

District I  
1625 N French Dr, Hobbs, NM 88240

District II  
1301 W Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101  
June 16, 2008

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

Submit to appropriate District Office

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address Fasken Oil and Ranch, Ltd. 303 W. Wall St., Ste. 1800, Midland, TX 79701		<sup>2</sup> OGRID Number 151416
<sup>3</sup> Property Code 37916	<sup>4</sup> Property Name Meadors "25"	<sup>5</sup> API Number 30-025-39639
<sup>6</sup> Well No 1		<sup>7</sup> Proposed Pool 1 Flying M; Atoka, South (Gas)
<sup>8</sup> Proposed Pool 2		

<sup>7</sup> Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	9S	32E		1980'	North	1980'	West	Lea

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code 8P	<sup>15</sup> Ground Level Elevation 4327' GR
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 11,200'	<sup>18</sup> Formation Atoka	<sup>19</sup> Contractor N/A	<sup>20</sup> Spud Date 2-1-2010

<sup>21</sup> Proposed Casing and Cement Program

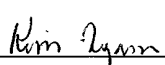

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48#	400'	450 sx CC	Surface
12 1/4"	9 5/8"	36#	3700'	1200 sx Lite C	Surface
				+ 250 sx C	
8 3/4"	5 1/2"	17#	10,900'	950 sx Lite H	3500'
				+ 450 sx Super C	

<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.

Fasken Oil and Ranch, Ltd. proposes to drill and complete the Meadors "25" #1 in the Flying M; Atoka, South (Gas) pool as a gas well.

Please see attached for the procedure, plat, BOP schematic, H2S Contingency plan, and a contact list with emergency phone numbers.

**Permit Expires 2 Years From Approval  
Date Unless Drilling Underway**

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief		OIL CONSERVATION DIVISION	
Signature 		Approved by 	
Printed name Kim Tyson		Title PETROLEUM ENGINEER	
Title Regulatory Analyst		Approval Date JAN 21 2010	Expiration Date
E-mail Address kimt@forl.com			
Date 11-6-09	Phone 432-687-1777	Conditions of Approval Attached <input type="checkbox"/>	

RECEIVED

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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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-39639</b>	Pool Code 76720	Pool Name Flying M; Atoka, South (Gas)
Property Code <b>37916</b>	Property Name MEADORS "25"	Well Number 1
OGRID No. 151416	Operator Name FASKEN OIL AND RANCH, LTD	Elevation 4327'

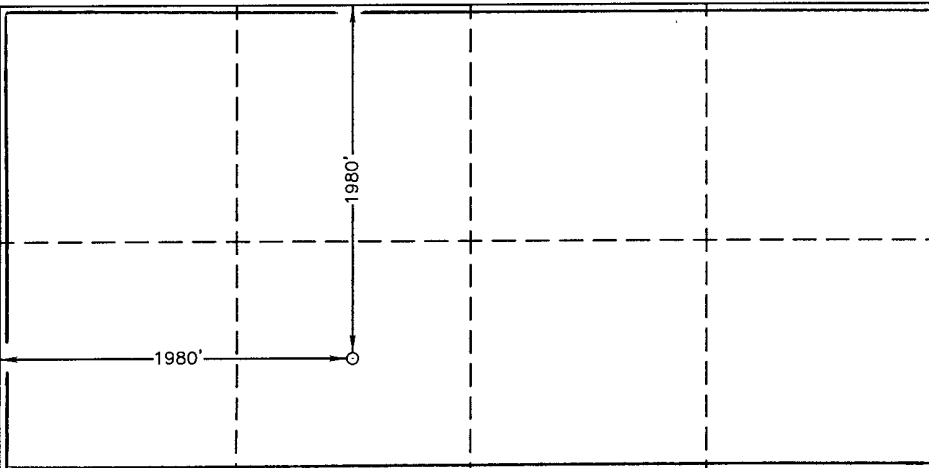
Surface Location

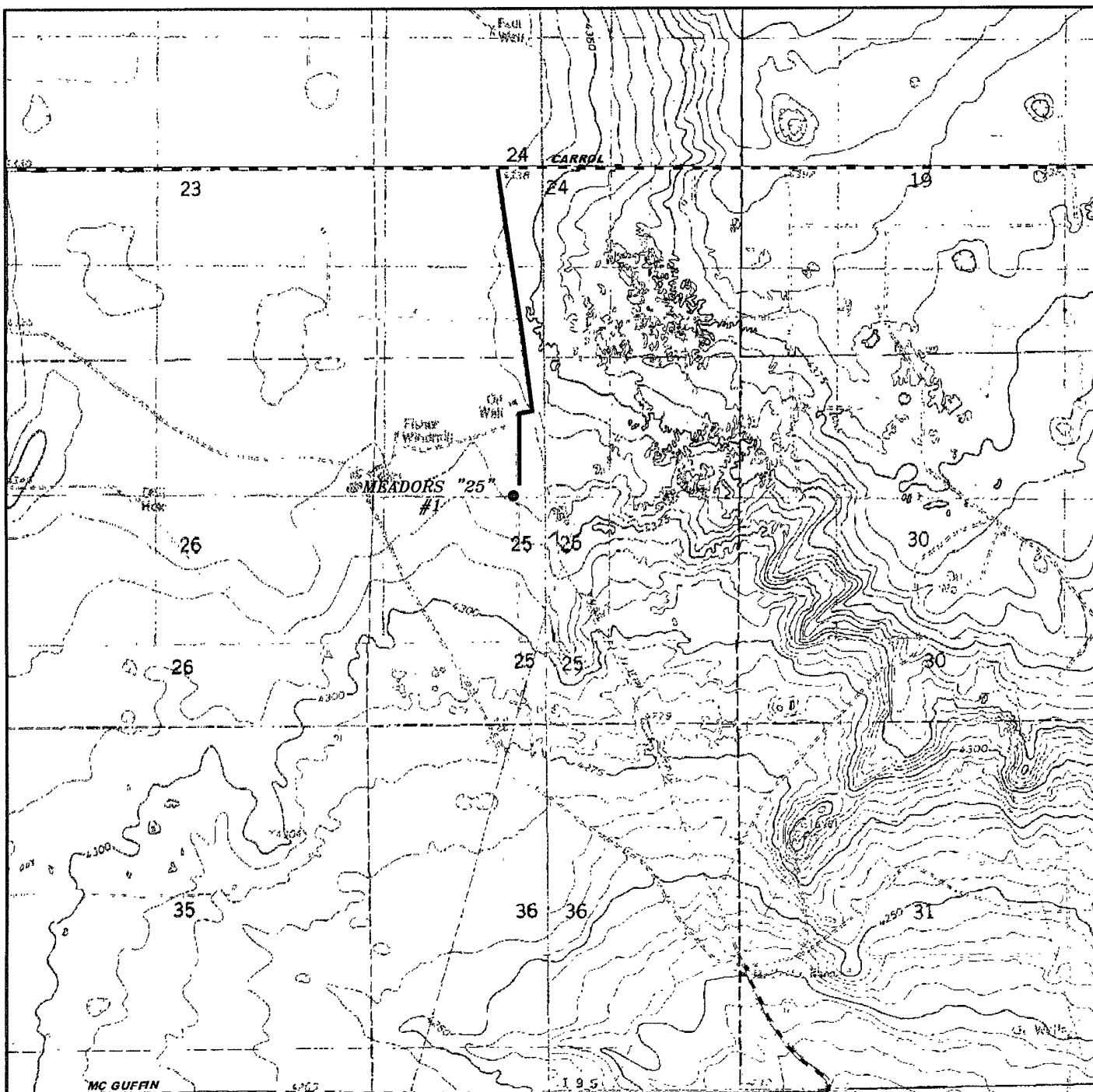
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	09 S	32 E		1980	NORTH	1980	WEST	LEA

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
Dedicated Acres 320		Joint or Infill	Consolidation Code	Order No.					

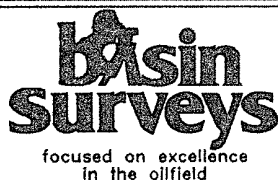
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

 <p>SURFACE LOCATION Lat - N 33°30'20.94" Long - W 103°37'37.85" NMSPC - N 912305.602 E 756585.436 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><u>Kim Tyson</u> 11-6-09 Signature Date</p> <p>Kim Tyson Printed Name</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>DATE SURVEYED Signature &amp; Seal of Professional Surveyor 7977</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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# MEADORS "25" #1

Located 1980' FNL and 1980' FWL  
Section 25, Township 09 South, Range 32 East,  
N.M.P.M., Lea County, New Mexico.



P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(575) 393-7316 - Office  
(575) 392-2206 - Fax  
basinsurveys.com

W.O. Number: JMS 21598

Survey Date: 08-05-2009

Scale: 1" = 2000'

Date: 08-06-2009



**FASKEN OIL  
AND RANCH,  
LTD**

## Recommended Drilling and Completion Procedure

Fasken Oil and Ranch, Ltd.-----Meadors "25" No. 1-----Flying M South (Atoka) Field  
1980' FNL & 1980' FWL  
Sec. 25, T9S, R32E  
Lea County, New Mexico

1. Set 20" conductor at 40'. Dig rat hole and mouse hole.
2. Move in rotary tools.
3. Drill 17-1/2" hole to 400' with spud mud using the following BHA: BHA: bit, bs, comb tool (3 pt roller and IBS), xo, shock sub, 1-8" dc, IBS, 14-8", xo and 6" dc's.
4. Control seepage with paper.
5. Set 13-3/8" casing at 400'. Cement with 450 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.
6. WOC 6 hrs. Install 13-5/8" 3000# bradenhead and BOP stack. Pressure test BOP and casing to 750 psi with rig pumps before drilling out shoe.
7. Drill 12-1/4" hole to 3700'. Drill with fresh water 1600' using the following BHA: BHA: bit, shock sub, 1-8" dc, IBS, 1-8" dc, IBS, 8" dc's. Convert to 9.0 ppg brine at 1600' with properties of 9.0 ppg and 35 vis. Add 50 bbl of oil if necessary. Control seepage with paper. RU H<sub>2</sub>S safety equipment package at 3000'.
8. Set 9-5/8" casing @ 3700'. Centralize casing at middle of shoe joint, top of 2<sup>nd</sup> joint, and every 4<sup>th</sup> joint from 3700' – 2000'.
9. Cement casing with 1200 sx Halliburton Lite "C" with 15# salt and 1/8# Pheno-Seal (s.w. 12.6 ppg, yield 2.23 ft<sup>3</sup>/sx) plus 250 sx Class "C" neat (s.w. 14.8 ppg, yield 1.32 ft<sup>3</sup>/sx).
10. Set slips, cut-off casing, install secondary seal unit and NU 13-5/8" 5000# x 11" 5000# intermediate spool. Install hydraulic Super choke. RU PVT and flow sensor. NU BOP and hydrotest BOP, choke manifold, and floor safety valves to 5000 psi high and 300 psi low, hydril to 2500 psi high and 300 psi low, and 200' of 9-5/8" casing to 2800 psi. RU mud loggers.
11. Drill 8-3/4" hole to 10,900' with 9.0 ppg brine water. Anticipate viscosity to increase naturally to 40-50 sec. while drilling through the Abo shale section beginning at 7200'. Add 100 bbl of oil as necessary through the Abo shale at 7200'. BHA: bit, bs, tri-collar, 6" dc, IBS, 6" dc, IBS, and 6" dc's from intermediate shoe to top of Abo and bit, bs and 6" dc's from top of Abo at 7200' to TD.
12. Mud up at 9000' with white starch and salt gel with properties of 9.0 ppg, 40-50 vis. and 12 cc water loss. Increase viscosity as necessary to maintain hole. Run open hole logs; CNL-LDT, DLL-MSFL, and Full Wave Sonic. DST all shows.
13. Set 5-1/2" casing at TD (Resin coat and centralize through all prospective pay zones) and cement with 10 bfw, 500 gallons Mud Flush 102, 10 bfw and 950 sx Halliburton Light "H" with 1/8# Pheno-Seal (s.w. 12.6, yield 1.93 ft<sup>3</sup>/sx) plus 450 sx Super "C" Modified with 5% salt (s.w. 13.2, yield 1.58 ft<sup>3</sup>/sx). Calculate cement volume for TOC at 3500'.
14. Set slips, cut-off casing, install secondary seal unit and NU 3000# WP tubinghead and flowtree.
15. Move out rotary tools.
16. Level location and set mast anchors.
17. Complete well as per completion procedure.

JRE/TET  
(Meadors25-1drlgproc.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	H <sub>2</sub> S	1.18	10 ppm * 20 ppm **	250 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21	5 ppm	--	1000 ppm
Chlorine	Cl <sub>2</sub>	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO <sub>2</sub>	1.52	5000 ppm	5%	10%
Methane	CH <sub>4</sub>	0.55	9%	Combustable above 5% in air	---

\*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).

\*\*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.

<u>Percent Vol.</u>	<u>Concentration ppm</u>	<u>Physical Effects</u>
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.
  3. 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, unidirectional 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. **UNDER NO CIRCUMSTANCE** 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, Texas.
- 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.



## **Fasken Oil and Ranch, Ltd.**

### **H2S Contingency Plan**

#### **Emergency Phone Numbers**

##### **Meadors "25" No. 1**

<b>Fasken Oil and Ranch, Ltd.</b>	<b>432 687-1777</b>
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#### **Key Personnel**

Tommy Taylor, Drilling Manager	432 556-2228
Cory Frederick, Drilling Engineer	432-288-0086
Deryl Briles, Drilling Foreman	432 556-4269
Jimmy Davis, Operations Manager	432 557-5668

#### **Hobbs, Lea County, New Mexico**

Ambulance	911
State Police	911 or 575 392-5580
Sheriff's Office	911 or 575 396-3611
Fire Department	911 or 575 397-9308
Local Emergency Planning Committee	575 393-2870
New Mexico Oil Conservation Division	575 393-6161

#### **Carlsbad, Eddy County, New Mexico**

Ambulance	911
State Police	911 or 575 885-3138
Sheriff's Department	911 or 575 887-7551
Fire Department	911 or 575 885-3125
Local Emergency Planning Committee	575 887-7553
Bureau of Land Management	575 887-6544
New Mexico Oil Conservation Division (Artesia)	575 748-1283

### **Statewide and National Emergency Numbers**

New Mexico Department of Homeland Security And Emergency Management	505 476-9600
New Mexico State Emergency Operations Center (24 Hour Number)	505 476-9635
National Emergency Response Center	800 424-8802

### **Other Numbers for Emergency Response**

Boots & Coots IWC	800 256-9688 or 281 931-8884
Cudd Pressure Control	432 563-3356
MCH Care Star Flight Service (air ambulance)	432 640-4000
Aerocare (air ambulance)	806 725-1111

Fasken Oil and Ranch, Ltd.

- ① 4" Series 900 Valves
- ② Series 900 Annular preventor
- ③ Series 900 Ram type preventor
- ④ 2" Series 900 Check Valve
- ⑤ 2" Series 900 choke
- ⑥ 2" Series 900 Valves
- ⑦ 3" Series 900 Valves

