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

# State of New Mexico Energy Minerals and Natural Resources

May 27, 2004

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit to appropriate District Office

☐ AMENDED REPORT

Form C-101

1220 S. St. Fr					Santa Fe, I						
			Operator Name	TO DRILL and Address	L, RE-ENT	ER, DEEP	EN, PLUGE 1514		OR ADI RID Number	D A ZONE	
			nch, Ltd.	W: 11 1	mv 7070	1		API Number			
	est Wa ertv Code	11, Su	ite 1800	Midland,	TX 7970 Property Name	1	30 - 2	775°	· · · · · · · · · · · · · · · · · · ·	il No.	
365				Qua		116"				1	
Lea;P	enn (G	as) (	Proposed Pool 1				16	Proposed Po	ol 2		
				<sup>7</sup> S	Surface Loca	ıtion					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South lin		East	/West line	County	
G	16	20S	34E		1980	North	1420	Ea	.st	Lea	
			<sup>8</sup> Propo	sed Bottom He	ole Location If	Different From	m Surface				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the			Feet from the East/We		County	
	L			Additio	onal Well Inf	ormation		1			
11 Work	Type Code		12 Well Type Code		13 Cable/Rotary		14 Lease Type Coo	le _	15 Grou	und Level Elevation	
N			G		Rotary					3637'	
16 N	lultiple		17 Proposed Depth		<sup>18</sup> Formation Morrow			<sup>19</sup> Contractor unknown		<sup>20</sup> Spud Date 8/1/07	
Depth to Grou		160'	13,700	Distance from n	tance from nearest fresh water well			Distance from nearest surface water greater than 1 mile			
Pit: Liner:	Synthetic 2		thick Clay	Pit Volume:	ter than bbls	1 mile Drilling Method:	<u> </u>	grea	rer tr	lan i milie	
	i-Loop Syste			24000	— Fr	_	ine Diesel/Oil-l	pased G	as/Air 🔲		
			21	Proposed (	Casing and C						
										n :	
Hole S			ing Size	Casing weight/foot		Setting Depth  /600		Sacks of Cement  1450		Estimated TOC	
17 1/	_	13 3/8"		48# /				1750		surface	
12 1/	•	9 5/8" 5 1/2"		36/40# 17/20#				2200		surface 4800'	
8 3/4" 5 1/2"		17720#	1772011					4000			
22 Describe th	ne proposed	program. If	this application is t	o DEEPEN or PI	LUG BACK, give	the data on the p	resent productive z	one and pro	oosed new r	productive zone.	
			am, if any. Use ad				•				
Faske	n Oil	and Rai	nch, Ltd.	proposes	to drill	the Qua:	il State "	'16" No	. 1 to	test the	
Morro	w form	ation.	Please se	e the at	tached fo	r procedu	res, BOP	schema	tics,	plats, and	
H2S C	onting	ency P	lan.							0.15.30	
m1 -	6		4 - 41 - C4	of N	arr Marri aa				/	22014151677	
The s	urrace	owner	is the St	ate of N	ew Mexico	•			\chi_{\text{\tin}\exiting{\text{\texitin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\tint{\text{\text{\text{\text{\text{\texi}\tint{\text{\texi}\text{\t		
	4, 4,7	• •	¥. Vitaliana kanasa						/6	A Style &	
	41.								789	0 600	
73							-		10	- 460 1 V	
<sup>23</sup> 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						OII	L CONSERV	/ A TION	3.7 50	TON GOAL CON	
constructed :	according t	o NMOCD	guidelin <u>es XX</u> a g					ATION		IOIN	
(attached) alternative OCD-approved plan.						oved by:	1-1	1	•	Community.	
Signature:	Hlu	ug )	(alle	·			rus [()	elles	MA-TE	AL MANAGEL	
Printed name: Jimmy D. Carlile					Title	OCT	ASTRICT SUP	FKAIZOK	AGEMEN	A BU LAB OF A MARCH SHAPE	
Title:			y Affairs	Coordina	tor	oval Date 1	2 0 2007	Expiration	on Date:	-	
E-mail Addre	ss: iim	myc@fo:	r1.com					1			
D .		3/07		687-1777		litiana af A 1	Attachad				



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

# 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

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

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

160

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

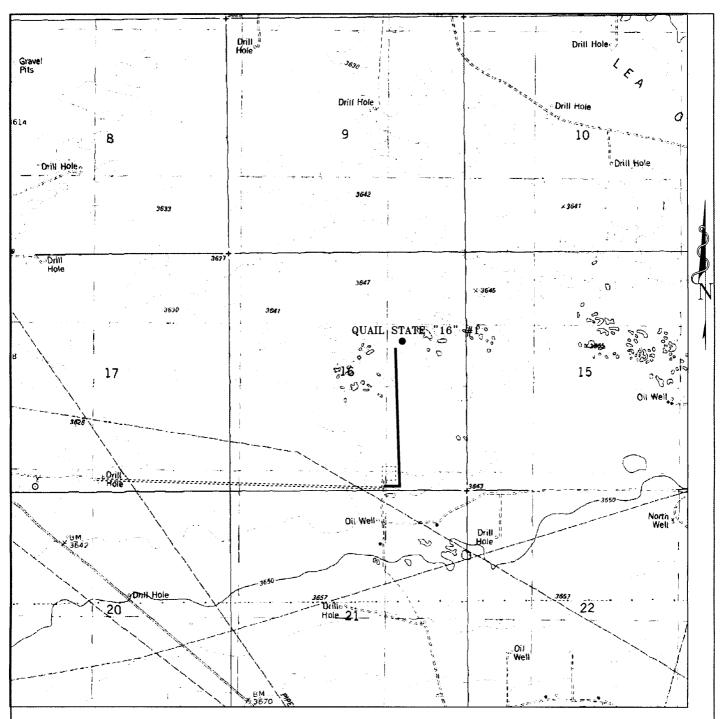
☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number				Pool Code	~			Pool Name		
30-025-3844D			8	30040		Lea; Penn (Gas)				
Property Code 36547			QUAIL STATE (16")				Well Number			
ogrid no. 151416			Operator Name FASKEN OIL AND RANCH, LTD				Elevation 3637'			
Surface Location										
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	m the	North/South line	Feet from the	East/West line	County
G	16	20 S	34 E		19	80	NORTH	1420	EAST	LEA
Bottom Hole Location If Different From Surface										
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	m the	North/South line	Feet from the	East/West line	County
Dedicated Acres, 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

DARD CHI HAS DEEN ATTROVED DI II.	
Lat - N32*34'29.8" Long - W103*33'40.6" NMSPCE - N 573755.1 E 779170.7 (NAD-83)	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.  Level 6/15/0 Signature Date  Jimmy D. Carlile  Reculatory 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.  JUNE 07, 2007  Date Signature in greyor
	Certificate Nor. Gary L. Jones 7977  BASIN SURVEYS



QUAIL STATE "16" #1 Located 1980' FNL and 1420' FEL Section 16, Township 20 South, Range 34 East, N.M.P.M., Lea County, New Mexico.



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: JMS 18233T
Survey Date: 06-15-2007
Scale: 1" = 2000'
Date: 06-18-2007

FASKEN OIL AND RANCH, LTD

#### Recommended Drilling and Completion Procedure

Fasken Oil and Ranch, Ltd.------Quail State "16" No. 1------ Lea (Penn) Field
1980' FNL & 1420' FEL
Lea County, New Mexico
Sec. 16, T 20S, R 34E

- 1. Set 20" conductor at 40'. Dig rat hole and mouse hole.
- 2. Move in rotary tools.
- 3. Drill 17-1/2" hole to 1600' with spud mud. Run a packed hole drilling assembly.
- 4. Set 13-3/8" casing at 1600'. Cement to surface with estimated 950 sx Class "C" with 4% gel and 2% CaCl<sub>2</sub> (s.w. 13.5 ppg, yield 1.74 ft<sup>3</sup>/sx) plus 500 sx Class "C" with 2% CaCl<sub>2</sub> (s.w. 14.8 ppg, yield 1.32 ft<sup>3</sup>/sx). Centralize casing at middle of shoe joint and every 4<sup>th</sup> joint to surface.
- 5. WOC 6 hrs. Install 13-5/8" 3000# bradenhead and BOP stack. Pressure test BOP and casing to 750# before drilling out shoe.
- 6. Drill 12-1/4" hole to 5200'. Drill with 10 ppg brine water to 5200'. Control seepage with paper. RU H<sub>2</sub>S safety equipment package at 4000'.
- 7. Set 9-5/8" casing @ 5200'. Centralize casing at middle of shoe joint, top of 2<sup>nd</sup> joint, top of 6<sup>th</sup> joint and top of 10<sup>th</sup> joint.
- 8. Cement casing with 1450 sx BJ Lite with 15# salt +  $\frac{1}{4}$ # celloflake (s.w. 12.6 ppg, yield 2.0 ft<sup>3</sup>/sx) + 300 sx Class "C" (s.w. 14.8 ppg, yield 1.32 ft<sup>3</sup>/sx).
- 9. Set slips, cut-off casing, install secondary seal unit and NU 13-5/8" 3000# x 11" 5000# intermediate spool. Install hydraulic Super choke. NU BOP and hydrotest BOP, choke manifold, and floor safety valves to 5000 psi, hydril to 2500 psi, and 200' of 9-5/8" casing to 2800 psi. RU mud gas separator complete with flare line and ignitor.
- 10. Drill 8-3/4" hole to total depth of 13,700' with fresh water. Displace hole with 10# brine water at 10,000' and mud up by 12,100' with XCD and Pac with properties of 10.0 ppg, 36-38 sec. viscosity and 8-10 cc water loss. Increase viscosity as necessary to maintain hole. DST all shows.
- 11. Run open hole logs; CNL-LDT, DLL-MSFL, and Full Wave Sonic. Side wall coring may be performed in selected intervals as determined by log shows.
- Set 5-1/2" casing at TD (Resin coat and centralize through all prospective pay zones). Cement casing in two stages with DV tool at approximately 9,000' as follows;

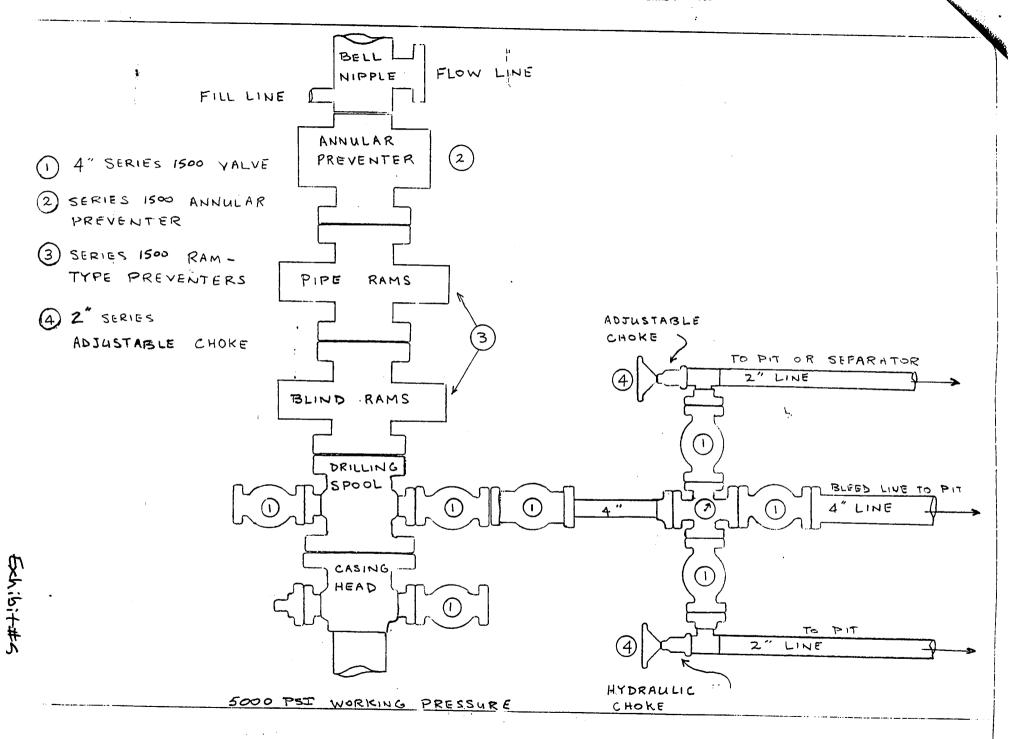
<u>First Stage:</u> 10 bfw, 500 gallons Mud Clean II, 10 bfw, 1100 sx Super "C" Modified (15#/sx Poz A and 11 #/sx CSE), 5% salt, 1.2% FL-25 and 0.2% CD-32 (s.w. 14.0 ppg, yield 1.39 ft³/sx). Batch mix slurry. Open DV tool and circulate for 6 hrs.

Second Stage: 900 sx BJ Lite "C" with 1/4# celloflake, 6% gel, 0.4% FL-52 and 1/4# Celloflake (s.w. 12.4, yield 2.01 ft<sup>3</sup>/sx) and 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 @ 4800'.

- 12. Set slips, cut-off casing, install secondary seal unit and NU 5000# WP tubinghead and flowtree.
- 13. Move out rotary tools.
- 14. Level location and set mast anchors.
- 15. Complete well as per completion procedure.

Mti/tet

(Quailstate16-1drlgproc.doc)



# FASKEN OIL AND RANCH, LTD.

303 W. WALL AVE.

SUITE 1800

MIDLAND, TEXAS 79701-5116

# CONTINGENCY PLAN FOR HYDROGEN SULFIDE DISCHARGE

DRILLING OPERATIONS

# CONTINGENCY PLAN FOR HYDROGEN SULFIDE DISCHARGE DRILLING OPERATIONS

I. HYDROGEN SULFIDE PHYSICAL PROPERTIES AND TOXICITY - Hydrogen sulfide is extremely toxic. The acceptable concentration for eight-hour exposure is 20 ppm, which is .002% by volume. Hydrogen sulfide is heavier than air (specific gravity - 1.192) and is colorless. It forms an explosive mixture with air between 4.3 and 46.0 volume percent. Toxicity data for hydrogen sulfide and various gasses are compared in the table below.

Common Name	Chemical Formula	Sp. Gravity (Air =1)	Threshold Limit	Hazardous Limit	Lethal Conc.
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm	300 ppm
Hydrogen Sulfide	H₂S	1.18	10 ppm * 20 ppm **	250 ppm/hr	600 ppm
Sulfur Dioxide	SO₂	2.21	5 ppm		1000 ppm
Chlorine	$Cl_2$	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	СО	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO <sub>2</sub>	1.52	5000 ppm	5%	10%
Methane	CH₄	0.55	9%	Combustabe above 5% in air	

<sup>\*</sup>Threshold Limit - concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects, 10 ppm = 1972 ACGIH concentration (American Conference of Governmental Industrial Hygienist).

<sup>\*\*</sup>Threshold Limit = 20 ppm - 1966 ANSI acceptable ceiling concentration for eight-hour exposure (based on a 40-hour week) per OSHA Rules and Regulations (Federal Register, Vol. 37, #202, Part II, dated October 18, 1972.

II. PHYSICAL EFFECTS OF HYDROGEN SULFIDE - The physiological effects of hydrogen sulfide are summarized in the table below.

Percent Vol.	Concentration ppm	Physical Effects
0.001	10	obvious and unpleasant odor.
0.002	20	Safe for 8-hour exposure.
0.01	100	Kills smell in 3 to 15 minutes, may sting eyes and throat.
0.02	200	Kills smell shortly, stings eyes and throat.
0.05	500	Dizziness, breathing ceases in a few minutes, needs prompt artificial resuscitation.
0.07	700	Unconscious quickly, death will result if not rescued promptly.
0.10	1000	Unconscious at once, followed by death within minutes.

- III. ACCIDENTAL RELEASE OF HYDROGEN SULFIDE The possible release of hydrogen sulfide gas could result from leakage at either wellhead, flow lines, separators or drill string at this drilling location.
  - A. In the event of an accidental release, the tool pusher, supervisor or agent of the operator in the vicinity at the time of the discharge will be in charge of all activities on the ground and shall be responsible for the following.
    - 1. Notify all personnel, Company or outside, that are in the area to evacuate as soon as possible. This includes drilling rig crews, roustabout gangs, supervisory personnel, maintenance personnel, sales representatives, farm or ranch hands, visitors and all others that may be in the vicinity.
    - 2. Notify the County Sheriff's office, and the Department of Public Safety, and request their assistance to provide road blocks and direct traffic away from the drilling location. They should also be asked to assist in the evacuation of residents, if any, in affected area.
    - Alert local Hospital and Fire Department in the event that medical services or ambulance assistance is needed.

- 4. Call the Operations Manager in the Midland Office and advise him of the nature and extent of the emergency situation.
- B. Operations Manager or his assistant will notify the appropriate state and federal agencies that the contingency plan has been activated and what level and type of reaction has already been initiated.
- C. Fasken's Senior Representative or employee on the scene will be in charge and shall initiate measures necessary to bring the gas flow under control securing whatever additional personnel and equipment are necessary to control the flow in the shortest time thereby reducing potential exposure of the general public to hydrogen sulfide.
- IV. **WEATHER CONDITIONS** During adverse weather conditions such as drizzle, rain, fog, calm winds, and snow, hydrogen sulfide collects in low lying areas. These areas should be avoided, any personnel in such areas should be evacuated, and law enforcement personnel should be requested to keep people and traffic from entering. Should moderate, undirectional winds be blowing hydrogen sulfide from the source of the discharge toward a populated area, residents and other personnel should be evacuated by law enforcement personnel who should then maintain an exclusion perimeter to avoid people from reentering the area until the emergency is over.
- V. TERMINATION OF EMERGENCY AND FOLLOW-UP PROCEDURES Fasken's Senior Representative or employee on the scene, with the cooperation of the Senior Law Enforcement Officer in whose jurisdiction the emergency occurred, will declare the emergency terminated when there is no further danger to oilfield personnel or general public. This will occur only after a sufficient number of gas measurements in the vicinity have been made by a qualified technician showing that hydrogen sulfide concentration is below the 20 ppm threshold. In addition, the Operator's Senior Representative or employee will perform the following duties connected with the emergency:
  - A. Notify all cooperating law enforcement agencies and emergency medial services that the emergency has been terminated.
  - B. Notify all evacuees that they may return safely to their residences or job sites.
  - C. Make an estimate of damages and/or expenses incurred in the control of the emergency, the evacuation of any persons and the destruction of property, if any, including domestic animals and livestock. He is to make an itemized list of all such damages and/or expenses along with their addresses, and any other specific information pertinent to the situation. He is to deliver this list to the Operations Manager as soon as possible.
  - D. <u>UNDER NO CIRCUMSTANCE</u> are damage estimates, names of affected personnel, if any, or any other information pertaining to the emergency to be given to the press. Public information regarding the emergency will be issued by headquarters office in Midland,
- VI. Copies of the Contingency Plan are available in Fasken's office in Midland, Texas.
- VII. This plan is subject to approval of the state and federal agencies and shall be revised as required.