

Hydrogen Sulfide Drilling Operations Plan
Harlequin 27-22 Federal # 1H
Sec 27, T19S, R34E
Lea County N.M.

1. Company and contract personnel admitted on location should be trained by a qualified H₂S safety instructor to the recognize and handle following:
 - A. Characteristics of H₂S gas
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems
 - D. Principle and operation of H₂S 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 H₂S 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. H₂S Detection and Alarm Systems will be in place before commencing any operations.
 - A. H₂S 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. H₂S 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 - H₂S Present in High Concentrations" *admit only emergency personnel*
5. Well Control Equipment
 - A. See BOP, and Choke exhibit.
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
8. If H₂S encountered, mud system shall be addressed to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers, if necessary. pH will be maintained at 10, to minimize H₂S in the system. Hydrogen sulfide scavengers will also be used to minimize hazards while drilling the well.

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.

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|------------------|------------------------------|
| 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.

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|------------------|------------------------------|
| 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.

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|------------------|--------------|
| 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 |

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|-------------------------------------|--------------|
| 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 |

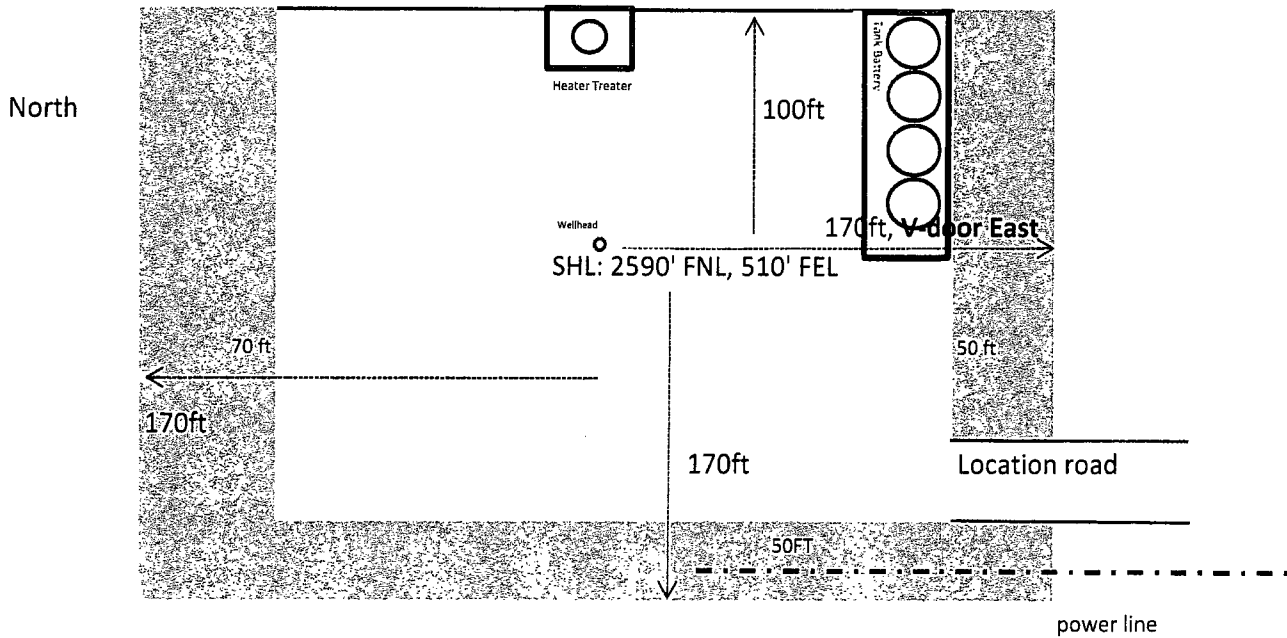
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| Boots & Coots IWC | 800-256-9688 or 281-931-8884 |
| Cudd Pressure Control | 915-699-0139 or 915-563-3356 |
| BJ Services (Artesia NM) | 575-746-3569 |
| (Hobbs NM) | 575-392-5556 |

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

LOCATION/BATTERY DIAGRAM

Harlequin 27/22 Federal #1H

Section 27, T-19S, R-34E, Lea County NM



If well is found productive a tank battery will be constructed

Battery will be buried and lined.

Location road 3521ft from existing lease road (see plat)

Gray area to be reclaimed and seeded to BLM Regulations

Push top soil to south side and stocked piled

Power line will follow road and will tie on to

electric line in south end section 27 (see attached plat)