



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

**SD WE 24 Fed P23 1H**

**SD WE 24 Fed P23 2H**

**SD WE 24 Fed P23 3H**

**SD WE 24 Fed P23 4H**

## 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.



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## 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

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

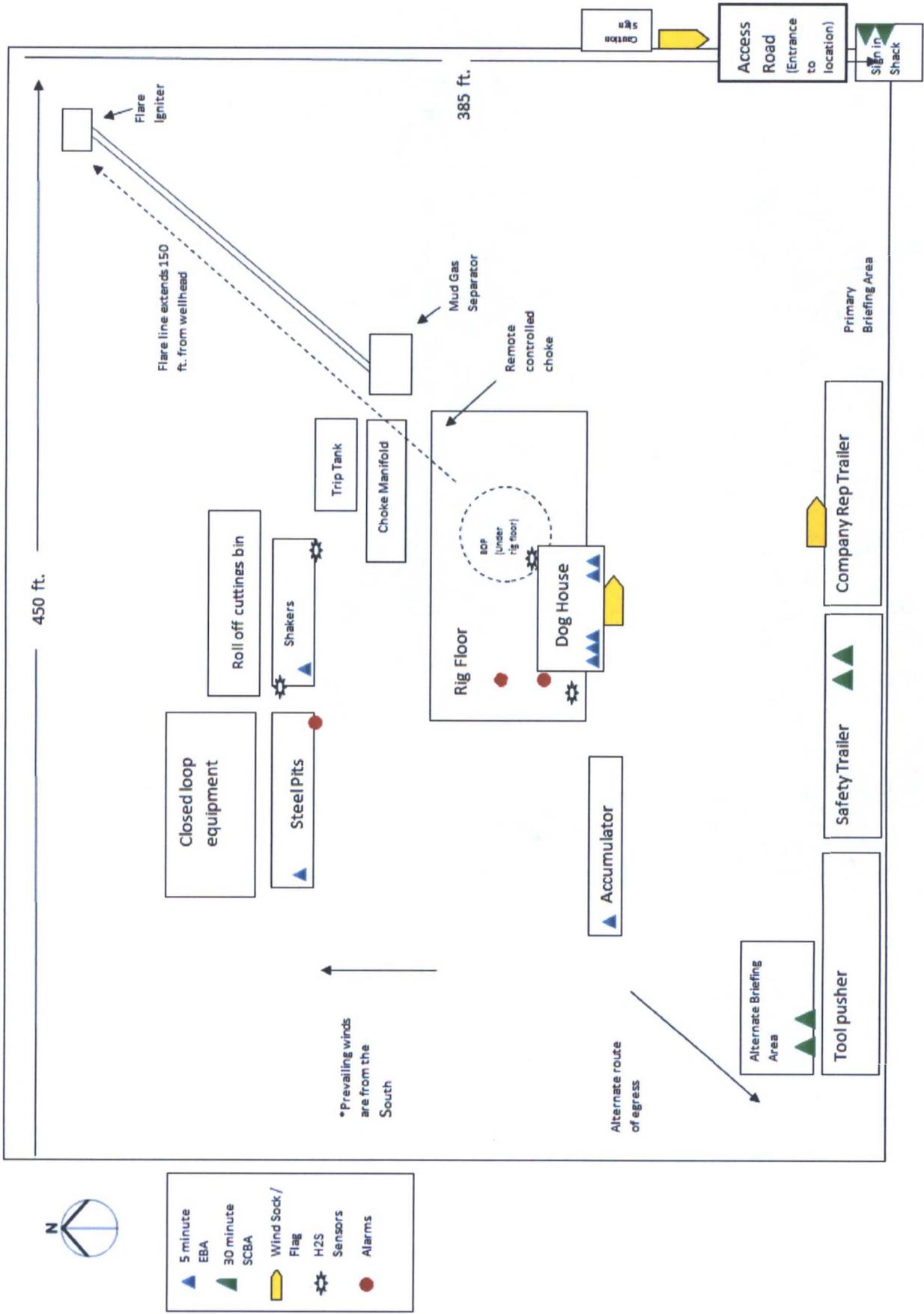


## Chevron MCBU D&C Emergency Notifications

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

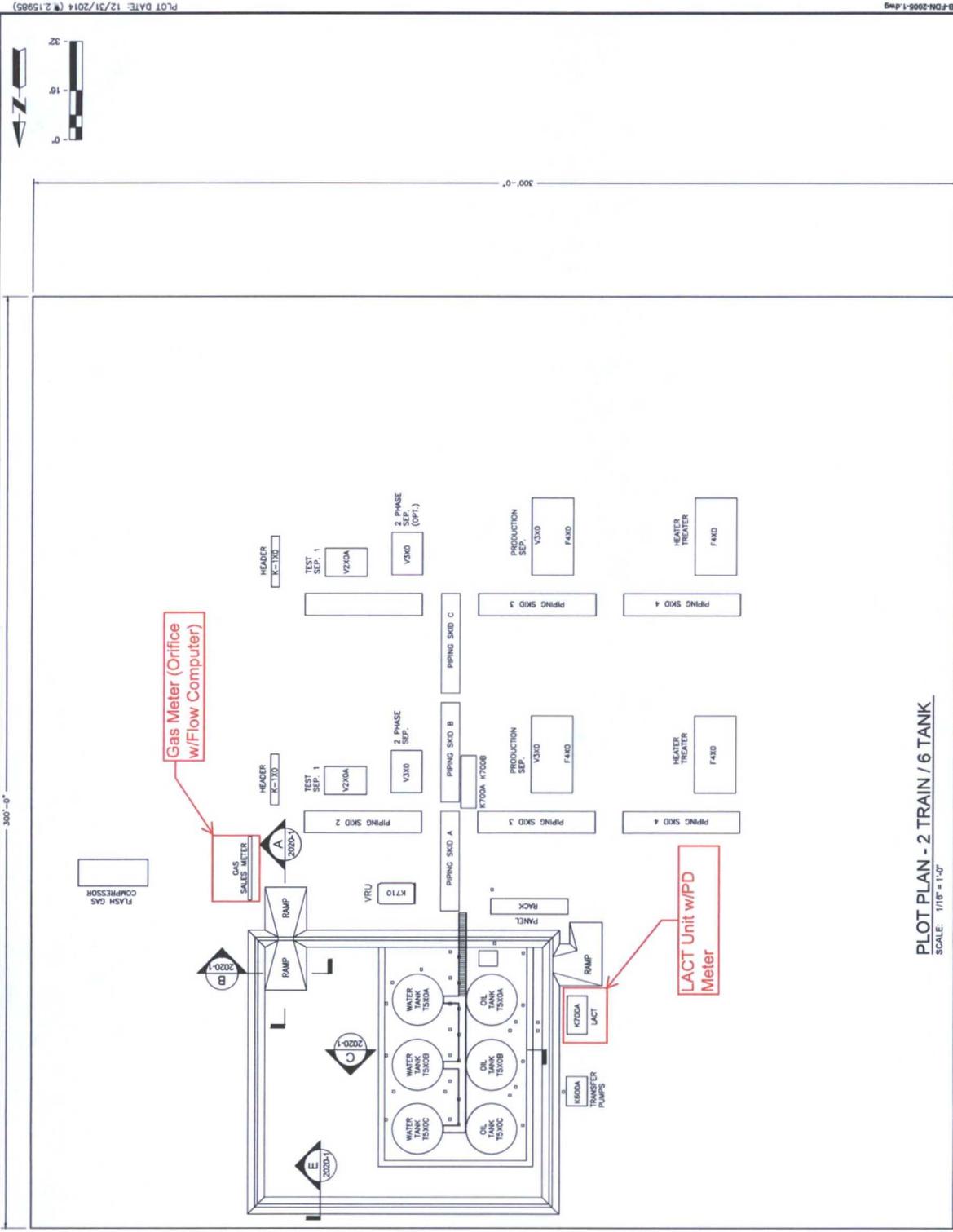
	Name	Title	Office Number	Cell Phone
1.	Vicente Ruiz	Drilling Engineer	(713) 372-6181	(713) 898-5436
2.	Josh Kirk	Superintendent	(713) 372-2505	(832) 374-7883
5.	Ikenna Chukwumaeze	Drilling Manager	(713) 372-7591	(713) 615-0701
6.	Scott Nash	Operations Manager	(713) 372-5747	(281) 814-9713
7.	Belle Davis	D&C HES	(432) 687-7477	(432) 234-8713
8.	Said Daher	Completion Engineer	(713) 372-0233	(832) 714-0724

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# Exhibit 4



PLOT PLAN - 2 TRAIN / 6 TANK  
SCALE: 1/16" = 1'-0"



PLOT DATE: 12/31/2014 (2:15985)

SLDRW-SDW-19CTB-MCB-STB-FDN-2005-1.dwg

HOBBS FMT - SALADO DRAW SEC. 19 CTB  
DELAWARE BASIN



API LEASE

**IFC**  
ISSUED FOR CONSTRUCTION

REVISIONS	DATE	BY	CHKD
ISSUED FOR CONSTRUCTION -			
APPROVED 07/17/15			

SLDRW-SDW-19CTB-MCB-STB-FDN-2005-1

R 32 E

Sec. 14

Bureau of Land Management

Sec. 13

Bureau of Land Management

43' PL R-O-W

43' PL R-O-W

Existing Lease Road

Proposed Frac Pond

T  
26  
S

Sec. 23

Bureau of Land Management

Sec. 24

Bureau of Land Management

Existing Fence Line

Proposed Temporary Water Line  
±5,254.01'

Proposed Flowline  
±1,816.25'

Proposed Facility Pads

Proposed Pad 25 Access Road  
(SD WE 23 Fed P25 1H-4H Wells)

Existing Lease Road

Proposed Salado Draw  
Pad 23  
(SD WE 24 Fed P23  
1H-4H Wells)

Image courtesy of USGS Image courtesy of Image Landsat.com © 2016 Microsoft Corporation



Bureau of Land Management  
RECEIVED  
JUN 01 2016

Carlsbad Field Office  
Carlsbad, N.M.

DETAIL

Scale: 1" = 1000'

1000' 0 500' 1000'

**CHEVRON U.S.A. INC.**  
WORK AREA DETAIL FOR THE  
SD WE 24 FED P23 1H-4H WELLS  
SECTIONS 23 & 24, T26S-R32E  
LEA COUNTY, NEW MEXICO



C. H. Fenstermaker & Associates, L.L.C.  
135 Regency Sq. Lafayette, LA 70508  
Ph. 337-237-2200 Fax. 337-232-3299  
www.fenstermaker.com

DRAWN BY: VHV		REVISIONS	
PROJ. MGR.: VHV	No. #	DATE:	REVISED BY:
DATE: JUNE 01, 2016	No. #	DATE:	REVISED BY:
FILENAME: T:\2015\2153294\DWG\SD WE 24 FED P23 1H-4H _AerialDetail.dwg			

FOR THE EXCLUSIVE USE OF  
CHEVRON U.S.A. INC.

I, Robert L. Lastrapes, Professional  
Surveyor, do hereby state this plat is true  
and correct to the best of my knowledge.



Robert L. Lastrapes  
Registration No. 23006

R 32 E

Sec. 14

Bureau of Land  
Management

Sec. 13

Bureau of Land  
Management

Existing Nuevo Pipeline ROW

Existing  
SD WE 14&23 Fed P7  
Nos. 3H & 4H Drillsite &  
Access Road

Existing  
Salado Draw SWD 13  
No. 1 Drillsite &  
Access Road

T  
26  
S

700'

Point of  
Commencement/  
Fnd. 1 1/2" Iron  
Pipe w/Cap

S 30° 10' 12" W  
199.19'

PROPOSED  
FRAC POND  
±11.24 Acres

Sec. 24

Bureau of Land  
Management

Existing  
P&A'd Well

Sec. 23

Bureau of Land  
Management

(±11.24 Acres-Pond)

NAD 27 NEW MEXICO EAST ZONE

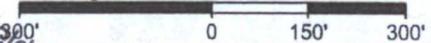


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PAGE 1 OF 2

SURFACE USE PLAT

Scale: 1" = 300'



LEGEND

- Section Line
- Existing Fence Line
- Existing Drillsite/Access
- Existing ROW
- P&A'd Well

CHEVRON U.S.A. INC.

PROPOSED FRAC POND  
SALADO DRAW FRAC POND  
SECTION 23, T26S-R32E  
LEA COUNTY, NEW MEXICO



C. H. Fenstermaker & Associates, L.L.C.  
135 Regency Sq. Lafayette, LA 70508  
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DRAWN BY: BOR		REVISIONS	
PROJ. MGR.: VHV	No.	DATE:	REVISED BY:
DATE: MAY 04, 2016	No.	DATE:	REVISED BY:
FILENAME: T:\2014\2146735\DWG\Salado Draw Frac Pond_SUP.dwg			