H2S - 61

OCD COMMENTS OXY HOBBS H2S CP

4/23/2013

REACTION-PROCESS CONTINGENCY PLAN FOR A HYDROGEN SULFIDE (H2S) GAS EMERGENCY INVOLVING THE OXY PERMIAN-CENTRAL OPERATING AREA HOBBS OPERATIONS

Revision 04/15/2013

Summary of Comments on 2013_0423 Oxy's Hobbs H2S CP VON.pdf

OCCIDENTAL PERMIAN LTD. HOBBS, NEW MEXICO

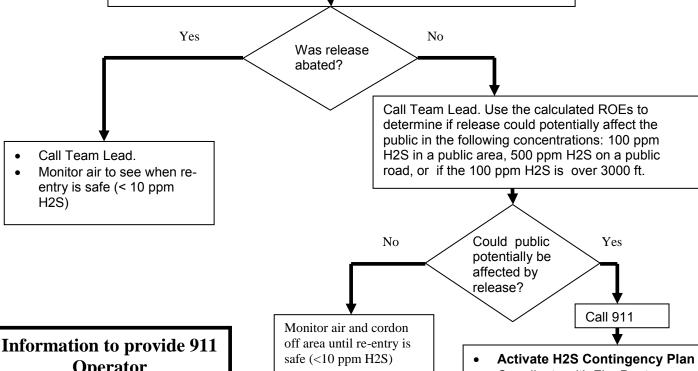
TABLE OF CONTENTS Hobbs Area H2S CONTINGENCY PLAN

Section	Topic Durness and Seens of Plan Coveress	Page
I.	Purpose and Scope of Plan Coverage Safety and Design Specifications Coordination with State Emergency Plan	4 5 9
II.	Emergency Procedures Discovery and Implementation of Immediate Action Plan	11 11
	Activation Of Hydrogen Sulfide Contingency Plan	12
	Training and Drills	12
	Physical Properties and Physiological Effects of Hydrogen Sulfide (H2S)	13
	Physical Properties and Physiological Effects of Sulfur Dioxide (SO2)	14
	"Non-OXY" Emergencies	15
III.	Roles and Responsibilities of Emergency Response Personnel	17
IV.	Appendices	
	A. Maps of Hobbs Area ROE Maps Calculated by PHAST	22
	B. Maps of locations of H2S Monitors and ESDs	23
	C. Location of SCBA and Gates at RCF	33
	D. List of Hobbs Area Facilities and 100 & 500 ppm	34
	E. ROE's List of North Hobbs Area Low Pressure Producing Wells and 100 & 500 ppm ROE's	35
	F. List of South Hobbs Area Low Pressure Producing Wells and 100 & 500 ppm ROEs	40
	G. List of Hobbs Area Produced Gas Injection Wells and 100 & 500 ppm ROE's	42
	H. Map of Wells with >100 ppm H2S ROE that includes a public area map	44
V.	Emergency Telephone List (Table of Contents)	46
	OXY Permian Emergency Answering Service	47
	Caprock Answering Service	47
	FIELD OPERATIONS Emergency Call-Out List	47
	PLANT OPERATIONS Emergency Call-Out List OXY Permian Contacts (Midland & Houston Offices)	48 49
	Emergency Services (Medical, Ambulance, Air Ambulance)	50
	Law Enforcement and Fire Departments	51
	Govt. Agencies/Airports/Poison Control	52
	Hobbs Operating Personnel	53
	Oxy Corporate Security / Houston EOC	54
	Contractor Support	55
	Outside Producing Companies Contact List	56

OPERATOR QUICK REFERENCE GUIDE

If H2S (facility alarm or personal monitor) is detected greater than 10 ppm

- Move away from the source and get away from the affected area-with continuous wind direction awareness indicators (upwind and perpendicular to the release)
- Verbally alert other affected personnel and direct them to a safe assembly area that will be determined using JSA or by current wind conditions
- Don personal SCBA and assist personnel in distress (always use the Buddy system)
- Account for on-site personnel using JSA or plant sign in sheet
- Take immediate measures to control the presence of or potential H2S discharged and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as necessary to correct or control the specific situation.



Operator

- Name, phone number and/or address of person reporting emergency
- Location of emergency (Well or facility number, cross street and/or lat/long)
- Any known injuries or missing persons
- Concise statement of what is happening
- What type of emergency services are needed on location

Coordinate with Fire Dept. regarding blocking unauthorized access to the unsafe area and assist as appropriate using ROEs and drawings which have been made previously available to the Fire Dept.

Coordinate with Fire Dept regarding the evacuating the public

Notify NMOCD and National Response Center as applicable.

REACTION-PROCESS CONTINGENCY PLAN FOR A HYDROGEN SULFIDE GAS EMERGENCY INVOLVING THE OXY PERMIAN-HOBBS AREA

Section I.

A. Purpose and Scope of Plan Coverage

The purpose of this plan is to conduct oil and gas operations in a manner that protects the public from exposure to hydrogen sulfide gas and to provide for the logical, efficient and safe emergency response action to be taken by the Occidental Permian, Central Operating Area, Hobbs Operations (Hobbs Area) as required by 19.15.11 NMAC and API RP-55, RP-68 and RP-49. The protection of the general public and workers in the event of an accidental release of potentially hazardous quantity of Hydrogen Sulfide Gas (H2S) or Sulfur Dioxide (SO2) from the site operations is of the highest priority.

Flares are installed at some Oxy facilities (See section on Batteries and Satellites for locations). The flares are the only sources of SO2 in Oxy's Hobbs operations and are used in emergency conditions or during maintenance. The worst case flaring events have been modeled using EPA software AERSCREEN. The results for SO2 indicated that the 10ppm SO2 threshold referenced in RP-55 would never be reached. Therefore, SO2 is not further discussed in this plan.

In the Hobbs Area, Oxy has operated a secondary recovery water flood and since 2003 has operated a tertiary recovery program which utilizes carbon dioxide (CO2) as a means of additional recovery of oil and gas production.

Operations in the Hobbs Area are divided into two areas, the North Hobbs and South Hobbs Units. A map of the Hobbs Area boundaries is included as Appendix I in Section IV of this plan.



The operations consist of producing oil and gas wells, water and gas injection wells, tank batteries with vapor recovery units, production/injection satellites, water injection facilities, several thousand feet of underground pipeline injection or production gathering systems, and the Reinjection Compression Facility (RCF).

Field personnel conduct 24 hour surveillance of the operations and are equipped with laptops capable of operating remote equipment through CADA system. All Oxy field personnel have updated H2S contingency plans which include COES, personal H2S monitors and SCBAs. All Hobbs personnel are trained and participate annually in Emergency Response drills and scenarios.



Sources of potentially hazardous volumes of H2S gas in the Hobbs Area operations include:

- Oil and gas producing and injection wells and associated lines
- Injection systems (pipelines)

Page: 4

Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 5/8/2013 8:05:14 AM		
typo: should b	e Appendix A				
Number: 2	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:23:51 PM		
spell out first time: supervisory control and data acquisition					
Number: 3	Author: GVonGonten	Subject: Highlight	Date: 4/30/2013 1:23:58 PM		
	Author: GVonGonten	Subject: Sticky Note	Date: 5/8/2013 8:05:18 AM		
spell out "Radius of Exposure"					
Number: 5	Author: GVonGonten	Subject: Highlight	Date: 4/30/2013 1:25:12 PM		

- Fluid gathering and handling facilities (satellites and batteries)
- Reinjection Compression Facility (RCF) and its distribution system

Leaks from these sources could create an H2S exposure area. Whether such exposure areas would be hazardous would depend upon their location and size. The calculations of the exposure potential, leak size is assumed to be the maximum possible from the particular system. This is generally and intentionally a conservative calculation because the vast majority of leaks will occur as a small fraction of the system. To determine which facilities are required to be in this plan, the Pasquill-Gifford equation was used. These calculations are based on the escape rates as allowed by New Mexico Hydrogen Sulfide standard for existing and new operations..

To calculate the radii of exposure (ROEs) in this plan Oxy utilized DNV's PHAST version 6.7, one of the most widely-used commercial consequence modeling software. Because PHAST incorporates more advanced techniques and scientific theories, its results are closer to realistic and more reliable compared with Pasquill-Gifford. In addition, PHAST version 6.7 has been validated with actual CO2 release data. Based on discussions with the Hobbs Fire Department, Oxy is able to provide an H2S ROE that corresponds to the release rate at the 10th minute of the release when the escape rate is at the maximum flowrate in the system which will provide the most relevant and useful information to the emergency responders..

Oxy utilizes conservative inputs into PHAST to model a worst case scenario for each potential release. Assumptions include:

- An escape rate that is the maximum inflow rate in the line/facility, the absolute open flow rate of the gas injectors or the maximum gas rate for oil producers
- The maximum anticipated line operating pressure for each individual line was used.
- Each release is modeled as a horizontal release for maximum ROE.
- The weather conditions are 1.5m/s wind speed and F stability class

Gas samples were taken to determine the H2S concentration from each facility. A representative H2S concentration was applied to all of the wells to calculate the ROEs from individual wells. The gas samples were analyzed by a third party using applicable ASTM and/or GPA standards. In addition, the H2S concentration is continuously monitored at the RCF.

B. Safety and Design Specifications

Production Wells

All wells with an ROE of >100 ppm that includes a public area (See Appendix H for a list of these wells) are being equipped with new 3,000 PSI integral type flanged wellheads. These wellheads are constructed with materials that meet or Page 5 of 56



Page: 5

Number: 1 Author: GVonGonten Suinsert "calculated using the PHAST model" Subject: Sticky Note Number: 1 Date: 4/30/2013 1:26:10 PM

exceed the NACE MRO 175 specification and the API 6A specification for wellhead and Christmas tree equipment. All wellheads are designed to NMOCD specifications and allow downhole accessibility under pressure for permanent well control. In addition, these wells have automatic shut-down controls that are maintained in good operating condition.

All producing wells have a high and low-pressure switch which will shut down the artificial lift equipment when a condition outside the normal operating range is detected. All rod pumped wells are equipped with an additional polished rod "blow out preventer". Production fluids are transported from the well to the Satellites through Schedule 40 ERW pipe (HIC resistant) rated to 2000 PSI.

All well controls are monitored through the SCADA system, automatically shut down and are capable of being controlled remotely.

Injection Systems

The Injection System in North Hobbs is a water- alternating- gas injection system (WAG). The WAG injection lines are 3" Sch. 40, ASTM A-312, GR TP 316/316L ERW with a MAOP of 2160 psi and are constructed to handle the injection pressure of 1750 psi. Also, a pressure safety valve on the injection source is designed to protect the injection line and each CO₂ distribution lateral is protected with thermal relief valves that will prevent a harmful overpressure condition due to trapped CO₂. Additionally, Oxy performs quarterly UT testing of pipelines.

Batteries 2 Satellites



North Hobbs Unit

There are 4 tank batteries, 7 CO2 atellites, and 4 waterflood satellite facilities. All of these locations are equipped with wind direction indicators. Each stair or ladder leading to the top of a tank or vessel with >300 ppm H2S is equipped with a chain or sign to restrict entry.

The 3 tank batteries have flares equipped with assist gas and are designed for complete combustion of hydrocarbon gas. In the event of an overpressure or an upset situation, the gas volume will be directed to the flare.

The pressure vessels, production headers, and injection headers are equipped with pressure monitoring devices and pressure safety valves. The pressure vessel design incorporates Emergency Shutdown (ESD) Valves to protect against an overpressure or underpressure condition. Pressure safety devices and flow control devices will be used to control the pressure and flow during the operation of the satellites and batteries. Level alarms and ESDs on the tank batteries and satellites are installed to prevent an unsafe condition due to overflow or gas release and automatically notify operational personnel through the answering service.



Page: 6

Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:26:47 PM	
recommend sp	pelling out "and" through	out		
Number: 2	Author: GVonGonten	Subject: Highlight	Date: 4/30/2013 1:26:29 PM	
	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 9:31:01 AM	
do all have potential to impact public area?				
Number: 4	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:56:47 PM	
Number: 5	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:56:54 PM	

All batteries and satellites in the North Hobbs Unit with an ROE of >100 ppm that includes a public area are equipped with H2S gas detectors set to alarm at ≥ 10 ppm that activates an ESD valve to isolate the source. Some additional batteries and satellites that do not have an ROE of >100ppm which includes a public area also have H2S alarms that activate an ESD. (See Appendix B for location of H2S detection equipment and ESDs at each location) The alarms have a blue beacon and automatically notify Oxy personnel through the answering service which is operational 24 hours a day. The H2S monitors are calibrated every 90 days.



All facilities are monitored and are capable of being controlled remotely by the SCADA system.

South Hobbs Unit

There is 1 central tank battery and 4 waterflood satellites in the South Hobbs Unit. Locations are equipped with wind direction indicators. Each stair or ladder leading to the top of a tank or vessel with >300 ppm H2S is equipped with a chain or sign to restrict entry.

The central tank battery and each of the satellites have a flare equipped with assist gas and is designed for complete combustion of hydrocarbon gas. In the event of an overpressure or an upset situation, the gas volume will be directed to the flare.

The pressure vessels, production headers, and injection headers are equipped with pressure monitoring devices and pressure safety valves. Pressure safety devices and flow control devices will be used to control the pressure and flow during the operation of the satellites and batteries. Level alarms on the tank batteries and satellites are installed to prevent an unsafe condition due to overflow or gas release and automatically notify operational personnel through the answering service.

The South Hobbs Unit batteries and facilities do not have an ROE of >100 ppm that includes a public area, however, the central tank battery and Satellite 3 are equipped with H2S gas detectors (See Appendix B for location of H2S detection equipment at each location) set to alarm at \geq 10ppm. The alarms have a blue beacon and automatically notify Oxy personnel through the answering service which operates 24 hours a day.

All facilities are monitored and are capable of being controlled remotely by the SCADA system ,

Reinjection Compression Facility (RCF)

The RCF is monitored 24 hours a day from the control room. The Facility control room is located on the Southwest corner of the facility. The location of SCBA (5-minute and 30-minute escape packs) is shown in Appendix C. All H2S alarms

Page: 7

Number: 1 Author: GVonGonten Subject: Sticky Note Date: 4/30/2013 1:30:45 PM

insert (see Appendix H)

are visible and audible and notify the plant operator at 10 ppm and automatically shut in equipment. Appendix B shows the location of the H2S monitors and all egress routes from the RCF. The mustering area will be determined based on the wind direction indicators and will be communicated to all workers at the facility through JSA.

H2S Fixed Monitoring System

Oxy maintains H2S fixed gas monitors in the North and South Hobbs Unit that notify operators of an H2S leak. The monitors detect any condition from 0 to 100 PPM with alarm capability at a high level, low level and a fault condition, and activate a shutdown on the producing well, production header, injection header, and fluid gathering systems to minimize the release of gas. This monitoring system can provide notification to the operations personnel before the release impacts the public. Battery backup is on standby and ensures continued operation of the monitors due to a power failure. All monitors are calibrated and tested every 90 days and records are kept in the Maximo data base. See Appendix B for a map of each location with H2S monitors.

SCADA Monitoring System

All operations in North and South Hobbs monitored 24 hours per day with a state of the art SCADA system. This system allows remote control of the operations and the alarm callout communications.



Warning Signs & Markers

In accordance to applicable regulations, warning signs are posted at each well, satellite, battery and all facility entrances containing >100 ppm H2S. Signs are also posted on all surface and buried lines where the potential exists to be exposed to a release of hydrogen sulfide gas. The posted markers and signs warn of the impending danger if the line ruptures. Signs are also posted at all road crossings where a pipeline exists. The signs meet ANSI Standards and include the words danger and 'poison gas'. Oxy has also posted these signs that are within the city limits in Spanish.

Security

All the injection and producing wells with >100 ppm H2S and located within ¼ mile of a public area (19.15.11.12.B) are equipped with fencing and locked gates around the wells. This fencing serves as a deterrent to public access and will remain locked when unattended.

Hydrogen Sulfide Precautions during Operations

All Oxy employees and contractors are required to have in their possession all the customary personal safety equipment such as hard hats, steel toe shoes and Page 8 of 56

Page: 8

Number: 1	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 2:58:53 PM	
- Number: 2	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:35:27 PM	
Number: 2	Author, Gvoridonten	Subject. Sticky Note	Date. 4/30/2013 1.33.27 FIVI	

safety glasses. Oxy employees and contractors are required to attend a site specific orientation of the operations 2nd advised in all safety measures. In addition each operator is equipped with a personal H2S monitor and SCBA (30-min supplied air) and is required to have it with him when working in a known H2S environment. All personal H2S monitors 4ill be calibrated on a monthly basis to assure proper working condition and accuracy. In addition, all Oxy field personnel have updated H2S contingency plans which include ROEs,





Drilling & Workover Operations

Drilling operations in the Hobbs area will be conducted with due consideration of API RP-49. Oxy has a drilling H2S contingency plan and meets the requirements specified in 19.15.11.11 for drilling operations. The plan is submitted to the NMOCD district office with the drilling permit application. The H2S concentrations are well known in the Hobbs area to calculate an ROE. However, if a situation should exist where the H2S concentration was not known, a 3000 ft. ROE would be assumed as per 18.15.11.7.





Workover operations in the Hobbs area will be conducted with due consideration of API RP-68 and in compliance with 19.15.11.11. Each workover operation is equipped with detection and monitoring equipment that automatically activates visible and audible alarms when the hydrogen sulfide's ambient air concentration reaches 10 ppm. The monitors are located on the rig floor as close to the wellbore as practical and on the circulating tanks. There will be two wind direction indicators which are visible at all times. Workover operations use a hydrogen sulfide mud program capable of handling hydrogen sulfide conditions



Drilling and Workover operations will be conducted in compliance with the City Ordinance pertaining to Oil and Gas Activities within the city of Hobbs, New Mexico.

and well control. In addition, the remote controlled BOPs are pressure and hydrogen sulfide-rated and meet or exceed API specifications. These BOPs will

be operational at all times during a well's workover and servicing.

C. Coordination with State Emergency Plans

As provided for in the New Mexico Hazardous Materials Emergency Response Plan (HMER), the New Mexico State Police responding to the emergency will assume the position of On-Scene-Commander (OSC) or they may establish a Unified Command of which the OXY OSC will be a key member. The OXY OSC will be the senior OXY employee on-site until when/if the Hobbs area TEAM LEAD or designated relief arrives. Under the Unified Command scenario, the OXY OSC shall cooperate with the other involved emergency responders, such as the New Mexico State Police, 11 all fire department, City Police, Sheriff's Office, NMOCD or other appropriate public emergency response agencies to manage the effective and safe response to the emergency situation. The OSC will ensure that the local authorities have any and all required information regarding the extent (ROE), chemical concentration, hazards and expected



Page: 9

Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:37:08 PM
typo: and be a	advised		
Number: 2	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:06:39 PM
Number: 3	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:36:47 PM
are			
Number: 4	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:07:27 PM
Number: 5	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:08:47 PM
Number: 6	Author: GVonGonten	Subject: Sticky Note	Date: 4/25/2013 4:09:46 PM
sufficiently wel	II known to enable Oxy	y to calculate a ROE	
Number: 7	Author: GVonGonten	Subject: Sticky Note	Date: 4/25/2013 4:08:37 PM
NMAC			
Number: 8	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:08:26 PM
Number: 9	Author: GVonGonten	Subject: Sticky Note	Date: 4/25/2013 4:15:53 PM
specify that wo	orkovers are covered by t	inis CP	
Number: 10	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:38:04 PM
add sentence t Fire Departme		calls 911, it expects that	the responding local fire department will be the Hobbs
Number: 11	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:16:49 PM
INUITIDEI. II	Author, Gvoridonten	Subject. Highlight	Date. 4/23/2013 4.10.43 FIVI

timeline for any OXY release so they can appropriately establish an action plan regarding restricted access (road blocks, etc), notification of the public, area evacuation or shelter in place. The ROE tables (see section IV) have been calculated with due consultation and input from the local area fire department to ensure adequacy and usability. These ROE can be used by the fire department electronic mapping software to display detailed maps of any areas of concern, showing public buildings, roadways and other pertinent information needed. The Hobbs AREA OSC will notify or delegate notifications of all OXY Permian or contract personnel as well as the civil authorities needed for response to the situation. The OXY OSC will assign additional OXY personnel to support roles as needed.

See additional roles and responsibilities in Section III Roles and Responsibilities of Emergency Response Personnel.

Section II. Emergency Procedures

A. <u>Discovery and Implementation of an Immediate Action Plan</u>

- Upon discovering or recognizing a potentially hazardous H2S release, from an H2S monitor alarm or personal H2S monitor that is triggered at 10 ppm, OXY employees should implement the following immediate action plan:
 - a. Move away from the source and get away from the affected area-using continuous *wind direction awareness indicators* (upwind and perpendicular to the release)
 - b. Verbally alert other affected personnel and direct them to a safe assembly area that will be determined on the job safety analysis (JSA) or by current conditions observed with the wind direction indicators.
 - c. Don personal protective breathing equipment-supplied air, respiratory protection (SCBA-self contained breathing apparatus)
 - d. Assist personnel in distress- First Aid/Rescue (always use the Buddy system)
 - e. Account for on-site personnel using JSA or Security gate sign in sheet
 - f. Take immediate measures to control the presence of or potential H2S discharged and to eliminate possible ignition sources. Emergency shutdown procedures should be initiated as necessary to correct or control the specific situation in addition to the automatic shutdowns.
- 2. If abatement measures were successful, monitor the ambient air in the area of exposure with multi gas meters to determine when it is safe for reentry (<10 ppm H2S) and notify TEAM LEAD.
- 3. If abatement measures were not successful, notify the TEAM LEAD (or relief) of the situation. Use the previously calculated ROEs to determine if the release could potentially affect the public in the following concentrations:
 - a. 100 ppm H2S ROE in a public area
 - b. 500 ppm H2S ROE on a public road
 - c. 100 ppm H2S ROE over 3000 ft

The list in Appendix H shows wells and facilities whose 100 ppm ROEs could potentially affect the public based on the calculated ROEs.

- 4. If the public could potentially be affected, call 911 and activate H2S Contingency Plan. Give all pertinent information including:
 - a. Name, phone number and/or address of person reporting emergency
 - b. Location of emergency (well or facility number, cross street and/or lat/long)
 - c. Any known injuries or missing persons
 - d. Concise statement of what is happening

- e. What type of emergency services are needed on location
- 5. Notify other key HOBBS AREA personnel and alert them to situation.
- 6. The Team leader shall then proceed to the site to assess the situation.
- 7. In the absence of the Team Leader (or relief) the OXY employee at the site shall assume the responsibilities of the TEAM LEADER and shall remain at the scene until relieved by another OXY employee.
- 8. Coordinate with responding fire dept. regarding blocking unauthorized access to the unsafe area and assist as appropriate using ROE's and site drawings which have been previously made available to the Lea County Emergency Communication Center and the Hobbs Fire Dept.. See section IV
- 9. Coordinate with responding fire dept regarding notifying and/or evacuating the public and assist as required (through public address, door to door, or reverse 911 as deemed appropriate by the responding Fire Department).
- 10. Notify state and local officials (NMOCD) and the National Response Center to comply with applicable release reporting requirements in a timely manner (See Section V for contact information).

B. Activation of Hydrogen Sulfide Contingency Plan (Action levels)

The H2S contingency plan shall be activated if it is indicated that the release of product could potentially pose a hazard to the general public in the following concentrations:

- 100 ppm in any public area
- 500 ppm at any public road
- or if 100 ppm ROE is greater than 3000 feet from the site of the release

As discussed above in Section II.A, this will be determined through use of previously calculated ROEs.(See section IV)

It is the responsibility of the Oxy OSC to ensure activation of the H2S contingency plan, and if necessary to coordinate these efforts in unified command with any state or local emergency responders.

C. Training and Drills

The value of training and drills in emergency response procedures cannot be over emphasized. All OXY personnel and long term contractors shall be trained on the emergency action plan annually. The importance of each role of the emergency responders and the assignment that each person has during an emergency will be stressed. In additional, the need for emergency preparedness will emphasized through the use of drills and other exercises that simulate an

emergency in which personnel perform or demonstrate their duties. These exercises will consist of table-top or realistic drills in which equipment is deployed, communications equipment is tested. Public officials will be informed and preferably involved in these annual exercises.

After drills or exercises are completed reviews and critiques will be conducted to identify any potential improvement opportunities. Action items will be agreed and tracked through to implementation. These action items will be implemented in Oxy's maintenance database. Documentation of the training, drills, attendance and reviews will be on file in the HOBBS AREA files.

The plan will be periodically reviewed and updated anytime its provisions or coverage change.

Oxy will provide annual training of residents as required on the protective measures to be taken in the event of a release of H2S.

D. Physical Properties and Physiological Effects of Hydrogen Sulfide

Physical Data

Chemical Name: Hydrogen Sulfide

CAS Number: 7783-06-4

UN Number: 1053

DOT Hazard Class: 3.2 (Flammable liquids: flashpoint between -18°C and 23°C) Synonyms: Sulfureted hydrogen, hydrosulfuric acid, dihydrogen sulfide,

Chemical Family: Inorganic sulfide

Chemical Formula: H2S

Normal Physical State: Colorless Gas, slightly heavier than air.

Vapor Density (specific gravity) at 59°F (15° C) and 1 atmosphere = 1.189

Auto ignition Temperature: 500°F (260° C)

Boiling Point: -76.4°F (-60.2° C) Melting Point: -117°F (-82.9° C)

Flammable Limits: 4.3 – 46 percent vapor by volume in air.

Solubility: Soluble in water and oil; solubility decreases as the fluid temperature increases.

Combustibility: Burns with a blue flame to produce Sulfur Dioxide (SO2SO2) Odor and Warning Properties: Hydrogen Sulfide has an extremely unpleasant odor, characteristic of rotten eggs, and is easily detected at low concentrations, however, due to rapid onset of olfactory fatigue and paralysis (inability to smell) ODOR SHALL NOT BE USED AS A WARNING MEASURE



Exposure Limits

The OSHA Permissible Exposure Limit (PEL) of 10 ppm (8-hour TWA) and IDLH of 100ppm.

Physiological Effects

Inhalation at certain concentrations can lead to injury or death. The 300 ppm is considered by the ACGI as Immediately Dangerous to Life and Health (IDLH) Hydrogen Sulfide is an extremely toxic, flammable gas that may be encountered in the production of gas well gas, high-sulfur content crude oil, crude oil fractions, associated gas, and waters. Since hydrogen sulfide is heavier than air, it can collect in low places.

It is colorless and has a foul, rotten egg odor. In low concentrations, H2S can be detected by its characteristic odor; however smell cannot be relied on to forewarn of dangerous concentrations because exposure to high concentrations (greater than 100 ppm) of the gas rapidly paralyzes the sense of smell due to paralysis of the olfactory nerve. A longer exposure to lower concentrations has a similar desensitizing effect on the sense of smell.

It should be well understood that the sense of smell will be rendered ineffective by hydrogen sulfide, which can result in the individual failing to recognize the presence of dangerously high concentrations.

Exposure to hydrogen sulfide causes death by poisoning the respiratory system at the cellular level. Symptoms from repeated exposure to low concentrations usually disappear after not being exposed for a period of time. Repeated exposure to low concentrations that do not produce effects initially may eventually lead to irritation if the exposures are frequent.

Respiratory Protection

Supplied air respiratory protection (SCBA) shall be worn above the initial action level of 10 ppm and until such time that H2S concentrations have been determined by monitoring the area with quad function H2S monitors.

E. Physical Properties and Physiological Effects of Sulfur Dioxide

Physical Data

Chemical Name: Sulfur Dioxide CAS Number: 7446-09-05

UN Number: 1079

DOT Hazard Class: 2.3 (Poisonous Gases)

Synonyms: Sulfurous acid anhydride, sulfurous oxide, sulfur oxide

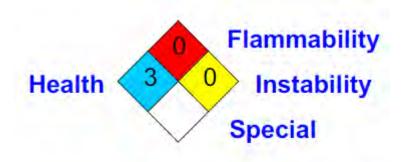
Normal Physical State: Colorless Gas, heavier than air.

Vapor Density: 2.2 Boiling Point: 148°F

Flammable Limits: Non-flammable (produced by burning hydrogen sulfide) Solubility: Soluble in water and oil; solubility decreases as the fluid

temperature increases.

Odor and Warning Properties: Sulfur Dioxide has a pungent odor associated with burning sulfur. It produces a suffocating effect and produces sulfurous acid on membranes of the nose and throat.



Exposure Limits

The OSHA PEL is 2 ppm as an 8-hour TWA. STEL is 5 ppm averaged over 15 minutes. IDLH is 100 ppm

Physiological Effects

Acute Toxicity: Inhalation at certain concentrations can lead to injury or death. 100 ppm is considered by the ACGIH as Immediately Dangerous to Life and Health.

Respiratory Protection

Supplied air respiratory protection (SCBA) shall be worn above the initial action level of 2 ppm for initial testing and until such time that SO2 concentrations have been determined and action levels established.



Page: 15

Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:41:14 PM	
typo				
Number: 2	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:25:13 PM	

F. "Non-OXY" Emergencies

It is possible that an OXY employee could discover a potentially hazardous leak from a pipeline or other facility not operated by OXY. Also, leaks could be reported to OXY personnel but upon investigation, turn out to be from someone else's facility. In such instances, the OXY employee(s) involved should lend assistance without unduly endangering themselves. Generally, such assistance would include the following actions:

- 1. Alert and/or assist any person apparently in immediate danger.
- 2. Notify all personnel of the location and nature of the emergency and assistance needed, if any.
- 3. Notify the Operator of the facility if the identity can be determined.
- 4. Continue to lend assistance, such as manning road barricades, until relieved by employees of the Operator or Public Safety Personnel.

Section III

Roles and Responsibilities of Emergency Response Personnel

Following is a description of key personnel responsibilities for incident response.

On Scene Commander (OSC): The civil authorities responding to the emergency will assume the position of OSC and they will establish a Unified Command of which the OXY OSC will be a key member. The first, most senior OXY personnel on the scene will act as the Oxy OSC until relieved by either the OXY Operation Team Lead or their designated alternate (for the Plant Operations the Plant Operator will act as initial Oxy OSC). The OSC's responsibility is to ensure control of the emergency incident. The OSC will notify or delegate notifications of all OXY Permian or contract personnel needed for response to the situation. The OSC will assign additional OXY personnel to support roles as needed. The initial priority for the OSC is to assess the size and scope of the incident scene. Such factors as the immediate level of danger to employees, contractors. and the general public should be high on the list of considerations. The OSC will act as a liaison between the site ERT and the Business Unit Emergency Management Team (BU EMT). The following is an abbreviated list concerning the responsibilities and recommended sequence for the OXY OSC to achieve his/her responsibilities.

- 1. Assess the size and scope of the incident scene.
- 2. Establish preliminary "hot and cold zones" based on the information available.
- 3. Set Ensure that the OXY Emergency Personnel are contacted according to the appropriate call out list (Field or Plant areas).
- 4. Manage all aspects of the incident as a key player in a Unified Command.
- 5. Communicate routinely with the OXY Permian Operations Emergency Manager on the BU EMT.
- 6. OSC is responsible for assigning support roles as listed below.

Note: The On Scene Commander, or relief, remains on site until the emergency is over. The On Scene Commander ensures repairs have been completed and ensures the operation has returned to normal, before releasing emergency team members.

Operations and Planning Section Chief: The Operations and Planning Section Chief (OPSC) plays an integral role in interfacing with the various State and Local emergency responders in coordinating all OXY response activities. This allows the OSC to focus on the incident and its big picture decisions. The minimum required actions of the OPSC are as follows:

- 1. Facilitate onsite responder personnel briefings and status updates.
- 2. Arrange for humanitarian assistance with the OXY Human Resources Manager if required by the scope of the incident with coordination from the OSC.
- 3. If requested, assist the local municipalities in a "search and rescue" operation categorized as a specialized employee under the OSHA HAZWOPER guidelines.
- 4. Perform all other response functions as requested by the OSC.

Technical Specialist: Technical Specialists, those individuals possessing critical skills, experience and knowledge in specific areas of OXY's or industry operations may be enlisted to assist in providing operational solutions for controlling releases in their areas of expertise. The Technical Specialist will function through the OPSC.

Examples of Technical Specialists include:

- Downhole Specialist
- Critical Well Control Specialist
- Drilling Specialist
- Construction Specialist
- Electrician
- Maintenance Specialist

Facility Engineers: Facility Engineers will function through the OPSC and assist in providing operational solutions to controlling the size and scope of an incident. The ability to identify process related equipment for isolation and routing for field sources often proves to be one of the biggest challenges during a crisis situation. The following tasks should receive the initial priority for responding Facility Engineers and operations personnel.

- 1. Identify source location and isolation equipment if available.
- Provide detailed isolation instructions for responding personnel. Keep in mind the responders may or may not be OXY employees and may or may not have a good understanding of E&P operations.
- 3. Be prepared to provide the operational technical portion of update sessions with the onsite field response groups.
- 4. Begin the operational aspect of a facility recovery plan to first address operational needs to return to "normal" operating mode

and second to complete long term considerations for site mitigation.

Safety Officer: The Safety Officer (SO) plays an integral part in assisting the OSC in managing the onsite issues surrounding an incident. Focused internally on the incident, the Safety Officer is constantly evaluating the safety and health issues involved with the incident and monitors pieces of the response process to allow the OSC to address "bigger picture" issues. The following is an abbreviated list of the responsibilities and recommended sequence for the SO to achieve his/her responsibilities.

- 1. Confirm the OSC's preliminary "hot and cold zones" are still applicable or adjust accordingly for such activities as staging areas, media crew locations, decontamination operations, etc.
- 2. Address Safety, Health, Environmental, and Regulatory issues including notifications.
- 3. If required, coordinate the development of a Site Safety and Health Plan or request this service from the BU EMT.
- 4. If required, develop an "incident mitigation or recovery plan" or request this service from the BU EMT.

Note: The SO must stay abreast of the incident status and situation in order provide relief as an alternate OSC if the situations dictates a change needs to be made.

Logistics Section Chief: The Logistics Section Chief (LSC) is responsible for assisting the OSC by arranging all aspects of field logistical support. The LSC must accommodate not only OXY responders but also municipal or other industrial responders as requested by the OSC or OPSC. The Logistical Manager's staff has multiple contracts and processes already in place to assist in such issues as food, lodging, vehicles, aircraft, etc. The following is an abbreviated list and recommended sequence to ensure the LSC is able to achieve his/her responsibilities.

- 1. Initiate both victim and emergency responder "personnel accountability systems" upon arrival to the incident scene.
- 2. Establish and maintain a communication between the OSC and the BU EMT.
- 3. Assist in media interactions with Public Information Officer.
- 4. Initiate and maintain an incident documentation system to ensure all activities are captured and a summary report will be available.
- 5. Begin supplying logistical support to the incident scene, staging operations, and local areas as soon as practical
- 6. Coordinate site security capabilities with the OSC, OPCS, SO, and responding municipalities.

Public Information Officer (PIO): The designated PIO reports to the OSC. The PIO will work very closely with the OSC, OPSC, and the OXY Corporate Communications Representative. Initial priorities for the PIO will include the following:

- 1. Establish themselves as the onsite Public Information Officer or media contact for all media inquiries.
- 2. Work with Corporate Communications to establish and distribute an initial press release as soon as feasible and with an announced time of when additional updates would be available.
- 3. Either assist the OSC or personally conduct all initial media interviews until relieved by a member of Corporate Communications or their designate.

Lea County Emergency Operations Center (EOC) Liaison: The Lea County EOC Liaison will report to the EOC as required to form communications between the EOC Emergency Manager and the OXY OSC or EMT Emergency manager. This position will only be filled if the event escalates to a level that requires the manning of the Lea County EOC and the event adversely affects, or could affect OXY operations or personnel.

Other Employees: All other personnel should stand by and wait for instructions from the OSC.

- 1. Once accounted for, Hobbs AREA employees may be called upon by the OSC to support in many different directions.
- 2. OXY personnel in "staging area" wait to assist in the actual response efforts, escorting vendors to remote locations as a guide, blocking roads, assisting with evacuations, etc.

It should be understood however, no employee or contractor of the Hobbs Area will be asked to provide incident scene support that they are not comfortable in their ability to perform or have not been specifically trained to do.

Caprock Answering Service: The Caprock Answering Service is a 14-hr answering service contracted by Oxy. Their phone number is posted on all pipeline markers and on SFRM facilities. The number can be called by any member of the public or an emergency responder. Upon notification of a possible emergency on Occidental Permian property, the answering service operator should ensure that he/she has all of the following information and proceed to call the OXY Technician on call and Operations Team Lead (OTL) and provide:

1. Name, phone number, and/or address of the person reporting emergency.

Number: 1 Author: GVonGonten Subject: Highlight Date: 4/30/2013 1:42:10 PM

- 2. Location of emergency. (Well/Facility Number, cross street and /or Lat/Long
- 3. Any known injuries or missing persons
- 4. Concise statement of what is happening.
- 5. What type of emergency services are needed on location.]

Section IV Appendices

Appendix A Maps of Hobbs Area ROE Maps Calculated by PHAST



This section includes large maps to be inserted.

Number: 1

Date: 4/30/2013 1:44:56 PM

Number: 1 Author: GVonGonten Subject: Sticky Note earlier copies of ROE had the top and bottom margins truncated

Appendix B Maps of Hobbs Area Facilities and Locations of H2S Monitors and ESD Valves











Number: 1

Author: GVonGonten

Subject: Sticky Note

Date: 4/25/2013 4:29:07 PM

no monitors on west side and northwest





Hobbs H2S Contingency Plan: Revised 04/15/2013









Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:46:29 PM				
no H2S monit	or?						
Number: 2	Author: GVonGonten	Subject: Sticky Note	Date: 4/25/2013 4:30:28 PM				
no monitors on west and south side							

Hobbs H2S Contingency Plan: Revised 04/15/2013







Number: 1

Author: GVonGonten

Subject: Sticky Note

Date: 4/25/2013 4:31:05 PM

no monitors N, S, W







Number: 1

Author: GVonGonten

Subject: Sticky Note

Date: 4/25/2013 4:31:22 PM

no monitors

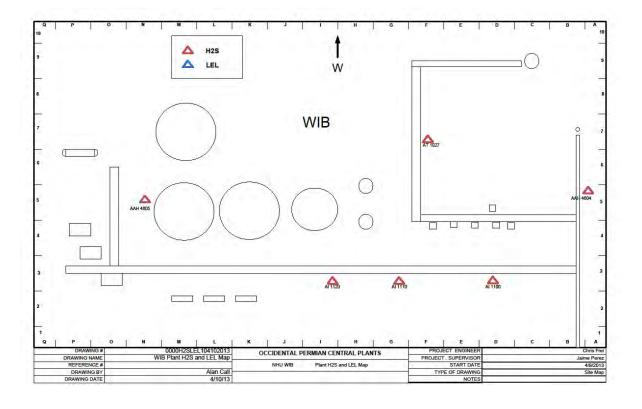
Hobbs H2S Contingency Plan: Revised 04/15/2013





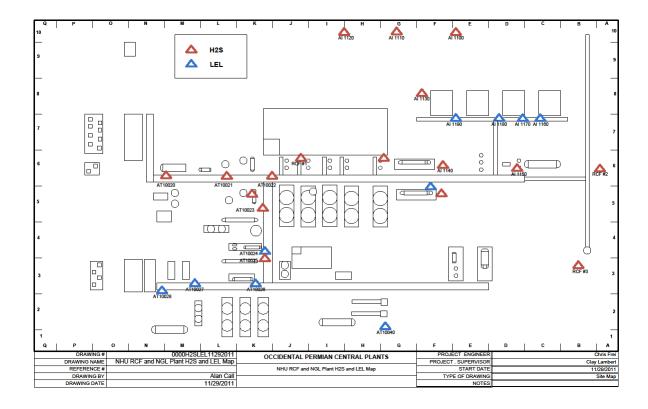








Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 3:58:10 PM	
no ESD?				
Number: 2	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 3:59:49 PM	
indilibel. 2	Author, dvoridonten	Subject. Sticky Note	Date. 4/30/2013 3.33.43 FIVI	





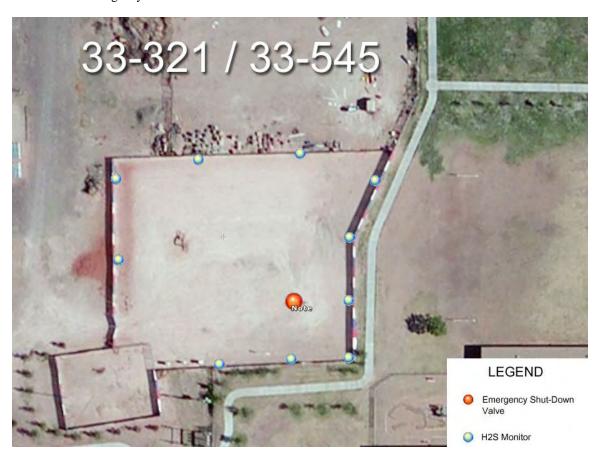


Number: 1

Subject: Sticky Note

Date: 4/25/2013 4:55:53 PM

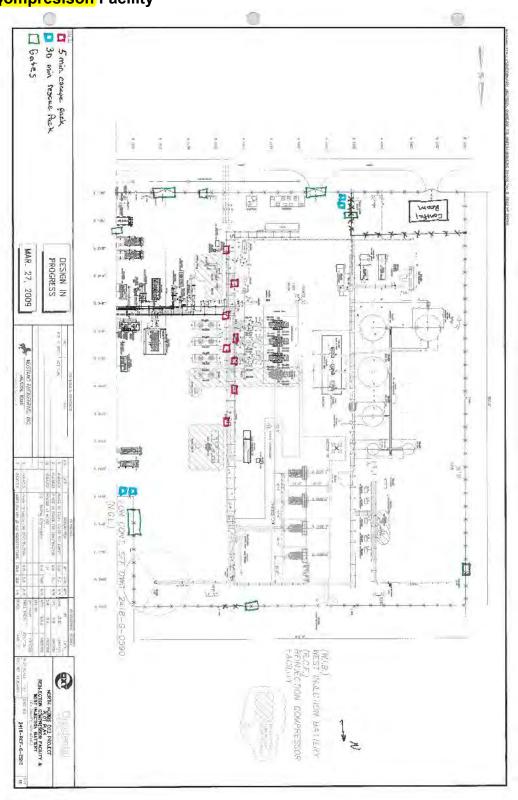
Number: 1 Author: GVonGonten well label differs from appendices g & h





Appendix C Location of SCBA and Gates at Reinjection Compresison Facility





Number: 1	Author: GVonGonten	Subject: Sticky Note	Date: 4/25/2013 4:53:22 PM	
typo				
Number: 2	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:53:15 PM	

Appendix D List of Hobbs Area Facilities and 100 and 500 ppm ROEs ROEs are calculated using PHAST Version 6.7

Unit	Description	ULSTR	H2S Conc. (ppm)	Latitude	Longitude	100 ppm ROE (ft)	500 ppm ROE (ft)
NHU	INJECTION BATTERY	E 33 18S,38E	19840	32.7065	-103.1616	463	100
NHU	SATELLITE 19 CO2	N 19 19S,38E	11000	32.7289	-103.1894	450	58
NHU	SATELLITE 24 CO2	O 24 18S,37E	9220	32.7287	-103.2038	430	55
NHU	SATELLITE 25	J 25 18S,37E	28115	32.7176	-103.2005	77	14
NHU	SATELLITE 27	M 27 18S,38E	46224	32.7136	-103.1434	142	28
NHU	SATELLITE 28	F 28 18S,38E	43430	32.7211	-103.1541	133	29
NHU	SATELLITE 29 CO2	G 29 18S,38E	4150	32.7198	-103.1700	103	16
NHU	SATELLITE 30 CO2	I 30 18S,38E	7000	32.7074	-103.1837	216	28
NHU	SATELLITE 31 EAST CO2	J 31 18S,38E	8960	32.7038	-103.1841	298	37
NHU	SATELLITE 32 EAST CO2	H 32 18S,38E	7020	32.7043	-103.1634	220	27
NHU	SATELLITE 32 WEST	K 32 18S,38E	39507	32.7010	-103.1723	84	26
NHU	SATELLITE 32 WEST CO2	K 32 18S,38E	7650	32.7015	-103.1731	270	28
NHU	SATELLITE 33	K 33 18S,38E	54654	32.7036	-103.1556	255	53
NHU	CENTRAL TANK BATTERY	L 29 18S,38E	16060	32.7182	-103.1794	630	73
NHU	WEST INJECTION BATTERY	H 25 18S,37E	20330	32.7208	-103.1999	746	100
NHU	RECOMPRESSION FACILITY	H 25 18S,37E	9760	32.7208	-103.1999	417	144
SHU	CENTRAL TANK BATTERY	A 9 19S,38E	119778	32.6801	-103.1479	773	110
SHU	SATELLITE 1	F 5 19S,38E	40892	32.6861	-103.1728	410	95
SHU	SATELLITE 2	B 9 19S,38E	43163	32.6803	-103.1523	250	85
SHU	SATELLITE 3	D 10 19S,38E	53477	32.6797	-103.1426	325	128
SHU	SATELLITE 5	K 4 19S,38E	57141	32.6882	-103.1569	248	61
	STATE A AND B BATTERY	H 32 18S,38E	139	32.70576	-103.1653	0.34	0
	STATE LAND 32 BATTERY	J 32 18S,38E	619	32.70220	-103.1679	4.1	0.2

Appendix E
List of North Hobbs Area Low Pressure Producing Wells and 100
and 500 ppm ROEs calculated using PHAST Version 6.7

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002523919	NHU	D-29-18S-38E	111-29	32.7228	-103.17771	7000	205	28
3002507511	NHU	D-31-18S-38E	111-31	32.7098	-103.1926	8960	205	28
3002507528	NHU	D-32-18S-38E	111-32	32.70918	-103.17663	8960	205	28
3002523207	NHU	D-33-18S-38E	114-33	32.70919	-103.15943	7020	205	28
3002507357	NHU	E-19-18S-38E	121-19	32.73377	-103.19471	9220	205	28
3002512494	NHU	E-27-18S-38E	121-27	32.71829	-103.14303	46220	92	25
3002507420	NHU	E-28-18S-38E	121-28	32.71914	-103.16051	4150	205	28
3002507449	NHU	E-29-18S-38E	121-29	32.71917	-103.17771	7000	205	28
3002507464	NHU	E-30-18S-38E	121-30	32.71916	-103.19474	9220	205	28
3002507559	NHU	E-33-18S-38E	121-33	32.70465	-103.16051	7020	205	28
3002528964	NHU	E-28-18S-38E	122-28	32.72115	-103.16089	43430	92	25
3002523263	NHU	E-33-18S-38E	123-33	32.70556	-103.15943	7020	205	28
3002507410	NHU	L-27-18S-38E	131-27	32.71555	-103.14303	46220	92	25
3002507447	NHU	L-29-18S-38E	131-29	32.71734	-103.17557	7000	205	28
3002507544	NHU	L-33-18S-38E	131-33	32.70281	-103.16051	7020	205	28
3002523277	NHU	L-28-18S-38E	132-28	32.71617	-103.15914	4150	205	28
3002507365	NHU	M-19-18S-38E	141-19	32.72641	-103.19474	11000	205	28
3002507383	NHU	M-20-18S-38E	141-20	32.72643	-103.17771	11000	205	28
3002505485	NHU	M-24-18S-37E	141-24	32.72913	-103.20864	9220	205	28
3002507408	NHU	M-27-18S-38E	141-27	32.71193	-103.14343	46220	92	25
3002512496	NHU	M-28-18S-38E	141-28	32.71191	-103.16051	4150	205	28
3002507487	NHU	M-30-18S-38E	141-30	32.71373	-103.1926	8960	205	28
3002507543	NHU	M-33-18S-38E	141-33	32.69828	-103.15944	7020	92	25
3002523246	NHU	M-28-18S-38E	142-28	32.71301	-103.1592	4150	205	28
3002528943	NHU	M-32-18S-38E	143-32	32.6997	-103.17774	7650	205	28
3002507047	NHU	C-24-18S-37E	211-24	32.73831	-103.20651	9220	205	28
3002507463	NHU	C-30-18S-38E	211-30	32.72461	-103.1883	7000	205	28
3002507525	NHU	C-32-18S-38E	211-32	32.70827	-103.17126	7650	205	28
3002507579	NHU	C-34-18S-38E	211-34	32.70919	-103.13899	46220	205	28
3002530258	NHU	C-32-18S-38E	212-32	32.70923	-103.17265	7650	205	28
3002529065	NHU	C-33-18S-38E	213-33	32.70744	-103.1536	7020	205	28
3002507355	NHU	F-19-18S-38E	221-19	32.73377	-103.18827	11000	205	28
3002509876	NHU	F-24-18S-37E	221-24	32.73377	-103.20542	9220	205	28
3002507462	NHU	F-30-18S-38E	221-30	32.71916	-103.18831	7000	205	28
3002507382	NHU	K-20-18S-38E	231-20	32.73186	-103.1745	11000	205	28

	1	1	1	ı	T			
API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002505483	NHU	K-24-18S-37E	231-24	32.73095	-103.20541	9220	205	28
3002507438	NHU	K-29-18S-38E	231-29	32.71734	-103.17342	4150	205	28
3002507507	NHU	K-31-18S-38E	231-31	32.70249	-103.18829	8960	205	28
3002523035	NHU	K-32-18S-38E	232-32	32.70189	-103.17204	7650	205	28
3002528410	NHU	K-33-18S-38E	233-33	32.70302	-103.15354	7020	205	28
3002529275	NHU	K-33-18S-38E	234-33	32.70024	-103.15325	54654	92	25
3002512493	NHU	N-20-18S-38E	241-20	32.72642	-103.17127	4150	205	28
3002505482	NHU	N-24-18S-37E	241-24	32.72642	-103.2054	9220	205	28
3002505501	NHU	N-25-18S-37E	241-25	32.71369	-103.20537	28115	92	25
3002512498	NHU	N-28-18S-38E	241-28	32.71192	-103.15406	7020	205	28
3002507533	NHU	N-32-18S-38E	241-32	32.69917	-103.17121	7650	205	28
3002507547	NHU	N-33-18S-38E	241-33	32.69828	-103.15515	54654	92	25
3002523481	NHU	N-19-18S-38E	242-19	32.72667	-103.18937	11000	205	28
3002523304	NHU	N-28-18S-38E	243-28	32.71307	-103.15576	4150	205	28
3002505481	NHU	B-24-18S-37E	311-24	32.73831	-103.2022	9220	205	28
3002507432	NHU	B-29-18S-38E	311-29	32.72278	-103.16695	4150	205	28
3002507491	NHU	B-31-18S-38E	311-31	32.70979	-103.18629	8960	205	28
3002507555	NHU	B-33-18S-38E	311-33	32.7101	-103.15187	7020	205	28
3002505541	NHU	B-36-18S-37E	311-36	32.71008	-103.20118	28115	92	25
3002529199	NHU	B-33-18S-38E	312-33	32.7106	-103.14989	54654	92	25
3002530263	NHU	B-32-18S-38E	313-32	32.70962	-103.16928	7650	205	28
3002507360	NHU	G-19-18S-38E	321-19	32.73377	-103.18631	11000	205	28
3002505480	NHU	G-24-18S-37E	321-24	32.73377	-103.20329	9220	205	28
3002505505	NHU	G-25-18S-37E	321-25	32.72007	-103.20225	11000	205	28
3002507416	NHU	G-28-18S-38E	321-28	32.71914	-103.15189	43430	92	25
3002507467	NHU	G-30-18S-38E	321-30	32.71917	-103.18629	7000	205	28
3002507492	NHU	G-31-18S-38E	321-31	32.70495	-103.1859	8960	205	28
3002507548	NHU	G-33-18S-38E	321-33	32.70557	-103.15078	7020	205	28
3002507518	NHU	G-32-18S-38E	322-32	32.70464	-103.16909	7650	205	28
3002528941	NHU	G-29-18S-38E	323-29	32.71853	-103.1697	4150	205	28
3002528951	NHU	G-33-18S-38E	323-33	32.70408	-103.14906	7020	205	28
3002505474	NHU	J-23-18S-37E	331-23	32.73189	-103.21829	28115	92	25
3002505500	NHU	J-25-18S-37E	331-25	32.71643	-103.20118	8960	205	28
3002507412	NHU	J-28-18S-38E	331-28	32.71555	-103.15187	54654	92	25
3002507499	NHU	J-31-18S-38E	331-31	32.70249	-103.18625	8960	205	28
3002529173	NHU	J-32-18S-38E	332-32	32.70072	-103.16922	7650	205	28
3002505446	NHU	O-13-18S-37E	341-13	32.74194	-103.2022	11000	205	28
3002512491	NHU	O-19-18S-38E	341-19	32.72642	-103.18629	11000	205	28
3002507371	NHU	O-20-18S-38E	341-20	32.72641	-103.16909	43430	92	25
3002505490	NHU	O-24-18S-37E	341-24	32.72642	-103.20332	9220	205	28
3002512489	NHU	O-28-18S-38E	341-28	32.71192	-103.15187	7020	205	28

			1	<u> </u>			100	500
API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	ppm ROE (ft)	ppm ROE (ft)
3002507445	NHU	O-29-18S-38E	341-29	32.7119	-103.16909	4150	205	28
3002524665	NHU	O-30-18S-38E	341-30	32.71372	-103.18415	7000	205	28
3002512757	NHU	O-33-18S-38E	341-33	32.69829	-103.15075	54654	92	25
3002507567	NHU	O-34-18S-38E	341-34	32.69829	-103.13457	46220	92	25
3002529931	NHU	B-33-18S-38E	342-28	32.71046	-103.15009	7020	205	28
3002529906	NHU	O-32-18S-38E	343-32	32.69827	-103.16662	7650	205	28
3002523522	NHU	A-24-18S-37E	411-24	32.7374	-103.19899	9220	205	28
3002507490	NHU	A-31-18S-38E	411-31	32.71008	-103.17986	8960	205	28
3002507516	NHU	A-32-18S-38E	411-32	32.71009	-103.16265	7650	205	28
3002505479	NHU	A-24-18S-37E	412-24	32.73921	-103.19683	9220	205	28
3002523384	NHU	A-30-18S-38E	412-30	32.72343	-103.18057	7000	205	28
3002529932	NHU	A-33-18S-38E	412-33	32.7056	-103.14606	7020	205	28
3002505456	NHU	H-14-18S-37E	421-14	32.74829	-103.21406	28115	92	25
3002507368	NHU	H-19-18S-38E	421-19	32.73377	-103.18304	11000	205	28
3002505466	NHU	H-23-18S-37E	421-23	32.73559	-103.21401	9220	205	28
3002523081	NHU	H-24-18S-37E	421-24	32.73468	-103.19825	9220	205	28
3002507468	NHU	H-30-18S-38E	421-30	32.71917	-103.182	7000	205	28
3002507493	NHU	H-31-18S-38E	421-31	32.70722	-103.17984	8960	205	28
3002512507	NHU	H-32-18S-38E	421-32	32.70465	-103.16265	7020	205	28
3002507554	NHU	H-33-18S-38E	421-33	32.70558	-103.14649	7020	205	28
3002528887	NHU	H-31-18S-38E	422-31	32.70478	-103.1807	8960	205	28
3002523130	NHU	H-32-18S-38E	424-32	32.70569	-103.16373	7020	205	28
3002505467	NHU	I-23-18S-37E	431-24	32.73187	-103.2140	9220	205	28
3002507413	NHU	I-28-18S-38E	431-28	32.71555	-103.14759	43430	92	25
3002507458	NHU	I-29-18S-38E	431-29	32.71735	-103.16265	4150	205	28
3002507474	NHU	I-30-18S-38E	431-30	32.71734	-103.182	7000	205	28
3002512758	NHU	I-31-18S-38E	431-31	32.70279	-103.17981	8960	205	28
3002507553	NHU	I-33-18S-38E	431-33	32.70176	-103.14713	54654	92	25
3002530308	NHU	I-33-18S-38E	433-33	32.70156	-103.14753	7020	205	28
3002512732	NHU	P-13-18S-37E	441-13	32.74103	-103.19683	11000	205	28
3002507366	NHU	P-19-18S-38E	441-19	32.72643	-103.17986	28115	92	25
3002505473	NHU	P-23-18S-37E	441-23	32.72824	-103.21398	9220	205	28
3002505486	NHU	P-24-18S-37E	441-24	32.72641	-103.19688	4150	205	28
3002507444	NHU	P-29-18S-38E	441-29	32.7119	-103.16265	7000	205	28
3002507473	NHU	P-30-18S-38E	441-30	32.7119	-103.17986	7020	205	28
3002507536	NHU	P-32-18S-38E	441-32	32.69827	-103.16373	7000	205	28
3002507580	NHU	P-34-18S-38E	441-34	32.69769	-103.13093	7020	205	28
3002534906	NHU	D-33-18S-38E	511-33	32.70732	-103.15962	7650	205	28
3002534907	NHU	F-32-18S-38E	512-32	32.70502	-103.17207	7020	205	28
3002534980	NHU	L-33-18S-38E	513-33	32.701	-103.15861	8960	205	28
3002536245	NHU	E-32-18S-38E	514-32	32.7047	-103.17799	9220	205	28

							100	500
API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	ppm ROE (ft)	ppm ROE (ft)
3002538023	NHU	M-13-18S-37E	516-13	32.74146	-103.2088	11000	205	28
3002538087	NHU	4-18-18S-38E	517-18	32.74185	-103.19361	7020	205	28
3002534643	NHU	C-33-18S-38E	521-33	32.70821	-103.15668	7020	205	28
3002534372	NHU	F-33-18S-38E	523-33	32.70553	-103.15359	54654	92	25
3002534993	NHU	N-33-18S-38E	524-33	32.70071	-103.15616	7000	205	28
3002536216	NHU	K-30-18S-38E	525-30	32.71634	-103.188830	54654	92	25
3002523334	NHU	F-33-18S-38E	526-33	32.70556	-103.15622	7020	205	28
3002536247	NHU	N-30-18S-38E	527-30	32.71272	-103.18994	7020	205	28
3002534374	NHU	J-32-18S-38E	531-32	32.70228	-103.16647	4150	205	28
3002535541	NHU	J-29-18S-38E	533-29	32.71739	-103.16775	54654	92	25
3002535758	NHU	K-33-18S-38E	535-33	32.70251	-103.15338	7650	205	28
3002536149	NHU	B-32-18S-38E	537-32	32.70852	-103.166120	7000	205	28
3002536281	NHU	J-30-18S-38E	538-30	32.71643	-103.18479	9220	205	28
3002536213	NHU	J-24-18S-37E	539-24	32.73122	-103.201920	7020	205	28
3002534964	NHU	A-32-18S-38E	541-32	32.70848	-103.16346	4150	205	28
3002534644	NHU	P-29-18S-38E	544-29	32.71347	-103.16494	7020	205	28
3002534416	NHU	G-33-18S-38E	545-33	32.70574	-103.15117	7000	205	28
3002536280	NHU	I-30-18S-38E	546-30	32.71553	-103.18078	7000	205	28
3002536242	NHU	P-30-18S-38E	547-30	32.71281	-103.18098	7020	205	28
3002536150	NHU	G-32-18S-38E	548-32	32.70556	-103.166370	9220	205	28
3002536193	NHU	I-24-18S-37E	549-24	32.73052	-103.198430	9220	205	28
3002535467	NHU	D-24-18S-37E	611-24	32.73783	-103.21118	9220	205	28
3002535450	NHU	E-24-18S-37E	612-24	32.73405	-103.21161	9220	205	28
3002535370	NHU	L-24-18S-37E	613-24	32.73002	-103.21114	9220	205	28
3002535555	NHU	G-24-18S-37E	614-24	32.73424	-103.20076	9220	205	28
3002537127	NHU	D-19-18S-38E	615-19	32.73882	-103.19444	9220	205	28
3002537102	NHU	D-30-18S-38E	617-30	32.72309	-103.19293	8960	205	28
3002537120	NHU	L-30-18S-38E	618-30	32.71631	-103.19863	7000	205	28
3002535332	NHU	C-30-18S-38E	621-30	32.72302	-103.18872	4150	205	28
3002534869	NHU	K-29-18S-38E	623-29	32.71601	-103.17067	4150	205	28
3002534870	NHU	N-29-18S-38E	624-29	32.71413	-103.1724	4150	205	28
3002537213	NHU	E-29-18S-38E	625-29	32.72074	-103.17559	11000	205	28
3002537235	NHU	L-19-18S-38E	627-19	32.73071	-103.19152	11000	205	28
3002538524	NHU	B-19-18S-38E	628-19	32.73931	-103.18697	4150	205	28
3002535384	NHU	O-29-18S-38E	634-29	32.71307	-103.16828	4150	205	28
3002537128	NHU	F-29-18S-38E	636-29	32.72073	-103.17093	11000	205	28
3002538125	NHU	B-19-18S-38E	638-19	32.7390	-103.18491	9220	205	28
3002537118	NHU	A-25-18S-37E	641-25	32.72299	-103.19839	8960	205	28
3002537105	NHU	I-25-18S-37E	642-25	32.71554	-103.19734	4150	205	28
3002535376	NHU	I-29-18S-38E	643-29	32.71753	-103.16551	46220	92	25
3002535349	NHU	L-27-18S-38E	644-28	32.71556	-103.14228	11000	205	28

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002538518	NHU	P-13-18S-37E	645-13	32.74221	-103.199150	9220	205	28
3002538071	NHU	M-13-18S-37E	646-13	32.74112	-103.21256	7000	205	28
3002534983	NHU	B-30-18S-38E	713-30	32.72229	-103.18468	4150	205	28
3002537474	NHU	C-29-18S-38E	721-29	32.72342	-103.17274	8960	205	28
3002537428	NHU	B-31-18S-38E	722-31	32.70741	-103.18722	9220	205	28
3002537481	NHU	B-25-18S-37E	731-25	33.44557	-102.46226	11000	205	28
3002537445	NHU	I-19-18S-38E	733-19	32.73021	-103.1823	54654	92	25
3002535011	NHU	O-33-18S-38E	734-33	32.69683	-103.15188	4150	205	28
3002537475	NHU	G-29-18S-38E	742-29	32.72098	-103.16681	8960	205	28
3002535451	NHU	I-31-18S-38E	743-31	32.70008	-103.18036	8960	205	28
3002505493	NHU	P-25-18S-37E	744-25	32.71191	-103.19689	7000	205	28
3002535527	NHU	M-29-18S-38E	814-29	32.71323	-103.17549	11000	205	28
3002540816	NHU	K-13-18S-37E	831-13	32.74518	-103.20828	11000	205	28
3002540834	NHU	L-18-18S-38E	833-18	32.74574	-103.19298	54654	92	25
3002535743	NHU	I-33-18S-38E	843-33	32.7017	-103.145410	7650	205	28
3002535534	NHU	M-33-18S-38E	844-32	32.69938	-103.16083	7650	205	28
3002535385	NHU	L-32-18S-38E	913-32	32.70155	-103.17472	11000	205	28
3002537410	NHU	L-19-18S-38E	616-19	32.73057	-103.19347	11000	205	28

Appendix F
List of South Hobbs Area Low Pressure Producing Wells and 100
and 500 ppm ROEs calculated using PHAST Version 6.7

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002526117	SHU	E-3-19S-38E	122E04	32.69176	-103.14487	57141	102	25
3002526119	SHU	J-4-19S-38E	124J04	32.68721	-103.15207	57141	102	25
3002526120	SHU	L-3-19S-38E	125L03	32.69094	-103.14185	57141	102	25
3002528334	SHU	F-4-19S-38E	130F04	32.69261	-103.15701	57141	102	25
3002528335	SHU	G-4-19S-38E	131G04	32.69267	-103.15244	57141	102	25
3002528336	SHU	H-4-19S-38E	132H04	32.69156	-103.14817	57141	102	25
3002528337	SHU	E-3-19S-38E	133E03	32.69143	-103.14189	57141	102	25
3002528338	SHU	F-4-19S-38E	135F04	32.68944	-103.15717	57141	102	25
3002528339	SHU	F-4-19S-38E	136F04	32.68963	-103.15343	57141	102	25
3002528340	SHU	I-4-19S-38E	137104	32.68868	-103.14816	57141	102	25
3002528341	SHU	I-4-19S-38E	138104	32.68878	-103.14489	57141	102	25
3002528342	SHU	F-3-19S-38E	139F03	32.69084	-103.13802	57141	102	25
3002528343	SHU	L-4-19S-38E	140L04	32.68599	-103.15751	57141	102	25
3002528344	SHU	K-4-19S-38E	141K04	32.68598	-103.15312	57141	102	25
3002528345	SHU	O-4-19S-38E	142004	32.68553	-103.14879	57141	102	25
3002528346	SHU	P-4-19S-38E	143P04	32.68512	-103.14541	57141	102	25
3002528347	SHU	M-3-19S-38E	144N03	32.68352	-103.14189	57141	102	25
3002528348	SHU	N-3-19S-38E	145K03	32.68351	-103.1379	57141	102	25
3002528349	SHU	D-9-19S-38E	146D09	32.6817	-103.15762	57141	102	25
3002528350	SHU	C-9-19S-38E	147C09	32.68172	-103.15319	57141	102	25
3002528351	SHU	A-9-19S-38E	148A09	32.6814	-103.14756	57141	102	25
3002507614	SHU	B-5-19S-38E	14B05	32.69554	-103.16911	57141	102	25
3002528352	SHU	A-9-19S-38E	149A09	32.68152	-103.14558	57141	102	25
3002528353	SHU	D-10-19S-38E	150M03	32.68102	-103.14038	57141	102	25
3002528356	SHU	C-9-19S-38E	153C09	32.67887	-103.15671	57141	102	25
3002528357	SHU	B-9-19S-38E	154B09	32.67872	-103.1528	57141	102	25
3002528358	SHU	B-9-19S-38E	155H09	32.67874	-103.14944	57141	102	25
3002528359	SHU	H-9-19S-38E	156H09	32.67817	-103.14542	57141	102	25
3002528360	SHU	D-10-19S-38E	157D10	32.6785	-103.1403	57141	102	25
3002528363	SHU	G-9-19S-38E	160G09	32.67512	-103.15223	57141	102	25
3002528365	SHU	H-9-19S-38E	162H09	32.6747	-103.14563	57141	102	25
3002507605	SHU	D-4-19S-38E	16D04	32.67799	-103.15514	57141	102	25
3002528975	SHU	D-5-19S-38E	177D05	32.69482	-103.17735	57141	102	25
3002528976	SHU	C-5-19S-38E	178C05	32.69408	-103.17303	57141	102	25
3002528977	SHU	F-5-19S-38E	179F05	32.69236	-103.17062	57141	102	25

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002528978	SHU	A-5-19S-38E	180B05	32.69373	-103.16864	57141	102	25
3002528979	SHU	A-5-19S-38E	181B05	32.69338	-103.16572	57141	102	25
3002528980	SHU	E-5-19S-38E	183E05	32.68947	-103.17409	57141	102	25
3002529083	SHU	F-5-19S-38E	184F05	32.6916	-103.17063	57141	102	25
3002529084	SHU	I-5-19S-38E	185105	32.68941	-103.16546	57141	102	25
3002528981	SHU	E-4-19S-38E	186E04	32.68981	-103.16087	57141	102	25
3002528982	SHU	K-5-19S-38E	188K05	32.68601	-103.17287	57141	102	25
3002529085	SHU	J-5-19S-38E	189J05	32.68654	-103.1696	57141	102	25
3002507629	SHU	B-4-19S-38E	18B04	32.69466	-103.15075	57141	102	25
3002529082	SHU	I-5-19S-38E	190105	32.68621	-103.16514	57141	102	25
3002528983	SHU	L-4-19S-38E	191L04	32.68626	-103.16027	57141	102	25
3002529054	SHU	O-5-19S-38E	194005	32.68281	-103.16905	57141	102	25
3002507598	SHU	A-4-19S-38E	19A04	32.69467	-103.14646	57141	102	25
3002507603	SHU	D-3-19S-38E	20D03	32.67801	-103.14217	57141	102	25
3002529750	SHU	E-5-19S-38E	211E05	32.69153	-103.17409	57141	102	25
3002529730	SHU	E-4-19S-38E	214E04	32.69174	-103.15978	57141	102	25
3002529891	SHU	C-4-19S-38E	220C04	32.69255	-103.15676	57141	102	25
3002529892	SHU	B-4-19S-38E	221B04	32.69347	-103.15374	57141	102	25
3002530486	SHU	N-34-18S-38E	223N34	32.69994	-103.1385	57141	102	25
3002530487	SHU	B-4-19S-38E	224B04	32.69469	-103.14943	57141	102	25
3002531211	SHU	M-34-18S- 38E	225M34	32.69826	-103.14256	57141	102	25
3002531212	SHU	D-5-19S-38E	228D05	32.69463	-103.175	57141	102	25
3002531427	SHU	F-4-19S-38E	231F04	32.69218	-103.15474	57141	102	25
3002531419	SHU	G-4-19S-38E	232G04	32.69178	-103.14962	57141	102	25
3002531429	SHU	K-4-19S-38E	236K04	32.68584	-103.15588	57141	102	25
3002534946	SHU	I-5-19S-38E	239	32.68743	-103.16285	57141	102	25
3002535342	SHU	N-34-18S-38E	240	32.69881	-103.13909	57141	102	25
3002535318	SHU	M-4-19S-38E	241	32.69357	-103.1599	57141	102	25
3002535305	SHU	A-5-19S-38E	242	32.69221	-103.1651	57141	102	25
3002537266	SHU	F-4-19S-38E	243	32.69193	-103.15468	57141	102	25
3002535742	SHU	E-34-18S-38E	244	32.70484	-103.14250	57141	102	25
3002537271	SHU	A-4-19S-38E	246	32.69469	-103.14584	57141	102	25
3002539955	SHU	D-9-19S-38E	248	32.68163	-103.16005	57141	102	25
3002507602	SHU	J-4-19S-38E	44J04	32.68827	-103.1497	57141	102	25
3002507570	SHU	K-34-18S-38E	4K34	32.70199	-103.13867	57141	102	25
3002523415	SHU	K-10-19S-38E	86K10	32.67376	-103.13899	57141	102	25

Appendix G

List of Hobbs Area Produced Gas Injection Wells and 100 and 500 ppm ROEs calculated using PHAST Version 6.7

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002505477	NHU	D-24-18S-37E	111-24	32.73922	-103.20973	9760	325	44
3002507358	NHU	D-19-18S-38E	112-19	32.7374	-103.19255	9760	325	44
	NHU	D-30-18S-38E				9760		44
3002529063	NHU	D-30-18S-38E	112-30	32.72496 32.72191	-103.19155 -103.19518		325	44
3002529064 3002505476	NHU	E-24-18S-37E	113-30 121-24	32.72191	-103.19516	9760 9760	325 325	44
	NHU	L-19-18S-38E					325	44
3002507361	NHU	L-24-18S-37E	131-19	32.73185	-103.19471	9760		44
3002505484	NHU		131-24	32.73186	-103.20867	9760	325	
3002529129	1 <mark>HU</mark>	C-24-18S-37E	212-24	32.73665	-103.20447	9760	325	44
3002528555	NHU	F-30-18S-38E K-19-18S-38E	223-30	32.72065	<u>-103.18799</u>	9760 0760	325	44
3002507362	NHU		231-19	32.73186	-103.18828	9760	325	44
3002529172	NHU	K-19-18S-38E	232-19	32.73239	-103.1912	9760	325	44
3002526935	NHU	K-30-18S-38E	232-30	32.71485	-103.19136	9760	325	44
3002528942	NHU	K-30-18S-38E	233-30	32.71775	-103.191	9760	325	44
3002526832	NHU	N-24-18S-37E	242-24	32.72908	-103.20446	9760	325	44
3002507369	NHU	B-19-18S-38E	311-19	32.73652	-103.18631	9760	325	44
3002529130	NHU	B-24-18S-37E	312-24	32.7401	-103.20431	9760	325	44
3002528955	NHU	J-30-18S-38E	333-30	32.71485	-103.18668	9760	325	44
3002528414	NHU	A-24-18S-37E	413-24	32.73682	-103.19644	9760	325	44
3002526933	NHU	H-25-18S-37E	422-25	32.72125	-103.20004	9760	325	44
3002529073	NHU	I-24-18S-37E	432-24	32.73233	-103.19995	9760	325	44
3002529098	NHU	P-24-18S-37E	442-24	32.72897	-103.19645	9760	325	44
3002528959	NHU	P-30-18S-38E	444-30	32.71158	-103.18298	9760	325	44
3002538114	NHU	M-18-18S-38E	518-18	32.74086	-103.19241	9760	325	44
3002536286	NHU	O-30-18S-38E	536-30	32.71275	-103.18661	9760	325	44
3002537152	NHU	J-24-18S-37E	622-24	32.73241	-103.20419	9760	325	44
3002537446	NHU	G-19-18S-38E	633-19	32.73381	-103.18338	9760	325	44
3002537101		B-24-18S-37E	637-24	32.73641	-103.20048	9760	325	44
3002540859	NHU	H-19-18S-38E	945-19	32.73361	-103.18225	9760	325	44
3002507077	NHU	1-30-18S-38E	111-30	32.7246	-103.19474	9760	325	44
3002507481	NHU	3-30-18S-38E	131-30	32.7173	-103.19424	9760	325	44
3002527138	NHU	4-19-18S-38E	142-19	32.7206	-103.18799	9760	325	44
3002528555	NHU	F-30-18S-38E	223-30	32.7115	-103.19126	<mark>9760</mark>	325	44
3002528886	NHU	N-30-18S-38E	242-30	32.7145	=103.18260	9760	325	44



Page: 42

Number: 1	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:43:43 PM	
Number: 2	Author: GVonGonten	Subject: Sticky Note	Date: 4/30/2013 1:50:03 PM	
duplicate				
Number: 3	Author: GVonGonten	Subject: Highlight	Date: 4/25/2013 4:43:50 PM	

Hobbs H2S Contingency Plan: Revised 04/15/2013

API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002505488	NHU	J-24-18S-37E	331-24	32.7288	-103.1915	9760	325	44
3002528879	NHU	A-24-18S-37E	414-24	32.741	-103.1968	9760	325	44
3002526933	NHU	H-25-18S-37E	431-25	32.729	-103.1830	9760	325	44
3002512732	NHU	P-13-18S-37E	441-13	32.740	-103.1999	9760	325	44
3002505499	NHU	P-25-18S-37E	441-25	32.723	-103.1960	9760	325	44
3002527001	NHU	P-30-18S-38E	442-30	32.724	-103.1999	9760	325	44
3002537480	NHU	A-25-18S-37E	741-25	32.723	-103.1956	9760	325	44

Appendix H

List of Hobbs Area Facilities and Wells with a 100pm ROE calculated with PHAST Version 6.7 that includes a Public Area

							1	
API Number	Unit	ULSTR	Well No.	Latitude	Longitude	H2S Conc. (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)
3002512494	NHU	E-27-18S-38E	121-27	32.71829	-103.143	46220	92	25
3002528964	NHU	E-28-18S-38E	122-28	32.72115	-103.161	43430	92	25
3002525304	NHU	L-27-18S-38E	131-27		-103.143	46220	92	25
				32.71555				
3002507383	NHU	M-20-18S-38E	141-20	32.72643	-103.178	11000	205	28
3002507408	NHU	M-27-18S-38E	141-27	32.71193	-103.143	46220	92	25
3002507463	NHU	C-30-18S-38E	211-30	32.72461	-103.188	7000	205	28
3002507579	NHU	C-34-18S-38E	211-34	32.70919	-103.139	46220	205	28
3002529275	NHU	K-33-18S-38E	234-33	32.70024	-103.153	54654	92	25
3002512493	NHU	N-20-18S-38E	241-20	32.72642	-103.171	4150	205	28
3002528555	NHU	F-30-18S-38E	223-30	32.72065	-103.18799	9760	325	44
3002512498	NHU	N-28-18S-38E	241-28	32.71192	-103.154	7020	205	28
3002523481	NHU	N-19-18S-38E	242-19	32.72667	-103.189	11000	205	28
3002507555	NHU	B-33-18S-38E	311-33	32.7101	-103.152	7020	205	28
3002529199	NHU	B-33-18S-38E	312-33	32.7106	-103.15	54654	92	25
3002507416	NHU	G-28-18S-38E	321-28	32.71914	-103.152	43430	92	25
3002507467	NHU	G-30-18S-38E	321-30	32.71917	-103.186	7000	205	28
3002507548	NHU	G-33-18S-38E	321-33	32.70557	-103.151	7020	205	28
3002528951	NHU	G-33-18S-38E	323-33	32.70408	-103.149	7020	205	28
3002507412	NHU	J-28-18S-38E	331-28	32.71555	-103.152	54654	92	25
3002512489	NHU	O-28-18S-38E	341-28	32.71192	-103.152	7020	205	28
3002512757	NHU	O-33-18S-38E	341-33	32.69829	-103.151	54654	92	25
3002507567	NHU	O-34-18S-38E	341-34	32.69829	-103.135	46220	92	25
3002529931	NHU	B-33-18S-38E	342-28	32.71046	-103.15	7020	205	28
3002523384	NHU	A-30-18S-38E	412-30	32.72343	-103.181	7000	205	28
3002529932	NHU	A-33-18S-38E	412-33	32.7056	-103.146	7020	205	28
3002507554	NHU	H-33-18S-38E	421-33	32.70558	-103.146	7020	205	28
3002507413	NHU	I-28-18S-38E	431-28	32.71555	-103.148	43430	92	25
3002507458	NHU	I-29-18S-38E	431-29	32.71735	-103.163	4150	205	28
3002507553	NHU	I-33-18S-38E	431-33	32.70176	-103.147	54654	92	25
3002530308	NHU	I-33-18S-38E	433-33	32.70156	-103.148	7020	205	28
3002507366	NHU	P-19-18S-38E	441-19	32.72643	-103.18	28115	92	25
3002507536	NHU	P-32-18S-38E	441-32	32.69827	-103.164	7000	205	28
3002534416	NHU	G-33-18S-38E	545-33	32.70574	-103.151	7000	205	28
3002535349	NHU	L-27-18S-38E	644-28	32.71556	-103.142	11000	205	28
3002534983	NHU	B-30-18S-38E	713-30	32.72229	-103.185	4150	205	28
3002535743	NHU SHU	I-33-18S-38E	843-33	32.7017	-103.145 -103.142	7650 57141	205 102	28 25
3002526120 3002528337	SHU	L-3-19S-38E E-3-19S-38E	125L03 1.33E05	32.69094 32.69143	-103.142	57141 57141	102	25
3002528342	SHU	F-3-19S-38E	139F03	32.69084	-103.142	57141	102	25
3002528347	SHU	M-3-19S-38E	144N03	32.68352	-103.136	57141	102	25
3002528348	SHU	N-3-19S-38E	145K03	32.68351	-103.142	57141	102	25
3002528976	SHU	C-5-19S-38E	178C05	32.69408	-103.173	57141	102	25

Hobbs H2S Contingency Plan: Revised 04/15/2013

3002507603	SHU	D-3-19S-38E	20D03	32.67801	-103.142	57141	102	25
3002530486	SHU	N-34-18S-38E	223N34	32.69994	-103.139	57141	102	25
3002531211	SHU	M-34-18S-38E	225M34	32.69826	-103.143	57141	102	25
3002531419	SHU	G-4-19S-38E	232G04	32.69178	-103.15	57141	102	25
3002537271	SHU	A-4-19S-38E	246	32.69469	-103.146	57141	102	25
3002528343	SHU	L-4-19S-38E	140L04	32.68599	-103.15751	57141	102	25
3002507629	SHU	B-4-19S-38E	18B04	32.69466	-103.15075	57141	102	25
3002507570	SHU	K-34-18S-38E	4K34	32.70199	-103.13867	57141	102	25
SATELLITE 27	NHU	M 27 18S,38E	NA	32.7136	-103.1434	46224	142	28
SATELLITE 19		N 19 19S,38E						
CO2	NHU		NA	32.7289	-103.1894	11000	450	58
CENTRAL		L 29 18S,38E						
TANK								
BATTERY	NHU		NA	32.7182	-103.1794	16060	630	73

Section V Emergency Telephone Lists

TABLE OF CONTENTS

	PAGE
OXY Permian Emergency Answering Service	46
Caprock Answering Service	46
FIELD OPERATIONS Emergency Call-Out List	47
PLANT OPERATIONS Emergency Call-Out List	48
OXY Permian Contacts (Midland & Houston Offices)	49
Emergency Services (Medical, Ambulance, Air Ambulance)	50
Law Enforcement and Fire Departments	51
Government Agencies/Airports/Poison Control Center	52
Hobbs Area Operational Personnel	53
Corporate Security / Houston EOC	54
Contractor Support	55
Outside Producing Companies Contact List	56

EMERGENCY TELEPHONE LISTS:

OXY PERMIAN EMERGENCY	713-935-7210
ANSWERING SERVICE	
CAPROCK ANSWERING SERVICE	575-397-8200/8255

FIELD OPERATIONS EMERGENCY CALL-OUT LIST

Scott Hodges	Office	575-397-8211
Operation Team Leader	Cell	432-238-4405
Hobbs, NM	Home	NA
Alternate:	Office	575-397-8251
Tony Aguilar	Cell	575-390-6312
	Home	575-441-7266
Alternate:	Office	575-397-8276
Glen Hubbard	Cell	575-631-6881
	Home	575-392-7663
Brian Suttton	Office	806-592-6336
Well Servicing Coord.	Cell	806-215-0094
_	Home	NA
Calvin Stewart	Office	806-592-6256
Well Operations Team	Cell	806-215-0370
Lead	Home	806-592-5078
Hollen Wheeler	Office	432-685-5904
Mgr. External Relations	Cell	432-741-3017
_	Home	432-230-9828

PLANT OPERATIONS EMERGENCY CALL-OUT LIST - Fax 806-592-7355

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
Jaime Perez	Central Plt. OTL	806-592-3192	806-592-3379	806-215-0281(C)
Ronnie Popejoy	HES Specialist	806-229-5381	806-592-7310	806-215-0527 (C)
Joey Rogers	HES Specialist		806-592-7311	806-215-3466
Nick Edwards	Safety Supervisor		432-685-5843	806-777-2615
Tom Janiszewski	Chief Counsel	281-913-7273	713-366-5529	713-560-8049
Hollen Wheeler	Public and Government Affairs	432-230-9828	432-685-5904	432-741-0317

ENGINEERING SUPPORT

Name	Title	Office	Home	Cellular
		Phone		
Greg Vencil	Engineer	713-366-5110	281-535-0198	713-560-8064
Jim Mathis	Engineer	806-592-6479	432-524-2045	806-215-0179
Chris Frei	Engineer	806-592-7336	806-637-7017	806-215-0178

EMERGENCY TELEPHONE LISTS:

HES SUPPORT PERSONNEL

Nick Edwards	Office	432-685-5843
HES Lead	Cell	806-777-2615

OXY PERMIAN MIDLAND OFFICE

Herbie Bruton	Office	432-685-5811
Field Operations	Cell	432-634-6152
Manager	Home	432-523-4021
Bill Elliott	Office	432-685-5845
Operations Manager	Cell	806-557-6736
	Home	432-689-6309
Pete Maciula	Office	432-685-5667
HES Lead	Cell	432-557-2450
	Home	432-552-2112

OXY PERMIAN HOUSTON OFFICE

Jeff Simmons	Office	713-316-5124
President and	Cell	713-560-8073
General Manager	Fax	281-985-8772
Bob Barnes	Office	713- 215-7906
Manager of Operations	Cell	832-433-0763
	Fax	713-985-1683
John Kirby	Office	713-366-5460
HES Team Leader	Cell	281-974-9523
	Home	281-458-1622

EMERGENCY SERVICES OUTSIDE SUPPORT PHONE NUMBERS

MEDICAL

HOSPITAL NAME	ADDRESS	CITY	PHONE NUMBER
Lea Regional Hospital	5419 Lovington Highway	Hobbs, NM	575-492-5000
Memorial Hospital	209 NW 8th	Seminole, TX	432-758-5811
Nor-Lea General Hospital	1600 N. Main Street	Lovington, NM	575-396-6611
Yoakum County Hospital	412 Mustang Drive	Denver City, TX	806-592-5484
Brownfield Regional Medical Center	705 E. Felt	Brownfield, TX	806-637-3551
Covenant Health Systems	4000 24th Street	Lubbock, TX	806-725-6000
Covenant Medical Center	2615 19th Street	Lubbock, TX	806-725-1011
University Medical Center (county Hospital)	602 Indiana	Lubbock, TX	806-775-8200

AMBULANCE

Hobbs, New Mexico	911 or 575-397-9308
Lovington, New Mexico	911 or 575-396-2359
Eunice, New Mexico	911 or 575-394-3258
Seminole, Texas	432-758-9871
Denver City, Texas	806-592-3516

AIR AMBULANCE

Native Air	1-800-627-7106
Hobbs NM 88240	
AEROCARE Methodist Hospital	1-800-627-2376
Lubbock, Texas - Aerocare will	
respond to a call from any OXY	
personnel. <u>ETA Lubbock to Hobbs 42</u>	
minutes. (Seminole Based)	

LAW ENFORCEMENT 911

POLICE

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-397-9265
Eunice, New Mexico	911 or 575-394-2112
Lovington, New Mexico	911 or 575-396-2811

SHERIFF

CITY/COUNTY	PHONE NUMBER
Lea County Sheriff - Lovington	911 or 575-396-3611

STATE HIGHWAY PATROL

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-392-5588

FIRE DEPARTMENT

CITY	PHONE NUMBER
Hobbs, New Mexico	911 or 575-397-9308
Lovington, New Mexico	911 or 575-396-2359
Denver City, Texas	911 or 806-592-3516
Seminole, Texas	911 or 432-758-9871

GOVERNMENT AGENCIES

AGENCY	PHONE NUMBER
New Mexico Oil Conservation Division	575-393-6161
Bureau of Land Management	575-393-3612
Air Quality Bureau, Santa Fe, NM	505-476-4300
LEPC - Lorenzo Velasquez,	575-391-2961 Office
Hobbs, NM	575-397-7413 Fax
	575-605-6561 Cell

AIRPORTS

CITY	PHONE NO.
Lea County Airport - Carlsbad Hwy	575-393-6612
Lea County Lovington Airport	575-396-9911
Lubbock Preston Smith International	806-762-6411
Airport	
Midland International Airport	432-560-2200

POISON CONTROL CENTER	1-800-432-6866
-----------------------	----------------

^{**} Call CHEMTREC for questions concerning response or chemical hazards in the event of a chemical spill.

NALCO 24 HR EMERGENCY	1-800-462-5378 or 1-800-IM-ALERT	
NALCO 24 HR MSDS FAX	281-263-7245	

HOBBS AREA OPERATIONAL PERSONNEL

EMPLOYEE	CELL PHONE	HOME PHONE
EMPLOYEE	NUMBERS	NUMBERS
Cordero, Pete	806-215-0066	575-392-3645
Henson, Willie	806-215-2168	575-393-5418
Hubbard, Glen	575-631-6881	575-392-7663
Jones, Steve	575-631-4469	575-394-3124
King, Jimmy	575-390-0068	575-392-8854
Ragsdale, Monty	575-390-3803	575-392-1740
Shaffer, Jessie	806-215-0115	575-441-6795
Whitley, Chuck	575-631-6259	575-397-0018
Baeza, Carlos	575-390-0018	
Laster, Mark	575-942-3346	
Savage, Tony	575-602-8328	
Haynes, Mark	575-499-4454	
Daniel Tucker	575-499-4992	
Hobbs Area Well Runner	806-215-0310	
Hobbs Area Night Rider	806-215-0304	

Hobbs Treating Facility

FAX	Nο	806-	-592.	-6484

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
Jaime Perez	Central Plt. OTL	806-592-3192	806-592-3379	806-215-0281(C)
Doug Isbell	OP. Spec.	806-592-5159	806-592-7360	806-215-1495 (C)
Clay Lambert	OP. Spec	(806)215-1331	(806) 592-7304	(806)215-0410 (C)
Ronnie Popejoy	HES Tech	806-229-5381	806-592-7315	806-215-0527 (C)

Gathering System Personnel:

Callout Service 806-592-9055

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
David(Chip) Mitchell	Measurement Tech		806-592- 6325	806-215-0184
Landon Tadlock	Gas Gathering Operator	806-592-5005	806-592- 6224	800-923-6149 (P) 806-215-0474 (C)
Todd King	Measurement Specialist	806-592-9467	806-592- 7360	806-215-0183 (C)

WCRP

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
Jaime Perez	Central Plt. OTL	806-592-3192	806-592- 3379	806-215-0281(C)
Doug Isbell	OP. Spec.	806-592-5159	806-592- 7360	806-215-1495 (C)
Kenley Powell	Operations Specialist		806-592- 4987	806-215-6943 (C)
Ronnie Popejoy	HES Tech	806-229-5381	806-592- 7315	806-215-0527 (C)

CORPORATE SECURITY

Security Representative		
Richard Powers**	Office	713-366-5897
	Home	N/A
	Cell/Pager	713-319-8988
	Fax	713-350-4804
<u>Alternate</u>		
Frank Munoz	Office	310-443-6015
	Home	N/A
	Cell/pager	310-498-1472
	Fax	713-350-4804

^{**}Must be notified to assist in providing site security for all major emergencies and spills or response for any bomb threats or terrorist activities.

GREENWAY EMERGENCY OPERATION CENTER (EOC)

(713) 366-EXTENSION

713-366-1583	Fax
713-215-7000	Receptionist
713-366-5203	EOC Coordinator
713-366-5460	HES Manager
713-366-5431	HR Manager
713-366-5693	Planning Manager
713-215-7906	Operations Manager
713-366-4048	Logistics Manager

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

COMPANY NAME	PHONE NUMBER(S)
Bird Electric - Hobbs, NM	575-392-6174
K & S Electric - Hobbs, NM	575-393-3114 24 hour
Custom Submersible	575-397-0271 or 575-393-2146 24 hr

WATER SERVICE AND VACUUM TRUCKS

Key Energy Services – Hobbs , NM	575-397-4994 24 hour
Maclaskey Oilfield Services Hobbs, NM	575-393-1016 24 hour
Pate Trucking	575-397-6264 24 hour

ROUSTABOUT CREWS

Banta Oilfield Service - Hobbs, NM	575-393-3875 24 hour
CJR Contractors – Denver City, TX	806-592-2558 24 hour or 592-2232
RWI Construction Inc - Hobbs, NM	575-393-5305 24 hour

DIRT WORK EQUIPMENT

Banta Oilfield Service – Hobbs, NM	575-393-3875 24 hour
Sweatt Construction Co. – Hobbs, NM	575-397-4541 24 hour
B & H Construction – Eunice, NM	575-394-2588 24 Hour

WELDERS

Custom Welding - Hobbs, NM	575-393-5904 24 hour
JPN Service Co – Denver City, TX	806-592-8858
	806-215-1060 Neil – 24 hour
RWI Construction Inc - Hobbs, NM	575-393-5305 24 hour

SAFETY EQUIPMENT

Total Safety – Hobbs, NM	575-392-2973 24 hour
Indian Fire and Safety – Hobbs, NM	575-393-3093 24 hour

CO2 SUPPLY

Trinity Pipeline	432-297-1004 24 hour
Lan Briley	432-661-0162
Billy Trull	432-661-1412

OUTSIDE PRODUCING COMPANIES

Amerada Hess	Office Phone	575-393-2144 / 2145
Apache Corp	Office Phone	575-394-2743
Apacile Corp	Emergency Number	1-888-561-5516
	Answering Service	1-888-257-6840
Bruton, Ralph	Business Phone	575-390-0366
Brothers	24 hours	575-369-9135
Chevron	Office Phone	575-393-4121
CHI Operating	Emergency Number	575-748-1691 24 hour
Crit Operating	Midland, Texas	432-685-5001
Conoco/Phillips	Supply/Transportation	800-332-9449
Pipeline	EVLRP/CO2 Facility	575-397-5578
DCP Midstream	Office Phone	575-397-5500
DCF WildStream	After Hours	800-847-6427
Duke	Office Phone	575-397-5600
Duke	After Hours	575-393-4165
Dynegy	Office	575-393-2823
Dynegy	Randy Duncan	575-631-7065
	Floyd Evans	575-631-7074
Enterprise	Chaparral Pipeline	1-800-666-0125
(NGL Line from RCF)	Emergency Number	1-000-000-0123
Equilon	Office Phone	806-592-9402
	After Hours	806-893-8611
Intrepid Operating	Emergency Number	432-699-4304
Legacy Reserves	Call for Emergency	102 000 1001
Loguey Reserves	Jessie Garcia/Foreman	432-853-3535
Marathon	Office Phone	575-393-7106 24 hour
NNG (RCF Fuel Gas)	Emergency Number	1-888-367-6671
Saga Petroleum	Office Phone	575-391-9291
	Ronny Long	432-638-6476
	Ronny Pryor	432-638-5826
Texland Petroleum	Office Phone	575-397-7450
Toxiana Totioidani	Levelland Emergency	806-894-4316
	After Hours (24 Hours)	
	Johnny Tarin Operator	432-894-1463
	Ronnie McCracken	432-894-1466
	Foreman	
Trinity Pipeline	Emergency/office	432-297-1004
(CO2) Supply	Number	
[` ′,	Jack Moody	432-661-0162
	Billy Trull	432-661-1412
Zia Natural Gas	Fuel Gas (NCTB/NIB)	575-392-4277