

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

Form C-144 CLEZ  
July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

**Closed-Loop System Permit or Closure Plan Application**

*(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

Type of action: ☒ Permit ☐ Closure

**Instructions:** Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: Nadel and Gussman HEYCO, LLC OGRID # 258462 *Corrected Copy*  
Address: P.O. Box 1936 Roswell N.M. 88202-1936  
Facility or well name: Loving 2 State #4  
API Number: 30-015-37109 OCD Permit Number: 209390  
U/L or Qtr/Qtr C Section 2 Township 23S Range 28E County: EDDY  
Center of Proposed Design: Latitude 32.336773° Longitude 104.059505° NAD: ☒ 1927 ☐ 1983  
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A  
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3. **Signs:** Subsection C of 19.15.17.11 NMAC  
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  
☐ Signed in compliance with 19.15.3.103 NMAC

4. **Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC  
**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  
☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_  
☐ Previously Approved Operating and Maintenance Plan API Number: \_\_\_\_\_

5. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)  
**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.  
Disposal Facility Name: CRI Disposal Facility Permit Number: NM-01-0019  
Disposal Facility Name: GM Disposal Facility Permit Number: NM-01-0006  
Disposal Facility Name: Lea Land Disposal Facility Permit Number: WM-1-035  
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?  
☐ Yes (If yes, please provide the information below) ☒ No  
**Required for impacted areas which will not be used for future service and operations:**  
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

6.

**Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Keith Cannon Title: Drilling Superintendent

Signature:  Date: 5/20/2009

e-mail address kcannon@heycoenergy.com Telephone: (575) 623-6601

7.

**OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature:  Approval Date: 6/3/2009

Title: Geologist OCD Permit Number: 209390

8.

**Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

**Instructions:** Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: \_\_\_\_\_

9.

**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

**Instructions:** Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

- ☐ Site Reclamation (Photo Documentation)  
☐ Soil Backfilling and Cover Installation  
☐ Re-vegetation Application Rates and Seeding Technique

10.

**Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

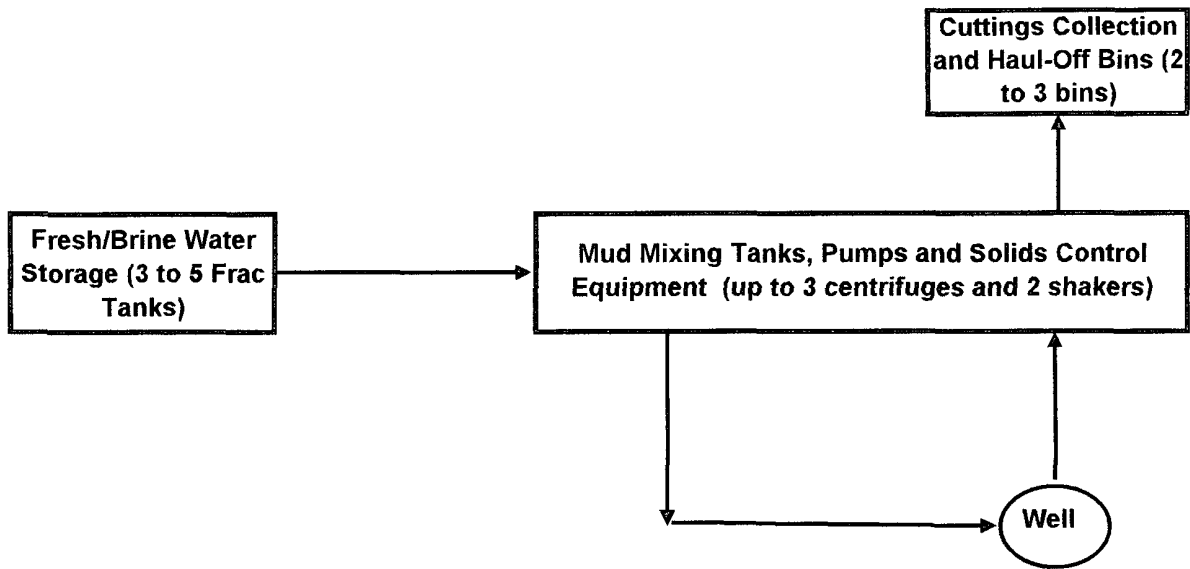
Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

# **CLOSED-LOOP SYSTEM**

## **Design Plan:**



## **Operating and Maintenance Plan:**

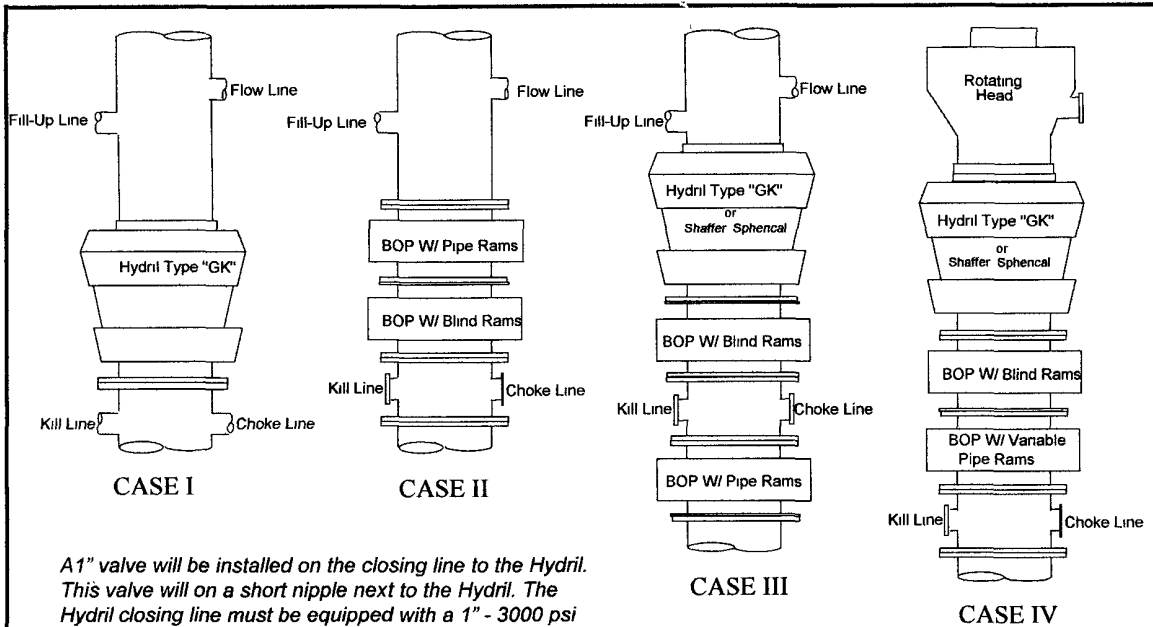
During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluid and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

## **Closure Plan:**

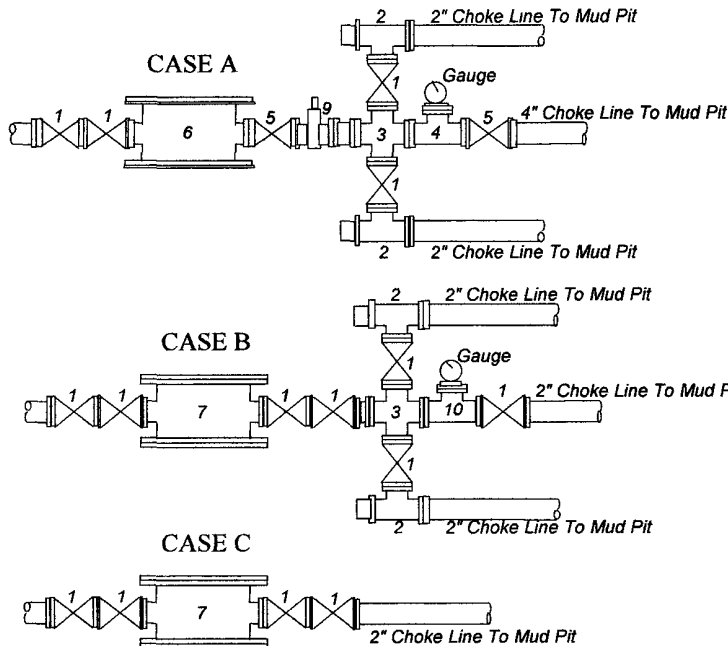
During drilling operations, third party service companies will haul-off drill solids and fluids to an approved disposal facility as noted on the C-144 form. At the end of the well, all closed loop equipment will be removed from the location.

# Nadel and Gussman Heyco, LLC

## MINIMUM BLOWOUT PREVENTER REQUIREMENTS



A1" valve will be installed on the closing line to the Hydri. This valve will be on a short nipple next to the Hydri. The Hydri closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydri.



BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13-5/8"	II	3000 psi	B

**\*Rotating head required**

Bradenhead .  
Mfr: \_\_\_\_\_  
Size: \_\_\_\_\_ Type: \_\_\_\_\_

### Legend

1. 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
2. 2" flanged adjustable chokes, min. 1" full opening & equipped with hard trim.
3. 4" x 2" flanged steel cross.
4. 4" flanged steel tee.
5. 4" flanged all steel valve (Type as in no. 1)
6. Drilling Spool with 2" x 4" flanged outlet
7. Drilling Spool with 2" x 2" flanged outlet.
8. 2" x 2" flanged steel cross.
9. 4" pressure operated gate valve.
10. 2" flanged steel tee.

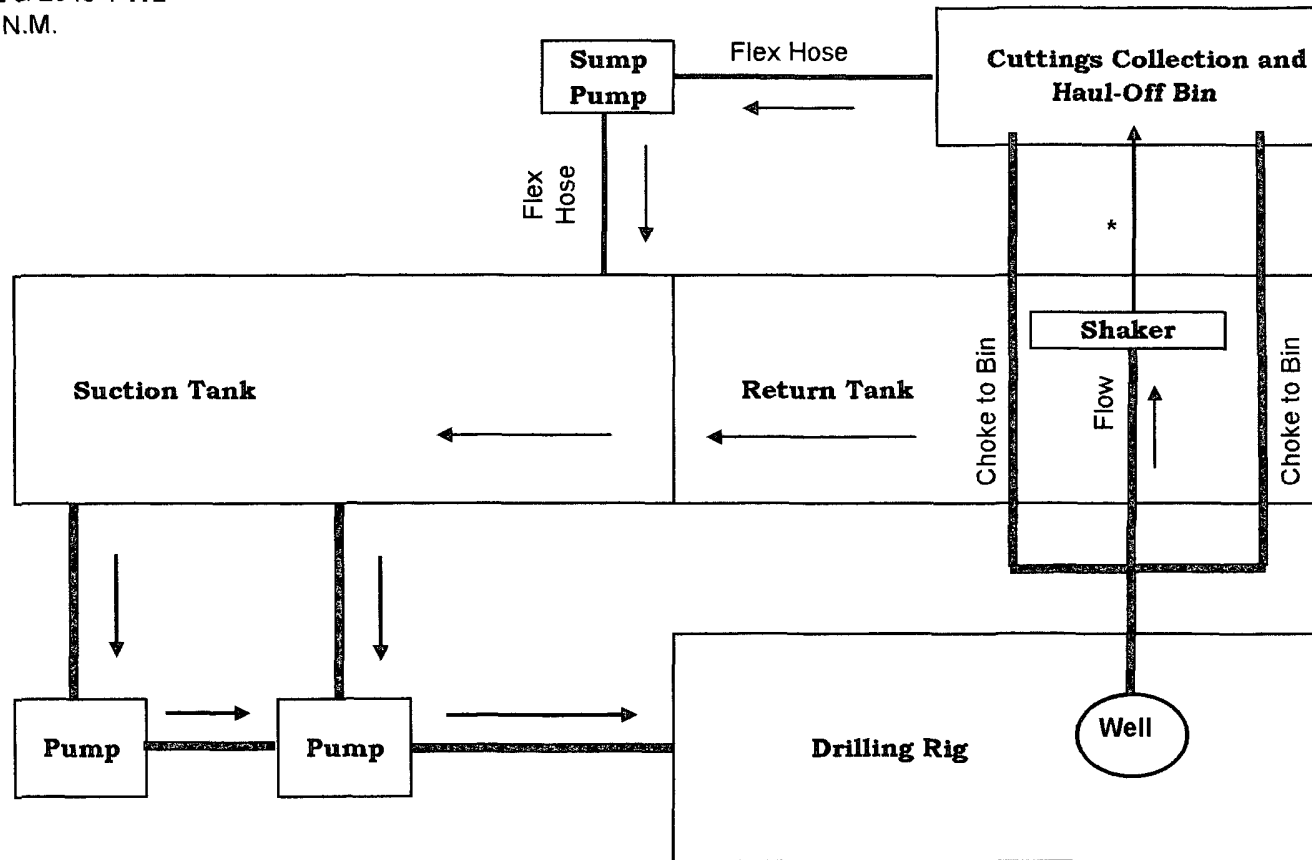
### Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

(10-31-96) WTXBOPS.PPT

## Choke Manifold Schematic for Closed Loop System

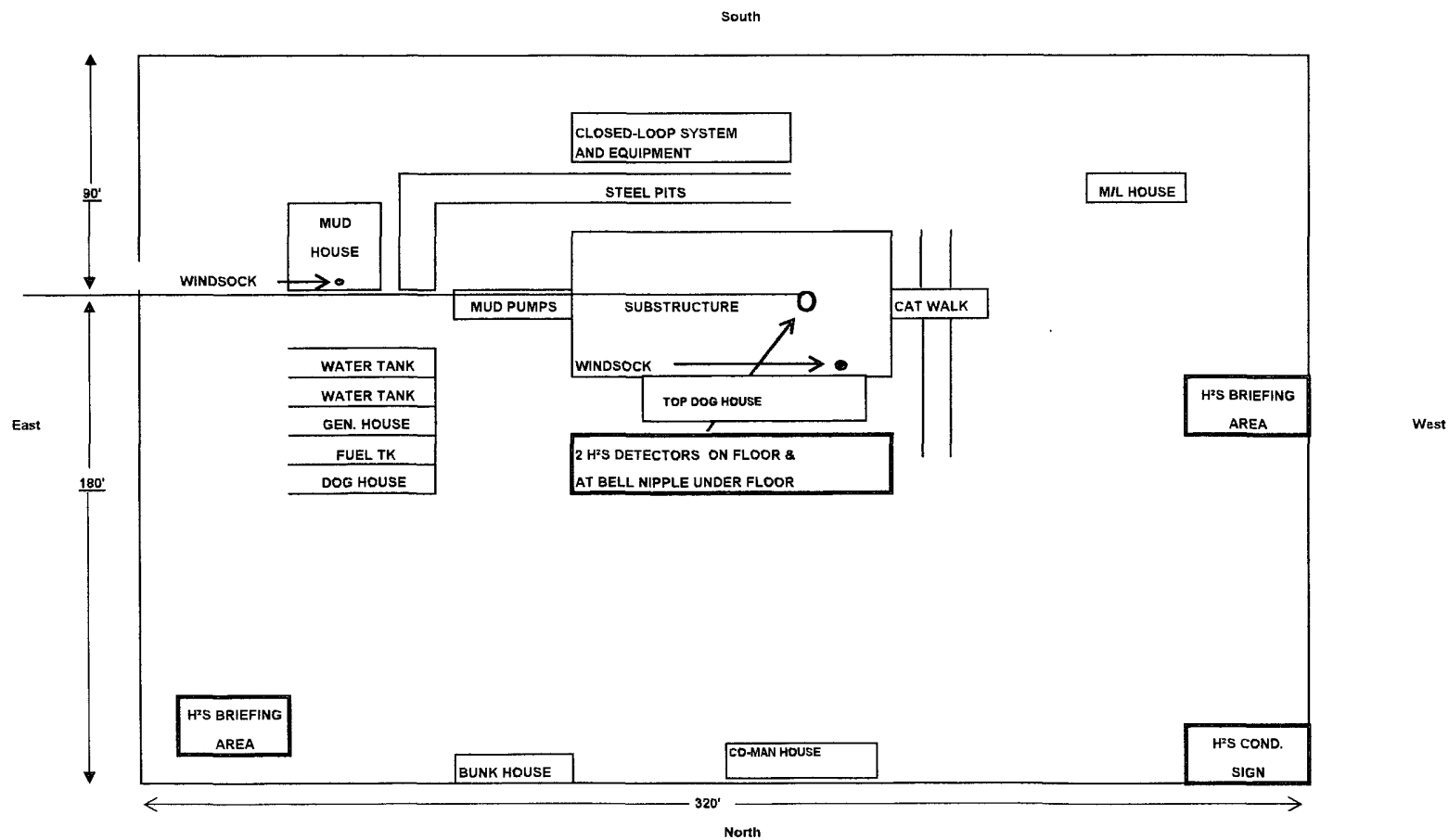
Loving 2 State #4  
Sec 2, T23S, R28E  
1850' FNL & 2045' FWL  
Eddy Co. N.M.



\* No pipe manifold from shaker to haul-off bin.

# EXHIBIT "D" LOCATION DIAGRAM

Loving 2 State #4  
1850' FNL & 2045' FWL  
SEC 2, T23S, R28E  
EDDY COUNTY, NM



**NADEL AND GUSSMAN HEYCO, L.L.C.**  
**P.O. BOX 1936**  
**ROSWELL N.M. 88202**  
**(575) 623-6601 (Office)**  
**(575) 624-5321 (Fax)**

5/8/2009

Jacqui Reeves  
District 2 Geologist  
New Mexico Oil and Gas Division  
1301 West Grand Avenue  
Artesia, NM 88210

**Re: Loving 2 State #4**  
**1850' FNL & 2045' FWL**  
**Unit Letter F Sec. 2, T23S, R28E**  
**Eddy, NM**  
**Rule 118 H2S Exposure**

Dear Miss. Reeves

Nadel and Gussman Heyco, LLC have evaluated this well and we do not expect to encounter hydrogen sulfide. However, we will employ a third party monitoring system. We will begin monitoring prior to drilling out the intermediate casing and will continue monitoring the remainder of the well.

Please contact me if you have any additional questions.

Sincerely,

Keith Cannon  
Drilling superintendent

**Hydrogen Sulfide Drilling Operations Plan**  
**Loving 2 State #4**  
**Sec 2, T23S, R28E**  
**1850' FNL & 2045' FWL**  
**Eddy Co. N.M.**

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. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse
3. Windsock and/or Wind Streamers
  - A. Windsock at mud pit area (high enough to be visible)
  - B. Windsock at briefing area (high enough to be visible)
  - C. Windsock at location entrance
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. See Exhibit #5.
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
7. Drillstem Testing
  - 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. Drilling Supervisor required to be familiar with effects of H<sub>2</sub>S on tubular goods/mechanical equipment
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.



PUBLIC PROTECTION PLAN FOR EMERGENCY CONTACTS

**NADEL AND GUSSMAN HEYCO, LLC** (575) 623-6601

**Company Personnel**

Terry West	Drilling Enrineer	432-682-4429 432-238-2874
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