



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

SD WE 24 Fed P23 1H

SD WE 24 Fed P23 2H

HOBBS OCD

SD WE 24 Fed P23 3H

SD WE 24 Fed P23 4H

JUN 22 2016

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## 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 Preparedness and Contingency Plan Summary

## 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



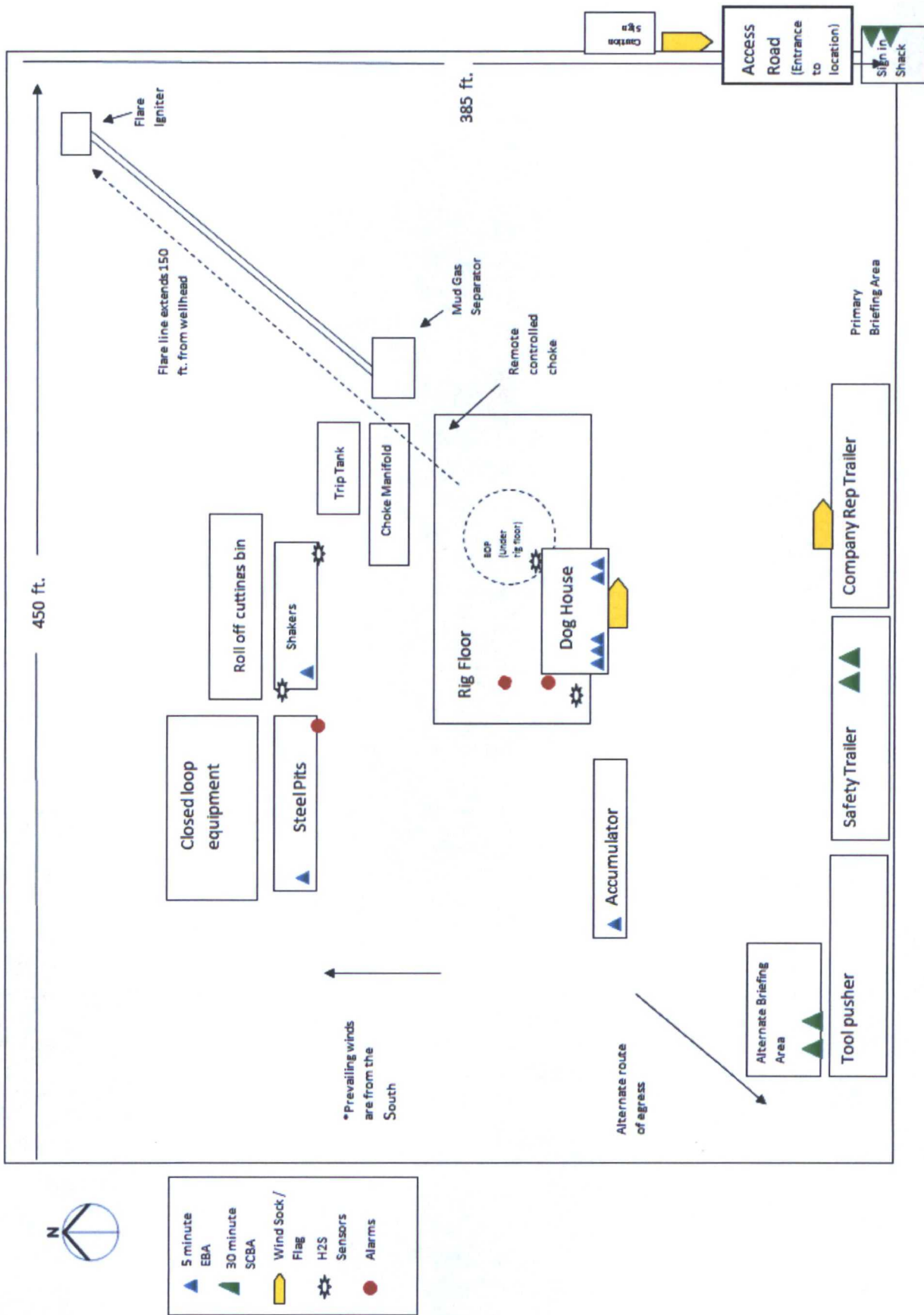
## Chevron MCBU D&C Emergency Notifications

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



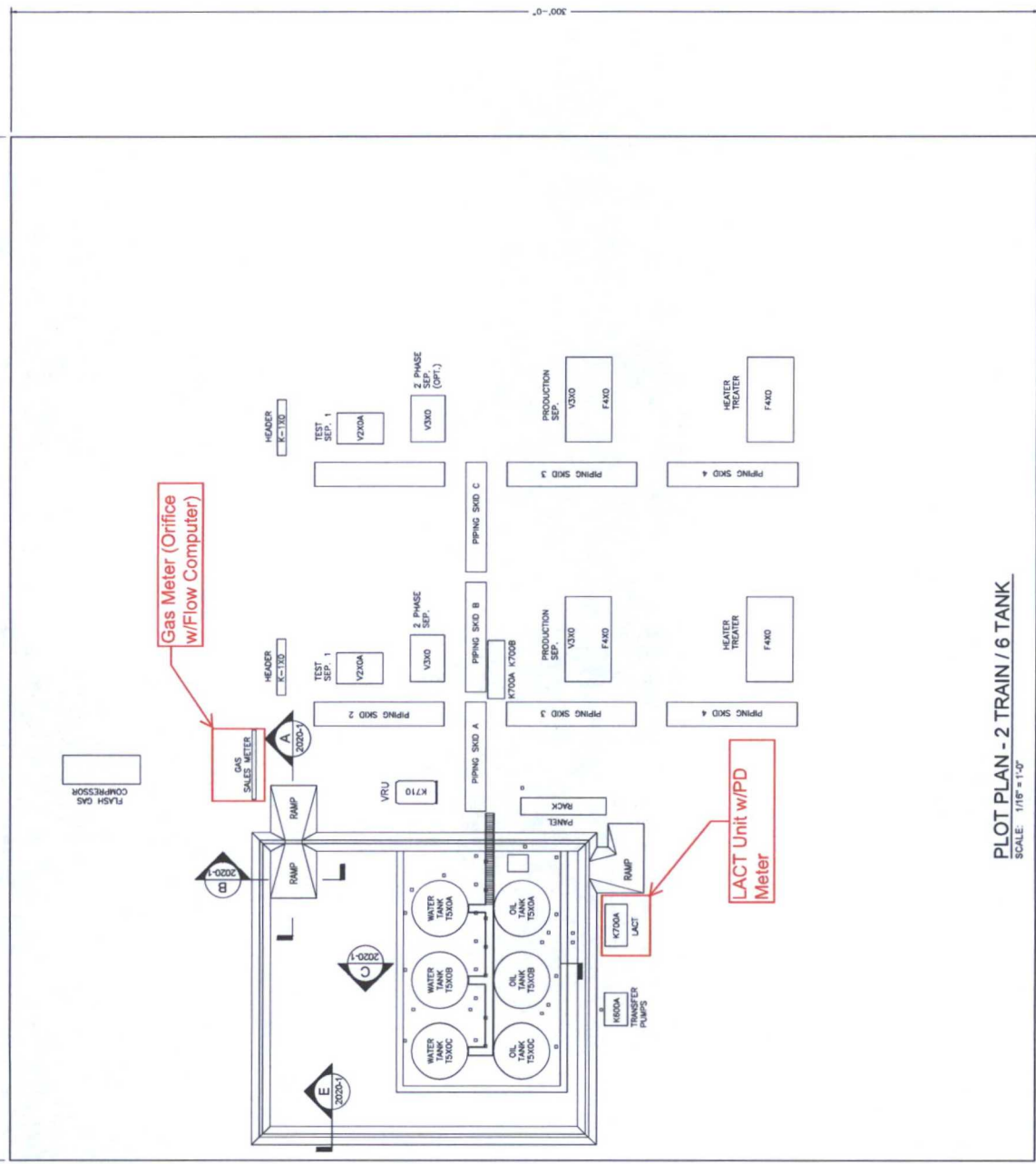
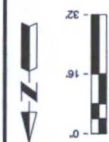
# H<sub>2</sub>S Preparedness and Contingency Plan Summary



# Exhibit 4

PLOT DATE: 12/31/2014 (1:2:15985)

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



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

Cherlon U.S.A. Inc.  
HOBBS FMT - SALADO DRAW SEC. 19 CTB  
DELAWARE BASIN  
PLOT PLAN

ISSUED FOR CONSTRUCTION  
IFC

NO.	REVISIONS	DATE	BY
1	ISSUED FOR CONSTRUCTION -	01/17/15	EMW
2			
3			

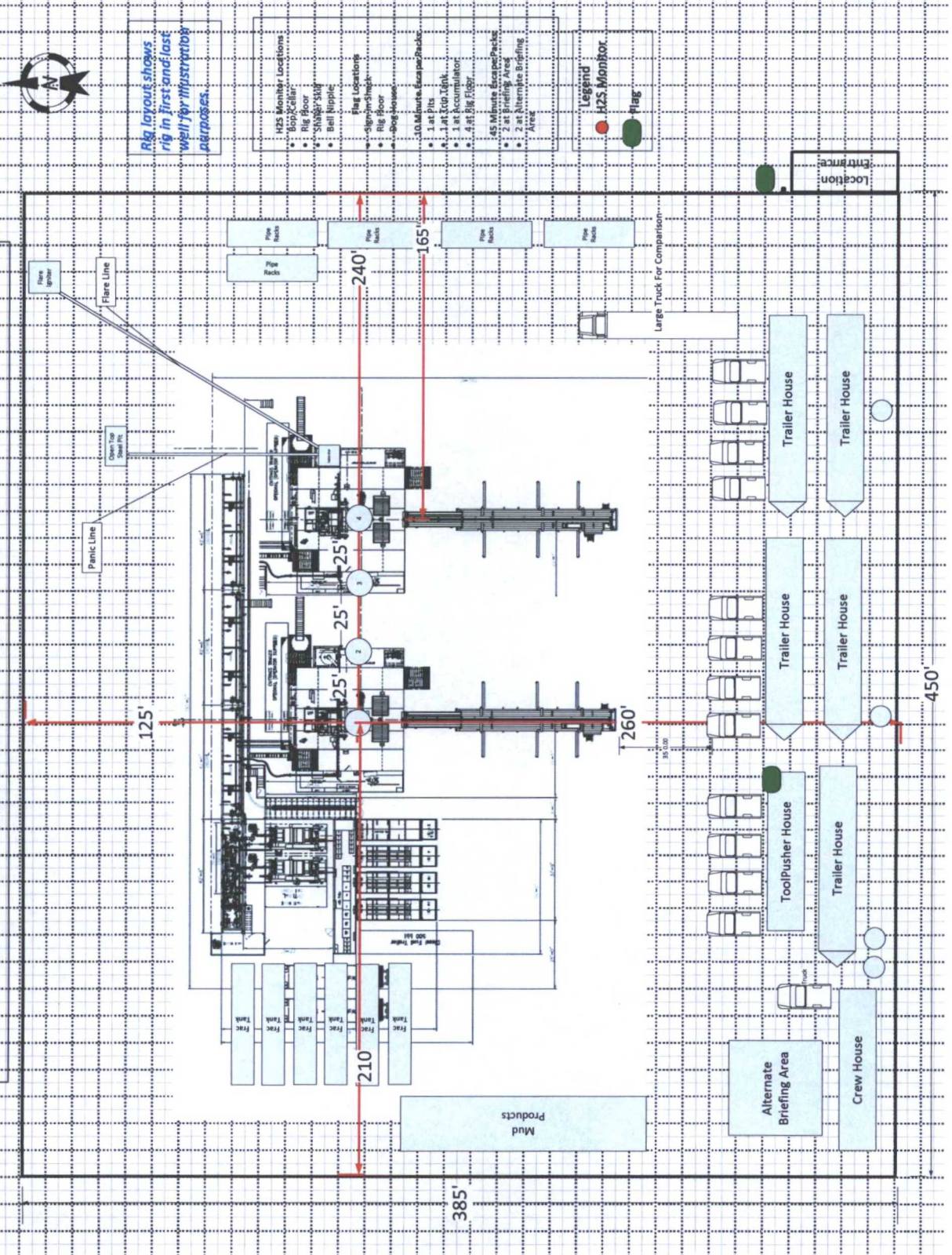
APR \_\_\_\_\_ LEASE

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



# Exhibit 6

Nabors Pace X Pad 23 - 2 mile





# Exhibit 7

SD WE 24 FED P23 4H WELL		NW ARCH. AREA CORNER	NE ARCH. AREA CORNER	SE ARCH. AREA CORNER	SW ARCH. AREA CORNER	LEGEND
X= 717,301 NAD 27	Y= 372,253	X= 716,922 NAD 27	Y= 372,549	X= 717,603 NAD 27	Y= 371,955	
LAT. 32.021499	LONG. 103.632196	ELEVATION +3137' NAVD 88	ELEVATION +3135' NAVD 88	ELEVATION +3131' NAVD 88	ELEVATION +3132' NAVD 88	Access Centerline
X= 758,488 NAD83	Y= 372,310	NW PAD CORNER	NE PAD CORNER	SE PAD CORNER	SW PAD CORNER	Water Line
LAT. 32.021625	LONG. 103.632684	X= 717,054 NAD 27	Y= 372,375	X= 717,508 NAD 27	Y= 371,995	Fence Line
ELEVATION +3133' NAVD 88	ELEVATION +3133' NAVD 88	ELEVATION +3136' NAVD 88	ELEVATION +3133' NAVD 88	ELEVATION +3132' NAVD 88	ELEVATION +3133' NAVD 88	Existing Pad
						Plugged & Abandoned Well

R 32 E

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

Sec. 24  
Bureau of Land Management

*Not to be used for construction, bidding, recording, conveyance, sales, or as the basis for the issuance of a permit.*

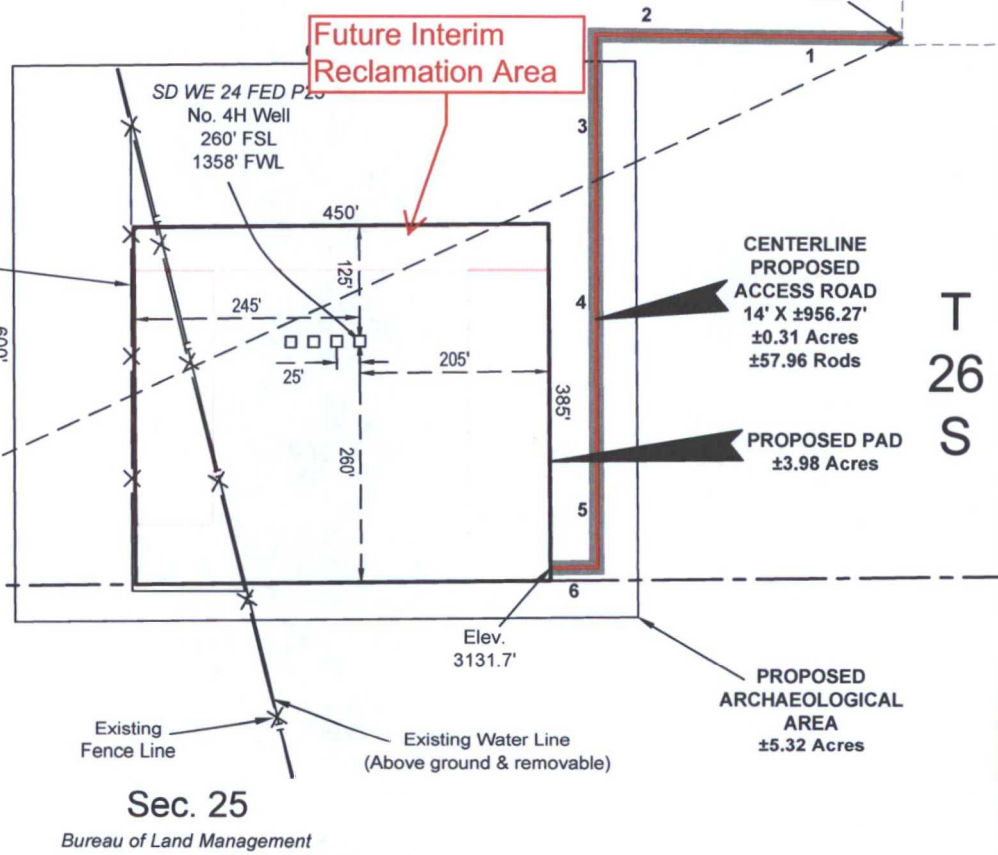


Robert L. Lastrapes  
Registration No. 23006

Sec. 23  
Bureau of Land Management



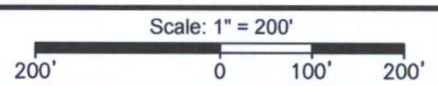
Fnd. 2" Iron Pipe w/Cap @ the SW Corner of Section 24



Sec. 25  
Bureau of Land Management

SURFACE USE PLAT

Page 1 of 3



CHEVRON U.S.A. INC.  
PROPOSED PAD & ACCESS ROAD  
SD WE 24 FED P23  
SECTION 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

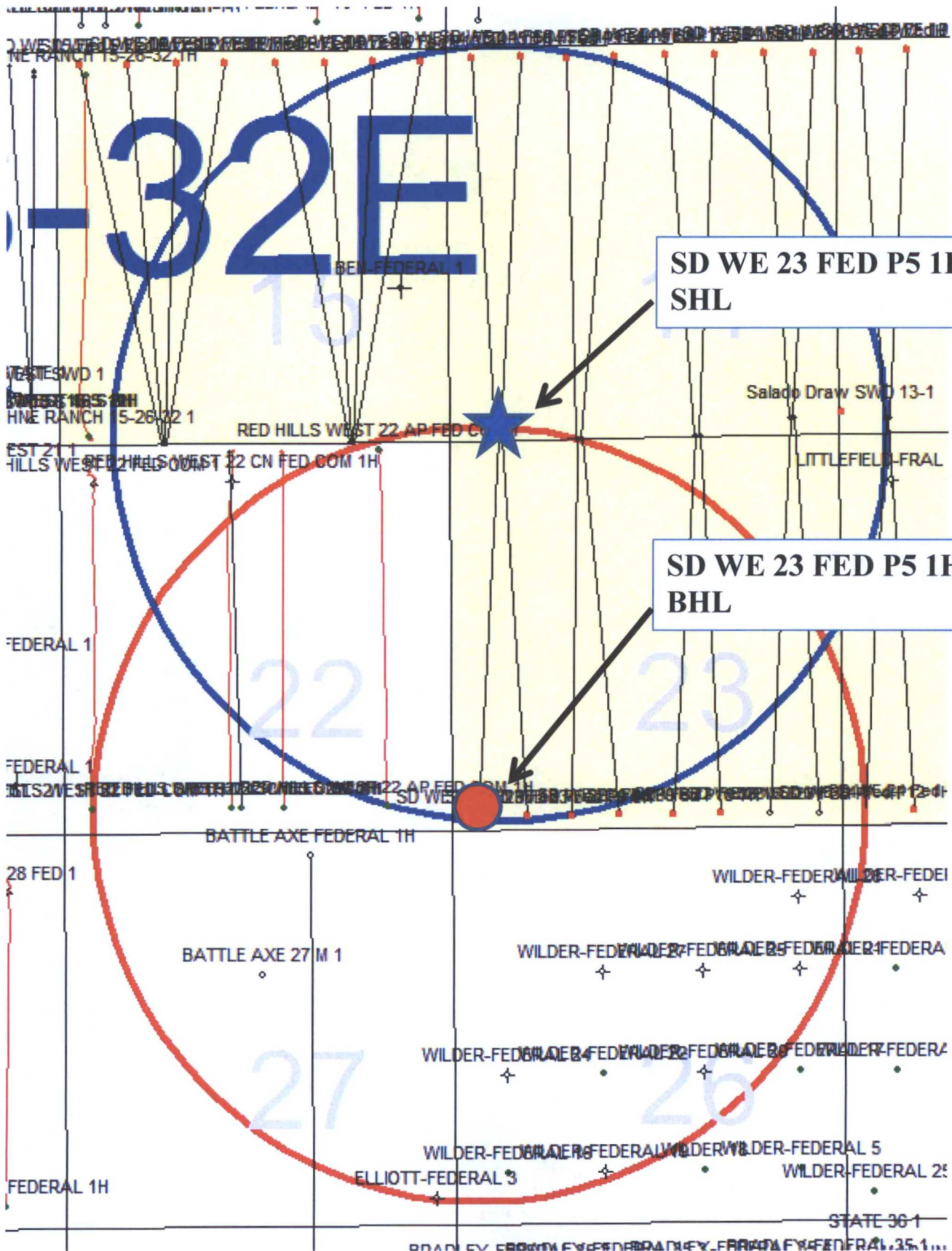
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DATE: 11/13/2015	No.	DATE:	REVISED BY:
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# Exhibit 3

SD WE 23 FED P5 1H

TWN 26S - RNG 32E - SEC 14 and SEC 23  
LEA, CO NM  
Surface and Bottom Hole Locations - 1 Mile Radius





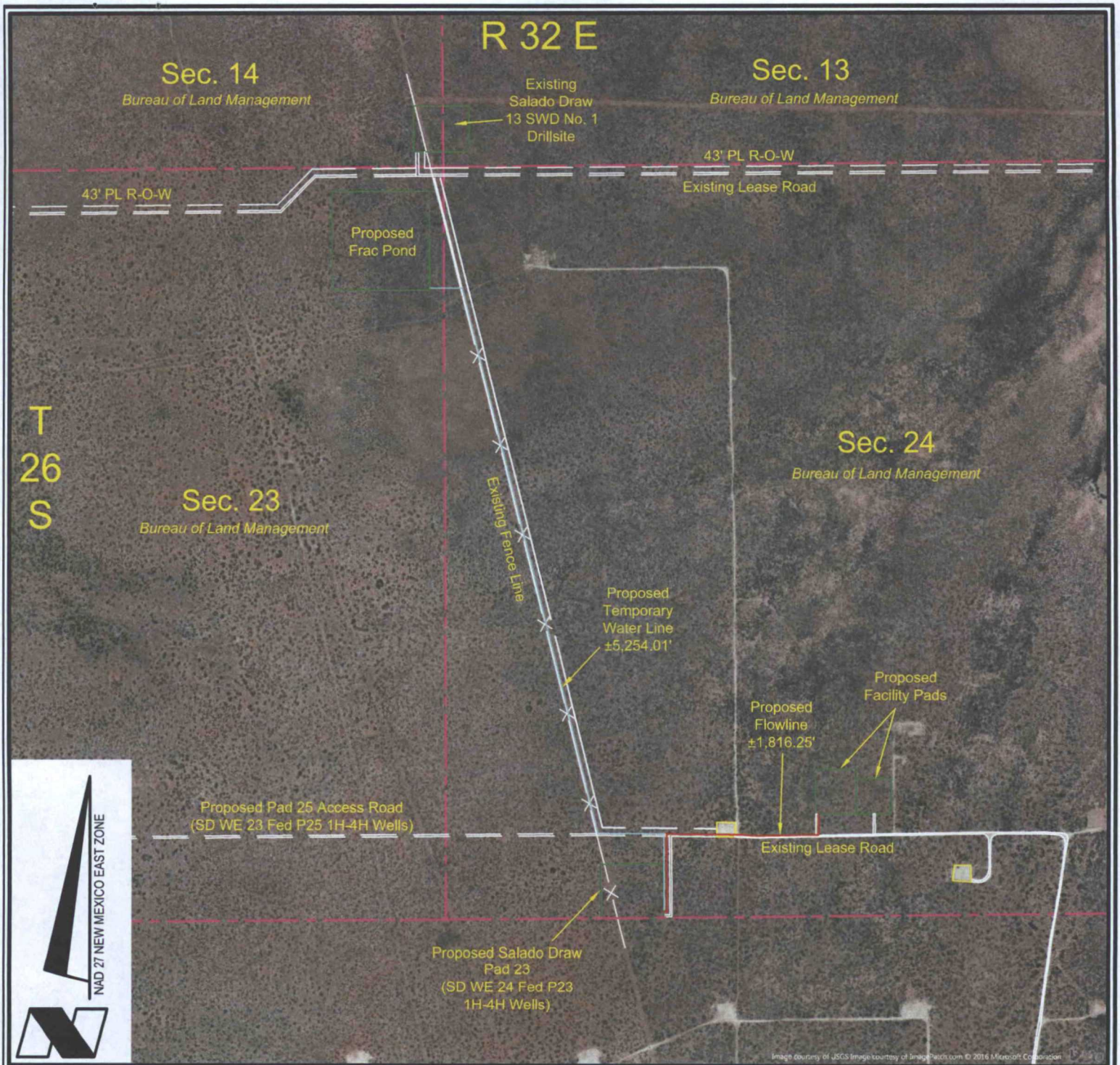
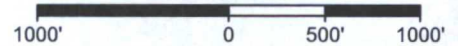


Image courtesy of USGS Image courtesy of Image Desk.com © 2016 Microsoft Corporation

DETAIL

Scale: 1" = 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.  
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 www.fenstermaker.com

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PROJ. MGR.: VHV	No. #	DATE:	REVISED BY:
DATE: JUNE 01, 2016	No. #	DATE:	REVISED BY:
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