



# H<sub>2</sub>S Preparedness and Contingency Plan Summary

**Salado Draw 29 26 33 Fed 5H**

**Salado Draw 29 26 33 Fed 7H**

**Salado Draw 29 26 33 Fed 6H**

**Salado Draw 29 26 33 Fed 8H**

## Training

MCBU Drilling and Completions H<sub>2</sub>S 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 H<sub>2</sub>S.

### Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H<sub>2</sub>S, who are not required to perform work in H<sub>2</sub>S areas, will be provided with an awareness level of H<sub>2</sub>S training prior to entering any H<sub>2</sub>S areas. At a minimum, awareness level training will include:

1. Physical and chemical properties of H<sub>2</sub>S
2. Health hazards of H<sub>2</sub>S
3. Personal protective equipment
4. Information regarding potential sources of H<sub>2</sub>S
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 H<sub>2</sub>S Training

Employees and contractors required to work in areas that may contain H<sub>2</sub>S will be provided with Advanced Level H<sub>2</sub>S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H<sub>2</sub>S training will include:

1. H<sub>2</sub>S safe work practice procedures;
2. Emergency contingency plan procedures;
3. Methods to detect the presence or release of H<sub>2</sub>S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H<sub>2</sub>S equipment.
4. Basic overview of respiratory protective equipment suitable for use in H<sub>2</sub>S 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 H<sub>2</sub>S training;
6. Proficiency examination covering all course material.

Advanced H<sub>2</sub>S training courses will be instructed by personnel who have successfully completed an appropriate H<sub>2</sub>S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.



## H<sub>2</sub>S Training Certification

All employees and visitors will be issued an H<sub>2</sub>S training certification card (or certificate) upon successful completion of the appropriate H<sub>2</sub>S training course. Personnel working in an H<sub>2</sub>S environment will carry a current H<sub>2</sub>S 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.

## H<sub>2</sub>S 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.

## H<sub>2</sub>S Detection and Monitoring System

- a) H<sub>2</sub>S 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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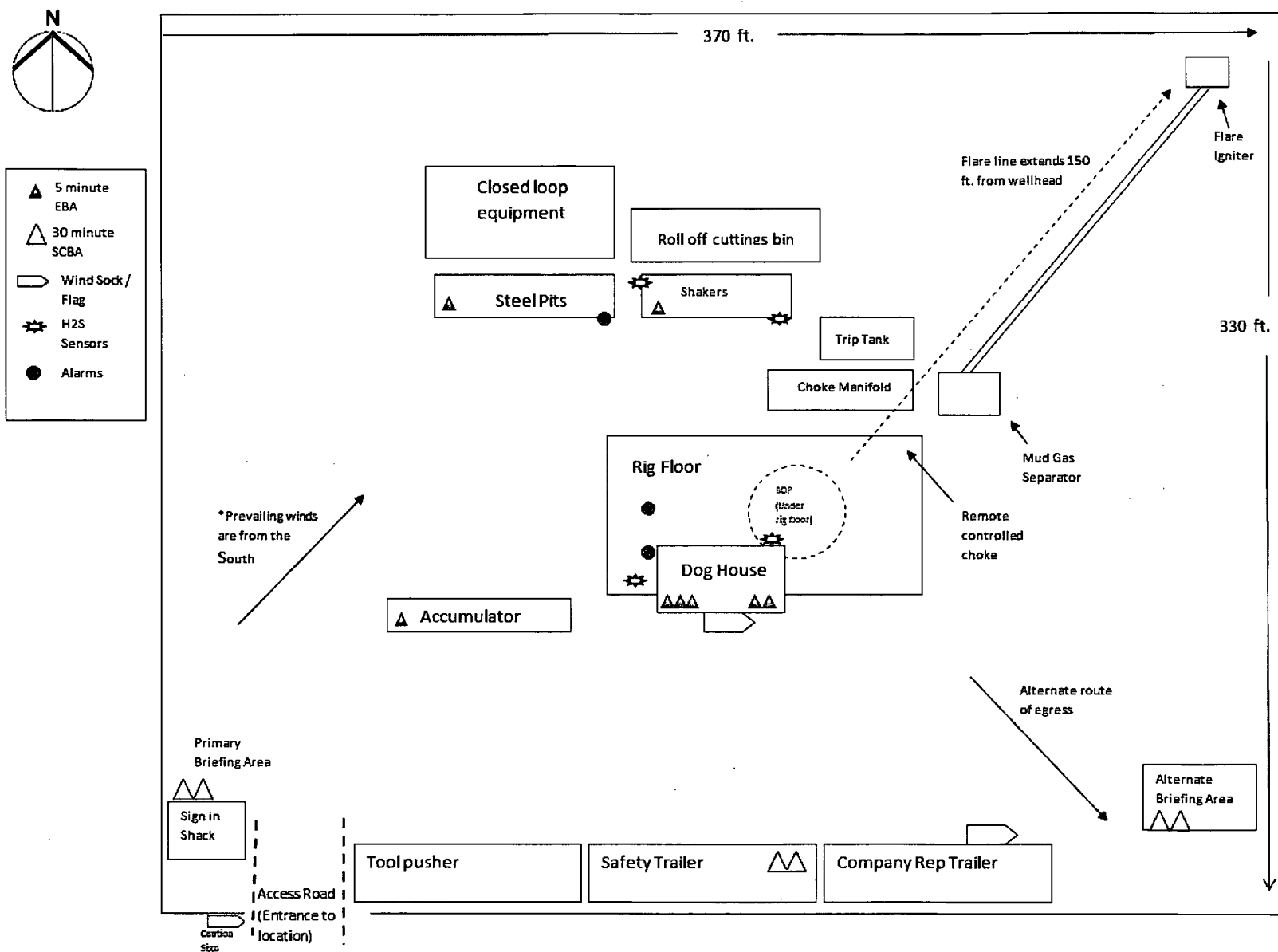


## Chevron MCBU D&C Emergency Notifications

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

	Name	Title	Office Number	Cell Phone
1.	Vicente Ruiz	Drilling Engineer	(713) 372-6181	(713) 898-5436
2.	Phil Clark	Superintendent	(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

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# Exhibit E

## NOTE:

Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

## NOTE:

Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance: New Mexico One Call - [www.nmonocall.org](http://www.nmonocall.org)

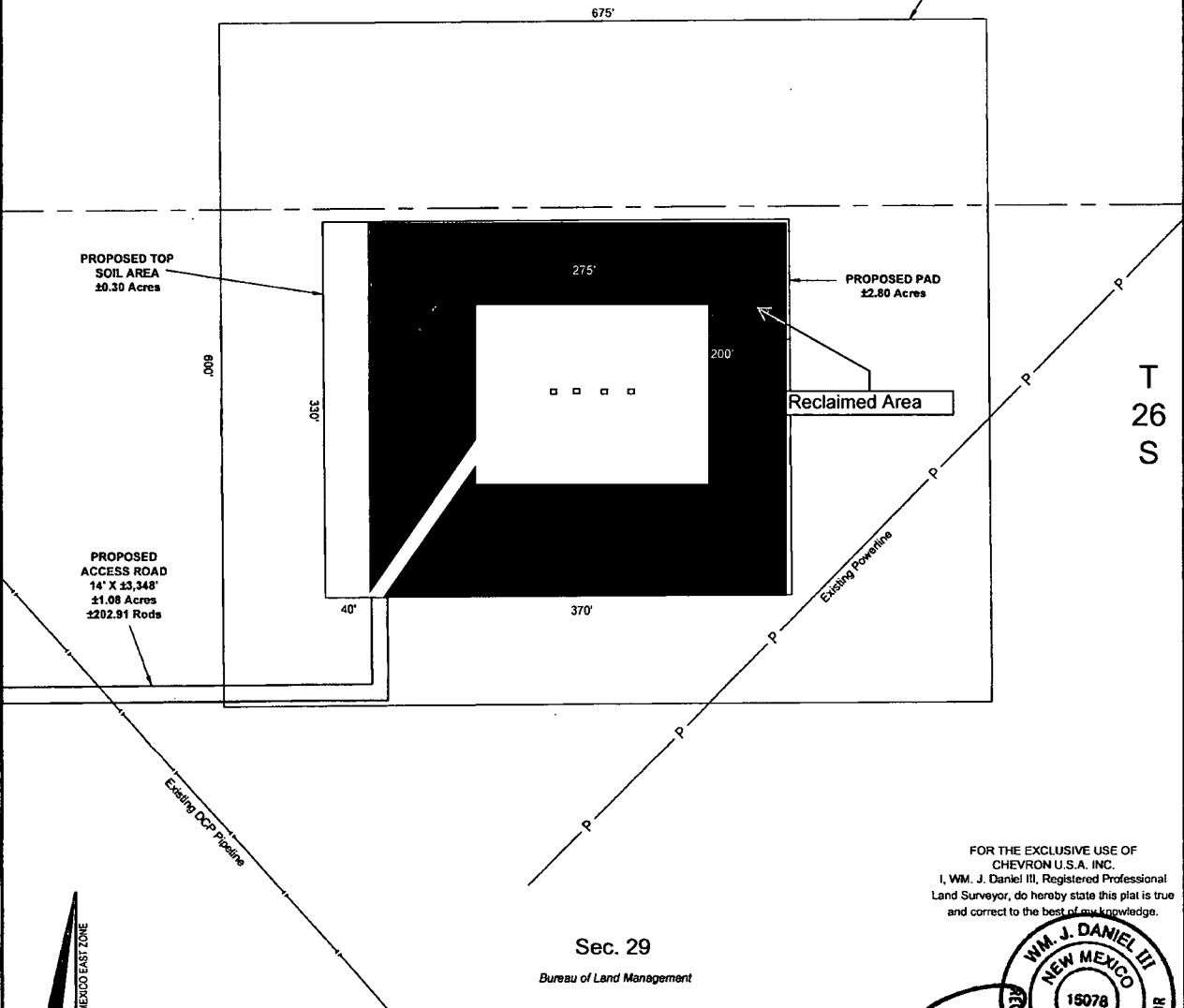
**DISCLAIMER:** At this time, C.H. Fenstermaker & Associates, LLC has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

NW ARCH. AREA CORNER	NE ARCH. AREA CORNER	SE ARCH. AREA CORNER	SW ARCH. AREA CORNER	SALADO DRAW 29 26 33 FED COM 5H WELL
X= 730,094 NAD 27 Y= 372,552 ELEVATION +3265' NAVD 88	X= 730,758 NAD 27 Y= 372,556 ELEVATION +3253' NAVD 88	X= 730,763 NAD 27 Y= 371,956 ELEVATION +3239' NAVD 88	X= 730,087 NAD 27 Y= 371,952 ELEVATION +3240' NAVD 88	X= 730,385 NAD 27 Y= 372,254 LAT. 32.021261 LONG. 103.599979
NW PAD CORNER/NE TOP SOIL AREA CORNER	NE PAD CORNER	SE PAD CORNER	SW PAD CORNER/SE TOP SOIL AREA CORNER	
X= 730,215 NAD 27 Y= 372,377 ELEVATION +3258' NAVD 88	X= 730,585 NAD 27 Y= 372,380 ELEVATION +3254' NAVD 88	X= 730,587 NAD 27 Y= 372,050 ELEVATION +3240' NAVD 88	X= 730,217 NAD 27 Y= 372,047 ELEVATION +3241' NAVD 88	X= 771,573 NAD 83 Y= 372,311 LAT. 32.021386 LONG. 103.590446
NW TOP SOIL AREA CORNER	SW TOP SOIL AREA CORNER			
X= 730,175 NAD 27 Y= 372,377 ELEVATION +3258' NAVD 88	X= 730,177 NAD 27 Y= 372,047 ELEVATION +3247' NAVD 88			ELEVATION +3247' NAVD 88

R 33 E

Sec. 20  
Bureau of Land Management

PROPOSED  
ARCHAEOLOGICAL  
AREA  
26.60 Acres



PROPOSED TOP  
SOIL AREA  
±0.30 Acres

PROPOSED  
ACCESS ROAD  
14' X 13,348'  
±1.08 Acres  
±202.91 Rods

PROPOSED PAD  
±2.80 Acres

Reclaimed Area

T  
26  
S

Sec. 29  
Bureau of Land Management

FOR THE EXCLUSIVE USE OF  
CHEVRON U.S.A. INC.  
I, WM. J. Daniel III, Registered Professional  
Land Surveyor, do hereby state this plat is true  
and correct to the best of my knowledge.



WM. J. Daniel III  
Registration No. 15078



LEGEND	
—	Section Line
P	Existing Powerline
—	Existing Pipeline

CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SALADO DRAW 29 26 33 FED COM 5H WELL  
SECTION 29, T26S-R33E  
LEA COUNTY, NEW MEXICO

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135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
[www.fenstermaker.com](http://www.fenstermaker.com)

Scale: 1"=100'  
100' 0 50' 100'

DRAWN BY: BMO		REVISIONS	
PROJ. MGR: VHV	No.	DATE:	REVISED BY:
DATE: APRIL 28, 2014	No.	DATE:	REVISED BY:
FILENAME: T:\2014\2144783\DWG\Salado Draw 29 26 33 Fed Com 5H_SUP.dwg			

ONSHORE OIL & GAS ORDER NO. 1  
Approval of Operations on Onshore  
Federal and Indian Oil and Gas Leases

**Salado Draw 29 26 33 FED #8H**

136' FNL and 3,906' FWL  
Section 29, Township 26, Range 33  
Lea County, New Mexico

**A. EXISTING ROADS/LEASE ROADS (Surface Land)**

Driving directions are from Jal, New Mexico. The location is approximately 50.5 miles from the nearest town, which is Jal, New Mexico. From Jal, NM. Proceed on Highway 128 approximately 30 miles and turn left onto highway 1 and go approximately 14.2 miles to Battle Axe road (CR 2) and turn left or east, and go approximately 6.7 miles and turn left and go about 0.5 of a mile north, then turn east 0.5 of a mile to the well.

The proposed access to the location is approximately 1 mile off of Battle Axe Road (CR 2) being approximately 1 mile in length and 14' in travel way width with a maximum disturbance area of 20' will be used, and in accordance with guidelines set forth in the BLM Onshore Orders. No turnouts are expected.

Existing county and lease roads will be used to enter proposed access road.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

Location, access, and vicinity plats attached hereto. **See Exhibits A-1 to A-4.**

*Note:* Exhibit A-2 (C102) shows compressor station adjacent to the facility pad. Chevron only plans to construct compressor station when low pressure gas takeaway is not available.

Plans for improvement and/or maintenance of existing roads planned to access the well site: Chevron will improve or maintain existing roads in a condition the same as or better than before operations begin. Chevron will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattle guards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.)

**B. NEW OR RECONSTRUCTED ACCESS ROADS (Surface Land)**