

H₂S Preparedness and Contingency Plan Summary

30-025-42168

Moose's Tooth 29-26-33 Fed Com 1H



OCT 06 2014

Training

RECEIVED

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

H₂S Preparedness and Contingency Plan Summary

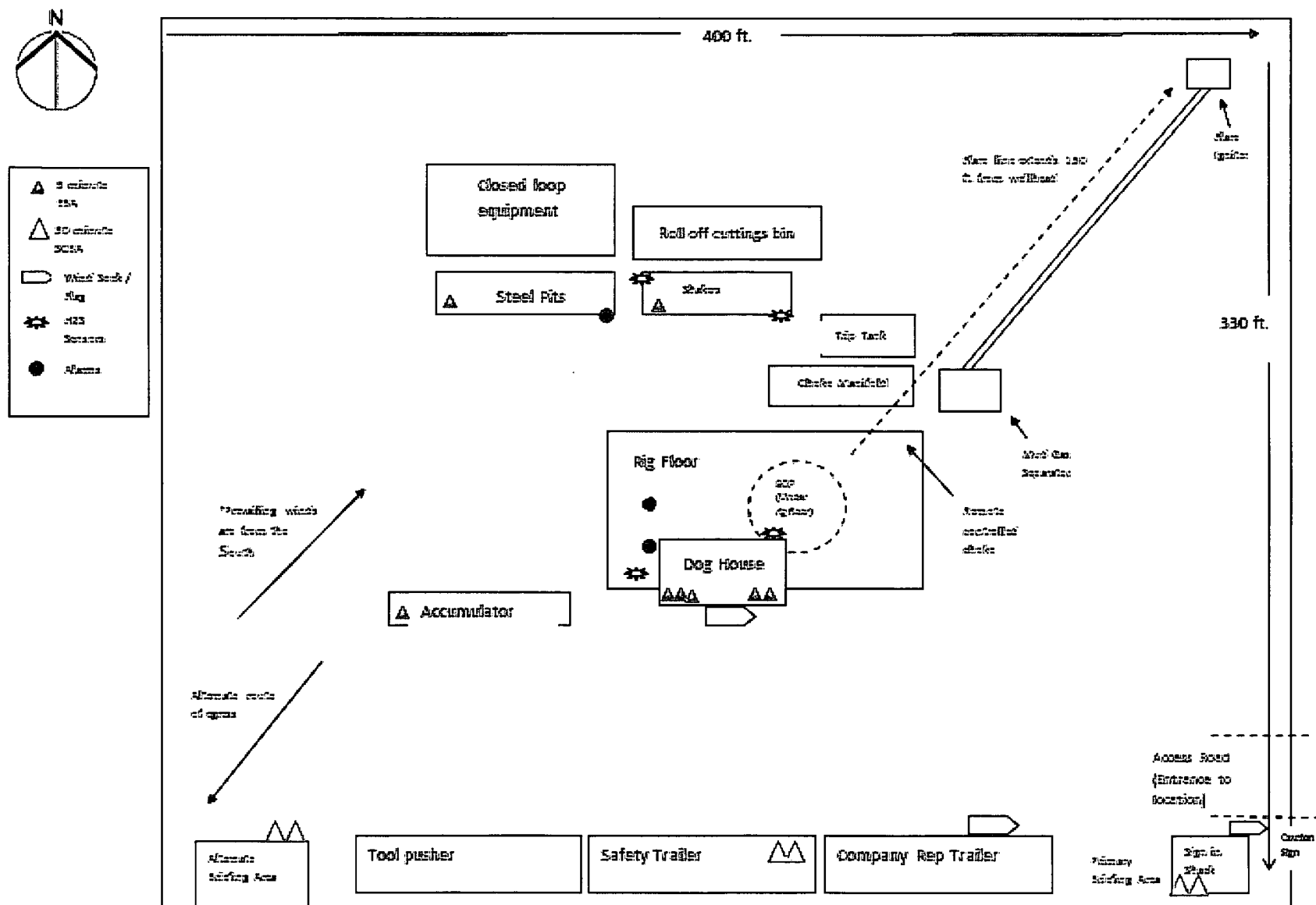


Chevron MCBU D&C Emergency Notifications

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

	Name	Title	Office Number	Cell Phone
1.	Cody Hinchman	Drilling Engineer	(713) 372-1944	(832) 470-4890
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

H₂S Preparedness and Contingency Plan Summary



Interim Reclamation Plat

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:

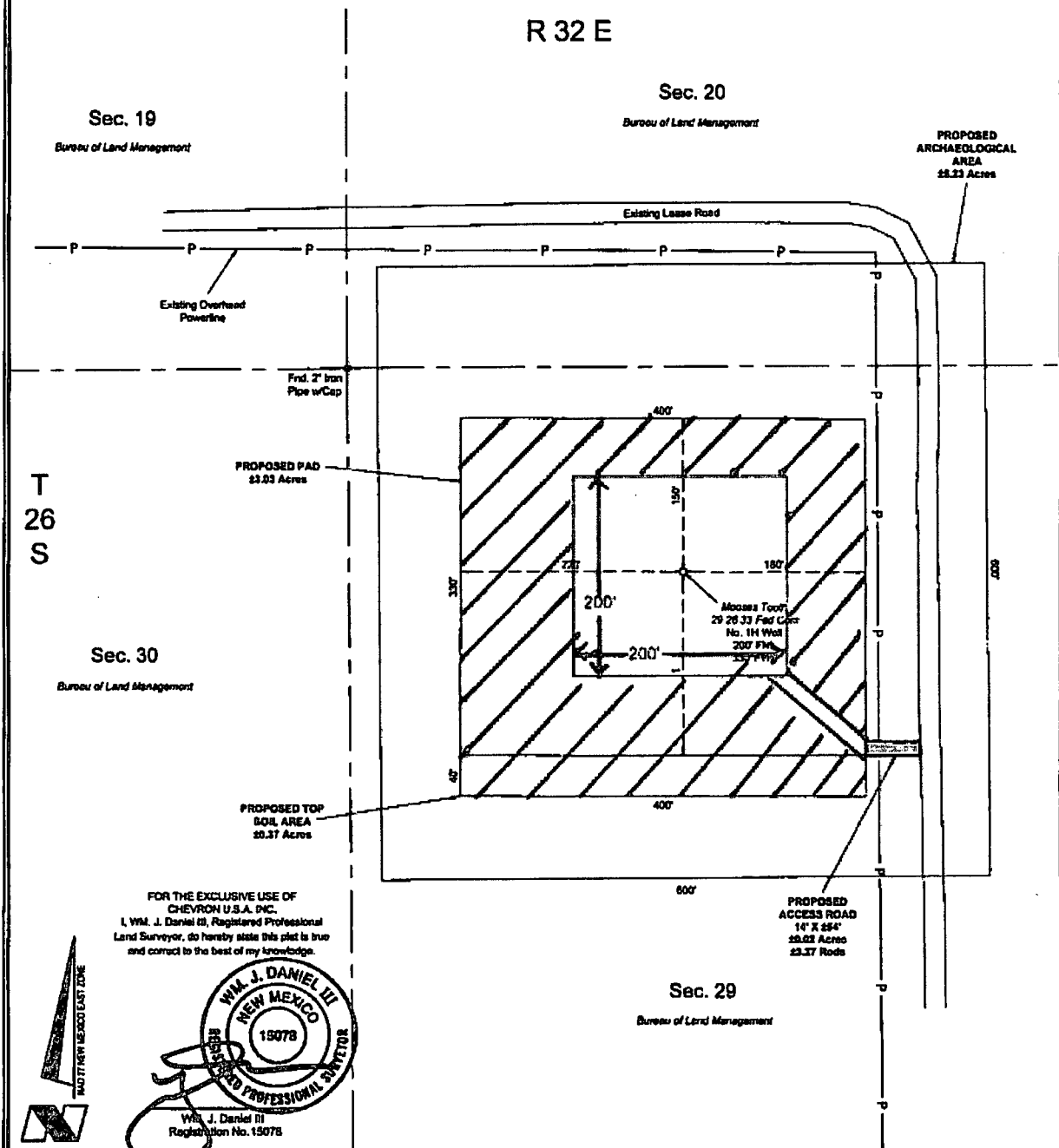
Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance: New Mexico One Call - www.onecall.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	NE ARCH. AREA	SE ARCH. AREA	SW ARCH. AREA	MOOSE TOOTH NO. 29 28 33
X= 728,565 NAD 27 Y= 372,454 ELEVATION +3209 NAVD 88	X= 727,162 NAD 27 Y= 372,459 ELEVATION +3210 NAVD 88	X= 727,165 NAD 27 Y= 371,889 ELEVATION +3207 NAVD 88	X= 728,568 NAD 27 Y= 371,864 ELEVATION +3189 NAVD 88	X= 728,565 NAD 27 Y= 372,181 LAT. 32.021087 LONG. 103.021775
NW PAD CORNER	NE PAD CORNER	SE PAD CORNER & NE TOP SOIL AREA CORNER	SW PAD CORNER & NW TOP SOIL AREA CORNER	MOOSE TOOTH NO. 29 28 33
X= 728,565 NAD 27 Y= 372,317 ELEVATION +3203 NAVD 88	X= 727,283 NAD 27 Y= 372,317 ELEVATION +3209 NAVD 88	X= 727,285 NAD 27 Y= 371,987 ELEVATION +3189 NAVD 88	X= 728,565 NAD 27 Y= 371,987 ELEVATION +3189 NAVD 88	X= 728,573 NAD 27 Y= 372,224 LAT. 32.021213 LONG. 103.021742
SE TOP SOIL AREA CORNER	SW TOP SOIL AREA CORNER			ELEVATION +3207 NAVD 88
X= 727,565 NAD 27 Y= 371,947 ELEVATION +7777 NAVD 88	X= 728,565 NAD 27 Y= 371,947 ELEVATION +7777 NAVD 88			

LEGEND

---	Section Line
---	Lease Road
-P-	Powerline
○	Point Description



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



133 Regency Sq. Lafayette, LA 70508
Ph. 337-337-2200 Fax. 337-337-3299
www.fenstermaker.com

Scale: 1"=100'

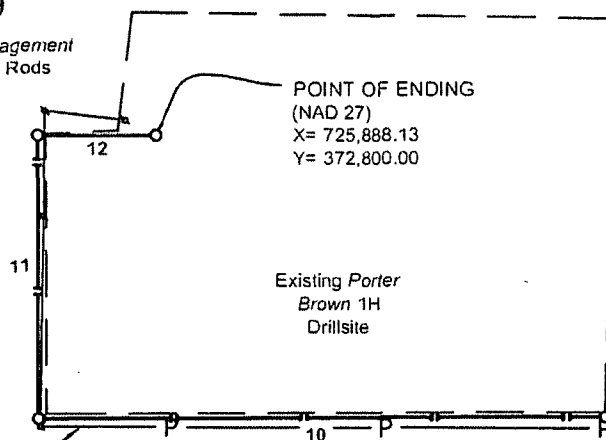
DRAWN BY: BMO		REVISIONS	
PROJ. MGR.: VHV	No.	DATE:	REVISED BY:
DATE: APRIL 22, 2014	No.	DATE:	REVISED BY:
FILENAME: T:\2013\2132516\DWG\Moose Tooth 29 28 33 1H_SUP.dwg			

CHEVRON U.S.A. INC.
PROPOSED PAD & ACCESS ROAD
MOOSE TOOTH 29 28 33 NO. 1H WELL
SECTION 29, T28S-R33E
LEA COUNTY, NEW MEXICO

R 33 E

Sec. 19

Bureau of Land Management
±1223.32', ±74.14 Rods
SE SE



Existing Porter
Brown 1H
Drillsite

Existing
Powerline

Sec. 20

Bureau of Land Management
±665.84', ±40.35 Rods
SW SW

PROPOSED FLOWLINE
±2314.95', ±140.30 Rods

Fnd. 2"
Iron Pipe
w/Cap

Existing Lease
Road

NOTE:

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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 System - www.nmonccall.org.

Sec. 29

Bureau of Land Management
±425.79', ±25.81 Rods
NW NW

Proposed Mooses Tooth
29 26 33 Fed Com 1H
Drillsite & Access Road
(As-Staked)

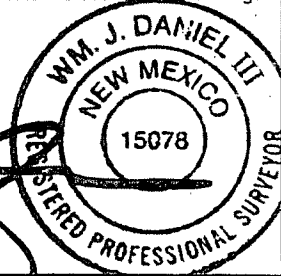
POINT OF BEGINNING
(NAD 27)
X= 726,884.99
Y= 372,166.65

Sec. 30

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

CHEVRON U.S.A. INC.

PROPOSED FLOWLINE
MOOSE TOOTH 29 26 33 FED COM 1H
SECTIONS 19, 20 & 29, T26S-R33E
LEA COUNTY, NEW MEXICO

DRAWN BY: BMO

REVISIONS

PROJ. MGR.: VHV

No.

DATE:

REVISED BY:

DATE: MAY 16, 2014

No.

DATE:

REVISED BY:

FILENAME: T:\2013\132516\DWG\Moose Tooth 29 26 33 Fed Com 1H_FL.dwg

COURSE	BEARING	DISTANCE
1	N 89° 26' 38" E	226.48'
2	N 00° 24' 24" W	199.31'
3	N 00° 24' 24" W	82.68'
4	N 27° 41' 16" W	43.95'
5	N 64° 28' 12" W	21.83'
6	N 80° 20' 33" W	26.10'
7	S 89° 36' 39" W	302.22'
8	S 88° 50' 02" W	189.05'
9	S 88° 50' 02" W	181.50'
10	S 89° 46' 17" W	608.07'
11	NORTH	308.47'
12	EAST	125.28'

T 26 S

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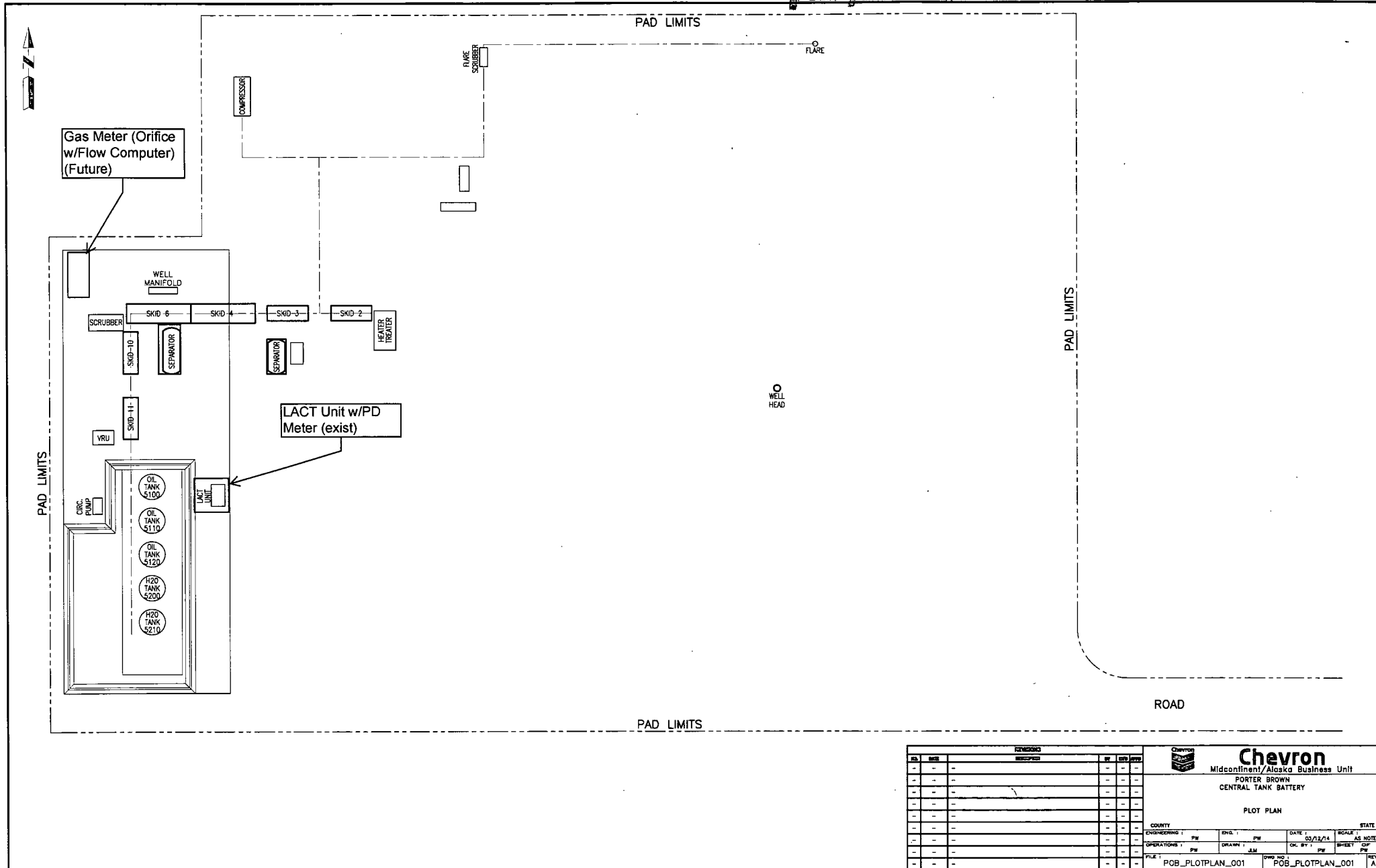
Scale: 1"=200'

200' 0 100' 200'



135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

Exhibit C



REVISIONS					Chevron	
NO.	DATE	DESCRIPTION	BY	CHKD	DATE	SCALE
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