HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

Fasken Oil and Ranch, Ltd.
Shell Federal #2 SWD Re-Entry
3300' FSL & 660' FWL
Sec. 5, T215, R24E
Eddy 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.

- 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.

Fasken Oil and Ranch, Ltd.

H2S Contingency Plan

Emergency Phone Numbers

Shell Federal No. 2

Fasken Oil and Ranch, Ltd.	432 687-1777
Key Personnel	
Tommy Taylor, Drilling Manager Cory Frederick, Drilling Engineer Deryl Briles, Drilling Foreman Jimmy Davis, Operations Manager	432 556-2228 432-288-0086 432 556-4269 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