



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.

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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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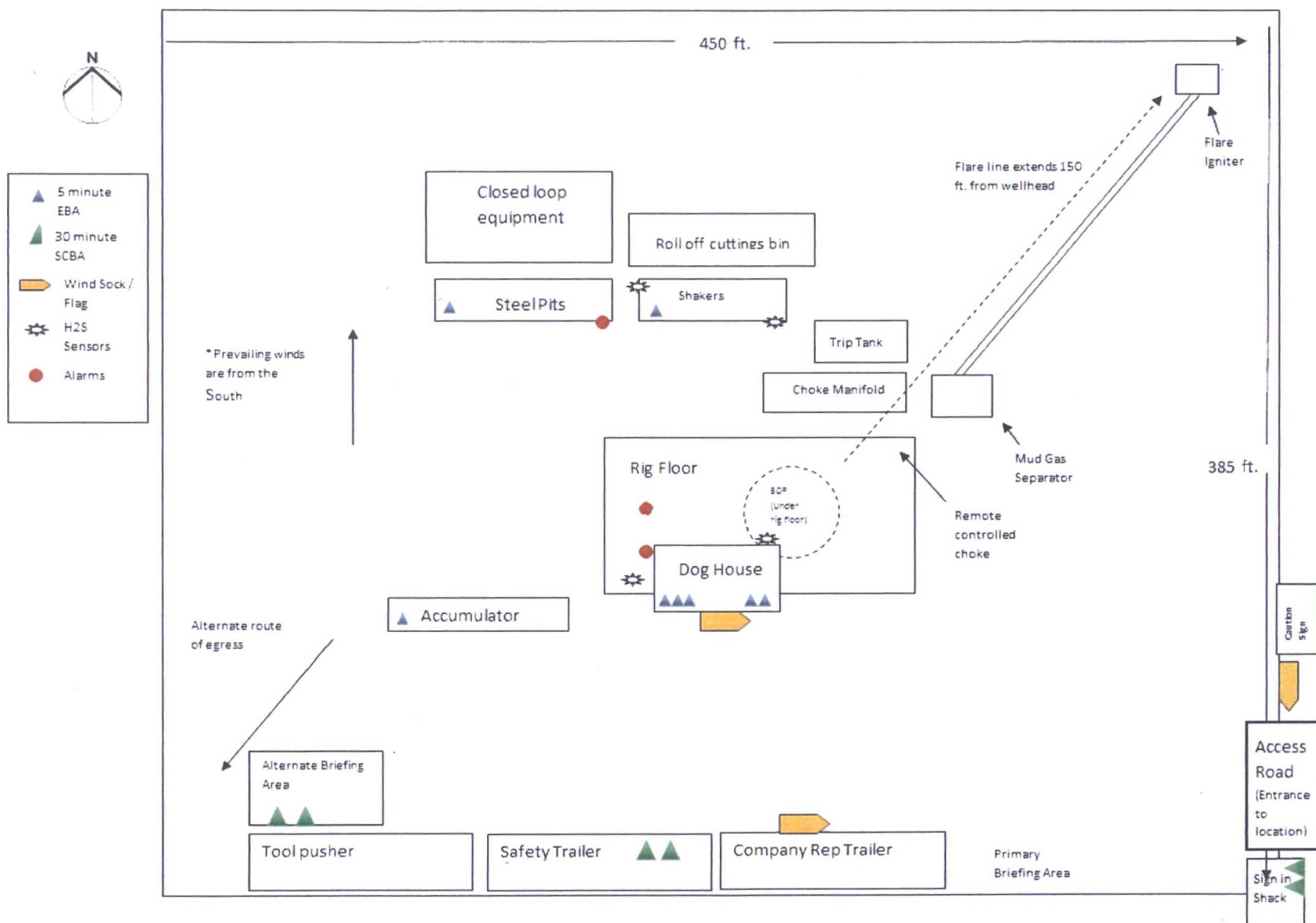


Chevron MCBU D&C Emergency Notifications

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	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: Trakem on 2017-06-16
	Database: WTA_McIntosh

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SD EA 18 19 Fed 14	723873.000	382449.000	32°02'57.868"N	103°36'39.786"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
SD EA 18 19 Fed P14 14H	0.00	50.00	723922.000	382449.000	32°02'57.865"N
Rig Nabors X30 (KB) to Ground level (At Slot SD EA 18 19 Fed P14 14H)					32.6ft
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

