#### 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 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

#### **State of New Mexico**

Form C-101 Revised July 18, 2013

# **Energy Minerals and Natural Resources**

**Oil Conservation Division** 

☐AMENDED REPORT

1220 South St. Francis Dr.

**Santa Fe, NM 87505** 

Occidental Per PO Box 4294	mian LTD		1. Operator Nan	ne and Address			1	57984		RID Numb		
Houston, TX 77210							3	0-025-		PI Number <b>25-529</b>	62	
<sup>4.</sup> Prop 19520	erty Code		North Hobbs	G/SA Unit	Property Name					o. W	Vell No. 986	
					rface Locati	on						
UL - Lot	Section 32	Township 18S	Range 38E	Lot Idn	Feet from 1752'	N/S Line SOUTH	301'	Feet From	EAST	W Line	County	
	1			8 Propose	d Bottom H	ole Location						
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	I	Feet From	E	W Line	County	
)	33	185	38E		1219'	SOUTH	2610	)'	EAST		LEA	
	1		1	9. Po	ol Informati	on			ı		•	
Hobbs; Gra	ayburg - Sa	an Andre	S	Pool	Name						Pool Code 31920	
				Addition	al Well Info	mation						
11. Wo	ork Type	Injed	12. Well Type			otary 14. Lease Type State		е Туре	15. Ground Level Elevation 3636'		ound Level Elevation	
<sup>16.</sup> N	16. Multiple 17. Proposed Depth 18. Formation 19. C			<sup>19.</sup> Con	tractor	06	5/01/20:	<sup>20.</sup> Spud Date				
Depth to Ground water Distance from nearest fresh water			resh water well	well Distance to nearest surface water				water				
✓ We will l	oe using a o	closed-loop	o system in lieu	of lined pits								
			:	<sup>21.</sup> Proposed Cas	sing and Cer	nent Program	1					
Type	Hole	e Size	Casing Size	Casing Wei	ight/ft	Setting Depth		Sacks of	Cement		Estimated TOC	
URF	13 1/	2" 9	5/8"	36	16	00'	5	515/class C		SU	SURF	
ROD	8 3/4	" 7	Ш	26	55	79'	8	823/class C		SURF		
1.40	. ,			ing/Cement Pro				5141/ 54	= \			
is-arillea c	asıng/cen	nent desi	gn; injection (	Order approved	05/03/2024	(Administratio	on Orae	r PIVIX-34	5)			
				2. Proposed Blo	wout Prever	tion Progran	1					
	Type Working Pressure			Test Pressure		Manufa		anufacturer				
NNULAR			5000		30	000						
<sup>23.</sup> I hereby of best of my k	ertify that th	ne informati	ion given above i	s true and complete	to the	0	IL CON	NSERVA	TION	DIVIS	ION	
I further ce	rtify that I	have comp		4.9 (A) NMAC 🔽	and/or							
19.15.14.9 (Signature:					Ap	proved By:						
orgnature.	Komi	Mathe	W									

Title:

Approved Date: 05/28/2024

Conditions of Approval Attached

Expiration Date:

05/28/2026

E-mail Address: roni\_mathew@oxy.com

Phone: 713-215-7827

Printed name: Roni Mathew

Title: Regulatory Advisor

Date: 05/08/2024

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

OIL

State of New Mexico Energy, Minerals & Natural Resources Department 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

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name			
30-025-52962	31920	31920 HOBBS; GRAYBURG-SAN A			
Property Code	Prop	Property Name			
19520	NORTH HOB	NORTH HOBBS G/SA UNIT			
OGRID No.	0per	ator Name	Elevation		
157984	OCCIDENTAL	PERMIAN LTD.	3636.2'		

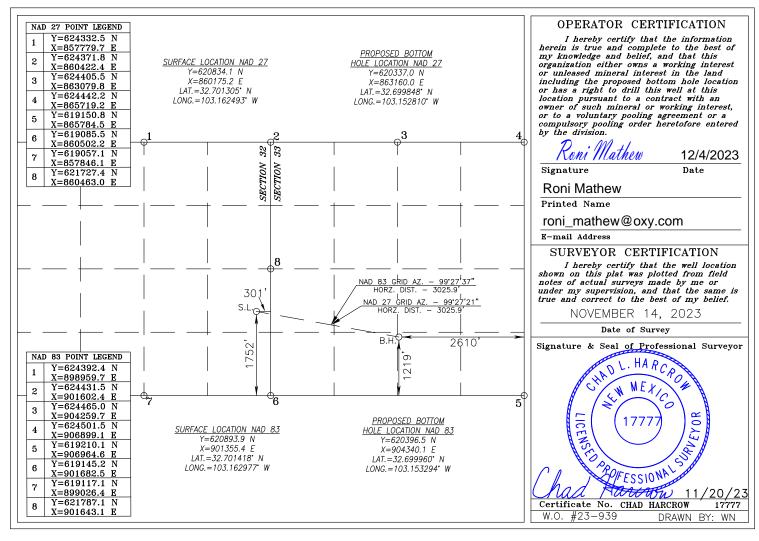
#### Surface Location

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		1752	SOUTH	301	EAST	LEA

#### Bottom Hole Location If Different From Surface

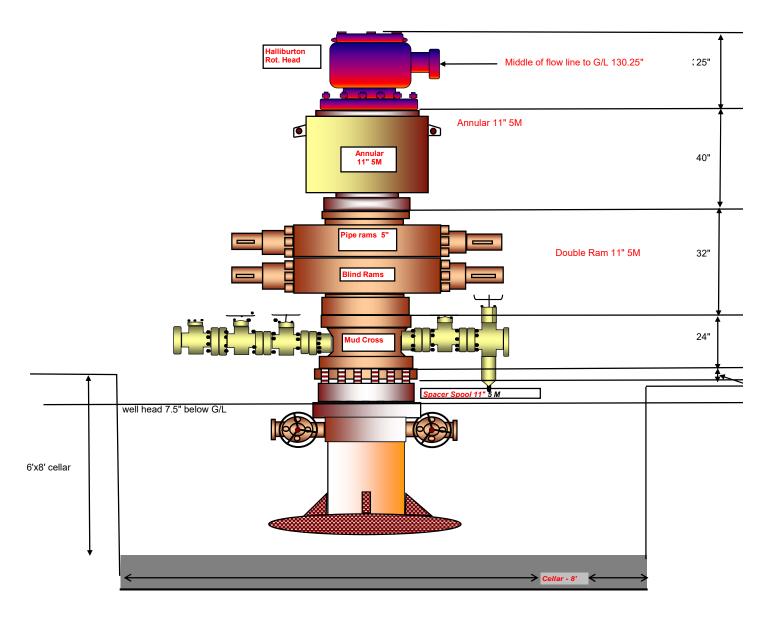
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	18-5	38-E		1219	SOUTH	2610	EAST	LEA
Dedicated Acres   Joint or Infill   Consolidation Code   Order No.									
	PMX - 345								

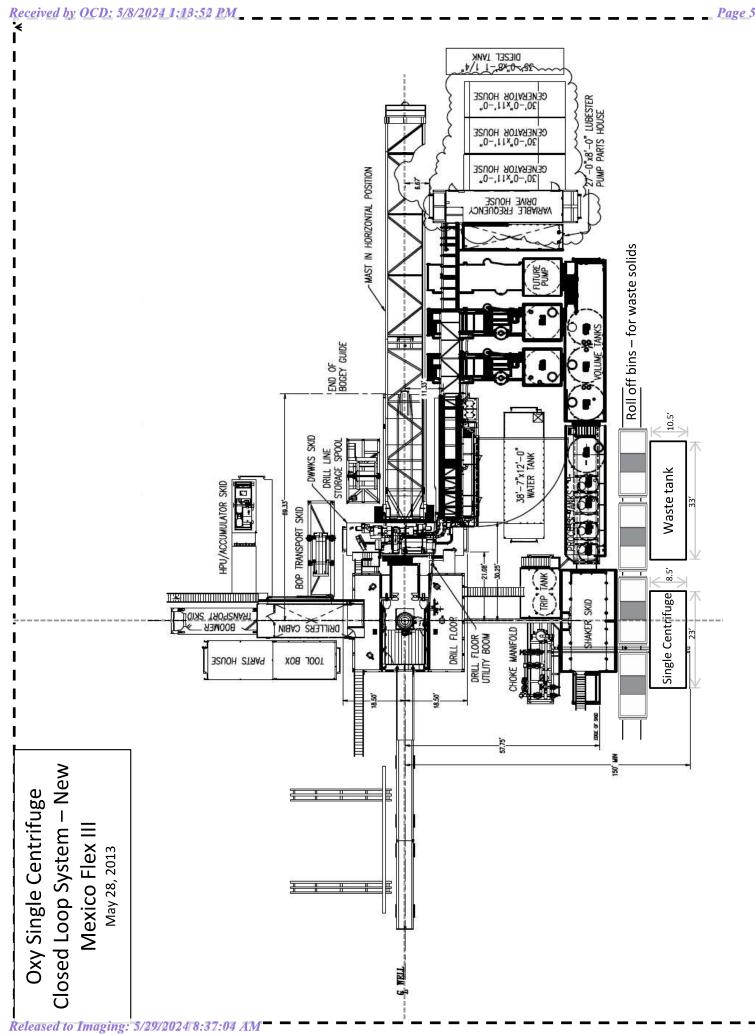
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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"

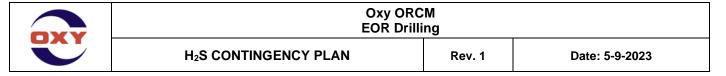




# HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

Oxy ORCM<br/>EOR Drilling

5-9-2023 Rev. 1



# **Table of Contents**

1.	Sco	pe	4
2.	Obje	ective	4
3.	Doc	ument Discussion	4
4.	Eme	ergency Procedures	4
	4.1 4.2 4.3	High H <sub>2</sub> S While Operating Uncontrollable Conditions Responsibility	5
5.	Gen	eral Evacuation Plan	6
6.	Eme	ergency Response Drills	7
7.	Trai	ning Requirements	7
8.	Serv	vice Company and Visiting Personnel Precautions	7
9.	Eme	ergency Equipment Requirements	7
	9.1 9.2 9.3	Minimum Emergency Equipment for Drilling Rigs  Use of SCBA  Rescue	8
10.	Toxi	ic Effects of H₂S	9
44	10.1 10.2	Table 1 – Toxicity of various gases  Table 2 – Physical effects of H₂S	10
11.		ekly Requirements List	
12.		nchments	
	12.1 12.2	Attachment 1 – List of Abbreviations	

Oxy ORCM EOR Drilling					
H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023			

# **Revision Status**

Revision #	Revision Date	Next 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 H₂S While Operating

In the event of any evidence that H<sub>2</sub>S 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.

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

- 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.



Oxy ORO EOR Drill		
H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023

All personnel	1.	On alarm, will report to the nearest upwind designated safe briefing / muster area.
	2.	Check status / headcount of personnel.
	3.	Secure breathing equipment if available and safe to retrieve.
	4.	Await orders from supervision.
DSM / WSM / WOC	1.	Report to nearest upwind designated safe briefing / muster area.
	2.	Notify and call out H <sub>2</sub> S Safety personnel and air trailer if not already on location from the respective contractor.
	3.	Coordinate preparations of individuals to return to work area when cleared to do so by the $H_2S$ Safety personnel.
	4.	Assess situation and take control measures as necessary.
Rig Manager / Supervisor	1.	Report to up nearest upwind designated safe briefing / muster area.
	2.	All personnel on location will be accounted for and 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).
	3.	Coordinate preparations of individuals to return to work area when cleared to do so by the $H_2\mbox{S}$ supervisor.
	4.	Assess situation and take control measures if needed.
	5.	If the DSM is not present the Rig Manager / Supervisor will assume supervision of the event until his return.
Driller / Operator / Line	1.	Begin evacuation procedures and secure well if safe to do so
Boss	2.	Check monitor for point of release if possible.
	3.	Don escape equipment, if necessary, report to nearest upwind designated safe briefing / muster area.
	4.	Assist Rig Manager in checking status of personnel.
	5.	Assign least essential person to notify DSM and toolpusher by quickest means in case of their absence.
	6.	Assumes the responsibilities of DSM and Rig Manager until they arrive should they be absent.
Derrickman / Floorman / Equipment Operators	Re	main in briefing / muster area until instructed by supervisor.
Mud engineer	1.	Report to nearest upwind designated safe briefing / muster area.
	2.	When instructed, begin check of mud for pH and $H_2S$ level. (Garett gas train)
H <sub>2</sub> S Safety personnel		entify the area / alarm where H <sub>2</sub> S was detected, and if H <sub>2</sub> S still esent at what level of concentration or if faulty sensor or false alarm.

# 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).

OXY -	Oxy ORCM EOR Drilling				
	H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023		

#### 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  $H_2S$  monitor which is intrinsically safe, and capable of sensing a minimum  $H_2S$  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

OXY.	Oxy ORCM EOR Drilling				
	H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023		

#### 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

<del>OXY</del>	Oxy ORCM EOR Drilling				
	H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023		

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<sub>2</sub>S 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	H <sub>2</sub> S	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	CO	50 ppm	400 ppm/hr	1000 ppm	
Carbon Dioxide	CO <sub>2</sub>	5000 ppm	5% 10%		
Methane	Ch₄	90,000 ppm	Combustible 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.

Oxy ORCM EOR Drilling				
H₂S CONTINGENCY PLAN	Rev. 1	Date: 5-9-2023		

#### 10.2 Table 2 – Physical effects of H₂S

Percent (%)	ppm	Grains (100 gr/ft³)*	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
H <sub>2</sub> S	Hydrogen Sulfide
HSE	Health, Safety, and Environmental
IMP	Incident Management Plan
NIOSH	National Institute of Occupational Safety and Health

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

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

DSM:			Well: Rig:						
Date:			Time:						
		Verify with	a H <sub>2</sub> S gas tester the H <sub>2</sub> S concentration of all areas listed below.						
DSM initial	RM initial	HSE Tech	Area	H₂S 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						
			8. Open Pit and/or Closed loop system, Wrangler pipe-rack area						
			9. Flare Line						
Hazards:									
DSM Signature			RM Signature						

#### Planning Report

LEAM Multi\_User Db Database: Company: Occidental Petroleum - Permian Project: Lea County, NM (NAD 27) North Hobbs Unit Site: Well: North Hobbs G/SA Unit 986-32

Wellbore: ОН Design: Plan #2 **Local Co-ordinate Reference:** TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well North Hobbs G/SA Unit 986-32 GE 3636.2 + KB 16.8 @ 3653.00usft GE 3636.2 + KB 16.8 @ 3653.00usft

Minimum Curvature

Project Lea County, NM (NAD 27)

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

New Mexico East 3001 Map Zone:

System Datum:

Mean Sea Level

North Hobbs Unit Site

Northing: 620,869.10 usft Site Position: Latitude: 32° 42' 5.04 N From: Мар Easting: 860,172.70 usft Longitude: 103° 9' 45.00 W 0.00 usft 13-3/16 "

**Position Uncertainty:** Slot Radius:

Well North Hobbs G/SA Unit 986-32 0.00 usft 620.834.10 usft 32° 42' 4.70 N **Well Position** +N/-S Northing: Latitude: 860,175.20 usft 103° 9' 44.97 W +E/-W 0.00 usft Easting: Longitude: **Position Uncertainty** 0.00 usft Wellhead Elevation: usft Ground Level: 3,636.20 usft **Grid Convergence:** 0.63°

ОН Wellbore Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) 47,480.00000000 HDGM\_FILE 6/15/2024 6.25 60.50

Plan #2 Design Audit Notes: PLAN Tie On Depth: 0.00 Version: Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 99.46

4/10/2024 **Plan Survey Tool Program** Date **Depth From** Depth To (usft) (usft) Survey (Wellbore) **Tool Name** Remarks 0.00 5,579.48 B001Mc\_MWD+HRGM\_Rev5 Plan #2 (OH)

ISCWSA MWD + HRGM

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	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	
2,513.23	49.90	99.46	2,310.82	-111.68	670.35	3.00	3.00	5.98	99.46	
5,579.48	49.90	99.46	4,286.00	-497.10	2,983.80	0.00	0.00	0.00	0.00 F	PBHL (NHU 986-32)

#### **Planning Report**

Database:LEAM Multi\_User DbCompany:Occidental Petroleum - PermianProject:Lea County, NM (NAD 27)Site:North Hobbs Unit

North Hobbs G/SA Unit 986-32

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 986-32 GE 3636.2 + KB 16.8 @ 3653.00usft GE 3636.2 + KB 16.8 @ 3653.00usft

Minimum Curvature

ed 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (NHU	986-32)								
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	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
900.00	1.50	99.46	899.99	-0.11	0.65	0.65	3.00	3.00	0.00
1,000.00	4.50	99.46	999.85	-0.97	5.81	5.89	3.00	3.00	0.00
1,100.00		99.46	1,099.29	-2.69	16.12	16.34	3.00	3.00	0.00
1,200.00		99.46	1,198.04	-5.26	31.55	31.98	3.00	3.00	0.00
1,300.00		99.46	1,295.85	-8.67	52.05	52.77	3.00	3.00	0.00
1,400.00	16.50	99.46	1,392.43	-12.92	77.58	78.65	3.00	3.00	0.00
1,500.00		99.46	1,487.52	-18.00	108.06	109.55	3.00	3.00	0.00
1,600.00		99.46	1,580.87	-23.89	143.40	145.38	3.00	3.00	0.00
1,700.00		99.46	1,672.22	-30.57	183.52	186.05	3.00	3.00	0.00
1,800.00		99.46	1,761.31	-38.03	228.30	231.44	3.00	3.00	0.00
1,900.00	31.50	99.46	1,847.90	-46.25	277.61	281.44	3.00	3.00	0.00
2,000.00		99.46	1,931.76	-55.20	331.33	335.89	3.00	3.00	0.00
2,100.00		99.46	2,012.65	-64.86	389.30	394.67	3.00	3.00	0.00
2,200.00		99.46	2,090.35	-75.20	451.37	457.59	3.00	3.00	0.00
2,300.00		99.46	2,164.66	-86.19	517.37	524.50	3.00	3.00	0.00
2,400.00	46.50	99.46	2,235.36	-97.81	587.11	595.20	3.00	3.00	0.00
2,500.00		99.46	2,302.27	-110.02	660.40	669.50	3.00	3.00	0.00
2,513.23		99.46	2,310.82	-111.68	670.35	679.59	3.00	3.00	0.00
2,600.00		99.46	2,366.72	-122.59	735.82	745.96	0.00	0.00	0.00
2,700.00		99.46	2,431.14	-135.16	811.27	822.45	0.00	0.00	0.00
2,800.00	49.90	99.46	2,495.55	-147.73	886.72	898.94	0.00	0.00	0.00
2,900.00		99.46	2,559.97	-160.30	962.17	975.43	0.00	0.00	0.00
3,000.00		99.46	2,624.39	-172.87	1,037.62	1,051.92	0.00	0.00	0.00
3,100.00		99.46	2,688.80	-185.44	1,113.07	1,128.41	0.00	0.00	0.00
3,200.00		99.46	2,753.22	-198.01	1,188.51	1,204.90	0.00	0.00	0.00
3,300.00	9.90	99.46	2,817.64	-210.58	1,263.96	1,281.38	0.00	0.00	0.00
3,400.00	49.90	99.46	2,882.05	-223.15	1,339.41	1,357.87	0.00	0.00	0.00
3,500.00		99.46	2,946.47	-235.72	1,414.86	1,434.36	0.00	0.00	0.00
3,600.00		99.46	3,010.89	-248.28	1,490.31	1,510.85	0.00	0.00	0.00
3,700.00		99.46	3,075.30	-260.85	1,565.76	1,587.34	0.00	0.00	0.00
3,800.00	49.90	99.46	3,139.72	-273.42	1,641.21	1,663.83	0.00	0.00	0.00
3,900.00		99.46	3,204.14	-285.99	1,716.65	1,740.32	0.00	0.00	0.00
4,000.00		99.46	3,268.55	-298.56	1,792.10	1,816.80	0.00	0.00	0.00
4,100.00		99.46	3,332.97	-311.13	1,867.55	1,893.29	0.00	0.00	0.00
4,200.00		99.46	3,397.39	-323.70	1,943.00	1,969.78	0.00	0.00	0.00
4,300.00	49.90	99.46	3,461.80	-336.27	2,018.45	2,046.27	0.00	0.00	0.00
4,400.00	49.90	99.46	3,526.22	-348.84	2,093.90	2,122.76	0.00	0.00	0.00
4,500.00		99.46	3,590.64	-361.41	2,169.35	2,199.25	0.00	0.00	0.00
4,600.00		99.46	3,655.05	-373.98	2,244.80	2,275.74	0.00	0.00	0.00
4,700.00		99.46	3,719.47	-386.55	2,320.24	2,352.22	0.00	0.00	0.00
4,800.00		99.46	3,783.89	-399.12	2,395.69	2,428.71	0.00	0.00	0.00
4,900.00	49.90	99.46	3,848.30	-411.69	2,471.14	2,505.20	0.00	0.00	0.00
5,000.00	49.90	99.46	3,912.72	-424.26	2,546.59	2,581.69	0.00	0.00	0.00

#### **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 986-32

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well North Hobbs G/SA Unit 986-32 GE 3636.2 + KB 16.8 @ 3653.00usft GE 3636.2 + KB 16.8 @ 3653.00usft

Grid

Minimum Curvature

ion Azimuth (°) 19.90 99.4	- , -	+N/-S (usft) -436.83	+E/-W (usft) 2,622.04	Vertical Section (usft) 2,658.18	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	- , -		2,622.04	2,658.18	0.00	0.00	0.00
19.90 99.4	6 4.041.55	-449.40	2,697.49	2.734.67	0.00	0.00	0.00
19.90 99.4	6 4,105.97	-461.97	2,772.94	2,811.16	0.00	0.00	0.00
19.90 99.4 19.90 99.4	,	-474.54 -487.11	2,848.39 2,923.83	2,887.64 2,964.13	0.00 0.00	0.00 0.00	0.00 0.00
19.90 99.4	6 4,286.00	-497.10	2,983.80	3,024.92	0.00	0.00	0.00
		,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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 342123

#### **CONDITIONS**

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	342123
	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	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-345	5/29/2024
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	5/29/2024