#### District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 **District III** 

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico

Form C-101 Revised July 18, 2013

# **Energy Minerals and Natural Resources**

**Oil Conservation Division** 

1220 South St. Francis Dr.

**Santa Fe, NM 87505** 

Occidental Permian LTD PO Box 4294								15	7984	2. OGRIL			
Houston, TX 77210									30	_ 3	0-025-5	2963	
<sup>4.</sup> Proj 19520	perty Code		North Hobbs	G/SA U	o. Property	Name						6. W	ell No. 987
					7. Surface I	ocation							
UL - Lot	Section 32	Township	Range 38E	Lo	t Idn Feet 1787'		N/S SOUTI	Line	Fe 303'	et From	E/W I	Line	County
	32	103	302	8. ]	Proposed Botto				303		27131		LLA
UL - Lot	Section	Township	p Range		ot Idn Feet			Line	Fe	et From	E/W I	Line	County
	33	185	38E		2571'	9	SOUTI	ł	1882'		EAST		LEA
	•	•	•		9. Pool Info	rmation					•		•
Hobbs; Gra	ayburg - S	an Andre	es		Pool Name	11111111111							Pool Code 31920
				<b>A</b>	dditional Well	Informa	ation						
11. W New Drill	ork Type	Inie	12. Well Type	A	13. Cable/			State	<sup>14.</sup> Lease	Type	3637		und Level Elevation
	Multiple	635	17. Proposed Dep	th	SAN ANDRES	nation			<sup>20.</sup> Spud Date				
Depth to Gro	ound water	1	Di	stance fron	n nearest fresh wate	r well				Distanc	e to nearest	surface	water
✓ We will	be using a	closed-loc	op system in lieu	of lined	pits				1				
				<sup>21.</sup> <b>Prop</b> o	osed Casing an	d Cemer	ıt Pro	gram					
Type	Hol	le Size	Casing Size	С	asing Weight/ft	S	Setting	Depth		Sacks of	f Cement		Estimated TOC
SURF	13 1/	′2"	9 5/8"	36		1600'			51	5/class (	C	SU	RF
PROD	8 3/4	."	7"	26		6215'		963/class		3/class (	ss C SU		RF
			Cas	sing/Cen	nent Program:	Additio	nal C	omme	nts				
as-drilled o	casing/cer	ment des			proved 05/03/					PMX-34	16)		
			:	22. Propo	sed Blowout P	reventio	n Pro	gram					
	Type			Working	g Pressure	Test Pressure		essure	Ma		Manufacturer		
ANNULAR			5000			3000							
best of my k	nowledge a	nd belief.	tion given above i		•			OII	L CON	SERV <i>A</i>	ATION D	IVIS	ION
I further ce 19.15.14.9 ( Signature:			/	4.9 (A) N	MAC <b>∠</b> and/or	Approv	ved By						
Printed nam	e: Roni M	athew				Title:							
Title: Regu	ulatory Ad	lvisor				Approv	ved Da	e: 0	5/28/2	024	Expiration 1	Date:	05/28/2026
E-mail Addı	ress: roni_	mathew	@oxy.com					J.	C, <b>2</b> 0, <b>2</b>	·-·			
Date: 05/08/2024 Phone: 713-215-7827				Condit	ions of	Annrous	al Attache	d					

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR. Santa Fe. New Mexico 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name			
30-025- <b>30-02</b> 9	<b>5-52963</b> 31920	HOBBS; GRAYBURG-SAN A	NDRES		
Property Code	Proj	perty Name	Well Number		
19520	NORTH HOI	BBS G/SA UNIT	987		
OGRID No.	Ope.	rator Name	Elevation		
157984	OCCIDENTAI	PERMIAN LTD.	3636.6		

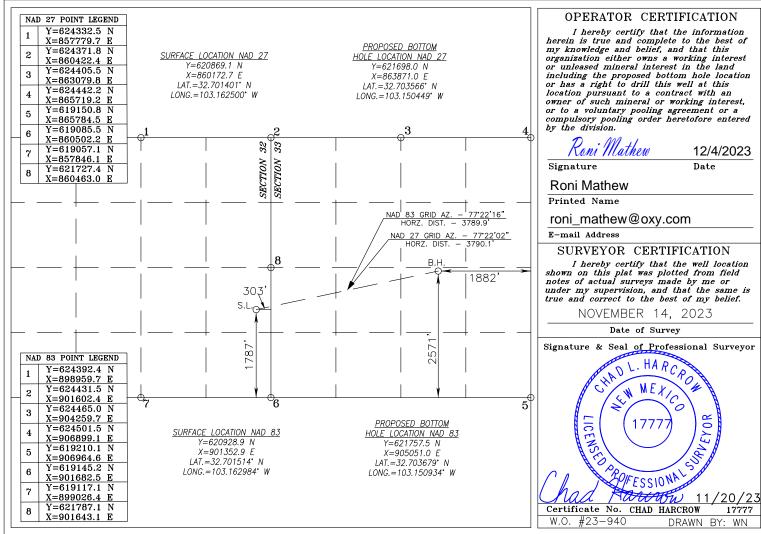
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	32	18-S	38-E		1787	SOUTH	303	EAST	LEA

#### Bottom Hole Location If Different From Surface

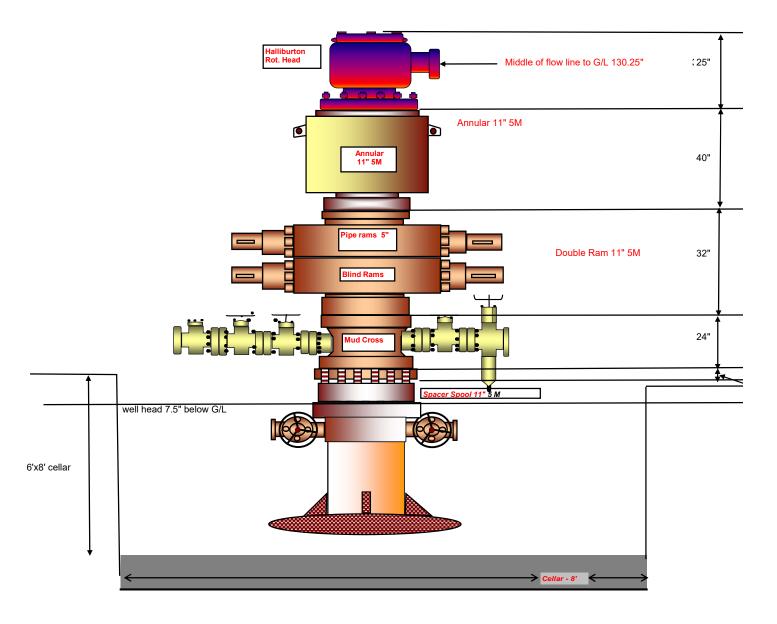
	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	J	33	18-S	38-E		2571	SOUTH	1882	EAST	LEA
Dedicated Acres   Joint or Infill		r Infill (	Consolidation	Code Or	der No.	346				

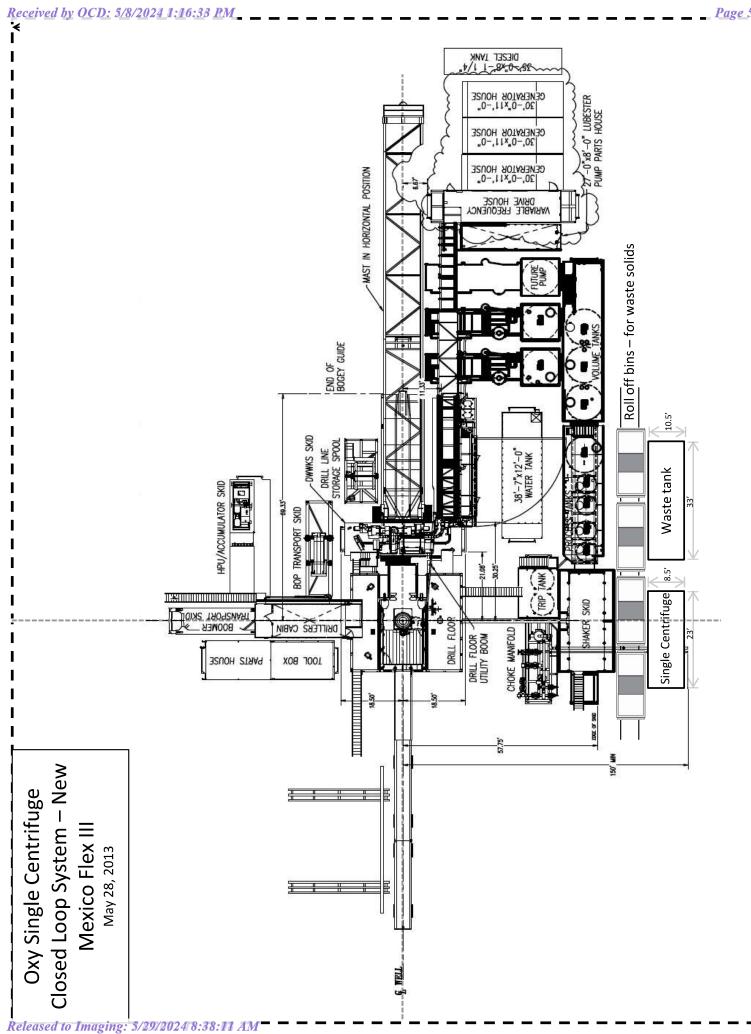
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



	Geo Program										
	NHSAU 990-32	NHSAU 988-32	NHSAU 989-32	NHUCOOP-16	NHSAU 986-32	NHSAU 987-32	NHUCOOP-17				
Тор	TVD	TVD	TVD	TVD	TVD	TVD	TVD				
Red Beds	198	197	197	197	202	202	203				
Rustler	1510	1511	1510	1512	1504	1503	1506				
Salt	1589	1590	1589	1591	1587	1587	1587				
Yates	2656	2657	2659	2661	2652	2642	2660				
Seven Rivers	2827	2852	2838	2880	2842	2842	2836				
Queen	3361	3373	3365	3385	3370	3366	3380				
Grayburg	3679	3685	3683	3695	3684	3674	3700				
San Andres	3959	3978	3962	3994	3968	3960	3979				

Total stack length 137"

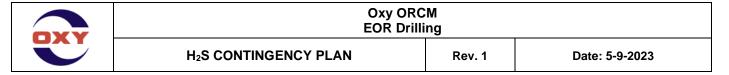




# HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

Oxy ORCM<br/>EOR Drilling

5-9-2023 Rev. 1



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	Oxy ORC EOR Drilli		
DXY	H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023

# **Revision Status**

Revision	Revision	Next	Change Description
#	Date	Review	Change Description
1	05-09-2023	05-09-2025	Complete reformat of the original document last dated 10-27-2022

Oxy ORC EOR Drilli		
H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023

#### 1. SCOPE

This contingency plan establishes guidelines for the public; all company employees, and contract employees whose work activities may involve exposure to H<sub>2</sub>S gas.

The H<sub>2</sub>S Contingency Plan must coincide and be compatible with Oxy Onshore Resources Carbon Management (ORCM) – Enhanced Oil Recovery (EOR) Incident Management Plan (IMP).

#### 2. OBJECTIVE

- 1. Provide an immediate and predetermined response plan to any condition when H<sub>2</sub>S is detected. All H<sub>2</sub>S detections in excess of 10 parts per million (ppm) concentrations are considered an Emergency.
- 2. Prevent any and all accidents and prevent the uncontrolled release of H<sub>2</sub>S into the atmosphere.
- 3. Provide proper evacuation procedures to cope with emergencies.

#### 3. DOCUMENT DISCUSSION

Implementation	For new drills, this plan with all details is to be fully implemented before drilling out of the surface shoe or 1000' before the anticipated $H_2S$ zone. For Completions or workovers, it needs to be in place before operations start					
Emergency response procedure	This section outlines the conditions and denotes steps to be taken in the event of an emergency.					
Emergency equipment procedure	This section outlines the safety and emergency equipment that will be required for the drilling, completion, or workover operations on this well.					
Training provisions	This section outlines the training provisions that must be adhered to prior to drilling, completing or working-over					
Drilling / Completions emergency call lists	Included are the telephone numbers of all persons to be contacted should an emergency exist.					
Briefing	This section deals with the briefing of all people involved in Drilling, Completion, or Well Servicing operation.					
Public safety	Public safety personnel will be made aware of any potential evacuation and any additional support needed.					
Checklists	Status checklists and procedural checklists have been included to insure adherence to the plan.					
General information	A general information section has been included to supply support information.					

# 4. EMERGENCY PROCEDURES

#### 4.1 High H<sub>2</sub>S While Operating

In the event of any evidence that  $H_2S$  is 10 ppm or higher while operating, personnel (Oxy and contractors) should take the following steps:

- 1. Begin evacuation procedures and secure well if it is safe to do so.
- 2. All personnel to report to the designated upwind safe briefing / muster area. If necessary and personnel ae unable to escape safely then don escape breathing equipment if available and proceed to muster area.

<del>OXY</del>	Oxy ORCM EOR Drilling						
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- All personnel on location should be accounted for at the muster area. An emergency search
  may be conducted only when personnel trained and qualified to do so are available (trained
  and qualified backup personnel must be in place).
- 4. Non-essential personnel should be directed to leave the well site.
- 5. Drill Site Manager (DSM) to call out the H<sub>2</sub>S contractor to send H<sub>2</sub>S Safety personnel and air trailer (if they are not already on location).
- 6. The location entrance should be fully secured. The proper condition flag should be displayed at the entrance to the location for drilling locations.
- 7. All personnel to wait at muster area until the H<sub>2</sub>S Safety personnel identifies the area / sensor where H<sub>2</sub>S was detected, and if H<sub>2</sub>S still is present. The H<sub>2</sub>S Safety personnel will also report the level of concentration or if there is a faulty sensor or false alarm.
- 8. If H<sub>2</sub>S is present, then the cascade system should be rigged up (if not already rigged up) and preparations made to work under cascade supplied air.
  - If no  $H_2S$  is present, the " $H_2S$  All Clear Sign off checklist" should be completed and signed by Rig Manager / Supervisor, DSM, and or  $H_2S$  Safety personnel. After signature, all personnel can resume work under normal conditions.
- 9. Crew / essential personnel may go in and work under cascade supplied air as required after H<sub>2</sub>S Safety personnel is on location and cascade system is operational.

**NOTE:** Self-contained breathing apparatus (SCBA) use is for emergency response or rescue which does include the initial well evaluation and possible shut in if not already shut in; no work will be performed utilizing the SCBA air packs.

# 4.2 Uncontrollable Conditions

If uncontrollable conditions occur:

- 1. Take steps to protect and / or remove any public in the down-wind area from the location partial evacuation and isolation. Notify necessary civil authorities and appropriate regulatory entities (i.e., BLM and Texas railroad commission) of the situation.
- 2. Remove all personnel to the nearest upwind designated safe briefing / muster area or off location.
- 3. Notify civil authorities of safe briefing / muster area.
- 4. An assigned contractor, employee, or civil authority will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
- 5. Proceed with best plan (at the time) to regain control of the well.
  - \*\*Reference the ORCM EOR Blowout Response Plan

# 4.3 Responsibility

Designated personnel listed below shall be responsible for the total implementation of this plan and shall be in complete command during any emergency.



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All personnel	On alarm, will report to the nearest upwind des muster area.	ignated safe briefing
	Check status / headcount of personnel.	
	Secure breathing equipment if available and s	afe to retrieve.
	Await orders from supervision.	
DSM / WSM / WOC	Report to nearest upwind designated safe brie	fing / muster area.
	Notify and call out $H_2S$ Safety personnel and ai on location from the respective contractor.	r trailer if not already
	Coordinate preparations of individuals to return cleared to do so by the $H_2S$ Safety personnel.	
	Assess situation and take control measures as	s necessary.
Rig Manager / Supervisor	Report to up nearest upwind designated sa area.	fe briefing / muster
	All personnel on location will be accounted for search may be conducted only when persqualified to do so are available (trained ar personnel must be in place).	sonnel trained and
	Coordinate preparations of individuals to return cleared to do so by the $H_2S$ supervisor.	n to work area when
	Assess situation and take control measures if	needed.
	f the DSM is not present the Rig Manager / Su supervision of the event until his return.	pervisor will assume
Driller / Operator / Line	Begin evacuation procedures and secure well	if safe to do so
Boss	Check monitor for point of release if possible.	
	Don escape equipment, if necessary, report designated safe briefing / muster area.	to nearest upwind
	Assist Rig Manager in checking status of pers	onnel.
	Assign least essential person to notify DSM quickest means in case of their absence.	and toolpusher by
	Assumes the responsibilities of DSM and Rigarrive should they be absent.	Manager until they
Derrickman / Floorman / Equipment Operators	nain in briefing / muster area until instructed by	/ supervisor.
Mud engineer	Report to nearest upwind designated safe brie	efing / muster area.
	When instructed, begin check of mud for pH argas train)	nd H₂S level. (Garett
H₂S Safety personnel	tify the area / alarm where H <sub>2</sub> S was detected ent at what level of concentration or if faulty se	•

# 5. GENERAL EVACUATION PLAN

When the site supervision determines the  $H_2S$  gas cannot be limited to the well location and the public will be involved, they will activate the Incident Management Plan (See ORCM EOR IMP).

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#### 6. EMERGENCY RESPONSE DRILLS

Muster drills should be conducted, at the work site, by each crew on a weekly basis. The drills should consist of a dry-run performance of personnel roles and responsibilities related to each assigned job.

Each drill should be critiqued by OXY DSM and any new considerations documented. The results should be communicated to the HSE Department, OXY and Contractor line management and all affected personnel, including Field and Office Superintendents. Records of each drill and a critique summary should be sent to the HSE Department for review if deemed necessary by the Drilling & Completions Manager.

#### 7. TRAINING REQUIREMENTS

When working in an area where H<sub>2</sub>S gas is expected, pre-job training requirements must be carried out. All companies will ensure that all essential personnel at the well site will have had adequate training in the following:

- 1. Hazards and characteristics of H<sub>2</sub>S.
- 2. Physical effects of H<sub>2</sub>S on the human body.
- 3. Toxicity of H<sub>2</sub>S and sulfur dioxide.
- 4. H<sub>2</sub>S detection.
- 5. Use of SCBA and supplied air equipment if expected to don and use the equipment
- 6. An adequate number of trained personnel in first aid and cardiopulmonary resuscitation (CPR).

## 8. SERVICE COMPANY AND VISITING PERSONNEL PRECAUTIONS

Each service company and visitor will be expected to attend a well site briefing / orientation upon arrival.

Each service company must equip and train their personnel on the use and capabilities with an H<sub>2</sub>S monitor which is intrinsically safe, and capable of sensing a minimum H<sub>2</sub>S concentration of 10 ppm. These devices are to be electronic, and capable of emitting a visual and audible alarm.

Visitors who are not equipped with personal H<sub>2</sub>S monitors must be escorted by somebody equipped with a properly calibrated personal H<sub>2</sub>S monitor with the approval of the functional superintendent.

### 9. EMERGENCY EQUIPMENT REQUIREMENTS

### 9.1 Minimum Emergency Equipment for Drilling Rigs

1. 1 sign at the location entrance with the following language:

Caution – Potential Poison Gas Hydrogen Sulfide (H<sub>2</sub>S) No Admittance Without Authorization

- 2. Windsocks
  - One 36" length windsock at the center of location visible from the rig floor
  - One 36" length windsock visible from the pit areas
  - One windsock located at the primary and secondary muster areas

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#### 3. H<sub>2</sub>S sensors and alarms

\*\*Safety contractor is to visually inspect and test the sensors and alarms on a weekly basis after rigging up\*\*

- i. Five (5) H<sub>2</sub>S Sensors
  - 1 between the reserve pit and rig at the generator side corner of the reserve pit
  - 1 at the shakers and trip tank or mud return line receiver tank
  - 3 at the rig floor and substructure:
    - 1 on rig floor driller side inside the derrick leg
    - 1 at bell nipple or beneath the rotary table adjacent to the flow line
    - 1 on substructure leg at draw-works side base of Blowout Preventor (BOP)
- ii. Five (5) Audio / Visual alarms
  - 1 audible alarm near the mud pumps facing the rig floor
  - 1 visual alarm on the A-leg side of the driller shack facing the driller
  - 1 audible alarm on the A-leg side of the driller shack facing the driller
  - 1 visual alarm in the generator house
  - 1 audio/visual control panel in the driller cabin
- 4. H<sub>2</sub>S condition flags shall be displayed at the front gate with color indication of severity of H<sub>2</sub>S.
- 5. Mud inspection devices:
  - Garrett gas train or hatch tester for inspection of sulfide concentration in mud system.
- 6. Adequate fire extinguishers shall be located at strategic locations
- 7. Hydraulic BOP equipment with a remote control that is rated for the anticipated pressures. Equipment is to be tested on installation and as required thereafter.
- 8. Gas buster equipment shall be installed before drilling out of surface.
- 9. 1 combustible gas detector on location at all times.
- 10. Radio / cell telephone communication at the rig (i.e., rig floor, trailer, vehicle, etc.).
- 11. Special control equipment such as a rotating head will be used as required.
- 12. An evacuation plan with evacuation routes should be established prior to well spud for each well and discussed with all personnel on location.
- 13. Designated areas will be maintained:
  - Parking and visitor area all vehicles are to be parked at a predetermined safe distance from the wellhead with the first movement forward and toward the exit when possible.
  - A designated smoking area.
  - Two briefing / muster areas on opposite sides of the location at the maximum allowable distance from the well bore to offset prevailing winds perpendicularly or at a 45-degree angle if wind direction tends to shift in the area.

#### 9.2 Use of SCBA

All SCBAs shall be fitted with positive pressure demand regulators and shall conform to a recognized oil and gas industry standard, such as US National Institute of Occupational Safety and Health (NIOSH) or equivalent.

SCBAs shall be inspected monthly to ensure that they are properly stored, cleaned, maintained and ready for use, as per the manufacturer recommendation or as conditions warrant. Maintenance will be performed by qualified personnel certified by the manufacturer of the equipment, shall be responsible for the safe and efficient operation of the system and shall regularly maintain the system in its entirety as per Occupational Safety and Health

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Administration (OSHA) 29 Code of Federal Regulation (CFR) 1910.134, Compressed Gas Association (CGA) 7.0 and 7.1.

Anyone who may use the SCBAs shall be trained in the use of that specific equipment. **Note:** Items as facial hair (i.e., beard, sideburns, etc.) and eyeglasses will not allow proper seal. Anyone that may be reasonably expected to wear SCBAs should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses or contact lenses.

Persons assigned a task that requires use of SCBA shall be medically cleared and have a current fit test for the breathing equipment in use.

SCBAs should be worn:

- 1. While sampling air to determine if toxic concentrations of H<sub>2</sub>S exist.
- 2. While entering areas where over 10 ppm H₂S has been detected.
- 3. Any time there is a doubt as to the H<sub>2</sub>S level in the area to be entered.

#### 9.3 Rescue

Oxy does not have the expectation for employees to perform rescue in an  $H_2S$  release situation. Rescue activities may be carried out by trained and certified personnel from a contracted safety company.

## 10. TOXIC EFFECTS OF H<sub>2</sub>S

 $H_2S$  is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 ppm, which is .001% by volume.  $H_2S$  is heavier than air (specific gravity - 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume.  $H_2S$  is almost as toxic as hydrogen cyanide and is between five and six times more toxic than carbon monoxide. The principal hazard of  $H_2S$  inhalation is death caused by paralysis of the respiratory system. The inhaled gas is absorbed into the bloodstream and is then carried to the brain where it affects the respiratory nerve center. Other symptoms of  $H_2S$  exposure include headaches, dizziness, drowsiness, increased heart rate, and nausea, with severity being determined by the amount of exposure. Coughing and pain in the eyes, throat, and chest may be attributed to the formation of acid formed when  $H_2S$  comes into contact with the moist surfaces of body tissue. Toxicity data for  $H_2S$  and various other gases are compared in Table 1. Physical effects at various  $H_2S$  exposure levels are shown in Table 2.

#### 10.1 Table 1 – Toxicity of various gases

Common name	Chemical formula	Threshold limit (1)	Hazardous limit (2)	Lethal concentration (3)
Hydrogen Cyanide	HCn	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H₂S	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	5 ppm	-	1000 ppm
Chlorine	Cl <sub>2</sub>	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	СО	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO <sub>2</sub>	5000 ppm	5%	10%
Methane	Ch₄	90,000 ppm	Combustibl	e above 5% in air

<sup>1)</sup> Threshold limit – concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.

<sup>2)</sup> Hazardous limit – concentration that will cause death with short-term exposure.

<sup>3)</sup> Lethal concentration – concentration that will cause death with short-term exposure.

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## 10.2 Table 2 – Physical effects of H₂S

Percent (%)	ppm	Grains (100 gr/ft <sup>3</sup> )*	Physical effects	
0.001	<10	00.65	Obvious and unpleasant odor.	
0.002	10	01.30	Safe for 8 hours of exposure.	
0.010	100	06.48	Kill smell in 3 – 15 minutes. May sting eyes and throat.	
0.020	200	12.96	Kills smell shortly; stings eyes and throat.	
0.050	500	32.96	Dizziness; breathing ceases in a few minutes; needs prompt artificial respiration.	
0.070	700	45.36	Unconscious quickly; death will result if not rescued promptly.	
0.100	1000	64.30	Unconscious at once; followed by death within minutes.	

<sup>\*</sup>at 15.00 psia and 60'f

#### 11. WEEKLY REQUIREMENTS LIST

Each of the following shall be performed each week:

- 1. Safety contractor will check each piece of the breathing equipment to make sure that demand or forced air regulator is working. This requires that the bottle be opened, and the mask assembly donned so that when you inhale you receive air or feel air flow. The mask shall be sized in accordance with the person's fit test for the particular mask.
- 2. Safety contractor will check the mask assembly to see that straps are loosened and turned back so that it is ready to don.
- 3. Safety contractor will check the pressure on all air bottles (active and spares) to make sure they are charged to full volume. Air quality shall be checked for proper air grade (breathing air Grade D) before the bottles are brought to location.
- 4. BOP skills (well control / muster drills) will be tested weekly.
- 5. Supply pressure on BOP accumulator stand will be checked weekly.

## 12. ATTACHMENTS

#### 12.1 Attachment 1 – List of Abbreviations

ВОР	Blowout Preventer
CFR	Code of Federal Regulation
CGA	Compressed Gas Association
CPR	Cardiopulmonary Resuscitation
DSM	Drill Site Manager
EOR	Enhanced Oil Recovery
H₂S	Hydrogen Sulfide
HSE	Health, Safety, and Environmental
IMP	Incident Management Plan
NIOSH	National Institute of Occupational Safety and Health

OXY.	Oxy ORCM EOR Drilling			
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OSHA	Occupational Safety and Health Administration
ORCM	Onshore Resources Carbon Management
Ppm	parts per million
SCBA	Self-Contained Breathing Apparatus

# 12.2 Attachment 2 – Drilling H₂S All Clear Sign Off Sheet

# DRILLING H2S ALL CLEAR SIGN OFF SHEET

		Well: Rig:	
		Time:	
	Verify with	a H <sub>2</sub> S gas tester the H <sub>2</sub> S concentration of all areas listed below.	
RM initial	HSE Tech	Area	H <sub>2</sub> S PPM
		1. Shakers, Mud pits, mixing hopper area (active and reserve)	
		2. Wellhead/Cellar, Sub, Choke manifold	
		3. Pump Trailer, MCC, Generator	
		4. Rig Floor	
		5. Back yard around Frac tanks, bulk bins, mud products	
		6. DSM Trailer, RM Trailer, Change House	
		7. Mud Engineer Trailer, Mud logger, Directional Driller, MWD Hands trailer	r
		8. Open Pit and/or Closed loop system, Wrangler pipe-rack area	
		9. Flare Line	
	•		
		RM Signature	
		RM HSE Tech	Time:  Verify with a H <sub>2</sub> S gas tester the H <sub>2</sub> S concentration of all areas listed below.  RM   HSE Tech   Area  1. Shakers, Mud pits, mixing hopper area (active and reserve)  2. Wellhead/Cellar, Sub, Choke manifold  3. Pump Trailer, MCC, Generator  4. Rig Floor  5. Back yard around Frac tanks, bulk bins, mud products  6. DSM Trailer, RM Trailer, Change House  7. Mud Engineer Trailer, Mud logger, Directional Driller, MWD Hands trailer  8. Open Pit and/or Closed loop system, Wrangler pipe-rack area  9. Flare Line

#### **Planning Report**

Database: LEAM Multi\_User Db
Company: Occidental Petroleum - Permian
Project: Lea County, NM (NAD 27)
Site: North Hobbs Unit
Well: North Hobbs G/SA Unit 987-32

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference: TVD Reference: MD Reference:

Survey Calculation Method:

North Reference:

Well North Hobbs G/SA Unit 987-32 GE 3636.6' + KB 16.8' @ 3653.40usft GE 3636.6' + KB 16.8' @ 3653.40usft

Grid

Minimum Curvature

Project Lea County, NM (NAD 27)

Map System:US State Plane 1927 (Exact solution)Geo Datum:NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site North Hobbs Unit

 Site Position:
 Northing:
 620,869.10 usft
 Latitude:
 32° 42′ 5.04 N

 From:
 Map
 Easting:
 860,172.70 usft
 Longitude:
 103° 9′ 45.00 W

Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 "

Well North Hobbs G/SA Unit 987-32 620.869.10 usft 32° 42' 5.04 N **Well Position** +N/-S 0.00 usft Latitude: Northing: 103° 9' 45.00 W +E/-W 0.00 usft Easting: 860,172.70 usft Longitude: **Position Uncertainty** 0.00 usft Wellhead Elevation: usft **Ground Level:** 3,636.60 usft 0.63° **Grid Convergence:** 

ОН Wellbore Magnetics **Model Name** Declination Dip Angle Field Strength Sample Date (°) (°) (nT) HDGM\_FILE 6/15/2024 6.25 60.50 47,479.90000000

Plan #2 Design Audit Notes: **PLAN** 0.00 Version: Phase: Tie On Depth: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 77.37

 Plan Survey Tool Program
 Date 4/10/2024

 Depth From (usft)
 Depth To (usft)
 Survey (Wellbore)
 Tool Name
 Remarks

 1
 0.00
 6,214.90
 Plan #2 (OH)
 B001Mc\_MWD+HRGM\_Rev5.

ISCWSA MWD + HRGM

**Plan Sections** Vertical Measured Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (°/100usft) (°/100usft) (°/100usft) (usft) (°) (°) (usft) (usft) (usft) (°) Target 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 850.00 0.00 0.00 850.00 0.00 0.00 0.00 0.00 0.00 0.00 2,764.76 57.44 77.37 2,459.73 192.92 860.73 3.00 4.04 3.00 77.37 6,214.90 57.44 77.37 4,316.40 828.90 3,698.30 0.00 0.00 0.00 0.00 PBHL (NU 987-32)

#### **Planning Report**

Database: LEAM Multi\_User Db
Company: Occidental Petroleum - Permian
Project: Lea County, NM (NAD 27)
Site: North Hobbs Unit

North Hobbs G/SA Unit 987-32

Wellbore: OH
Design: Plan #2

Well:

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well North Hobbs G/SA Unit 987-32 GE 3636.6' + KB 16.8' @ 3653.40usft GE 3636.6' + KB 16.8' @ 3653.40usft

Grid Minimum Curvature

Planned Survey

Measured Vertical Vertical Dogleg Build Turn
Depth Inclination Azimuth Depth +N/-S +E/-W Section Rate Rate Rate
(usft) (°) (°) (usft) (usft) (usft) (vf100usft) (°/100usft) (°/100usft)

Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.0			0.00	0.00	0.00	0.00	0.00	,	0.00
SHL (NU		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	•	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.0			200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.0			300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.0			400.00	0.00	0.00	0.00	0.00	0.00	0.00
400.0	0.00								
500.0	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.0	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.0	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.0			800.00	0.00	0.00	0.00	0.00	0.00	0.00
850.0	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00
900.0	00 1.50	77.37	899.99	0.14	0.64	0.65	3.00	3.00	0.00
1,000.0			999.85	1.29	5.74	5.89	3.00	3.00	0.00
1,100.0			1,099.29	3.57	15.94	16.34	3.00	3.00	0.00
1,200.0			1,198.04	6.99	31.21	31.98	3.00	3.00	0.00
1,300.0			1,295.85	11.54	51.49	52.77	3.00	3.00	0.00
1,400.0			1,392.43	17.20	76.74	78.65	3.00	3.00	0.00
1,500.0			1,487.52	23.96	106.89	109.55	3.00	3.00	0.00
1,600.0			1,580.87	31.80	141.86	145.38	3.00	3.00	0.00
1,700.0			1,672.22	40.69	181.54	186.05	3.00	3.00	0.00
1,800.0	00 28.50	77.37	1,761.31	50.62	225.84	231.44	3.00	3.00	0.00
1,900.0			1,847.90	61.55	274.62	281.44	3.00	3.00	0.00
2,000.0	00 34.50	77.37	1,931.76	73.46	327.76	335.89	3.00	3.00	0.00
2,100.0	00 37.50		2,012.65	86.32	385.11	394.67	3.00	3.00	0.00
2,200.0	00 40.50	77.37	2,090.35	100.08	446.51	457.59	3.00	3.00	0.00
2,300.0	00 43.50	77.37	2,164.66	114.71	511.80	524.50	3.00	3.00	0.00
2,400.0	00 46.50	77.37	2,235.36	130.17	580.79	595.20	3.00	3.00	0.00
2,500.0			2,302.27	146.42	653.30	669.50	3.00	3.00	0.00
2,600.0			2,365.19	163.42	729.12	747.21	3.00	3.00	0.00
2,700.0			2,423.97	181.11	808.06	828.10	3.00	3.00	0.00
2,764.7			2,459.73	192.92	860.73	882.08	3.00	3.00	0.00
2,800.0			2,478.70	199.41	889.71	911.79	0.00	0.00	0.00
2,900.0			2,532.51	217.85	971.96	996.07	0.00	0.00	0.00
3,000.0			2,586.33	236.28	1,054.20	1,080.36	0.00	0.00	0.00
3,100.0 3,200.0			2,640.14 2,693.95	254.71 273.15	1,136.45 1,218.69	1,164.64 1,248.93	0.00 0.00	0.00 0.00	0.00 0.00
3,300.0			2,747.77	291.58	1,300.94	1,333.21	0.00	0.00	0.00
3,400.0			2,801.58	310.01	1,383.18	1,417.50	0.00	0.00	0.00
3,500.0			2,855.40	328.45	1,465.43	1,501.79	0.00	0.00	0.00
3,600.0			2,909.21	346.88	1,547.67	1,586.07	0.00	0.00	0.00
3,700.0	00 57.44	77.37	2,963.03	365.31	1,629.92	1,670.36	0.00	0.00	0.00
3,800.0	00 57.44	77.37	3,016.84	383.75	1,712.16	1,754.64	0.00	0.00	0.00
3,900.0			3,070.65	402.18	1,794.41	1,838.93	0.00	0.00	0.00
4,000.0			3,124.47	420.61	1,876.65	1,923.21	0.00	0.00	0.00
4,100.0			3,178.28	439.05	1,958.90	2,007.50	0.00	0.00	0.00
4,200.0			3,232.10	457.48	2,041.14	2,091.78	0.00	0.00	0.00
4,300.0	00 57.44	77.37	3,285.91	475.92	2,123.39	2,176.07	0.00	0.00	0.00
4,400.0			3,339.72	475.92	2,123.39	2,176.07	0.00	0.00	0.00
4,500.0			3,393.54	512.78	2,203.03	2,260.33	0.00	0.00	0.00
4,600.0			3,393.54 3,447.35	512.76	2,207.00	2,344.64	0.00	0.00	0.00
4,700.0			3, <del>44</del> 7.35 3,501.17	549.65	2,370.12	2,426.93	0.00	0.00	0.00
4,800.0			3,554.98	568.08	2,534.61	2,597.50	0.00	0.00	0.00
4,900.0			3,608.80	586.52	2,616.86	2,681.78	0.00	0.00	0.00
5,000.0	00 57.44	77.37	3,662.61	604.95	2,699.10	2,766.07	0.00	0.00	0.00

#### **Planning Report**

Database: LEAM Multi\_User Db
Company: Occidental Petroleum

Company: Occidental Petroleum - Permian
Project: Lea County, NM (NAD 27)
Site: North Hobbs Unit

Well: North Hobbs G/SA Unit 987-32
Wellbore: OH

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

**Survey Calculation Method:** 

TVD Reference: MD Reference: North Reference: Well North Hobbs G/SA Unit 987-32 GE 3636.6' + KB 16.8' @ 3653.40usft GE 3636.6' + KB 16.8' @ 3653.40usft

Grid

Minimum Curvature

nned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.00	57.44	77.37	3,716.42	623.38	2,781.35	2,850.35	0.00	0.00	0.00
5,200.00	57.44	77.37	3,770.24	641.82	2,863.59	2,934.64	0.00	0.00	0.00
5,300.00	57.44	77.37	3,824.05	660.25	2,945.84	3,018.92	0.00	0.00	0.00
5,400.00	57.44	77.37	3,877.87	678.68	3,028.08	3,103.21	0.00	0.00	0.00
5,500.00	57.44	77.37	3,931.68	697.12	3,110.33	3,187.49	0.00	0.00	0.00
5,600.00	57.44	77.37	3,985.50	715.55	3,192.57	3,271.78	0.00	0.00	0.00
5,700.00	57.44	77.37	4,039.31	733.99	3,274.82	3,356.06	0.00	0.00	0.00
5,800.00	57.44	77.37	4,093.12	752.42	3,357.06	3,440.35	0.00	0.00	0.00
5,900.00	57.44	77.37	4,146.94	770.85	3,439.31	3,524.64	0.00	0.00	0.00
6,000.00	57.44	77.37	4,200.75	789.29	3,521.55	3,608.92	0.00	0.00	0.00
6,100.00	57.44	77.37	4,254.57	807.72	3,603.80	3,693.21	0.00	0.00	0.00
6,200.00	57.44	77.37	4,308.38	826.15	3,686.04	3,777.49	0.00	0.00	0.00
6,214.90	57.44	77.37	4,316.40	828.90	3,698.30	3,790.05	0.00	0.00	0.00
PBHL (NU 98	37-32)								

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 342126

#### **CONDITIONS**

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	342126
	Action Type:
	[C-101] Drilling Non-Federal/Indian (APD)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	Notify OCD 24 hours prior to casing & cement	5/29/2024
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	5/29/2024
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	5/29/2024
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	5/29/2024
pkautz	Cement is required to circulate on both surface and production strings of casing	5/29/2024
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing	5/29/2024
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud	5/29/2024
pkautz	MUST COMPLY WITH ALL COA'S IN ADMINISTRATIVE ORDER PMX-346	5/29/2024