



H₂S Preparedness and Contingency Plan Summary

SD EA 18/19 Fed Com P14 12H

SD EA 18/19 Fed Com P14 13H

SD EA 18/19 Fed Com P14 14H

SD EA 18/19 Fed Com P15 15H

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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 H₂S, who are not required to perform work in H₂S areas, will be provided with an awareness level of H₂S training prior to entering any H₂S 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;
5. 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 H₂S training courses will be instructed by personnel who have successfully completed an appropriate H₂S 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) placed 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.

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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

| <u>Agency</u> | <u>Telephone Number</u> |
|------------------------------------|-------------------------|
| 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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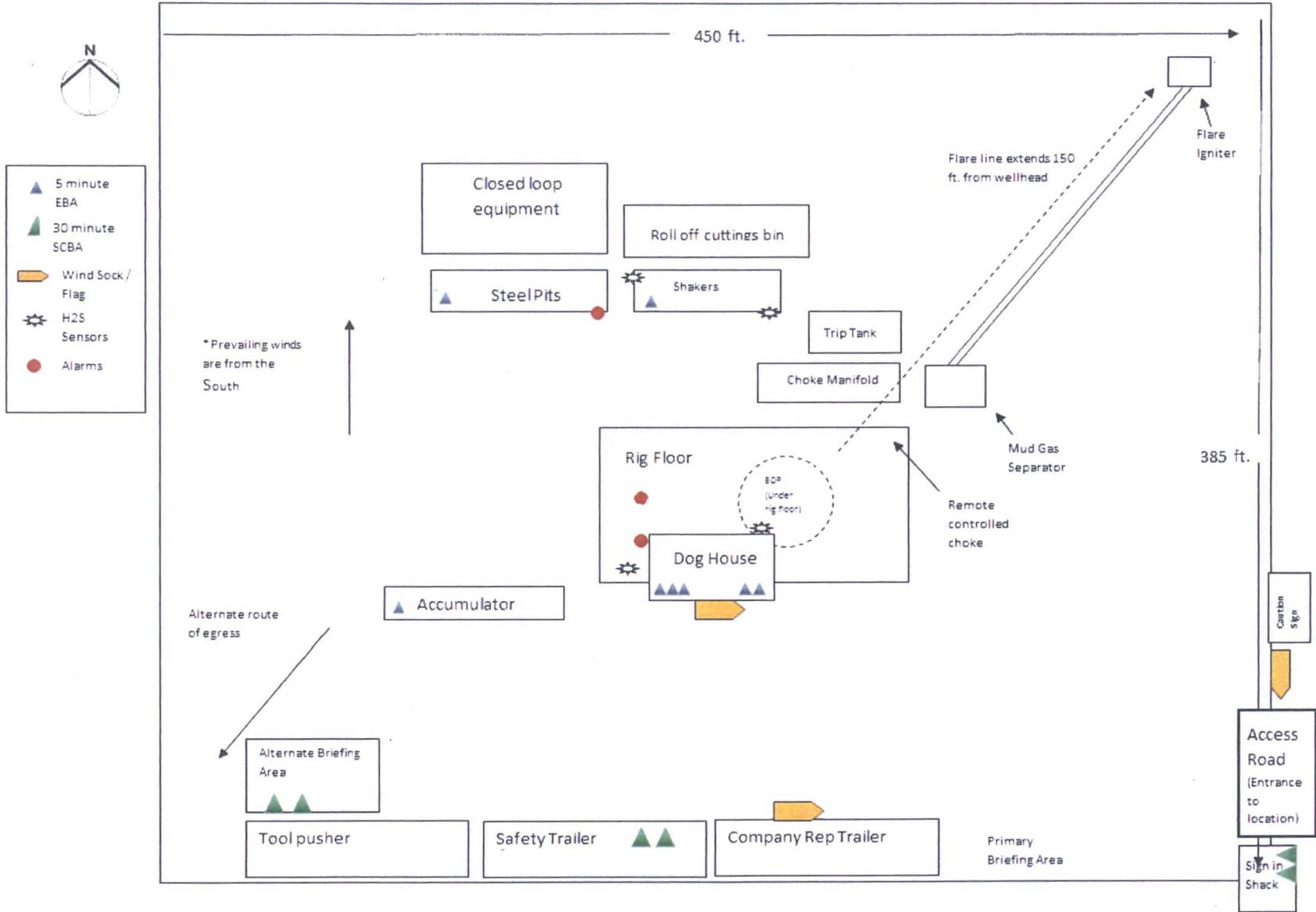
Chevron MCBU D&C Emergency Notifications

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

| | Name | Title | Office Number | Cell Phone |
|----|---------------------|---------------------|----------------|-----------------|
| 1. | Bryson Abney | Drilling Engineer | (713) 372-6447 | (832) 683-0938 |
| 2. | Yung Wilson | Superintendent | (713) 372-6475 | (713) 205-7624 |
| 5. | Ikenna Chukwumaeze | Drilling Manager | (713) 372-7591 | (713) 615-0701 |
| 6. | Scott Nash | Operations Manager | (713) 372-5747 | (281) 814-9713 |
| 7. | Luke Meaux | D&C HES | (432) 687-7133 | (432) 208 -3572 |
| 8. | Markquale Fields | Completion Engineer | (713) 372-0233 | (832) 714-0724 |



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Chevron U.S.A. Inc.



Location: Lea County, NM
 Field: Jennings / Upper BN SPRN Shale (Lea County, NM)
 Facility: SD EA 18 19 Fed 14

Slot: SD EA 18 19 Fed P14 14H
 Well: SD EA 18 19 Fed P14 14H
 Wellbore: SD EA 18 19 Fed P14 14H

| Well Profile Data | | | | | | | | |
|-------------------|----------|---------|---------|----------|--------------|--------------|---------------|---------|
| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
| Tie On | 32.60 | 0.000 | 25.296 | 32.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Tangent | 1700.00 | 0.000 | 25.296 | 1700.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Build | 2700.00 | 10.000 | 25.296 | 2694.93 | 78.70 | 37.19 | 1.00 | -78.47 |
| End of Tangent | 4292.51 | 10.000 | 25.296 | 4263.25 | 328.72 | 155.36 | 0.00 | -327.76 |
| End of Drop | 5292.51 | 0.000 | 179.648 | 5258.18 | 407.42 | 192.55 | 1.00 | -406.23 |
| End of Tangent | 11831.87 | 0.000 | 179.648 | 11797.54 | 407.42 | 192.55 | 0.00 | -406.23 |
| End of Build | 12581.87 | 90.000 | 179.648 | 12275.00 | -70.04 | 195.48 | 12.00 | 71.23 |
| End of Tangent | 22435.37 | 90.000 | 179.648 | 12275.00 | -9923.35 | 256.01 | 0.00 | 9924.73 |

| Bottom Hole Location | | | | | | | | | |
|----------------------|---------|---------|----------|--------------|--------------|-------------------|--------------------|----------------|-----------------|
| MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
| 22435.37 | 90.000 | 179.648 | 12275.00 | -9923.35 | 256.01 | 724178.00 | 372526.00 | 32°01'19.651"N | 103°36'36.003"W |

| | |
|--|---|
| Plot reference wellpath is SD EA 18 19 Fed P14 14H Rev A.0 | Grid System: NAD27 / TM New Mexico SP, Eastern Zone (2001), US feet |
| True vertical depths are referenced to Rig Nabors X30 (KB) | * Wellpath was transformed from a different geographic datum |
| Measured depths are referenced to Rig Nabors X30 (KB) | North Reference: Grid north |
| Rig Nabors X30 (KB) to Mean Sea Level: 3255.8 feet | Scale: True distance |
| Mean Sea Level to Ground level (At Slot: SD EA 18 19 Fed P14 14H) -3223 feet | Depth are in feet |
| Coordinates are in feet referenced to Slot | Created by: Frank on 2017-08-16 |
| | Database: W.A. Modified |

| Location Information | | | | | | | | | |
|--|-------------------|--------------------|-------------------|--------------------|----------------|-----------------|--|--|--|
| Facility Name | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude | | | | | |
| SD EA 18 19 Fed 14 | 723872.000 | 382449.000 | 32°02'37.869"N | 103°36'39.786"W | | | | | |
| Slot | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude | | | |
| SD EA 18 19 Fed P14 14H | 0.00 | 50.00 | 723922.000 | 382449.000 | 32°02'37.865"N | 103°36'38.295"W | | | |
| Rig Nabors X30 (KB) to Ground level (At Slot: SD EA 18 19 Fed P14 14H) | | | | | 32.4ft | | | | |
| Mean Sea Level to Ground level (At Slot: SD EA 18 19 Fed P14 14H) | | | | | -3223ft | | | | |
| Rig Nabors X30 (KB) to Mean Sea Level | | | | | 3255.8ft | | | | |

