H₂S Preparedness and Contingency Plan Summary



Salado Draw 18 26 33 Fed 3H

Salado Draw 18 26 33 Fed 4H

Salado Draw 19 26 33 Fed 3H

Salado Draw 19 26 33 Fed 4H

Training

MCBU Drilling and Completions H₂S training requirements are intended to define the minimum level of training required for employees, contractors and visitors to enter or perform work at MCBU Drilling and Completions locations that have known concentrations of H₂S.

Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H_2S , who are not required to perform work in H_2S areas, will be provided with an awareness level of H_2S training prior to entering any H_2S areas. At a minimum, awareness level training will include:

- 1. Physical and chemical properties of H₂S
- 2. Health hazards of H₂S
- 3. Personal protective equipment
- 4. Information regarding potential sources of H₂S
- 5. Alarms and emergency evacuation procedures

Awareness level training will be developed and conducted by personnel who are qualified either by specific training, educational experience and/or work-related background.

Advanced Level H₂S Training

Employees and contractors required to work in areas that may contain H₂S will be provided with Advanced Level H₂S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H₂S training will include:

- 1. H₂S safe work practice procedures;
- 2. Emergency contingency plan procedures;
- 3. Methods to detect the presence or release of H₂S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H₂S equipment.
- 4. Basic overview of respiratory protective equipment suitable for use in H₂S environments. Note: Employees who work at sites that participate in the Chevron Respirator User program will require separate respirator training as required by the MCBU Respiratory Protection Program;
- Basic overview of emergency rescue techniques, first aid, CPR and medical evaluation procedures. Employees who may be required to perform "standby" duties are required to receive additional first aid and CPR training, which is not covered in the Advanced Level H₂S training;
- 6. Proficiency examination covering all course material.

Advanced H_2S training courses will be instructed by personnel who have successfully completed an appropriate H_2S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.



H₂S Training Certification

All employees and visitors will be issued an H₂S training certification card (or certificate) upon successful completion of the appropriate H₂S training course. Personnel working in an H₂S environment will carry a current H₂S training certification card as proof of having received the proper training on their person at all times.

Briefing Area

A minimum of two briefing areas will be established in locations that at least one area will be upwind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated upwind briefing areas for instructions.

H₂S Equipment

Respiratory Protection

- a) Six 30 minute SCBAs 2 at each briefing area and 2 in the Safety Trailer.
- b) Eight 5 minute EBAs 5 in the dog house at the rig floor, 1 at the accumulator, 1 at the shale shakers and 1 at the mud pits.

Visual Warning System

- a) One color code sign, displaying all possible conditions, will be placed at the entrance to the location with a flag displaying the current condition.
- b) Two windsocks will be on location, one on the dog house and one on the Drill Site Manager's Trailer.

H₂S Detection and Monitoring System

- a) H₂S monitoring system (sensor head, warning light and siren) place<u>d</u> throughout rig.
 - Drilling Rig Locations: at a minimum, in the area of the Shale shaker, rig floor, and bell nipple.
 - Workover Rig Locations: at a minimum, in the area of the Cellar, rig floor and circulating tanks or shale shaker.

H₂S Preparedness and Contingency Plan Summary



Well Control Equipment

- a) Flare Line 150' from wellhead with igniter.
- b) Choke manifold with a remotely operated choke.
- c) Mud / gas separator

Mud Program

In the event of drilling, completions, workover and well servicing operations involving a hydrogen sulfide concentration of 100 ppm or greater the following shall be considered:

- 1. Use of a degasser
- 2. Use of a zinc based mud treatment
- 3. Increasing mud weight

Public Safety - Emergency Assistance

| Agency | Telephone Number | |
|------------------------------------|------------------|--|
| Lea County Sheriff's Department | 575-396-3611 | |
| Fire Department: | | |
| Carlsbad | 575-885-3125 | |
| Artesia | 575-746-5050 | |
| Lea County Regional Medical Center | 575-492-5000 | |
| Jal Community Hospital | 505-395-2511 | |
| Lea County Emergency Management | 575-396-8602 | |
| Poison Control Center | 800-222-1222 | |

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Chevron MCBU D&C Emergency Notifications

Below are lists of contacts to be used in emergency situations.

| | Name | Title | Office Number | Cell Phone |
|----|-----------------|---------------------|----------------|-----------------|
| 1. | Vicente Ruiz | Drilling Engineer | (713) 372-6181 | (713) 898-5436 |
| 2. | Phil Clark | Superintendenț | (713) 372-7588 | (832) 741-4175 |
| 5. | Kim McHugh | Drilling Manager | (713) 372-7591 | (713) 204- 8550 |
| 6. | Darrell Hammons | Operations Manager | (713) 372-5747 | (281) 352 2302 |
| 7. | Andrea Calhoun | D&C HES | (713) 372-7586 | (832) 588-0100 |
| 8. | Said Daher | Completion Engineer | (713) 372-0233 | (832) 714-0724 |

H₂S Preparedness and Contingency Plan Summary





Salado Draw 19-26-33 Fed 3H, 4H





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CERTIFICATION

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 which currently 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 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 of 18 U.S.C. 1001 for the filing of a false statement.

| Executed this <u>57</u> ^H day of <u>MAY</u> | , 20 <u>14</u> |
|--|----------------|
| Name: La Lider | |
| James Ward - Project Manager | |

Address: <u>1400 Smith Street, 40050</u> Houston, TX 77002

Office <u>713-372-1748</u>

E-mail: jwgb@chevron.com

METES AND BOUNDS DESCRIPTION OF A CALLED 2.07 ACRE FACILITY PAD SECTION 19, T26S-R33E LEA COUNTY, NEW MEXICO

Survey of a proposed 300' x 300' facility pad on Bureau of Land Management land in Section 19 of Township 26 South Range 33 East, Lea County, New Mexico.

COMMENCING at a found 2" iron pipe with cap, located at the Northeast corner of the Northwest quarter of said Section 19 Township 26 South Range 33 East; **thence** South 74 degrees 59 minutes 23 seconds West 1,607.96 feet to the **POINT OF BEGINNING**, said **POINT OF BEGINNING** having the following coordinates: X= 722,323.17, Y= 377,206.42 (New Mexico State Plane coordinate system, East zone, NAD 27).

Thence South 00 degrees 25 minutes 43 seconds East 299.93 feet;

Thence South 89 degrees 34 minutes 38 seconds West 299.99 feet;

Thence North 00 degrees 25 minutes 42 seconds West 299.90 feet;

Thence North 89 degrees 34 minutes 20 seconds East 299.99 feet to the POINT OF BEGINNING.

The bearings recited hereon are oriented to New Mexico State Plane coordinate system, East zone, NAD. 27.

This description represents a survey made on the ground for a surface easement and intended solely for that purpose. This description does not represent a boundary survey.



WM. J. Dauiel Diffession Registered Professional Land Surveyor #15078 CULE Stermaker & Associates, LLC 135 Regency Square Lafayette, LA 70508 337-237-2200

METES AND BOUNDS DESCRIPTION OF A CALLED 0.92 ACRE COMPRESSOR PAD SECTION 19, T265-R33E LEA COUNTY, NEW MEXICO

Survey of a proposed 200' x 200' compressor pad on Bureau of Land Management land in Section 19 of Township 26 South Range 33 East, Lea County, New Mexico.

COMMENCING at a found 2" iron pipe with cap, located at the Northeast corner of the Northwest quarter of said Section 19 Township 26 South Range 33 East; **thence** South 69 degrees 09 minutes 24 seconds West 1,447.05 feet to the **POINT OF BEGINNING**, said **POINT OF BEGINNING** having the following coordinates: X= 722,523.91, Y= 377,108.00 (New Mexico State Plane coordinate system, East zone, NAD 27).

Thence South 00 degrees 25 minutes 43 seconds East 200.00 feet;

Thence South 89 degrees 34 minutes 17 seconds West 200.00 feet;

Thence North 00 degrees 25 minutes 43 seconds West 200.00 feet;

Thence North 89 degrees 34 minutes 17 seconds East 200.00 feet to the POINT OF BEGINNING.

The bearings recited hereon are oriented to New Mexico State Plane coordinate system, East zone, NAD 27.

This description represents a survey made on the ground for a surface easement and intended solely for that perpose **DAM** sessible of the sess



WM J. Daniel III Registered Professional Land Surveyor #15078 C.H. Jenstermaker & Associates, LLC 135 Regency Square Lafayette, LA 70508 337-237-2200