

**Hydrogen Sulfide Drilling Operations Plan**  
**Wizard 34 Federal Com # 1H**  
**Sec 34, T18S, R32E**  
**Lea County N.M.**

**HOBBS OCD**

**MAR 30 2015**

**RECEIVED**

1. Company and contract personnel admitted on location should be trained by a qualified H<sub>2</sub>S safety instructor to the recognize and handle following:
  - A. Characteristics of H<sub>2</sub>S gas
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing knowledge
  - E. Evacuation procedure, routes and first aid support
  - F. Proper use of 30 minutes Pressure-on-Demand Air Pack
2. Supervisory personnel will be trained in the following areas:
  - A. Effects of H<sub>2</sub>S on metal components.
  - B. Corrective action and shut in procedures, blowout prevention, and well control procedure.
  - C. Contents of Hydrogen Sulfide Drilling Operations Plan.
3. H<sub>2</sub>S Detection and Alarm Systems will be in place before commencing any operations.
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at wellhead, shale shaker and mud pits. Will be installed and maintained by third party safety company.
  - B. Thirty minute self-contained work unit located in at briefing areas.
3. Windsock and/or Wind Streamers
  - A. Windsock at mud pit area (high enough to be visible)
  - B. Windsock on dog house (high enough to be visible)
4. Condition Flags and Signs
  - A. H<sub>2</sub>S warning signs on lease access road into location
  - B. Flags displayed on sign at location entrance
    1. Green flag indicates "Normal Safe Conditions"
    2. Yellow Flag indicates "Potential Pressure and Danger"
    3. Red Flag indicates "Danger - H<sub>2</sub>S Present in High Concentrations" *admit only emergency personnel*
5. Well Control Equipment
  - A. Flare line.
  - B. Choke manifold.
  - C. Blind rams and pipe rams to accommodate all pipe size with properly size closing unit.
  - D. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
6. Communication
  - A. While working under masks chalkboards will be used for communication
  - B. Hand signals will be used where chalk board is inappropriate
  - C. Two -way radios or cell phones used to communicate off location or minimally in Drilling Foreman's trailer or living quarters
  - D.
7. Drillstem Testing (**not planned**)
  - A. Exhausts watered
  - B. Flare line equipped with electric Igniter/propane pilot light in case gas reaches surface
  - C. If location near dwelling closed DST will be performed

9. If H<sub>2</sub>S encountered, mud system shall be addressed to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers, if necessary. pH will be maintained at 10, to minimize H<sub>2</sub>S in the system. Hydrogen sulfide scavengers will also be used to minimize hazards while drilling the well.

# **WARNING**

**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
  - 2. HAED HATS REQUIRED**
  - 3. SMOKING IN DESIGNATED AREAS ONLY**
  - 4. BE WIND CONSCIOUS AT ALL TIME**
- CHECK IN WITH COMPANY MAN AT MAIN OFFICE**

**Nadel and Gussman HEYCO LLC**

**575-623-6601**

## PUBLIC PROTECTION PLAN FOR EMERGENCY CONTACTS

**NADEL AND GUSSMAN HEYCO, LLC** (432) 682-4429

### **Company Personnel**

Jason Goss	Drilling Engineer	432-682-4429 512-784-2613
Keith Cannon	Drilling Supt.	575-623-6601 575-626-1936

#### **ARTESIA N.M.**

Ambulance	911
State Police	575-746-5000
City Police	575-746-5000
Sheriff's Office	575-746-9888
Fire Department	575-746-5050 or 575-746-5051
N.M.O.C.D	575-748-1283

#### **CARLSBAD N.M.**

Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-885-3125 or 575-885-2111
Carlsbad BLM	575-887-6544

#### **HOBBS N.M.**

Ambulance	911
State Police	575-392-5588
City Police	575-397-9265
Sheriff's Office	575-396-3611
Fire Department	575-397-9308
N.M.O.C.D	575-393-6161
Hobbs BLM	575-393-3612

Flight for Life (Lubbock Tx)	806-743-9911
Aerocare (Lubbock Tx)	806-747-8923
Med flight air Ambulance (Albuq NM)	505-842-4433
SB air Med Services (Albuq NM)	505-842-4949

Boots & Coots IWC	800-256-9688 or 281-931-8884
Cudd Pressure Control	915-699-0139 or 915-563-3356
BJ Services (Artesia NM)	575-746-3569
(Hobbs NM)	575-392-5556

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
24 Hour	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635