

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

JUN - 2 2009

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

Address: P.O. Box 1936 Roswell N.M. 88202-1936

Facility or well name: Loving 2 State #5

API Number: 30 015 37111

OCD Permit Number: 209358

U/L or Qtr/Qtr K Section 2 Township 23S Range 28E County: EDDY

Center of Proposed Design: Latitude 32.332301° Longitude 104.059806° 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

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: Keith Cannon 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: Jaqui Beaver Approval Date: 6/4/2009

Title: Geologist OCD Permit Number: 209358

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 indentify 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.

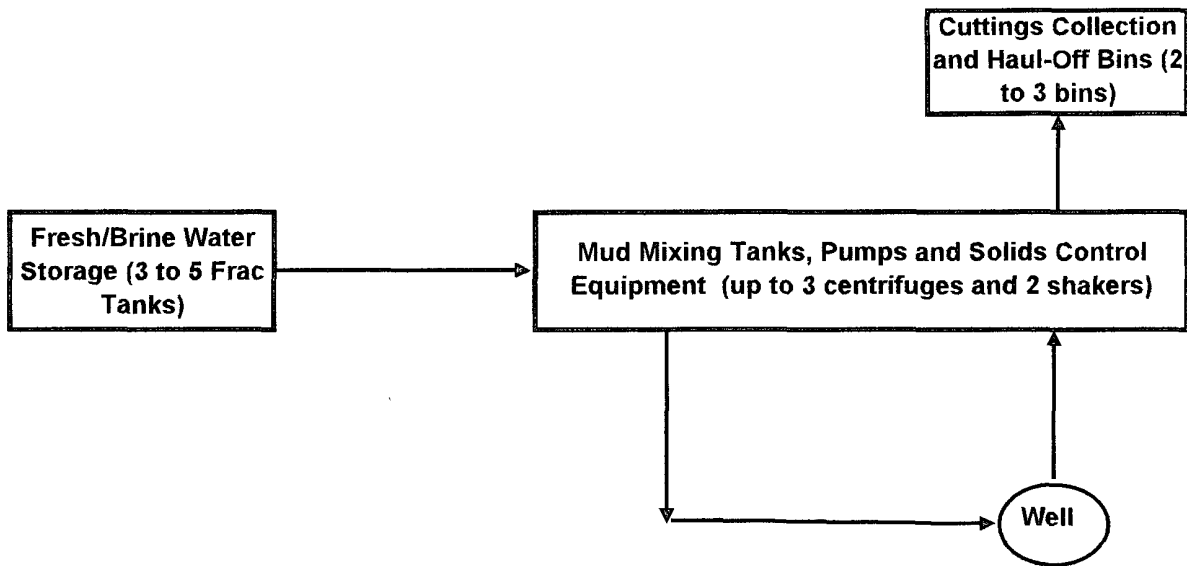
Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

CLOSED-LOOP SYSTEM

Design Plan:



Operating and Maintenance Plan:

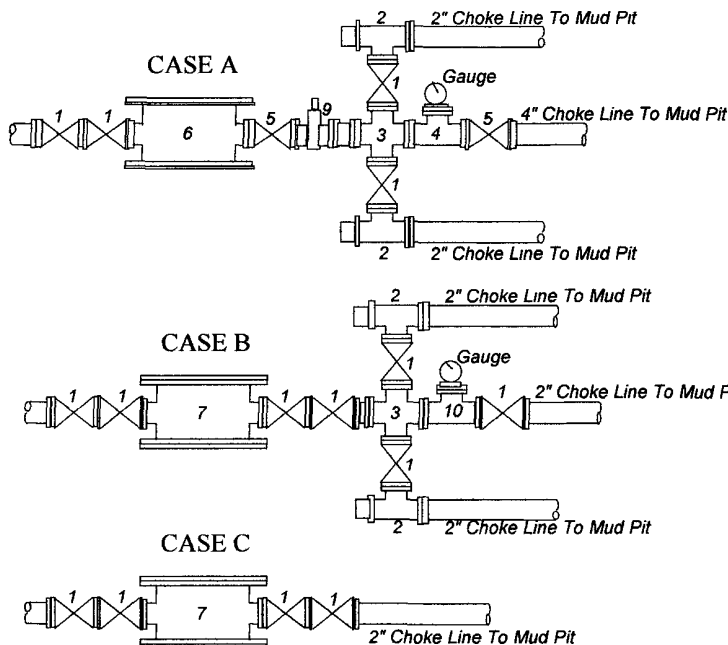
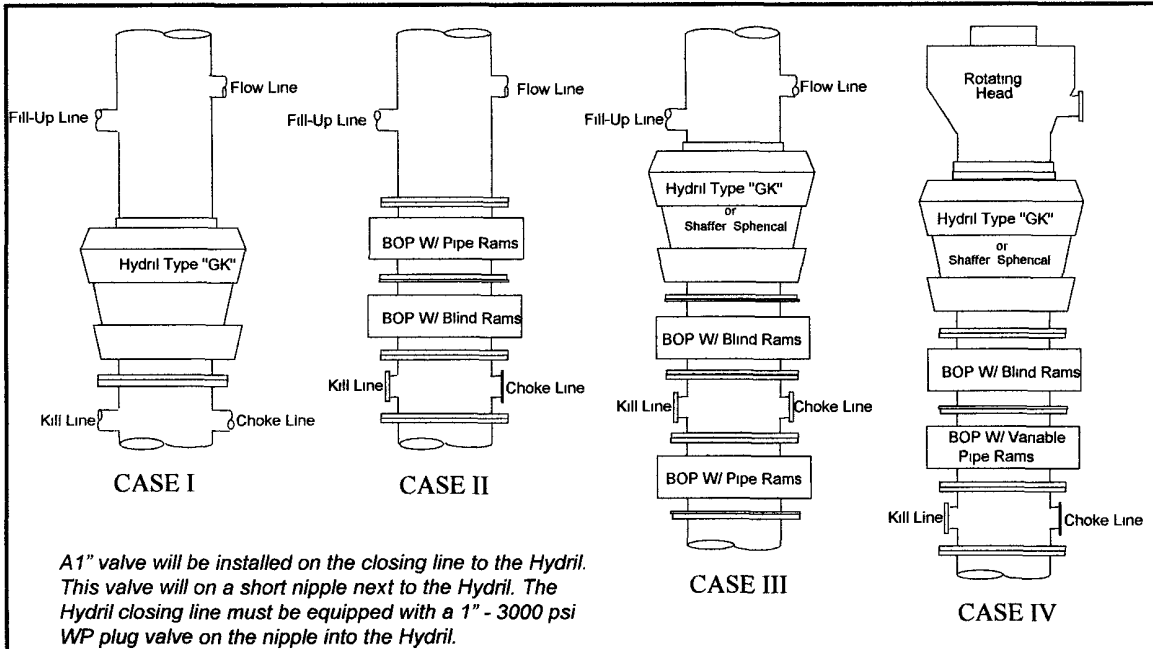
During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluid and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

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



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

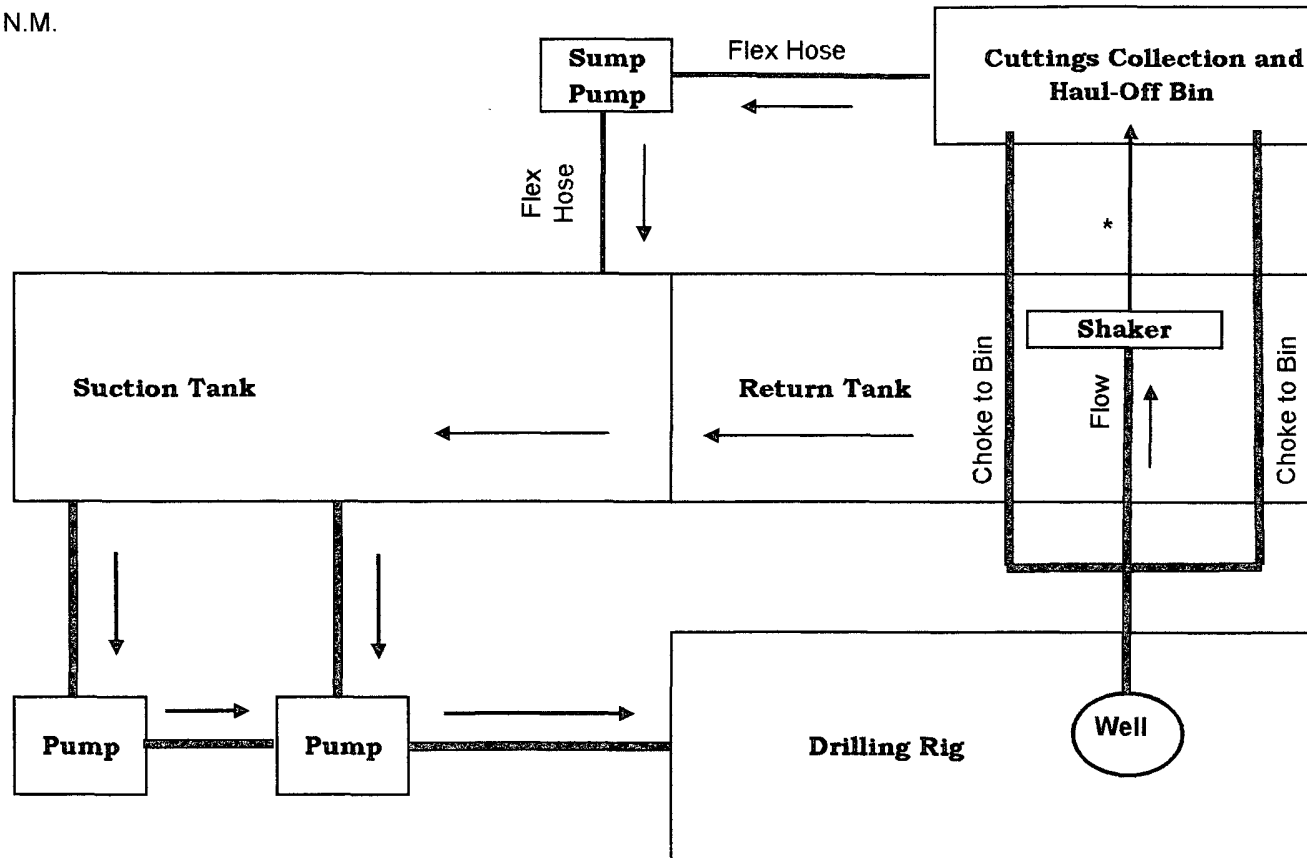
Choke Manifold Schematic for Closed Loop System

Loving 2 State #5

Sec 2, T23S, R28E

1865' FSL & 1980' FWL

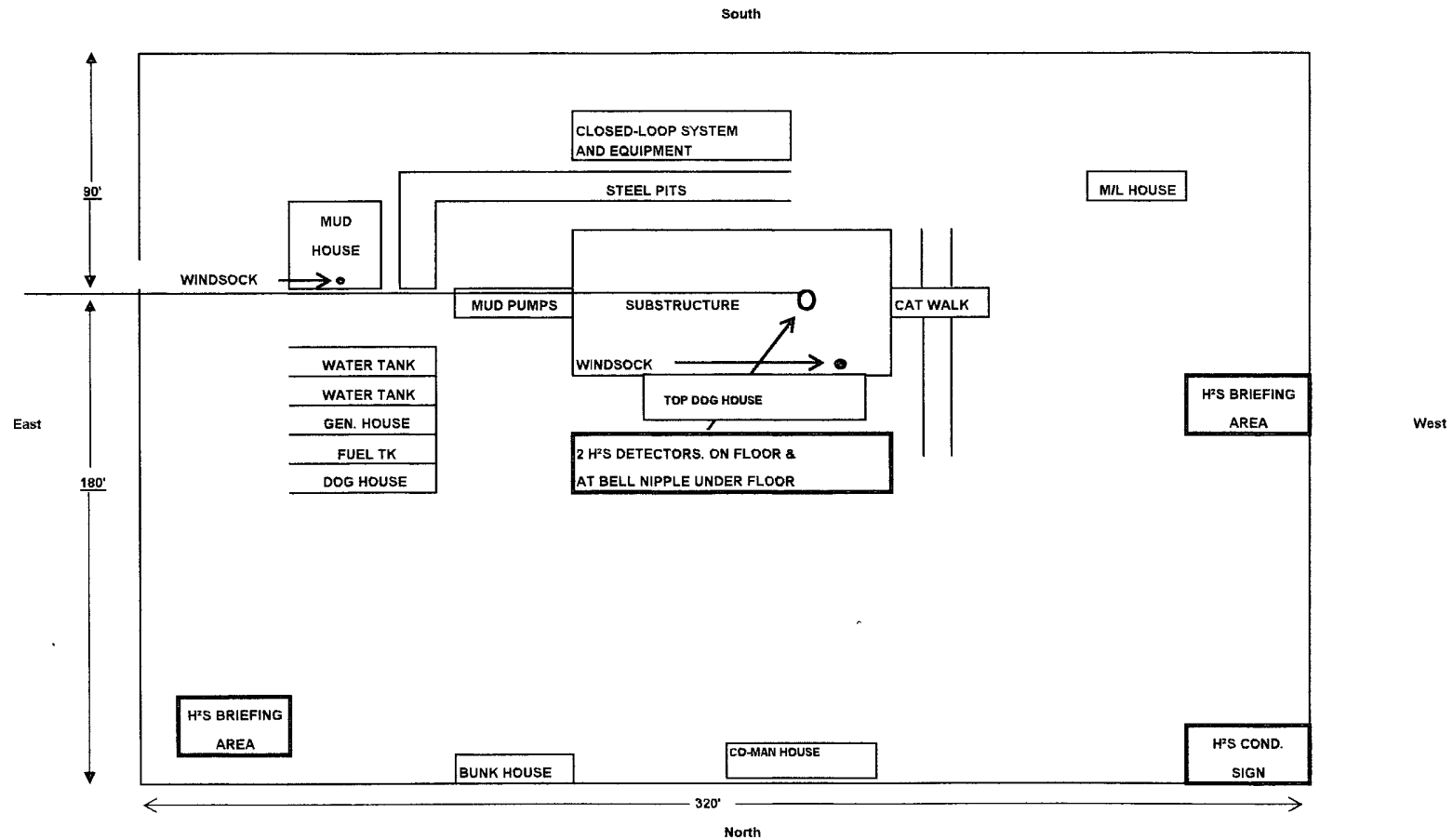
Eddy Co. N.M.



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

EXHIBIT "D" LOCATION DIAGRAM

Loving 2 State #5
1865' FSL & 1980' 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 #5
1865' FSL & 1980' FWL
Unit Letter K, 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 #5
Sec 2, T23S, R28E
1865' FSL & 1980' FWL
Eddy Co. 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. H₂S Detection and Alarm Systems
 - A. H₂S 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. 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 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 H₂S on tubular goods/mechanical equipment
9. 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.

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