
eur oper	Tubing	9,750°	2-3/8"	4.70#	N-80	EUE 8rd

5. Proposed Cementing Program:

Cement 13-3/8" casing with 400 sx Class "C" cement with 2% CaCl2 (s.w. 14.8 ppg, yield 1.32 cuft/sx). Circulate cement to surface

Cement 9-5/8" casing with 600 sx Class "C" with 4% gel and 2% $CaCl_2$ (s.w. 13.51 ppg, yield 1.74 ft³/sx) plus 200 sx Class "C" with 2% $CaCl_2$ (s.w. 14.8 ppg, yield 1.34 ft³/sx). Circulate cement to surface.

Cement 4-1/2" production casing (resin coated and centralized through pay zones) with 1100 sx Super "C" Modified (CSE) with 5% Salt, 0.6% FL-25 and 0.6% FL-52 (s.w. 13.2 ppg, yield 1.58 ft³/sx). Estimate TOC at 6000'

Pressure Control Equipment: See exhibit #5. Operator request variance and proposes to pressure test BOP stack with rig pump to 1500 psig prior to drilling out the 9-5/8" casing shoe. BOP hydrotest will be conducted on first bit trip or prior to drilling the Wolfcamp formation. Hydrotest will included testing the rams, choke line, choke manifold, upper and lower kelly valves and floor safety valves to 5000 psig high and 250 psig low. The annular preventor will be hydrotested to 2500 psig high and 250 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>
0-400'	Fresh Water	8.5	40	NC
400'-3000'	Fresh Water	8.5	28	N C.
3000'-5000'	Fresh Water	8.5	28	N.C.
5000'-8400'	Cut Brine	9.0	29	N.C.
8400'-10200'	Gel/Starch/PAC	9.5-10.0	36	10 cc

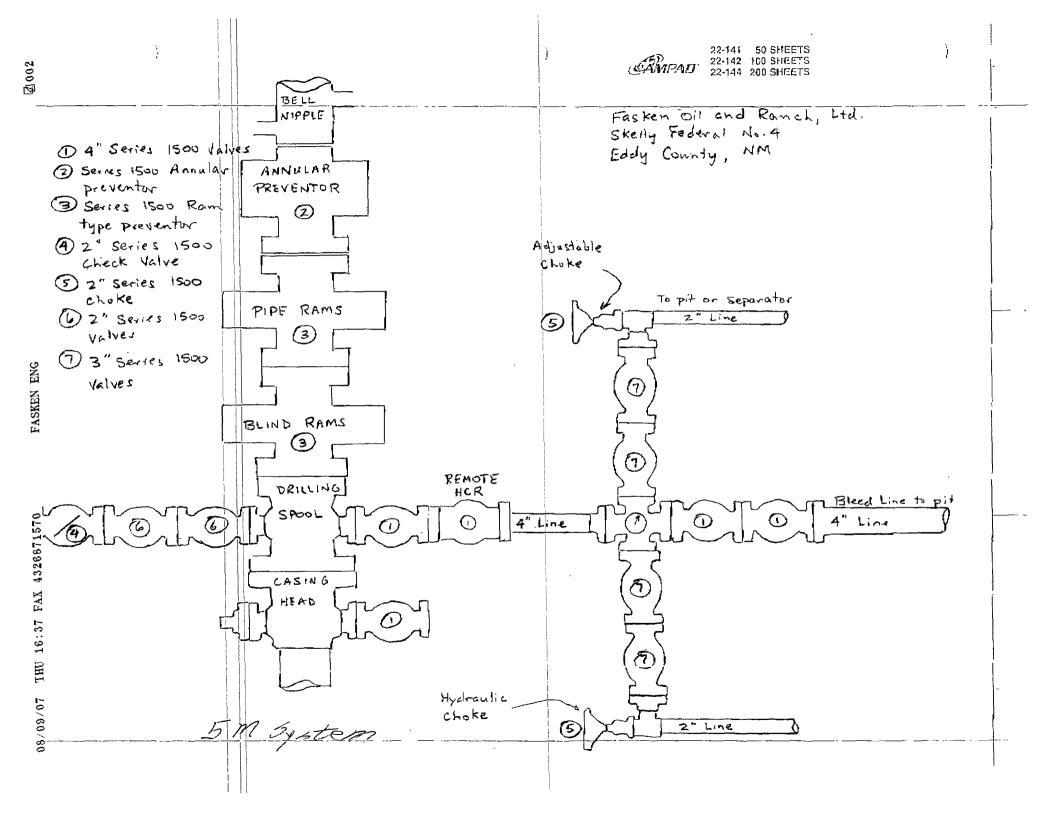
8. Auxiliary Equipment: Upper Kelly Cock, Full Opening Stabbing Valve, PVT.

9. Testing Logging and Coring Programs

- DST's DST any mudlog shows. DST's will comply with the "Drill Stem Testing Requirements" of Onshore Oil and Gas Order No. 2.
- Logging: 2-man Mudlogging unit from 5000' to T.D.
- Electric Logs: Platform Express with CNL-LDT, DLL-MSFL, GR and Caliper.
- Coring: None anticipated
- 10. <u>Abnormal Pressure, Temperatures or Other Hazards</u>: Lost circulation is anticipated in the surface. Maximum bottomhole pressure is estimated to be 4875 psig.
- 11. Anticipated Starting Date: September 1, 2007.

See A

Lee Ry



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

EXHIBIT #3
FASKEN OIL AND RANCH, LTD.
SKELLY FEDERAL NO. 4
1350' FNL AND 1135' FEL
SEC.9, T21S, R24E
EDDY COUNTY, NM

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.

- 1. 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.

SURFACE USE PLAN

Fasken Oil and Ranch, Ltd. Skelly Federal No. 4 1350' FNL & 1135' FEL Sec. 9, T21S, R24E Eddy County, New Mexico

- 1. EXISTING ROADS Area map, Exhibit #1, is a reproduction of the U.S.G.S., Foster Ranch N.M. Quadrangle. Existing and proposed roads are shown on the exhibit All roads shall be maintained in a condition equal to that which existed prior to start of construction.
 - A. Exhibit #1 shows the proposed development well site as staked.
 - B. From the junction of the County Rd. 28 (White Pine) & County Rd. 401(Marathon Rd) go North on County Rd 28 for 1.3 miles, turn East on lease road for 0.9 miles to a Y in road. Turn left heading East for 0.7 miles with road winding Northwest for 1.9 miles to a T in road. Go North 2.9 miles to Skelly Federal No.2 location and follow new lease road to Skelly Federal No. 4.
- 2. PLANNED ACCESS ROADS AND PIPELINE 2545' of new access road will be constructed. If the well is successful, we will bury a 4", 1000# working pressure pipeline along the edge of the road to connect to an existing pipeline.
- LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS.
 - A. Water wells Richard Howell wind mill water well in Section 10.
 - B. Disposal wells None Known.
 - C. Drilling wells None known.
 - D. Producing wells As shown on Exhibit #2

Fasken Oil and Ranch, Ltd.:

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch, Ltd.:

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch, Ltd.

Fasken Oil and Ranch. Ltd.

Fasken Oil and Ranch. Ltd.

Yates Petroleum Corp.:

Ross Federal No. 2

Ross Federal No. 2

Ross Federal No. 2

Ross Federal No. 4

Ross Federal No. 1

Pegasus 10 No. 1

Quandry Federal No. 1

E. Abandoned wells - As shown on Exhibit #2.

Fasken Oil and Ranch, Ltd.: Skelly Federal No. 3
Mobil Skelly Federal Unit No. 1-V

- 4. If, upon completion, the well is a producer Fasken Oil and Ranch, Ltd. will furnish maps or plats showing "On Well Pad Facilities" and "Off Well Pad Facilities" (if needed) on a Sundry Notice before construction of these facilities starts.
- 5 LOCATION AND TYPE OF WATER SUPPLY

Fresh and Brine water will be purchased locally from a private source and trucked over the access roads.

6. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill sites excavations or from a local source. These materials will be transported over the access roads as shown on Exhibit #1.

METHOD FOR HANDLING WASTE DISPOSAL

- A. 1. Drill cuttings will be disposed of in the reserve pit
 - 2. Trash, waste paper, and garbage will be contained in a trash trailer and disposed of in an approved public landfill.
 - 3. All mud materials including salts will be picked up by the mud supplier and transported back to their warehouse facilities.
 - Sewage from trailer houses will drain into hole with a minimum depth of 10'. A "Porta John" will be provided for the rig crews. This will be properly maintained and removed after drilling operations are completed.
 - 5. Chemicals remaining after completion of the well will be stored in the manufacturer containers and picked up by the supplier.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time, they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during the testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

9. WELL SITE LAYOUT

- A. Exhibit #3 is the H₂S Drilling Operations Plan.
- B. Exhibit #4 (Scale 1" = 50') shows the proposed well site layout.
- C. This exhibit indicates the proposed location of reserve pit, trash trailer and living facilities.
- D. Mud pits in the active circulation system will be steel pits.
- E. The reserve pit will be lined with a polyethylene liner. The pit liner will be a minimum of 2' over the reserve pit walls where the liner will be anchored down.
- F. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion operations. The fourth side will be fenced after drilling has been completed. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location pad and surface facilities. After the area has been shaped and contoured, top soil from the spoil pile (if any) will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards

If the well is a dry hole, the pad and road area will be recontoured to match the existing terrain Topsoil will be spread to the extent possible Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

11. OTHER INFORMATION

- A. The topography is of hilly terrain with vegetation of sagebrush and native grasses. The soils are silty and very shallow.
- B. The surface is federally owned and used for livestock grazing. The surface is leased by Richard Howell, P.O. Box 94, Lakewood, NM 88256
- C. An archeological study over this location, road and proposed pipeline has been prepared and is attached herewith.
- D. There are no buildings of any kind in the area
- 12. OPERATOR'S REPRESENTATIVE Field representative for contact regarding compliance with the Surface Use Plan is:

Before, during & after Construction:

Tommy E. Taylor 303 W. Wall Ave., Suite 1800 Midland, Texas 79701-5116 (432) 687-1777

TET (SkellyFed4apd doc)

Fasken Oil and Ranch, Ltd.

Skelly Federal No. 4

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 11th day of July, 2007.

Signature

Name: Tommy Taylor

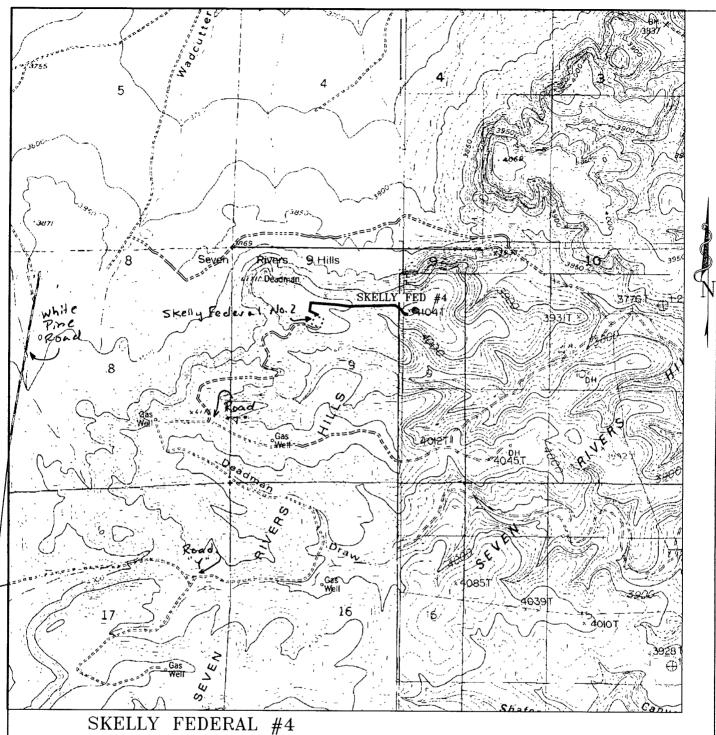
Position: Drilling Manager

Address: 303 West Wall, Suite 1800

Midland, TX 79701

Telephone: (432) 687-1777

Email: tommyt@forl.com



Located 1350' FNL and 1135' FEL Section 9, Township 21 South, Range 24 East,

N.M.P.M., Eddy County, New Mexico.

Exhibit #1



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

W.O Number.	18061T
Survey Date	05-03-2007
Scale: 1" = 2	000'
Date: 05-04-	-2007

FASKEN OIL AND RANCH, LTD

Conditions of Approval Cave and Karst

EA#: NM-520-07-1017 Lease #: NM-0247971 Fasken Oil & Ranch, Ltd. Skelly Fed. #4

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Closed Mud System with Buried Cuttings Pit:

All fluids will be in steel tanks and hauled off. A 70X100 foot cuttings pit will be utilized for this location. The cuttings pit will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The pit liner will then be folded over the cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Cementing:

All casing strings will be cemented to the surface.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cavebearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:

Any blasting will be a phased and time delayed.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Fasken Oil and Ranch, LTD

Well Name & No. 4-Skelly Federal

Location: 1350' FNL, 1135' FEL, Sec. 9, T-21-S, R-24-E, Eddy County, NM

Lease: NM 0247971

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 2 hours in advance for a representative to witness:

- 1. Spudding well
- 2. Setting and/or Cementing of all casing strings
- 3. BOPE tests
 - Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822.
- B. Although Hydrogen Sulfide has not been reported in this section, it has been reported in Sections 27 and 29 measuring 100 ppm in STVs and 8000 ppm in the gas stream. Hydrogen Sulfide plan attached to APD.
- C. 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.
- **D.** When floor controls are required, (3M or Greater), 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.

II. CASING:

A. The <u>13-3/8</u> inch surface casing shall be set at <u>approximately 400</u> feet and cemented to the surface.

- 1. 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.
- 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 18 hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- 3. 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.
- 4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the San Andres and Wolfcamp formations.

Possible high pressure gas bursts in the Wolfcamp and over pressured Pennsylvanian section.

High cave/karst area.

- B. The minimum required fill of cement behind the <u>9-5/8</u> inch intermediate casing is for cement to come to surface. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the <u>4-1/2</u> inch production casing is for cement to come to surface.
- **D.** 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.

III. PRESSURE CONTROL:

- A. 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.
- **B.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** PSI.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the <u>9-5/8</u>" intermediate casing shoe shall be 5000 (5M) PSI.
- **D.** The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - 1. The tests shall be done by an independent service company.
 - 2. The results of the test shall be reported to the appropriate BLM office.
 - 3. 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.
 - 4. 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.
 - 5. BOP/BOPE to be tested by an independent service company within 500 feet of the top of the Wolfcamp if the time between setting the intermediate casing and this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
 - **6.** A variance to test the surface casing and BOP/BOPE to the reduced pressure of <u>1000</u> psi with the rig pumps is approved.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation and shall be used until production casing is run and cemented.

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well

V. Drill Stem Test

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

Engineer on call phone (after hours): Carlsbad - 505-706-2779

WWI 080207