

COPY

BTA OIL PRODUCERS LLC HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

Attachment to APD
BTA Oil Producers, LLC
Mesa 8105 JV-P #18H
Sec 1, T26S, R32E
Lea County, NM

1. HYDROGEN SULFIDE TRAINING

HOBBS OCD

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:

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- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

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

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection 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 and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. 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 penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- b. Protective equipment for essential personnel:
 - Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H₂S detection and monitoring equipment:
 - 2 - portable H₂S monitor positioned on location for best coverage and

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response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.

- d. Visual warning systems:
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 readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
The mud program has been designed to minimize the volume of H₂S circulated to the surface.
- f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- g. Communication:
Company vehicles equipped with cellular telephone.

BTA OIL PRODUCERS LLC has conducted a review to determine if an H₂S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H₂S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H₂S contingency plan is necessary.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED*
- 2. HARD HATS REQUIRED*
- 3. SMOKING IN DESIGNATED AREAS ONLY*
- 4. BE WIND CONSCIOUS AT ALL TIMES*
- 5. CK WITH BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE*

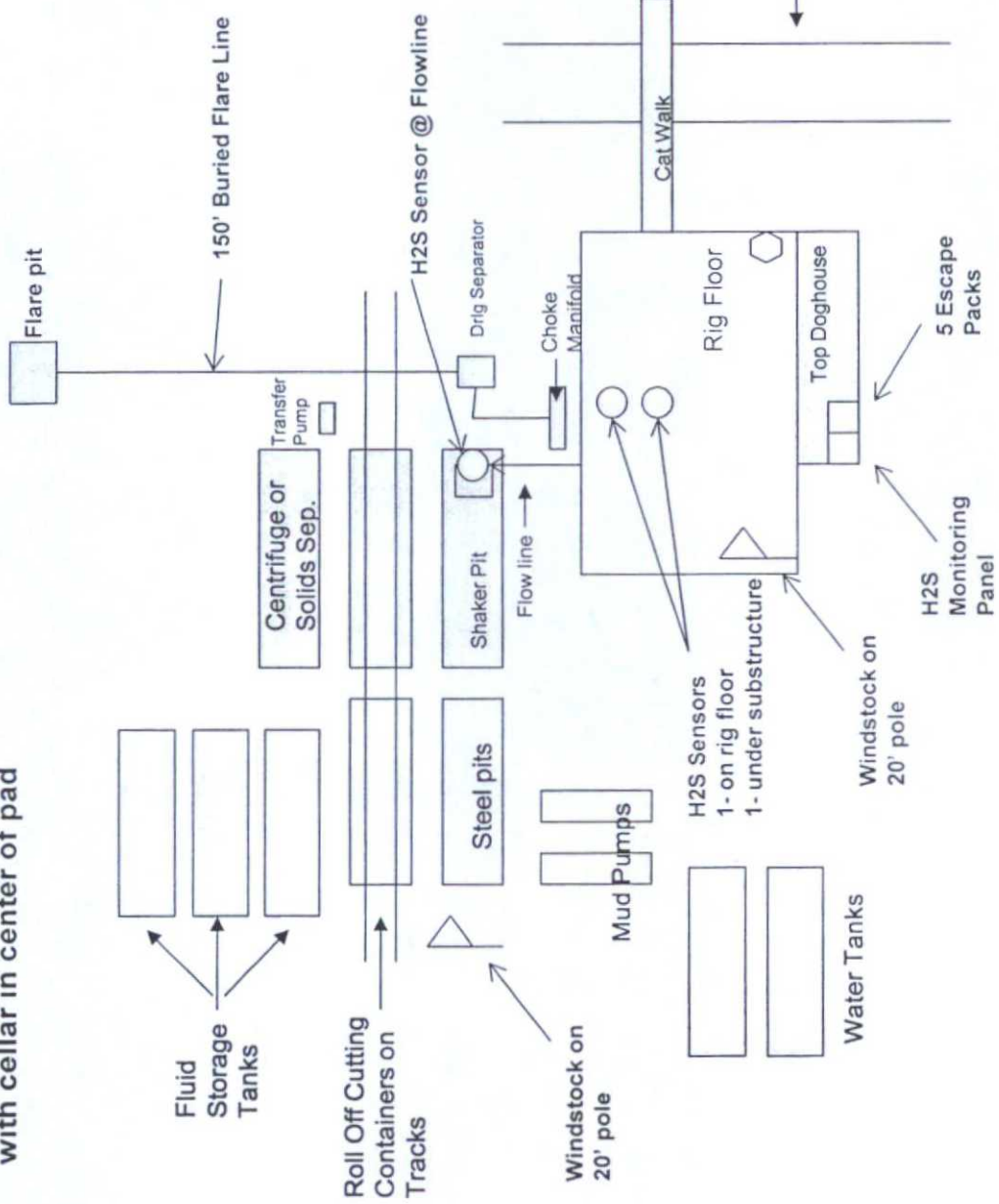
BTA OIL PRODUCERS LLC

1-432-682-3753

BTA OIL PRODUCERS LLC
H₂S Equipment Schematic
Terrain: Shinnery Sand Hills

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Well pad will be 400' X 440'
with cellar in center of pad



Prevailing Wind
Direction in SENM

☐ Location Entry Condition Sign

☐ Primary Briefing Area w/SCBA

Company Representative's Trailer

BTA Oil Producers, LLC
Mesa 8105 JV-P #18H
Rig Pad Layout - Ancillary Facilities
Sec 1, T26S, R32E
Lea County, NM

OPERATOR CERTIFICATION

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BTA OIL PRODUCERS, LLC
Mesa 8105 JV-P #18H
UL -P-, Sec. 1, T26S, R32E Surface
310' FSL & 1294' FEL
UL -A-, Sec. 1, T26S, R32E Bottom
230' FNL & 1294' FEL
Lea County, New Mexico

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 that presently 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 USC 1001 for the filing of false statements. Executed this 13th day of February, 2015.

Signed: Kayla McCommell

Printed Name: Kayla McConnell
Position: Production Assistant
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