H2S-61

OXY HOBBS
H2S CP

2020

From:	Montgomery, Kelley A
To:	Chavez, Carl J, EMNRD
Cc:	Choquette, Garret; Gary, Mark; Aguilar, Raymond A; Allen, Kris
Subject:	[EXT] OXY H2S CP (H2S-61): Updated ROEs
Date:	Wednesday, April 1, 2020 10:00:23 AM
Attachments:	Oxy"s Hobbs H2S contingency plan 2020 4-1-20.pdf

Hi Mr. Chavez,

Oxy has calculated all ROEs with Pasquill-Gifford and incorporated them into our Hobbs H2S Contingency Plan. The updated plan is attached. Please let me know if you would also like a hardcopy and I will send.

I hope you are doing well. Take care.

Regards,

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From: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Sent: Friday, February 07, 2020 3:31 PM
To: Montgomery, Kelley A <Kelley_Montgomery@oxy.com>; Choquette, Garret <John_Choquette@oxy.com>; Lu, Yuan <Yuan_Lu@oxy.com>
Subject: [EXTERNAL] OXY H2S CP (H2S-61): Alternate Air Dispersion Model Determination

Ms. Montgomery, et al.:

Please find attached the New Mexico Oil Conservation Division above subject determination attached to this message.

Please contact me if you have questions.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
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E-mail: CarlJ.Chavez@state.nm.us
"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD **and see "Publications")**

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

Revision 04/01/2020

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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 (A standby person is required when an employee has the potential to be exposed to 100 ppm or greater H2S concentrations during the course of their work. The standby person must be adequately trained and have a SCBA/Supplied Air Respirator to provide effective emergency rescue)
- 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.

Was release abated?

Yes

- Call Surface Lead.
- Monitor air to see when re-entry is safe (< 10 ppm H2S)

No

Call Surface Lead. Use the calculated ROEs to determine if release could potentially affect the public in the following concentrations: 100 ppm H2S in a public area, 500 ppm H2S on a public road, or if the 100 ppm H2S is over 3000 ft.

Could public potentially be affected by release?

No

Monitor air and cordon off area until re-entry is safe (<10 ppm H2S)

Yes

- **Oxy to Activate H2S Contingency Plan**
- Call 911 and alert the local emergency departments. The reverse 911 system can be used to alert residents in addition to door-to-door notifications.

Notify NMOCD and National Response Center as applicable within 14 days and submit form C-141.

Information to provide 911 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

Note: abatement measures have been in place after uncontrolled event. The area will be monitored to determine safe re-entry as per API RP-55 paragraph 7.6

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

Section I. OVERVIEW

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 1 and 1.2 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 the supervisory control and data acquisition (SCADA) system. All Oxy field personnel have updated H2S contingency plans which include radii of exposure (ROEs), personal H2S monitors and Self Contained Breathing Apparatus (SCBA). 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)
- 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 the radii of exposure (ROEs) and which facilities are required to be in this plan, the Pasquill-Gifford (PG) equation was used. These calculations are based on the escape rates as allowed by New Mexico Hydrogen Sulfide standard for existing and new operations.

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 could include a public area (See Appendix 4 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 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 down hole 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 CO_2 distribution lateral is protected with thermal relief valves that will prevent a harmful overpressure condition due to trapped CO_2. Additionally, Oxy performs quarterly UT testing of pipelines.

Batteries and Satellites

North Hobbs Unit

There are 3 tank batteries, 7 CO2 satellites, and 4 water flood 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 under pressure 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.

All batteries and satellites in the North Hobbs Unit with an ROE of >100 ppm that could include a public area are equipped with H2S gas detectors set to alarm at ≥ 10 ppm that activates an ESD valve to isolate the source (See Appendix 3). 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 red 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 3 CO2 Satellites with security fencing, safety signage and locking entrance gates. 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 and sign to restrict entry.

The central tank battery has two flare stacks 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 flares (High and Low pressure).

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 central tank battery and satellites are equipped with H2S gas detectors (See Appendix 2 for location of H2S detection equipment at each location) set to alarm at ≥ 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 2. All H2S alarms are visible and audible and notify the plant operator at 10 ppm and automatically shut in equipment. Appendix 2 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 2 for a map of each location with H2S monitors.

SCADA Monitoring System

All operations in North and South Hobbs are 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 and wind direction Indicators

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 surfaces 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 and English. Wind Socks or Wind Vanes are used as wind direction indicators

Security

All the injection and producing wells with >100 ppm H2S and located within ¼ mile of a public area (NMAC19.15.11.12.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 safety glasses. Oxy employees and contractors are required to attend a site specific orientation of the operations and be advised in all safety measures. In addition, each Oxy 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 are 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 (Recommended Practices for Drilling and Well Servicing Operations Involving H2S). Oxy has a drilling H2S contingency plan and meets the requirements specified in NMAC19.15.11.11 for drilling operations. The plan is submitted to the NMOCD district office with the drilling permit application. The H2S concentrations are sufficiently well known in the Hobbs area to enable Oxy 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 NMAC19.15.11.7.

Workover operations in the Hobbs area are covered by this H2S Contingency Plan and will be conducted with due consideration of API RP-68 and in compliance with NMAC19.15.11.11. 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 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.

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.

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, local 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 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. Discovery and Implementation of an Immediate Action Plan

1. 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 (A standby person is required when an employee has the potential to be exposed to 100 ppm or greater H2S concentrations during the course of their work. The standby person must be adequately trained and have a SCBA/Supplied Air Respirator to provide effective emergency rescue)
   e. Account for on-site personnel using JSA or Security gate sign in sheet
   f. Take immediate measures to control (ESD, Well Control, Isolation…) 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 (ESD, Well Control, Isolation…) were successful, monitor the ambient air in the area of exposure with multi gas meters to determine when it is safe for re-entry (<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 3, 4 and 5 shows wells and facilities and their 100 ppm ROEs.

4. If the public could potentially be affected, activate H2S Contingency Plan, then call 911. 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. Assist law enforcement to block unauthorized access to the unsafe area using ROE's and site drawings which are contained in the H2S CP and have been previously made available to the Lea County Emergency Communication Center and the Hobbs Fire Dept.. *See section IV*.

9. Notify and/or evacuate the public (through public address, door to door, or reverse 911 as deemed appropriate).

10. Notify state and local officials (NMOCD with form C-141 within 14 days off incident) 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)

It is the responsibility of the Oxy On Scene Command (OSC) to ensure activation of the H2S contingency plan.
The H2S contingency plan shall be activated by Oxy 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 Radius of Exposure (ROEs). (See section IV)

C. Training and Drills

The value of annual training and drills in emergency response procedures cannot be over emphasized. All OXY personnel and long term contractors shall be trained on the H2S contingency plan which includes response actions, roles & responsibilities, internal/external notifications, PPE, policies & procedures . 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.

D. Physical Characteristics 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.

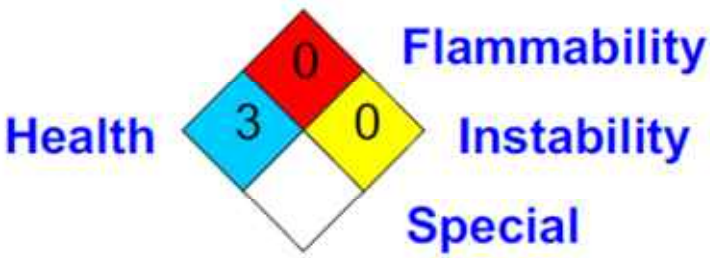
Exposure to hydrogen sulfide causes death by poisoning the respiratory system at the cellular level. Symptoms from repeated exposure to low concentrations usually disappear after not being exposed for a period of time. Repeated exposure to low concentrations that do not produce effects initially may 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 Characteristics 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
Chemical Family: Inorganic
Chemical Formula: SO2
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.

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 first, most senior OXY personnel on the scene will act as the Oxy OSC until relieved by either the OXY Surface 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 civil authorities responding to the emergency may assume the position of OSC and establish a Unified Command of which the OXY OSC will be a key member. 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, provide assistance to the local municipalities in a “search and rescue” operation.
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.

2. 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.

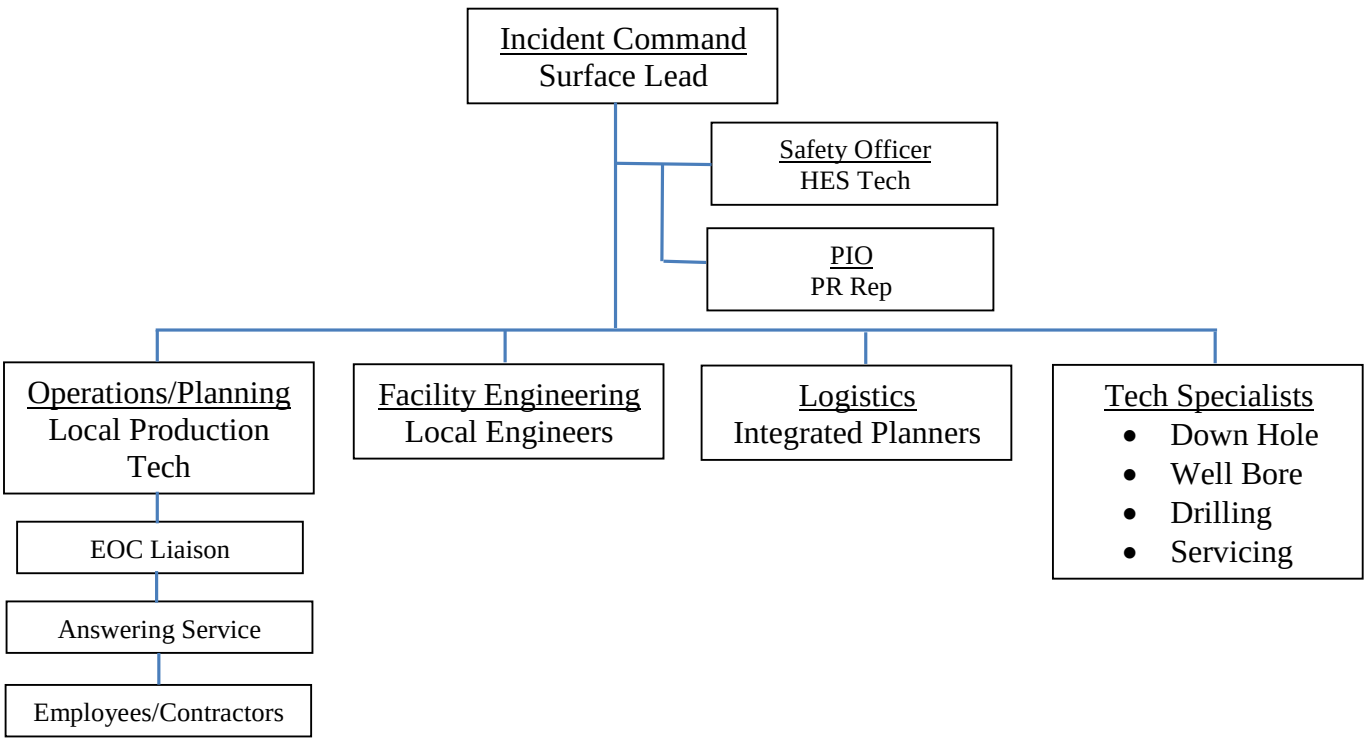
Other Employees: All other personnel should stand by and wait for instructions from the OSC.

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.

Midland Call Center: The Midland Call Center is a 24-hr answering service. 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 Surface Lead and provide:

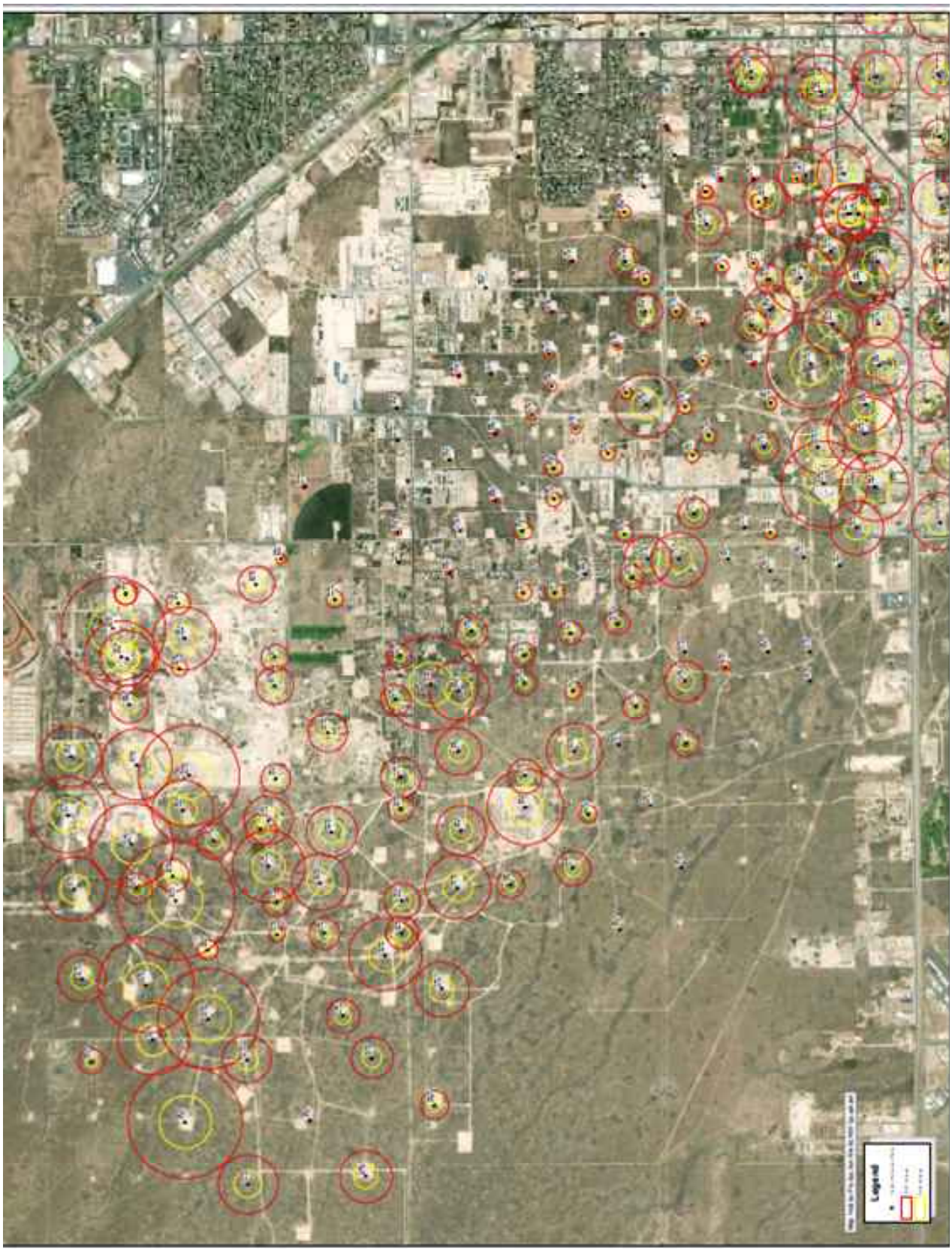
1. Name, phone number, and/or address of the person reporting emergency.
2. Location of emergency. (Well/Facility Number, cross street and /or Lat/Long
3. Any known injuries or missing persons
4. Concise statement of what is happening.
5. What type of emergency services are needed on location.]



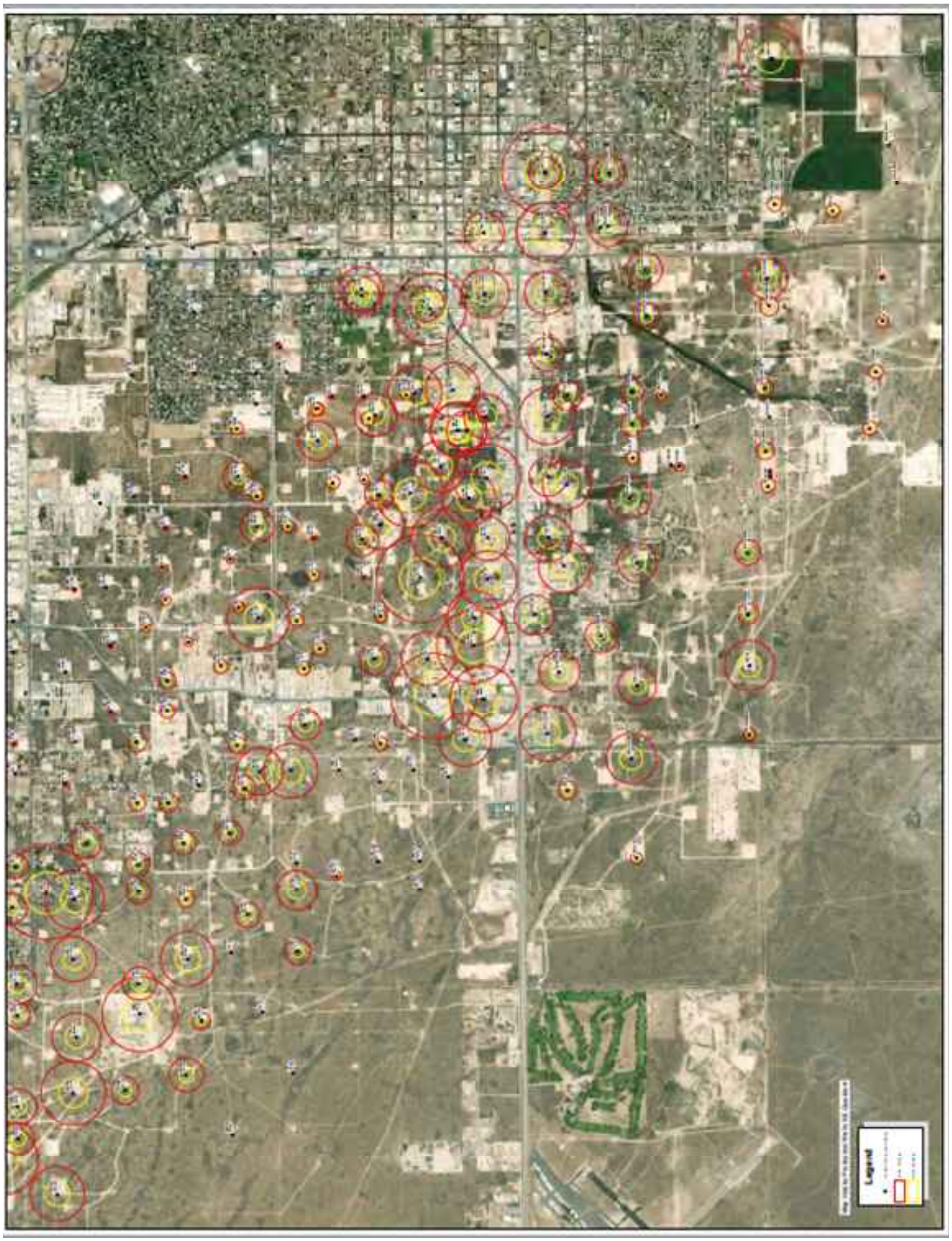
Section IV: Appendices

Appendix 1: Maps of Hobbs Area ROE Maps

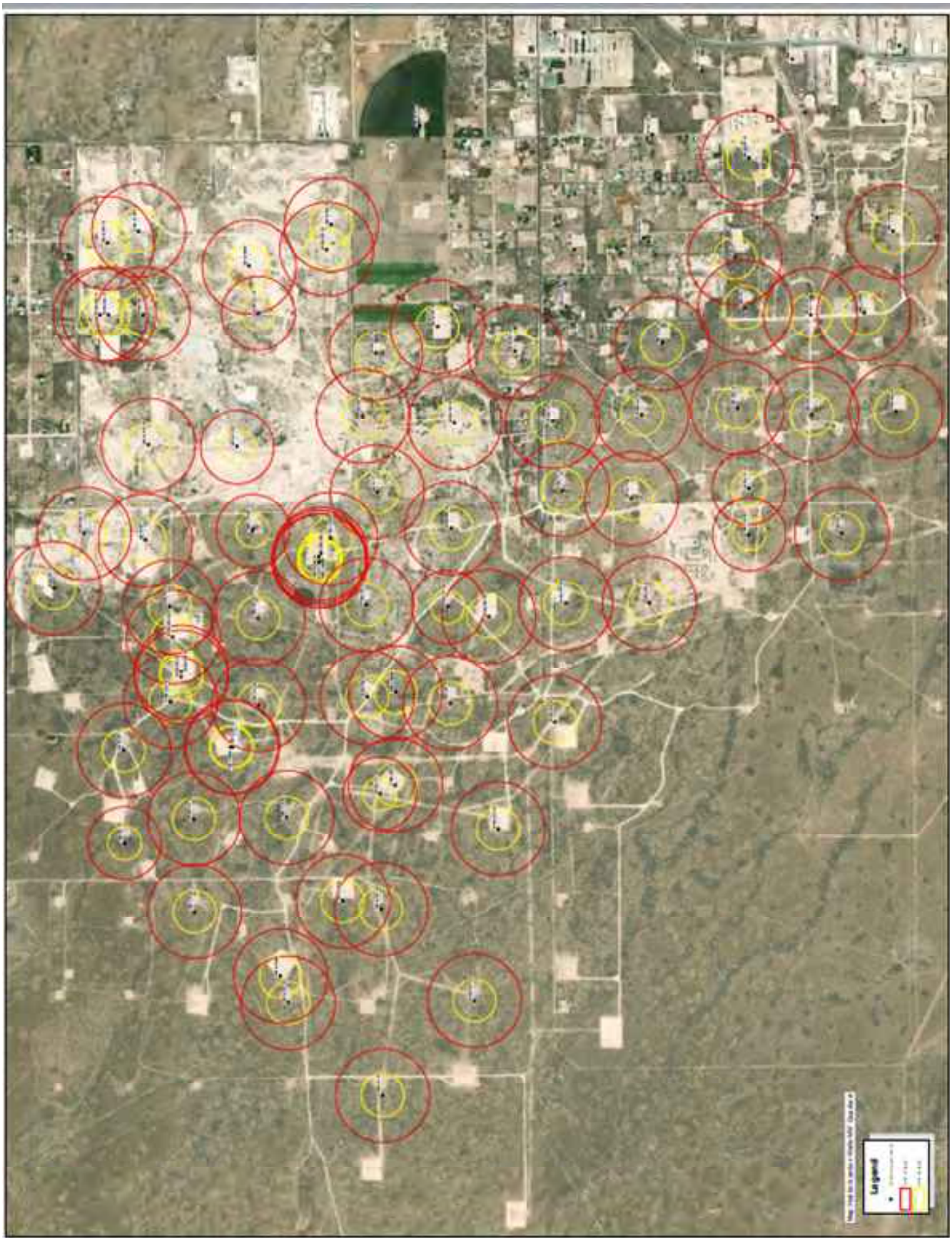
Hobbs Operation Northwest Production Wells – Pasquill Gifford ROE



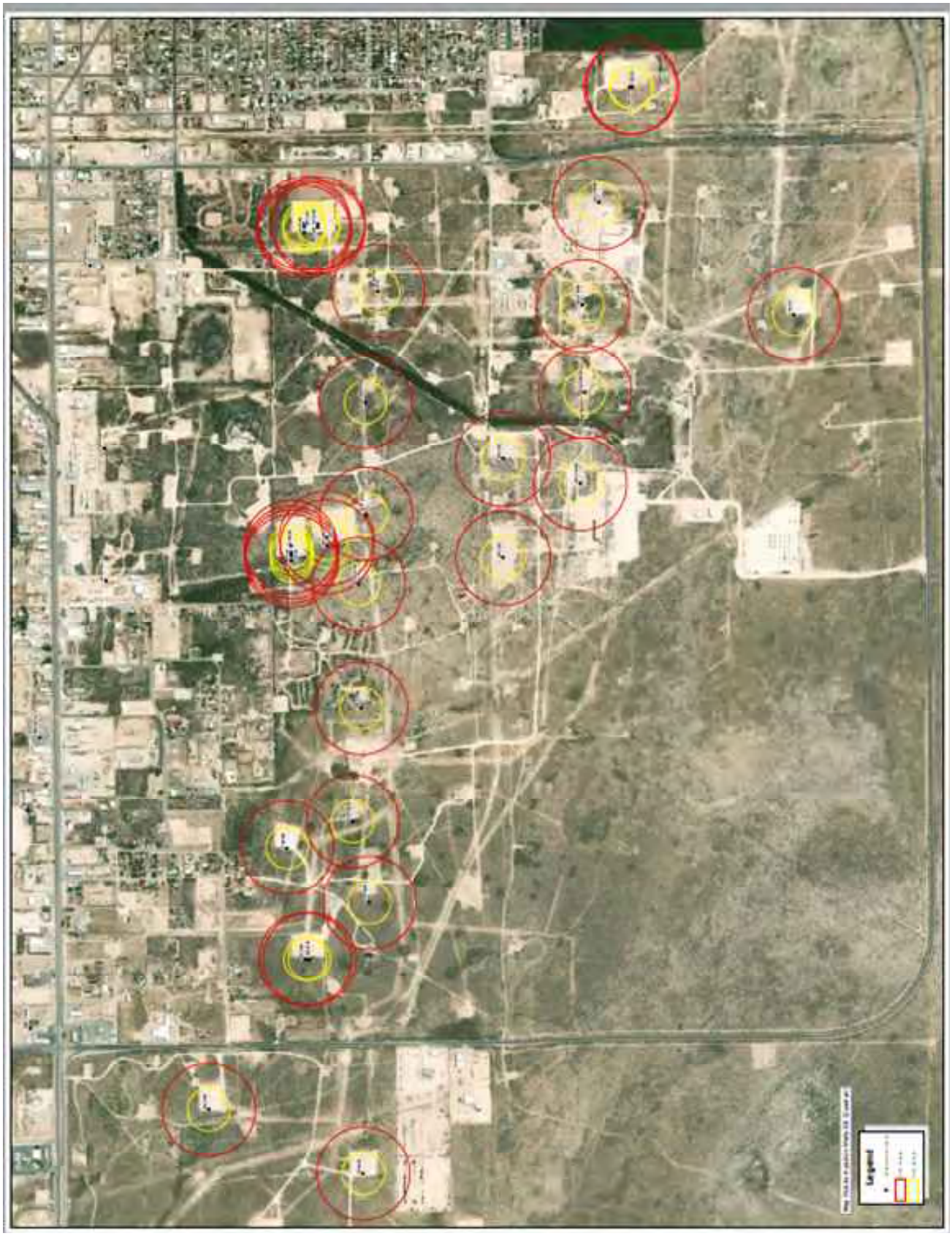
Hobbs Operation Southeast Production Wells – Pasquill Gifford ROE

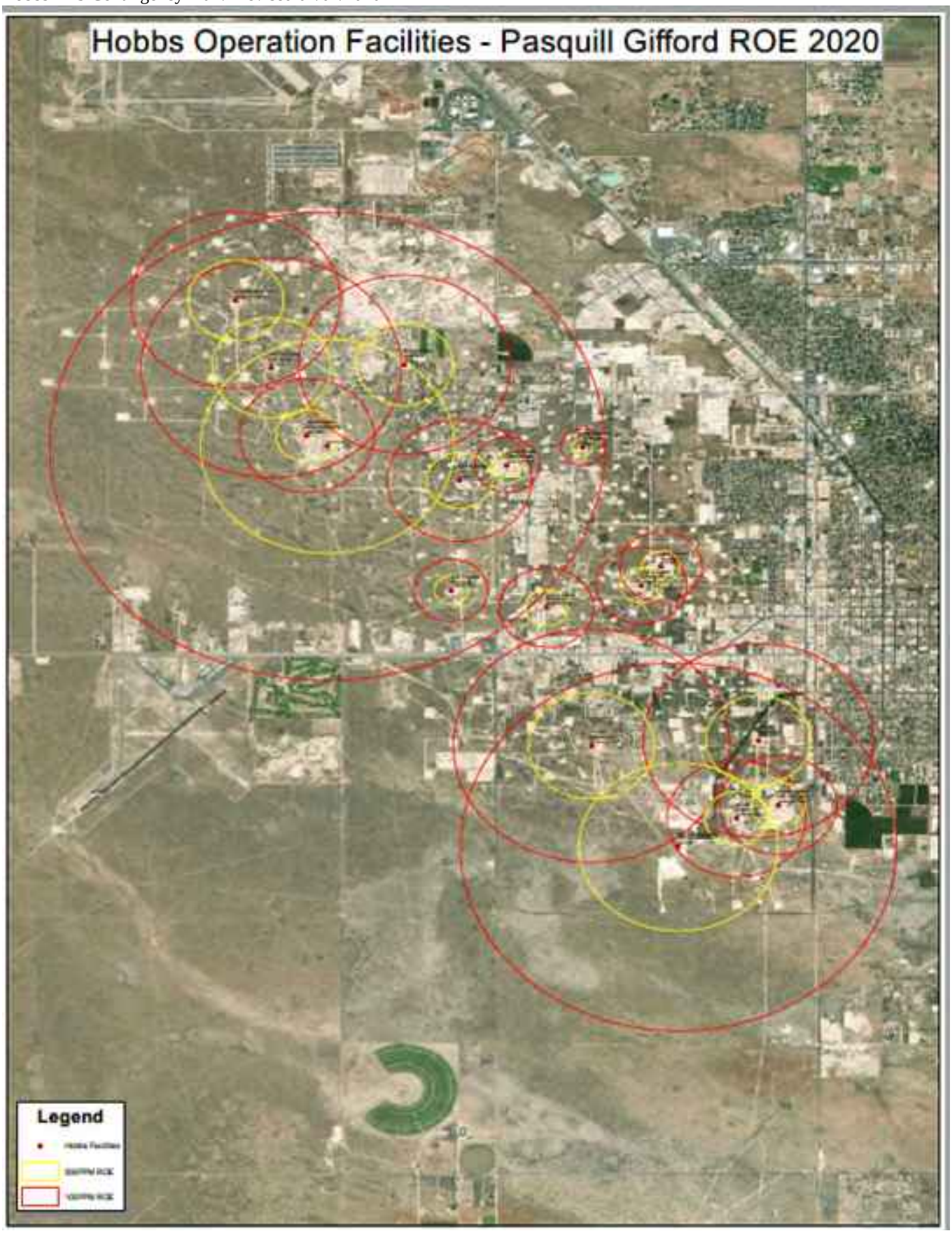


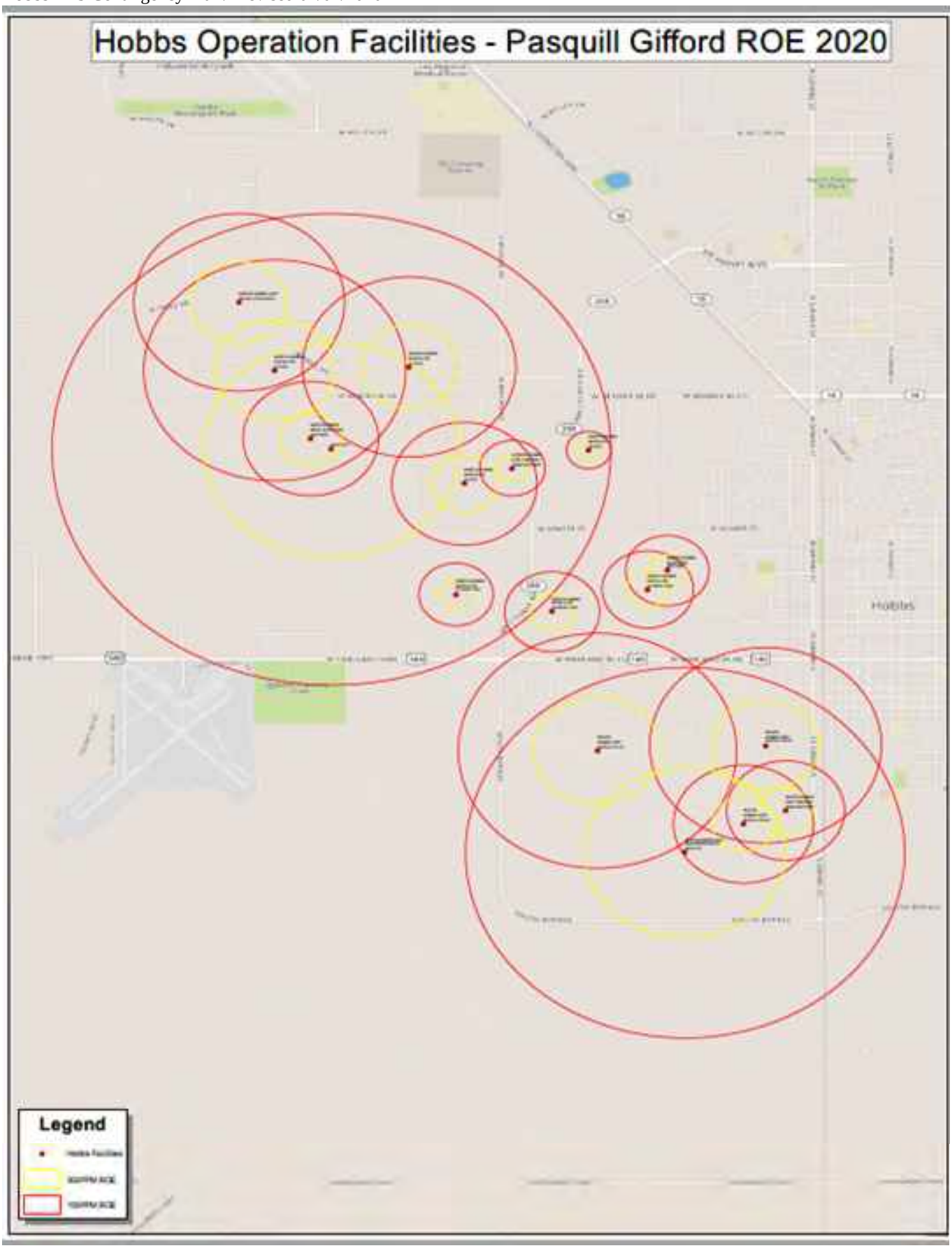
Hobbs Operation Northwest Injection Wells – Pasquill Gifford ROE



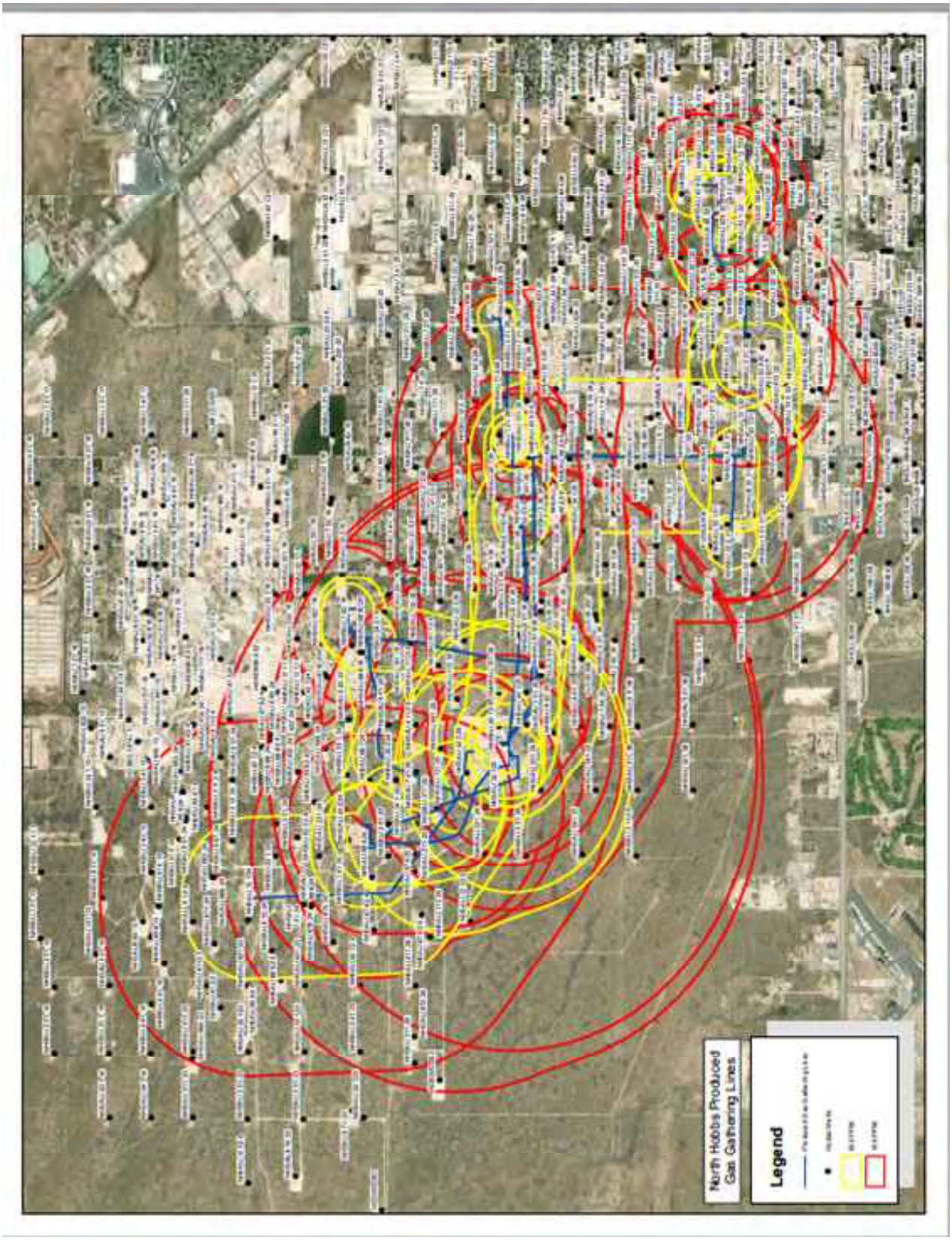
Hobbs Operation Southeast Injection Wells – Pasquill Gifford ROE



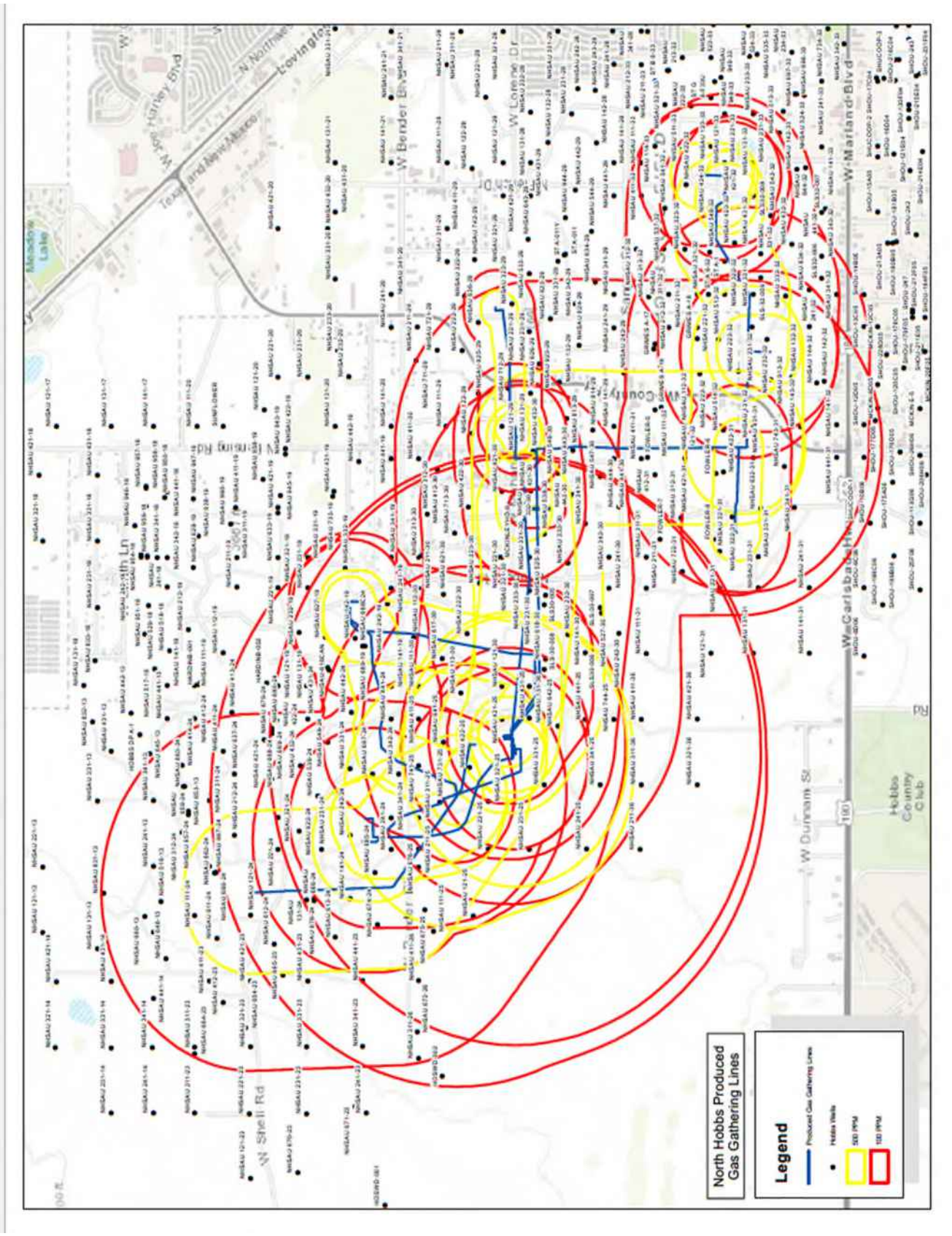

Hobbs Operation Facilities - Pasquill Gifford ROE 2020
Legend


Hobbs Operation Facilities - Pasquill Gifford ROE 2020
Hobbs
Legend

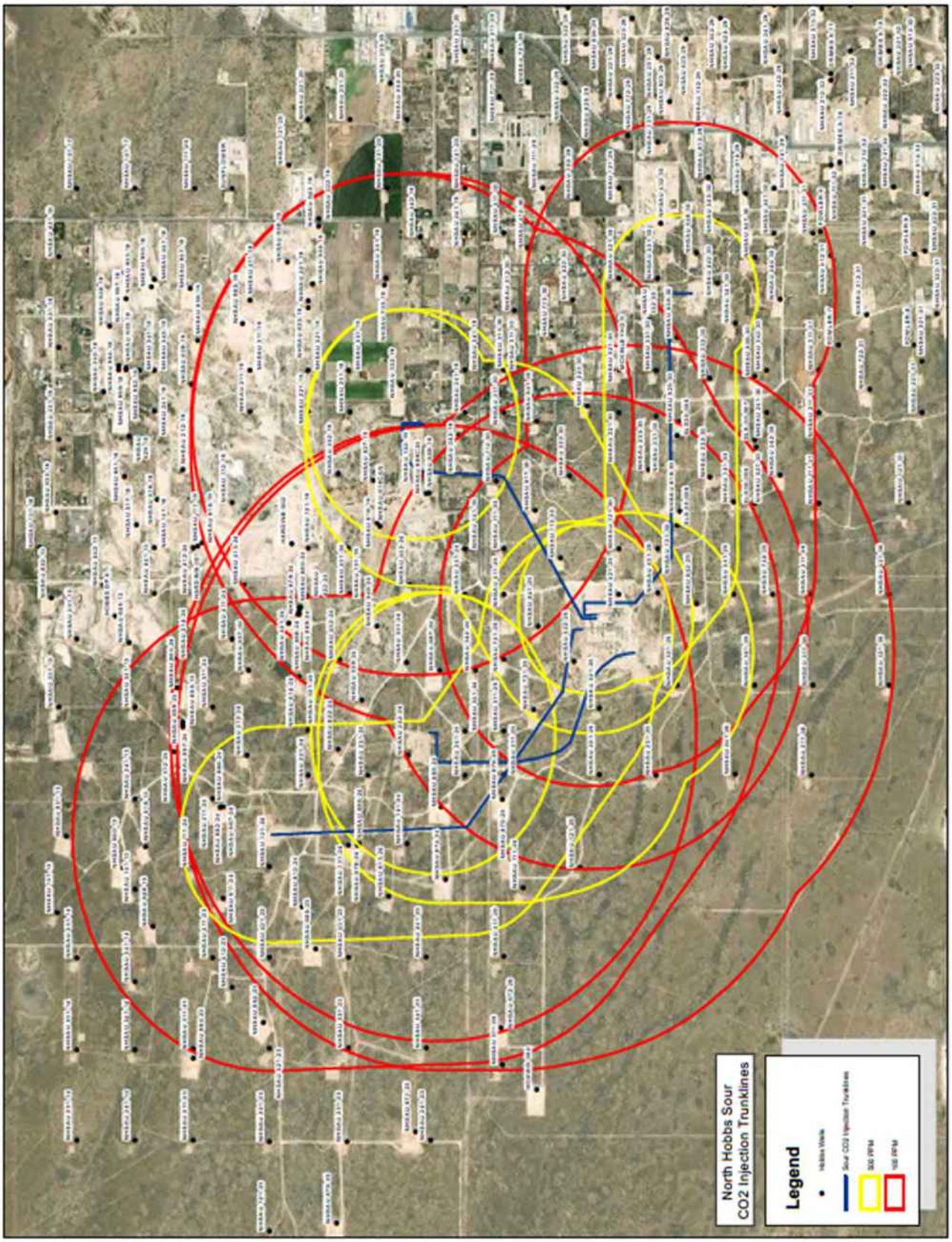
North Hobbs Produced Gas Gathering Lines – Pasquill Gifford ROE



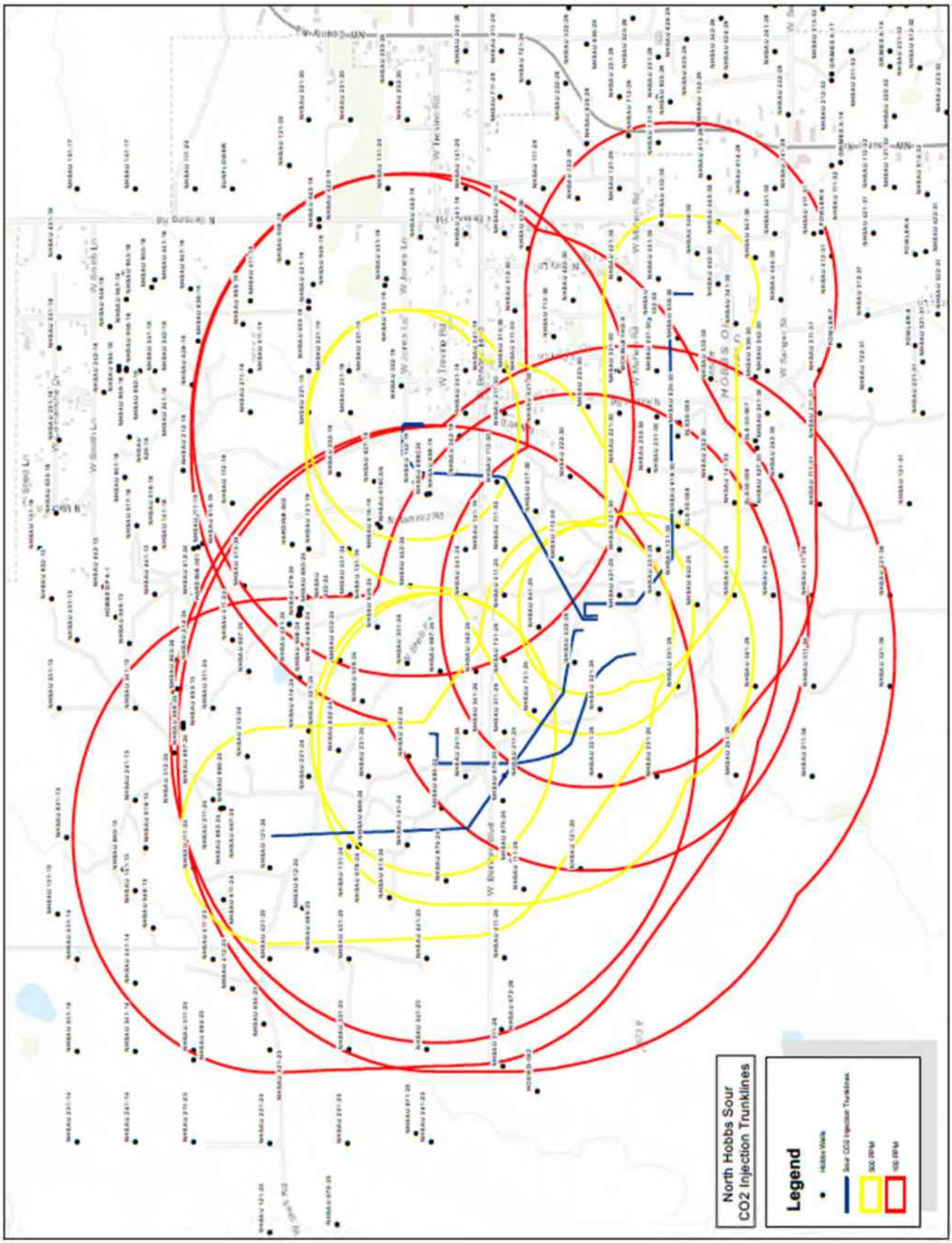
North Hobbs Produced Gas Gathering Lines – Pasquill Gifford ROE



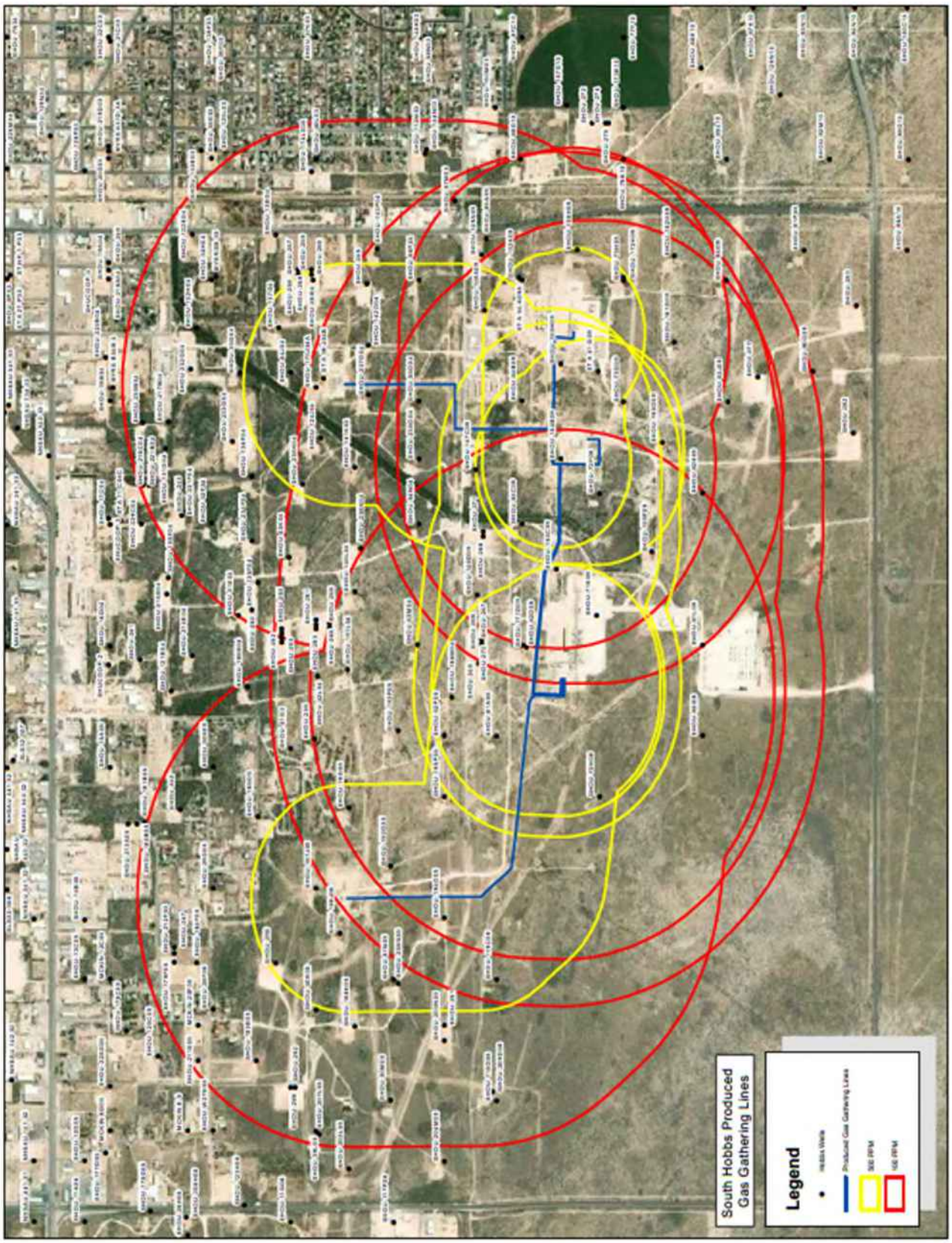
North Hobbs CO2 Injection Lines – Pasquill Gifford ROE



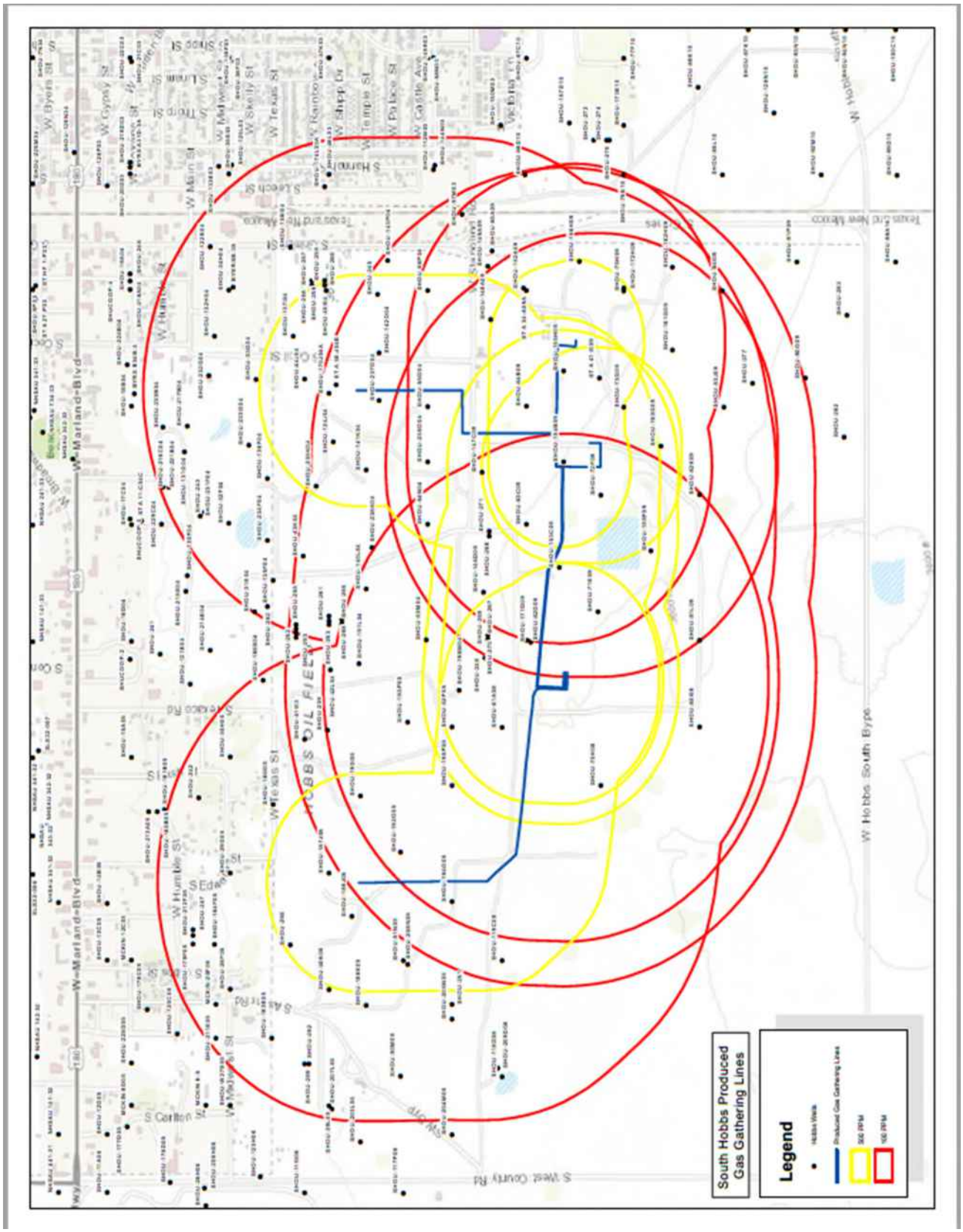
North Hobbs CO2 Injection Lines – Pasquill Gifford ROE



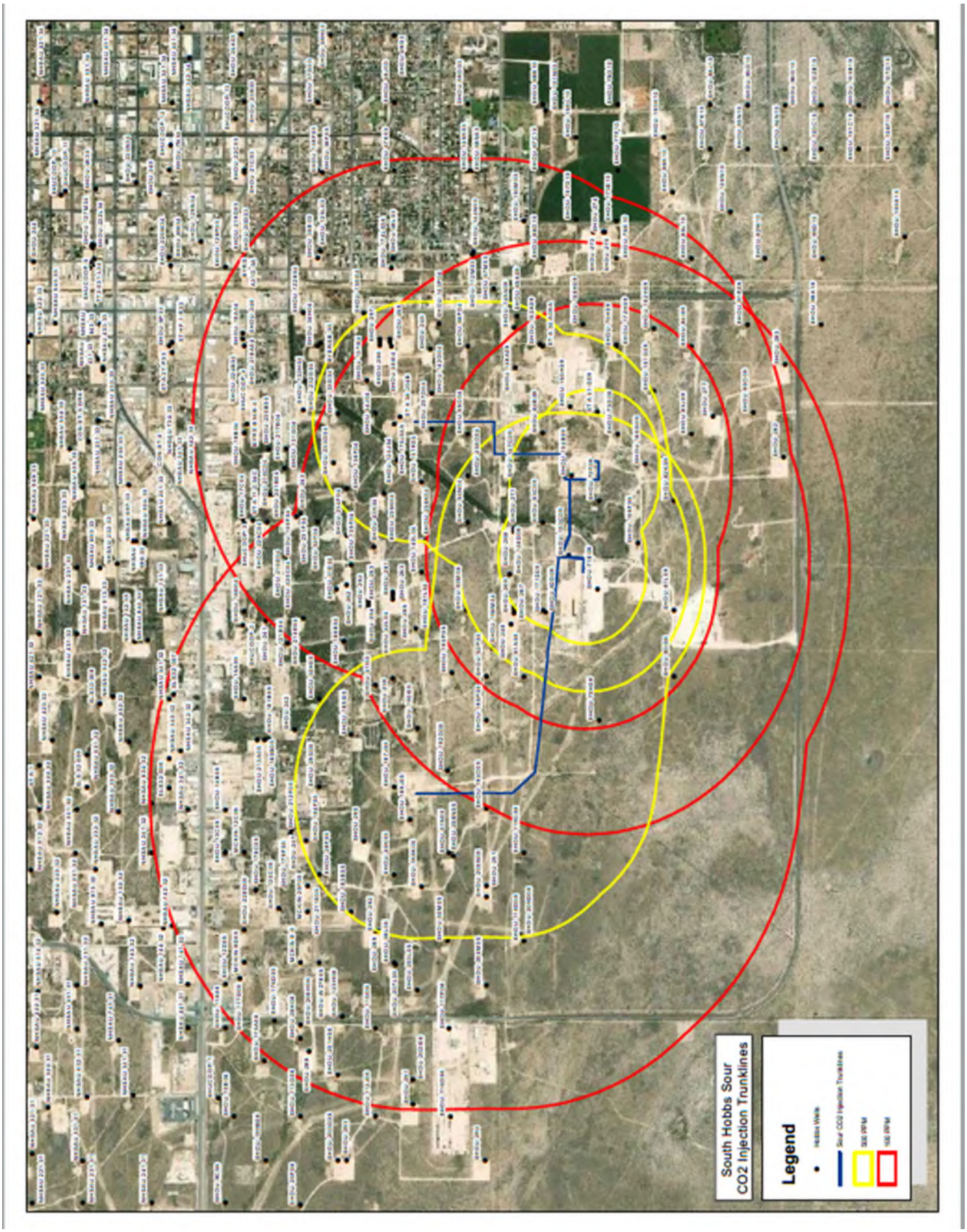
South Hobbs Produced Gas Gathering Lines – Pasquill Gifford ROE



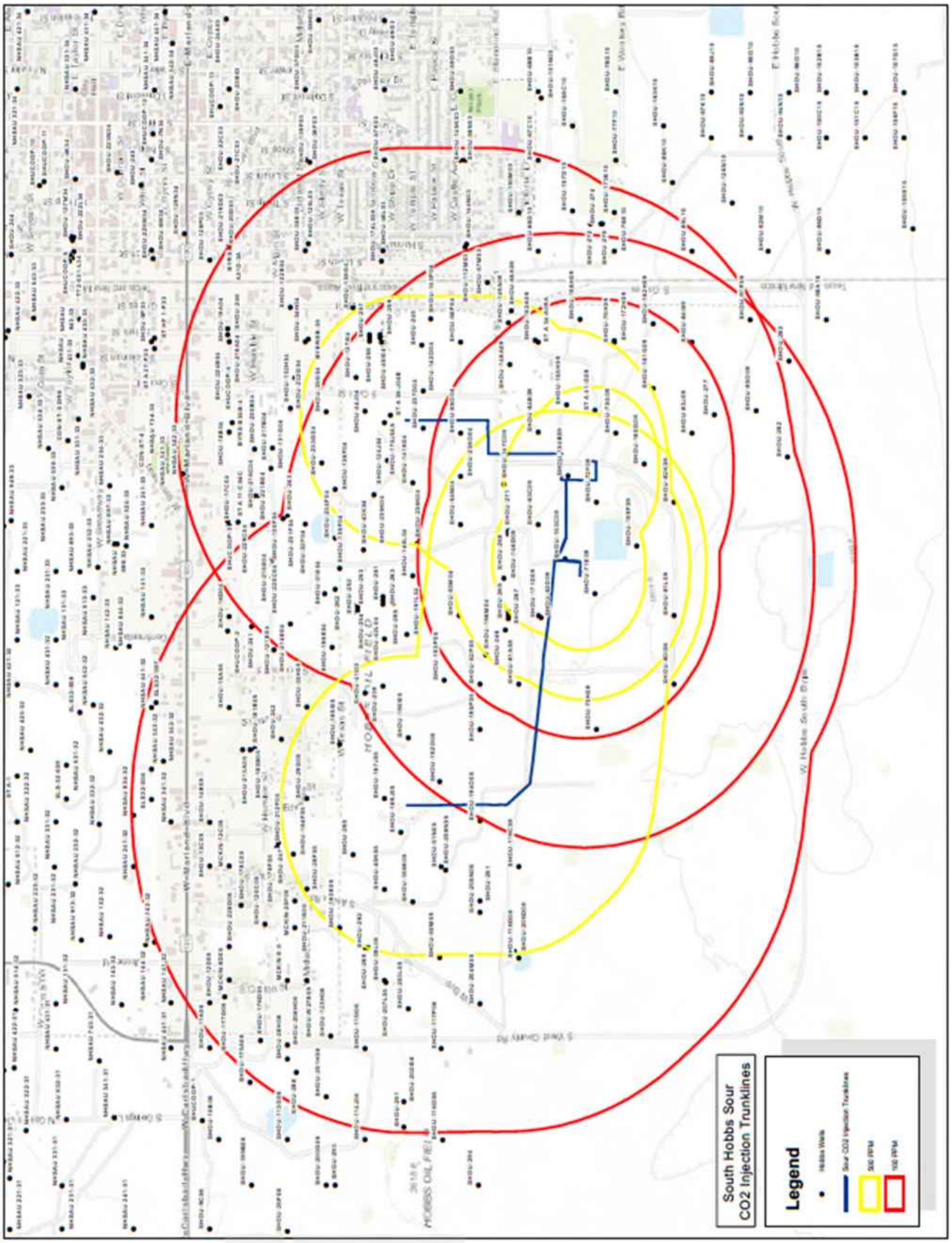
South Hobbs Produced Gas Gathering Lines – Pasquill Gifford ROE



South Hobbs CO2 Injection Lines – Pasquill Gifford ROE

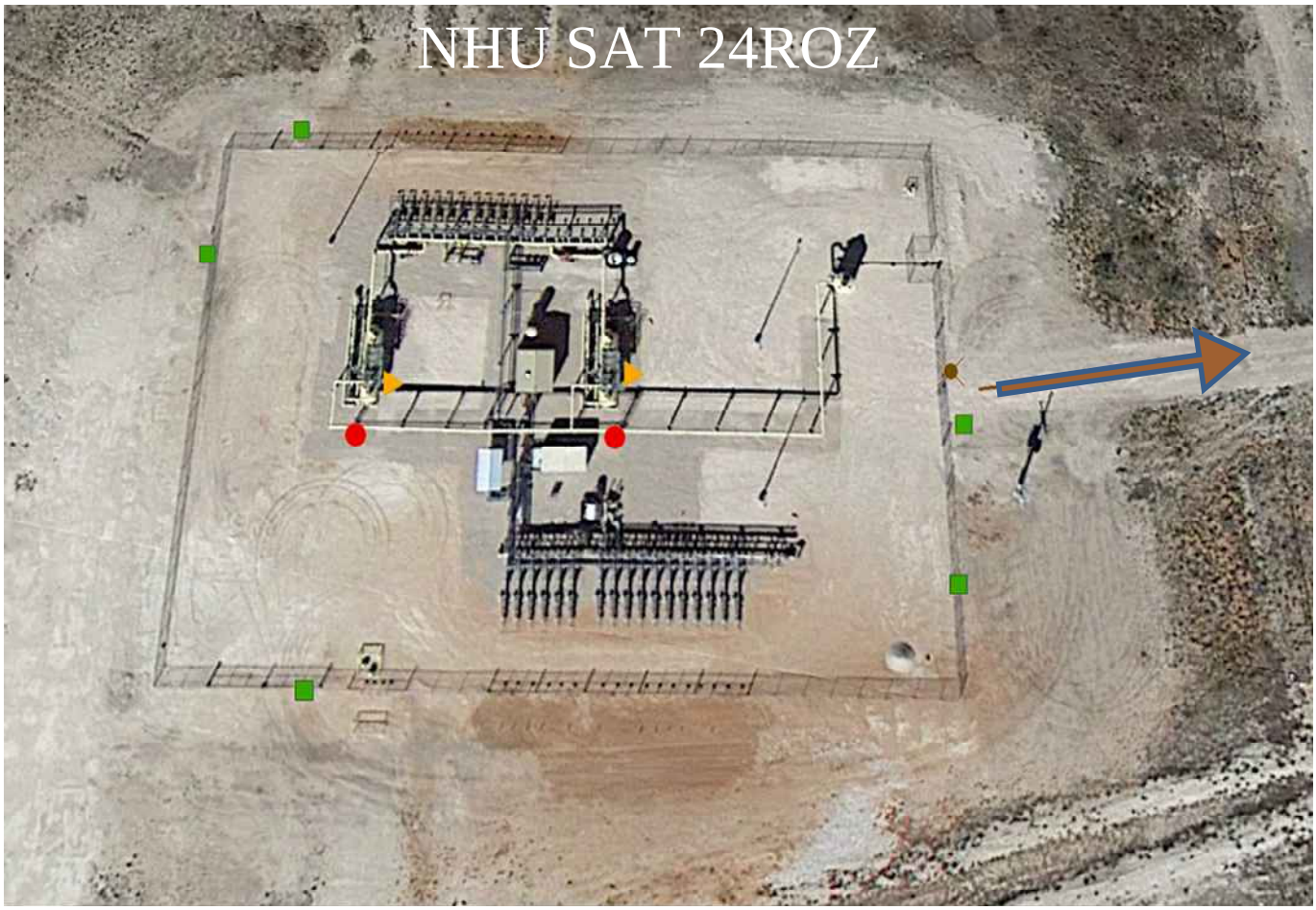


South Hobbs CO2 Injection Lines – Pasquill Gifford ROE



Appendix 2: Maps of Hobbs Area Facilities and Locations of Safety Equipment

Note: H2S monitors are strategically located based on location or absence of any off-site receptors.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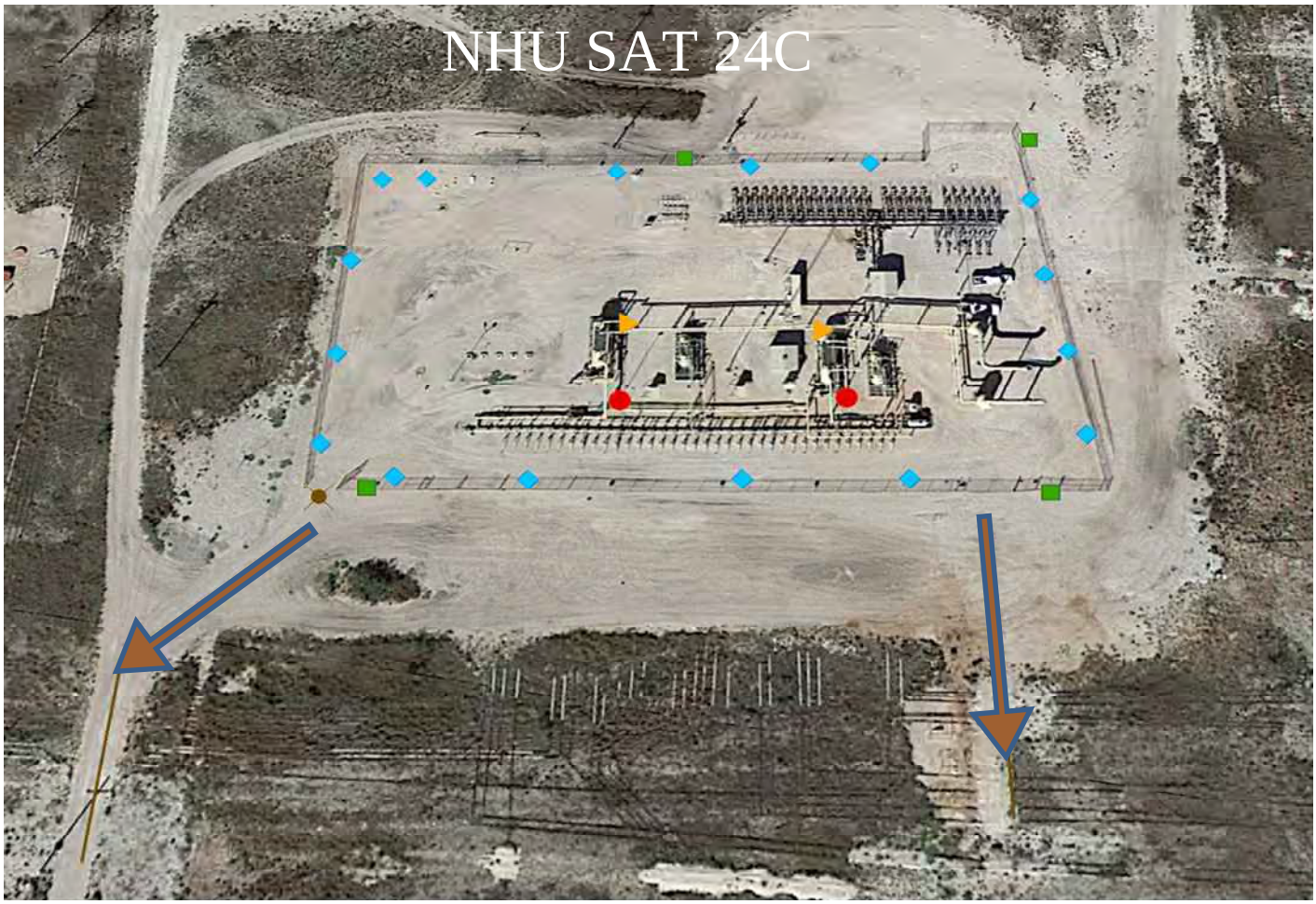
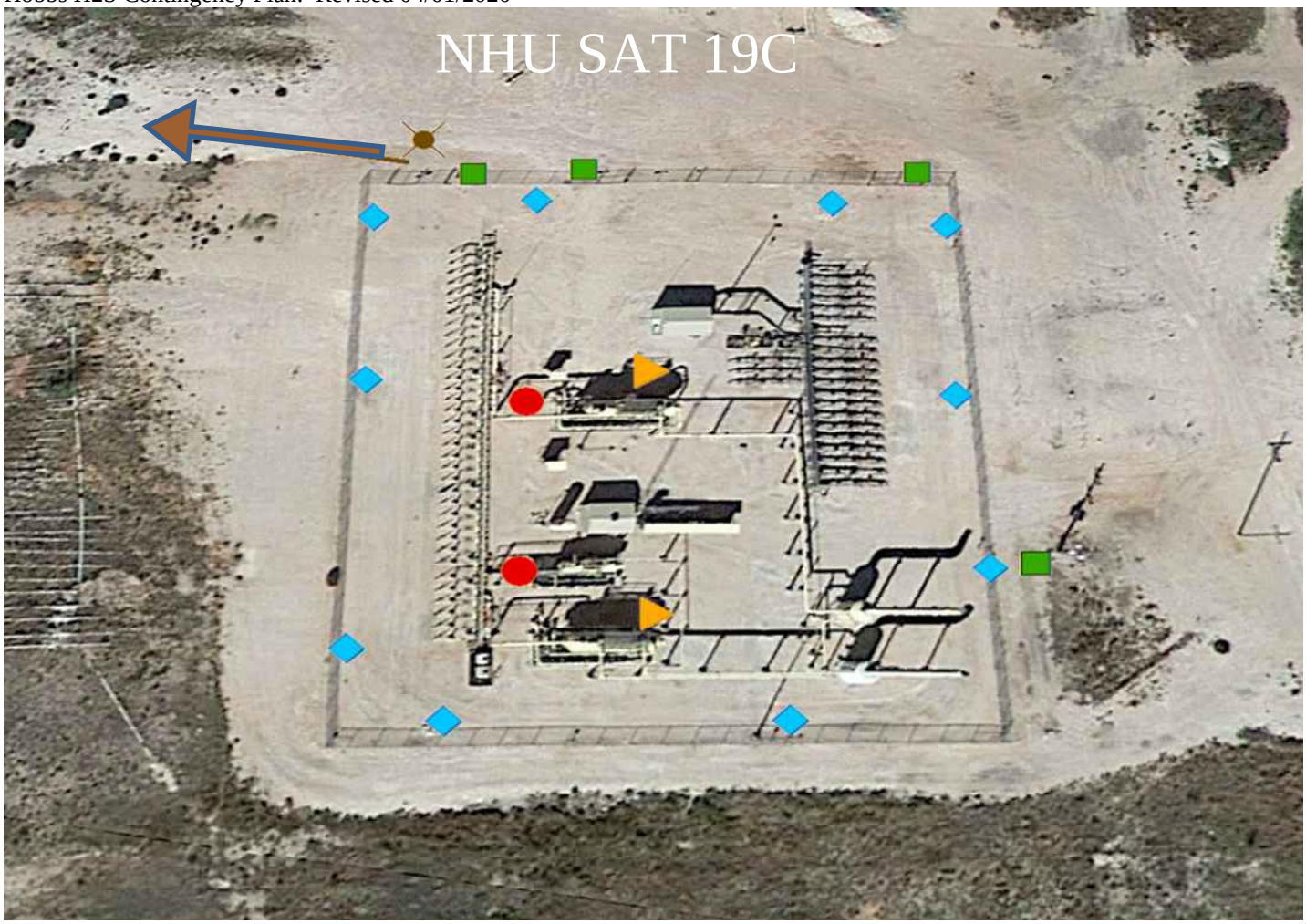

NHU SAT 24C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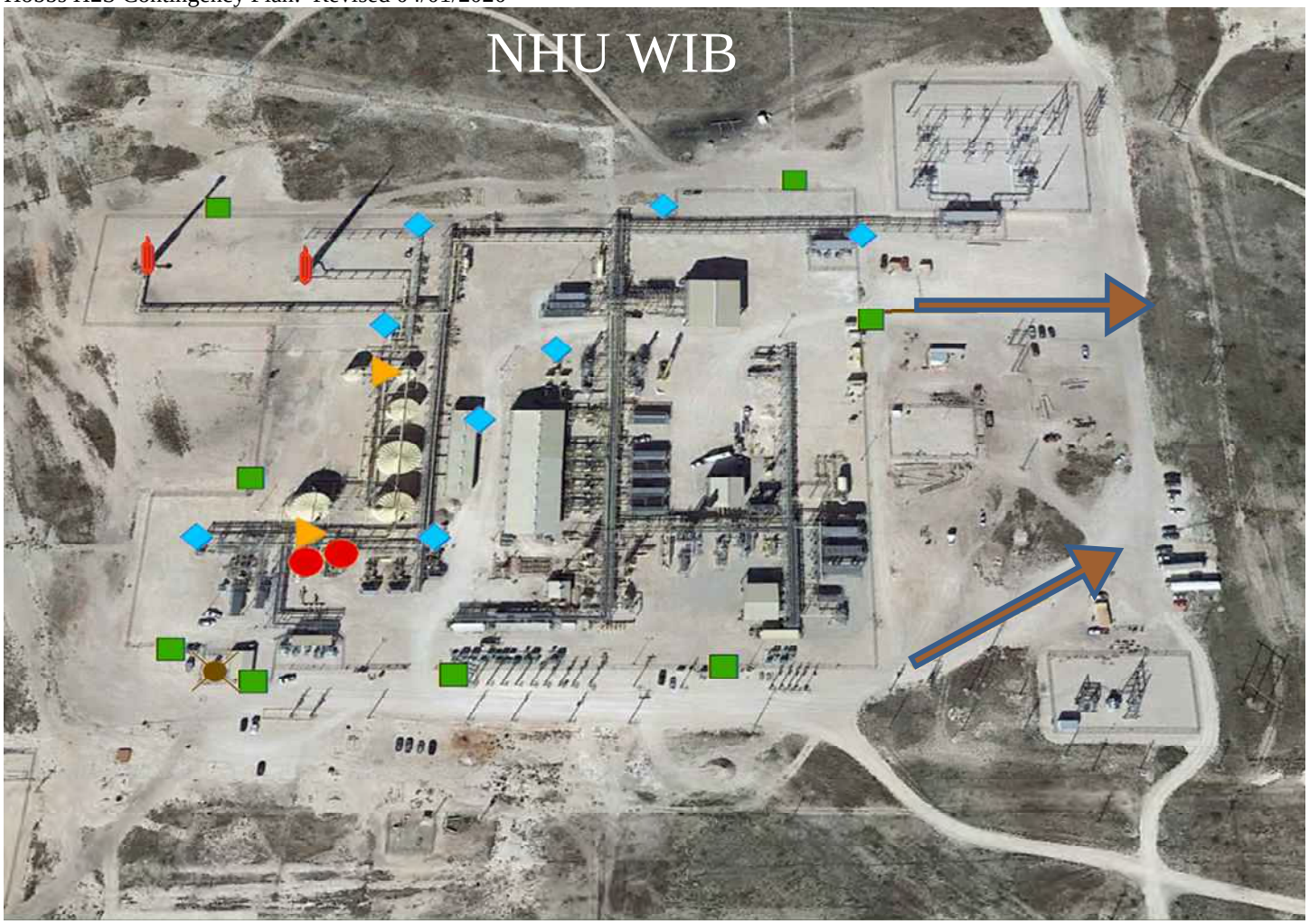
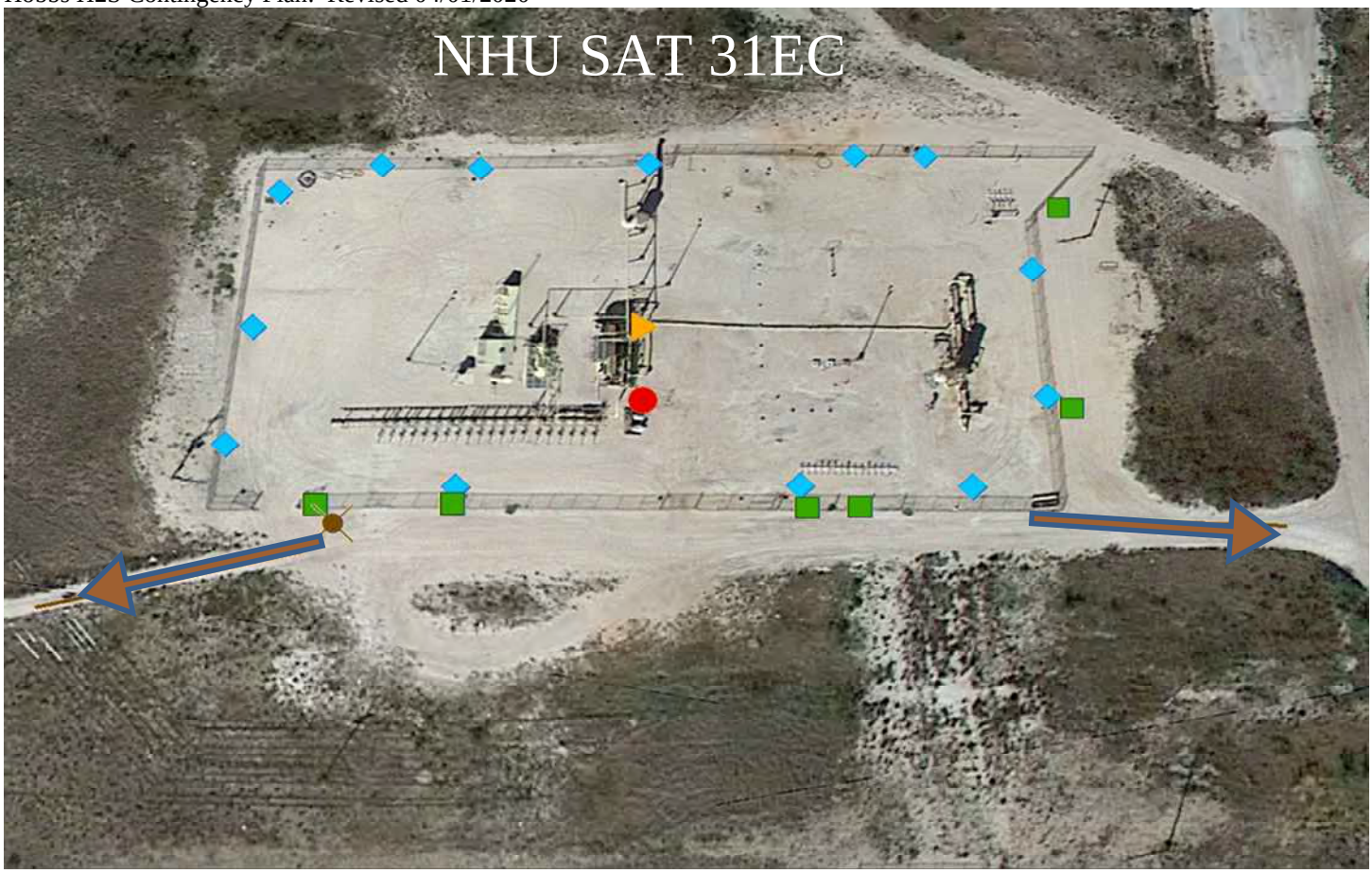
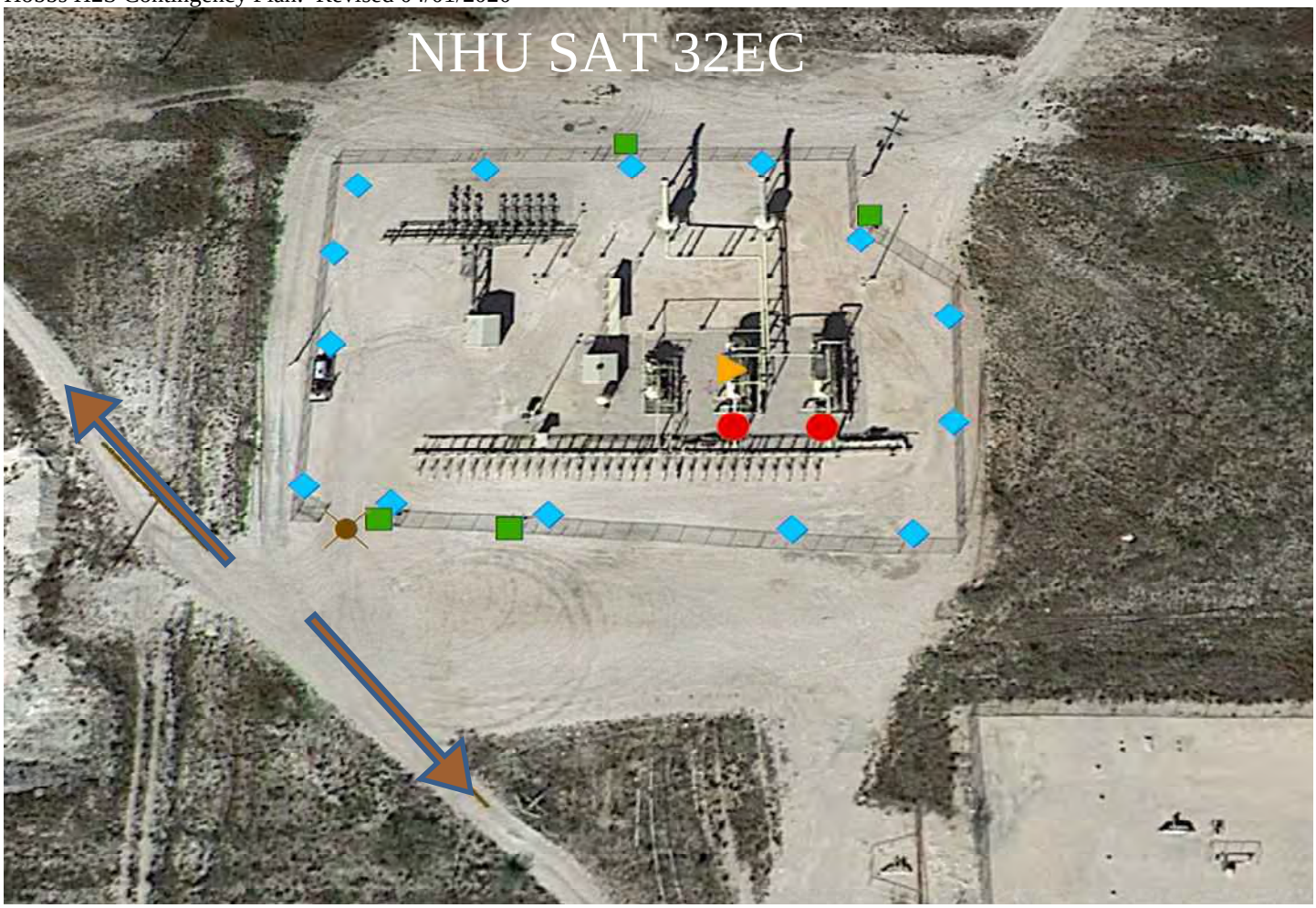

NHU WIB


NHU SAT 31EC


NHU SAT 32WC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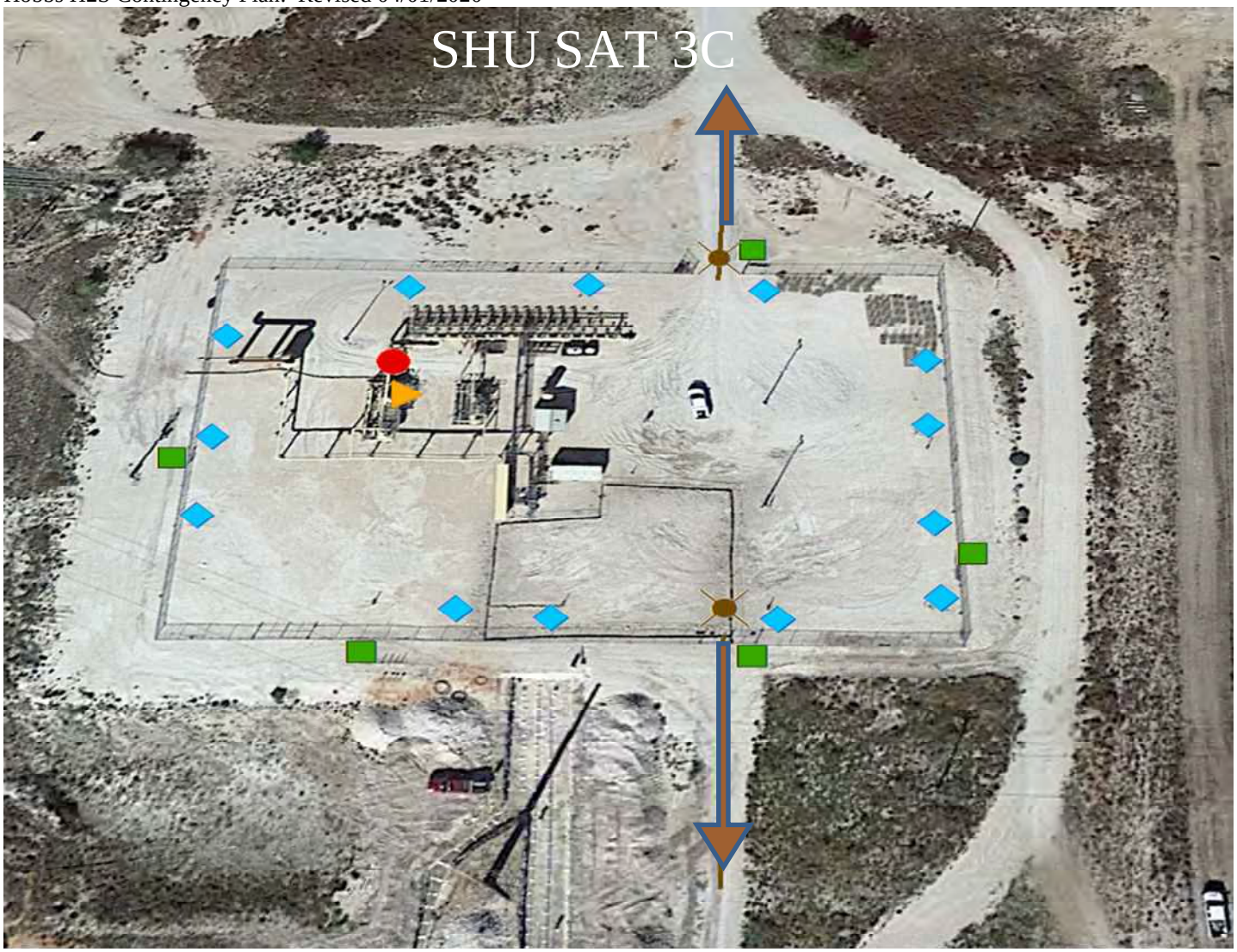
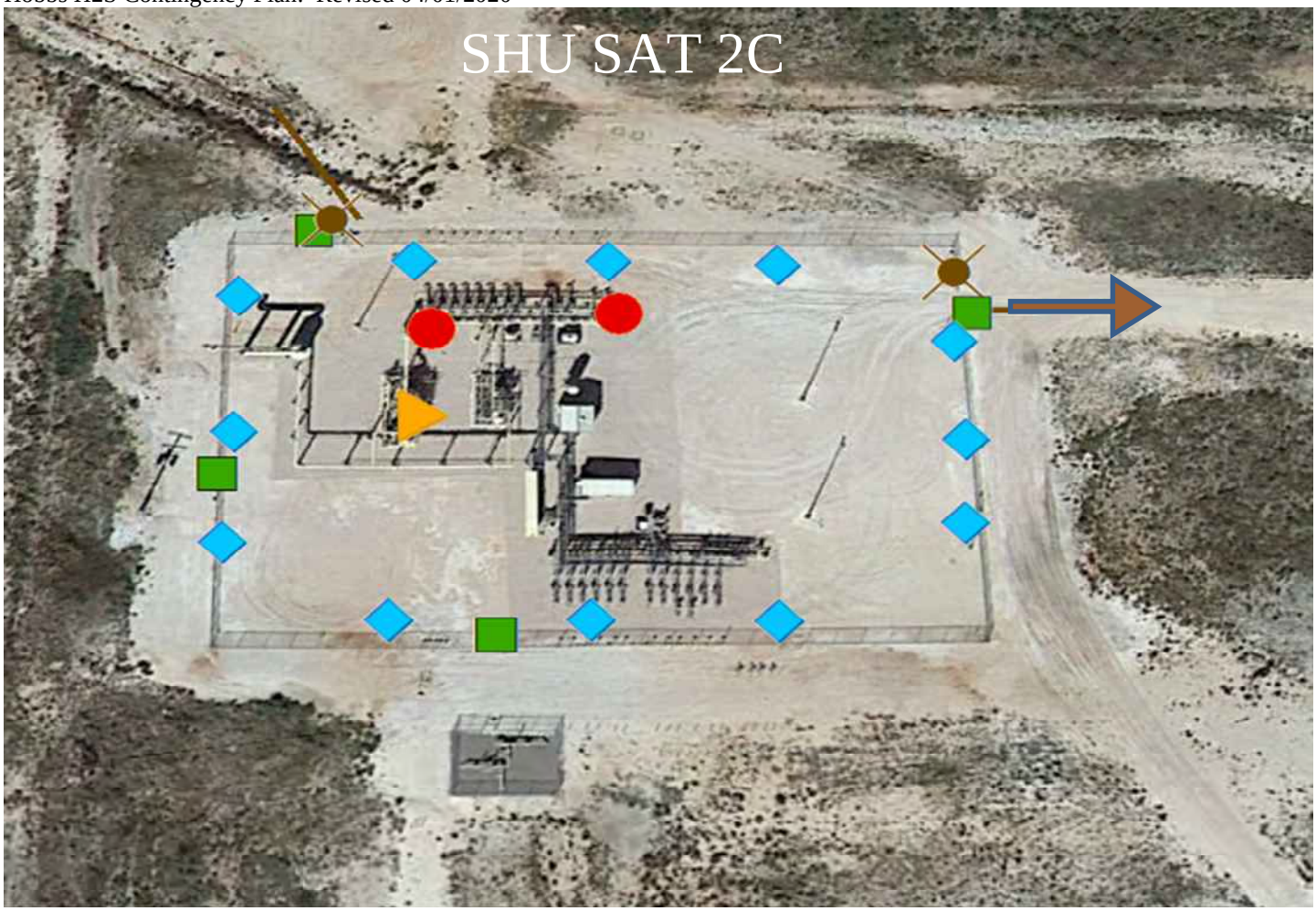
NHU NIB

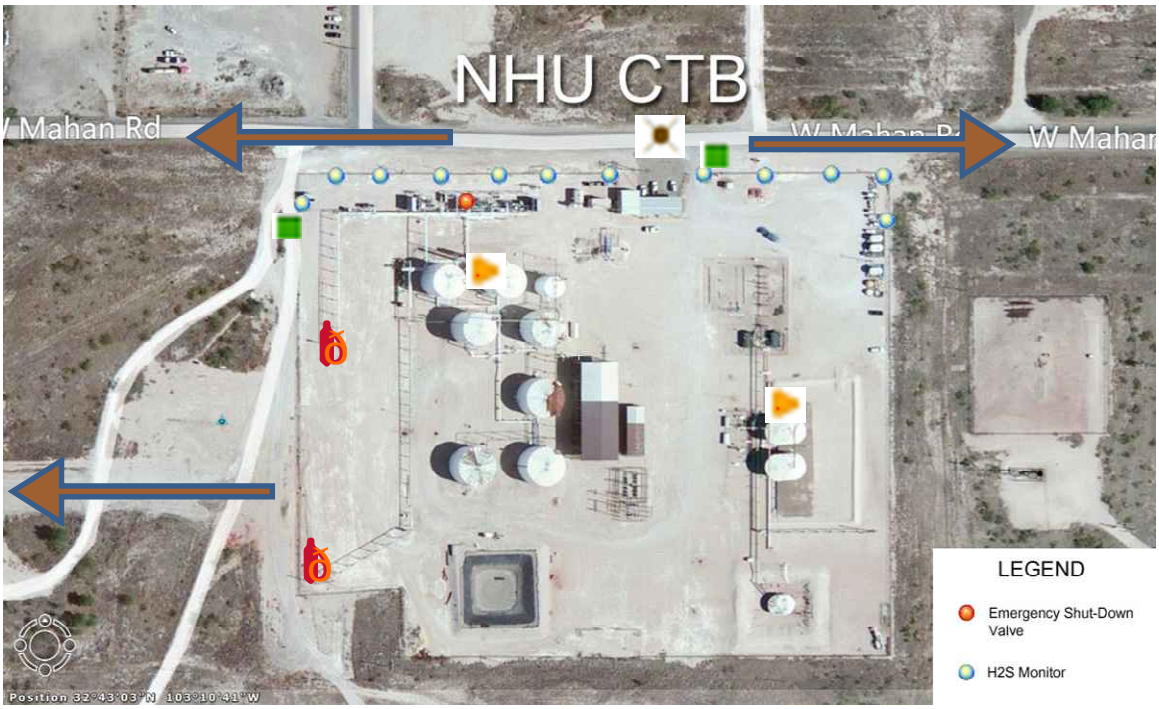

SHU SAT 1C


SHU RCF


SHU SAT 3C


SHU CTB


SHU SAT 2C


NHU CTB
Mahan Rd
W Mahan
LEGEND
Emergency Shut-Down Valve
H2S Monitor
Position 32°43'03"N 103°10'41"W


SATELLITE 28
LEGEND
Emergency Shut-Down Valve
H2S Monitor
Position 32°43'15"N 103°09'14"W

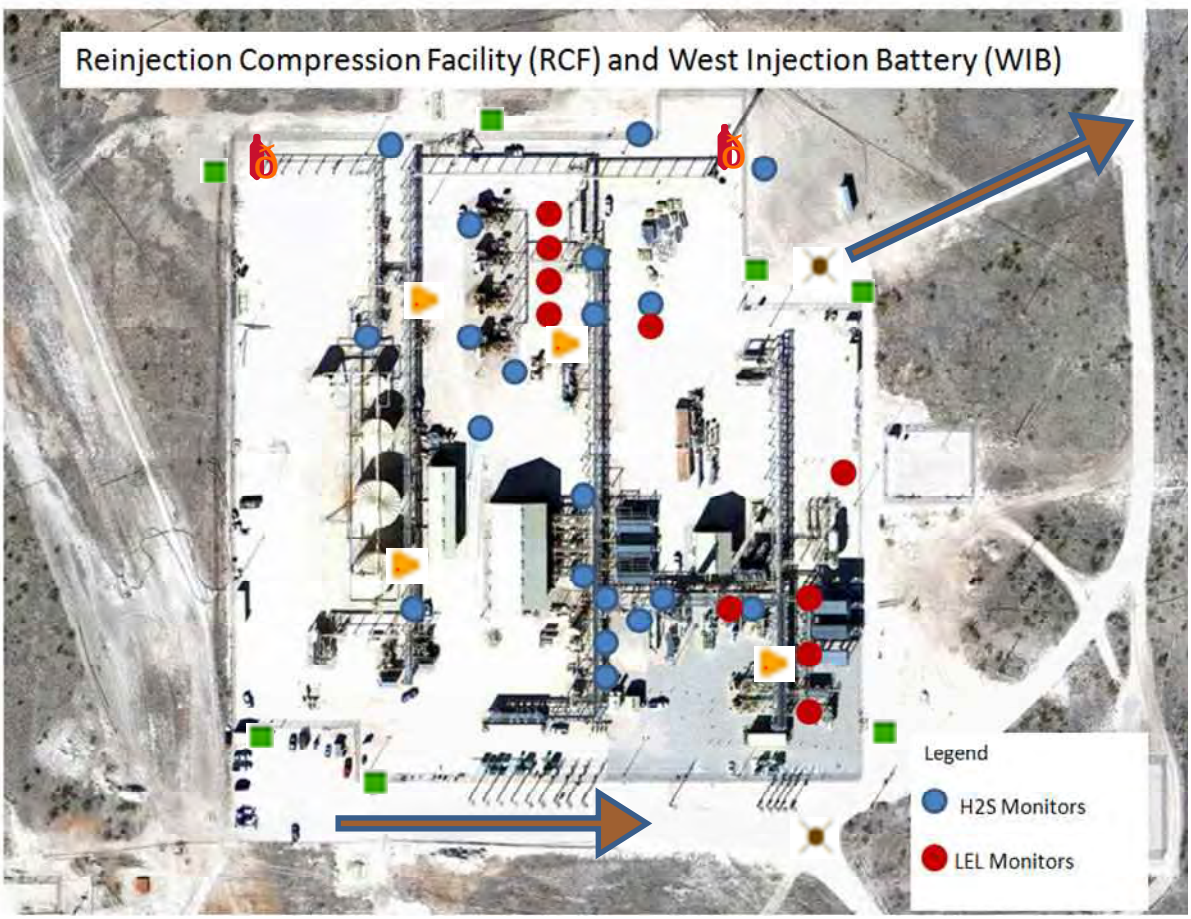

SATELLITE 25
LEGEND
Emergency Shut-Down Valve
Position 32°43'06"N 103°12'03"W


SATELLITE 29C
LEGEND
Emergency Shut-Down Valve
H2S Monitor
Position 32°43'11"N 103°10'11"W


SATELLITE 30C
LEGEND
Emergency Shut-Down Valve
H2S Monitor
Position 32°42'56"N 103°10'59"W


SATELLITE 33
LEGEND
Emergency Shut-Down Valve
H2S Monitor
Position 32°42'13"N 103°09'19"W


SATELLITE 3
LEGEND
H2S Monitor
Position 32°40'46"N 103°08'33"W


Reinjection Compression Facility (RCF) and West Injection Battery (WIB)
Legend
H2S Monitors
LEL Monitors

Appendix 3:

List of Hobbs Area Facilities (Active) with 100 and 500 ppm ROEs

Unit	Description	ULSTR	H2S Conc. (ppm)	Latitude	Longitude	100 ppm ROE (ft)	500 ppm ROE (ft)
NHU	INJECTION BATTERY	E 33 18S,38E	8900	32.7065	-103.1616	1,417	647
NHU	SATELLITE 19 CO2	N 19 19S,38E	8000	32.7289	-103.1894	3,629	1,658
NHU	SATELLITE 24 CO2	O 24 18S,37E	10400	32.7287	-103.2038	4,455	2,036
NHU	SATELLITE 29 CO2	G 29 18S,38E	2800	32.7198	-103.1700	753	344
NHU	SATELLITE 30 CO2	I 30 18S,38E	7200	32.7074	-103.1837	2,472	1,130
NHU	SATELLITE 32 EAST CO2	H 32 18S,38E	2300	32.7043	-103.1634	1,553	710
NHU	SATELLITE 32 WEST CO2	K 32 18S,38E	3000	32.7015	-103.1731	1,612	737
NHU	CENTRAL TANK BATTERY	L 29 18S,38E	7800	32.7182	-103.1794	1,116	510
NHU	WEST INJECTION BATTERY	H 25 18S,37E	17500	32.7208	-103.1999	2,303	1,052
NHU	RECOMPRESSION FACILITY	H 25 18S,37E	6900	32.7208	-103.1999	9,505	4,343
NHU	24 ROZ	F 24 18S 37E	11300	32.7358	-103.2079	3,580	1,636
SHU	CENTRAL TANK BATTERY	A 9 19S,38E	14000	32.6801	-103.1479	2,005	916
SHU	SAT. BATTERY 1C	J 5 19S,38-	6000	32.4110	-103.102	4,733	2,163
SHU	SAT. BATTERY 2C	J 4 19S 38E	6200	32.4113	-103.859	3,941	1,801
SHU	SAT. BATTERY 3C	G 9 19S 38E	13600	32.4059	-103.938	2,379	1,087
SHU	RECOMPRESSION FACILITY	E 9 19S 38E	7900	32.6780	-103.1589	7,472	3,414

Appendix 4:

List of Hobbs Area Producing Wells (Active) with 100 and 500 ppm

API Number	Description / Well Number	H2S (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)	Latitude	Longitude
3002505446	NORTH HOBBS G/SA UNIT #341	7300	328	150	32.74207	-103.20262
3002505447	NORTH HOBBS G/SA UNIT #331	7300	685	313	32.74570	-103.20262
3002505454	NORTH HOBBS G/SA UNIT #431	7300	270	124	32.74482	-103.21454
3002505464	NORTH HOBBS G/SA UNIT #311	7300	1208	552	32.73939	-103.21880
3002505466	NORTH HOBBS G/SA UNIT #421	7300	513	234	32.73575	-103.21450
3002505470	NORTH HOBBS G/SA UNIT #221	7300	633	289	32.73576	-103.22315
3002505473	NORTH HOBBS G/SA UNIT #441	7300	442	202	32.72845	-103.21449
3002505479	NORTH HOBBS G/SA UNIT #412	7300	654	299	32.73934	-103.19726
3002505480	NORTH HOBBS G/SA UNIT #321	7300	301	137	32.73391	-103.20370
3002505482	NORTH HOBBS G/SA UNIT #241	7300	345	158	32.72663	-103.20590
3002505483	NORTH HOBBS G/SA UNIT #231	7300	326	149	32.73116	-103.20591
3002505486	NORTH HOBBS G/SA UNIT #441	7300	280	128	32.72662	-103.19727
3002505490	NORTH HOBBS G/SA UNIT #341	7300	389	178	32.72662	-103.20370
3002505500	NORTH HOBBS G/SA UNIT #331	7300	372	170	32.71663	-103.20157
3002505501	NORTH HOBBS G/SA UNIT #241	7300	7	3	32.71392	-103.20583
3002505504	NORTH HOBBS G/SA UNIT #421	7300	805	368	32.71936	-103.19727
3002505505	NORTH HOBBS G/SA UNIT #321	7300	297	136	32.72027	-103.20264
3002507355	NORTH HOBBS G/SA UNIT #221	7300	396	181	32.73389	-103.18867
3002507357	NORTH HOBBS G/SA UNIT #121	7300	309	141	32.73390	-103.19511
3002507360	NORTH HOBBS G/SA UNIT #321	7300	289	132	32.73389	-103.18677
3002507365	NORTH HOBBS G/SA UNIT #141	7300	429	196	32.72661	-103.19512
3002507366	NORTH HOBBS G/SA UNIT #441	7300	29	13	32.72660	-103.18032
3002507371	NORTH HOBBS G/SA UNIT #341	7300	5	2	32.72660	-103.16956
3002507382	NORTH HOBBS G/SA UNIT #231	7300	49	23	32.73204	-103.17496
3002507383	NORTH HOBBS G/SA UNIT #141	7300	67	31	32.72660	-103.17818
3002507408	NORTH HOBBS G/SA UNIT #141	7300	11	5	32.71207	-103.14390
3002507410	NORTH HOBBS G/SA UNIT #131	7300	14	7	32.71570	-103.14349
3002507412	NORTH HOBBS G/SA UNIT #331	7300	37	17	32.71569	-103.15234
3002507413	NORTH HOBBS G/SA UNIT #431	7300	20	9	32.71569	-103.14806
3002507416	NORTH HOBBS G/SA UNIT #321	7300	13	6	32.71936	-103.15235
3002507420	NORTH HOBBS G/SA UNIT #121	7300	2	1	32.71935	-103.16097
3002507432	NORTH HOBBS G/SA UNIT #311	7300	49	22	32.72297	-103.16740
3002507438	NORTH HOBBS G/SA UNIT #231	7300	186	85	32.71751	-103.17387
3002507444	NORTH HOBBS G/SA UNIT #441	7300	365	167	32.71206	-103.16310
3002507445	NORTH HOBBS G/SA UNIT #341	7300	668	305	32.71206	-103.16956
3002507447	NORTH HOBBS G/SA UNIT #131	7300	155	71	32.71751	-103.17602
3002507449	NORTH HOBBS G/SA UNIT #121	7300	207	95	32.71935	-103.17817
3002507458	NORTH HOBBS G/SA UNIT #431	7300	50	23	32.71750	-103.16311

3002507462	NORTH HOBBS G/SA UNIT #221	7300	261	119	32.71935	-103.18869
3002507463	NORTH HOBBS G/SA UNIT #211	7300	1007	460	32.72479	-103.18868
3002507464	NORTH HOBBS G/SA UNIT #121	7300	362	165	32.71936	-103.19513
3002507467	NORTH HOBBS G/SA UNIT #321	7300	256	117	32.71935	-103.18675
3002507468	NORTH HOBBS G/SA UNIT #421	7300	178	82	32.71935	-103.18246
3002507473	NORTH HOBBS G/SA UNIT #441	7300	500	228	32.71207	-103.18031
3002507474	NORTH HOBBS G/SA UNIT #431	7300	209	95	32.71751	-103.18246
3002507490	NORTH HOBBS G/SA UNIT #411	7300	585	267	32.71025	-103.18031
3002507491	NORTH HOBBS G/SA UNIT #311	7300	9	4	32.70995	-103.18674
3002507492	NORTH HOBBS G/SA UNIT #321	7300	28	13	32.70512	-103.18674
3002507503	NORTH HOBBS G/SA UNIT #211	7300	431	197	32.70996	-103.18870
3002507511	NORTH HOBBS G/SA UNIT #111	7300	276	126	32.70996	-103.19299
3002507516	NORTH HOBBS G/SA UNIT #411A	7300	144	66	32.71024	-103.16310
3002507518	NORTH HOBBS G/SA UNIT #322B	7300	136	62	32.70481	-103.16953
3002507525	NORTH HOBBS G/SA UNIT #211	7300	167	76	32.70844	-103.17172
3002507528	NORTH HOBBS G/SA UNIT #111	7300	333	152	32.70935	-103.17709
3002507533	NORTH HOBBS G/SA UNIT #241	7300	786	359	32.69934	-103.17171
3002507536	NORTH HOBBS G/SA UNIT #441	7300	475	217	32.69843	-103.16415
3002507543	NORTH HOBBS G/SA UNIT #141	7300	725	331	32.69843	-103.15987
3002507544	NORTH HOBBS G/SA UNIT #131	7300	728	333	32.70296	-103.16094
3002507547	NORTH HOBBS G/SA UNIT #241	7300	478	219	32.69842	-103.15557
3002507553	NORTH HOBBS G/SA UNIT #431	7300	375	171	32.70188	-103.14761
3002507554	NORTH HOBBS G/SA UNIT #421	7300	386	177	32.70572	-103.14697
3002507555	NORTH HOBBS G/SA UNIT #311	7300	27	12	32.71025	-103.15234
3002507559	NORTH HOBBS G/SA UNIT #121	7300	310	142	32.70480	-103.16095
3002509876	NORTH HOBBS G/SA UNIT #221	7300	162	74	32.73392	-103.20591
3002512489	NORTH HOBBS G/SA UNIT #341	7300	0	0	32.71207	-103.15234
3002512491	NORTH HOBBS G/SA UNIT #341	7300	264	121	32.72661	-103.18676
3002512494	NORTH HOBBS G/SA UNIT #121	7300	11	5	32.71843	-103.14350
3002512496	NORTH HOBBS G/SA UNIT #141	7300	156	71	32.71206	-103.16096
3002512498	NORTH HOBBS G/SA UNIT #241	7300	31	14	32.71206	-103.15452
3002512507	NORTH HOBBS G/SA UNIT #421	7300	534	244	32.70480	-103.16309
3002523035	NORTH HOBBS G/SA UNIT #232	7300	568	260	32.70206	-103.17252
3002523081	NORTH HOBBS G/SA UNIT #421	7300	332	152	32.73481	-103.19866
3002523130	NORTH HOBBS G/SA UNIT #424	7300	345	158	32.70585	-103.16417
3002523246	NORTH HOBBS G/SA UNIT #142	7300	327	149	32.71316	-103.15965
3002523263	NORTH HOBBS G/SA UNIT #123	7300	101	46	32.70571	-103.15987
3002523277	NORTH HOBBS G/SA UNIT #132	7300	50	23	32.71632	-103.15959
3002523304	NORTH HOBBS G/SA UNIT #243	7300	137	63	32.71321	-103.15621
3002523384	NORTH HOBBS G/SA UNIT #412	7300	68	31	32.72361	-103.18103
3002523481	NORTH HOBBS G/SA UNIT #242	7300	324	148	32.72686	-103.18976
3002523522	NORTH HOBBS G/SA UNIT #411	7300	370	169	32.73753	-103.19941
3002524665	NORTH HOBBS G/SA UNIT #341	7300	263	120	32.71389	-103.18460
3002528410	NORTH HOBBS G/SA UNIT #233	7300	115	53	32.70315	-103.15398

3002528941	NORTH HOBBS G/SA UNIT #323	7300	90	41	32.71872	-103.17017
3002528943	NORTH HOBBS G/SA UNIT #143	7300	569	260	32.69987	-103.17825
3002528964	NORTH HOBBS G/SA UNIT #122	7300	16	7	32.72136	-103.16135
3002529065	NORTH HOBBS G/SA UNIT #213	7300	53	24	32.70758	-103.15404
3002529199	NORTH HOBBS G/SA UNIT #312	7300	69	31	32.71074	-103.15036
3002529275	NORTH HOBBS G/SA UNIT #234	7300	579	264	32.70038	-103.15368
3002529906	NORTH HOBBS G/SA UNIT #343	7300	621	284	32.69843	-103.16705
3002529931	NORTH HOBBS G/SA UNIT #342	7300	32	15	32.71060	-103.15056
3002529932	NORTH HOBBS G/SA UNIT #412	7300	479	219	32.70574	-103.14654
3002530258	NORTH HOBBS G/SA UNIT #212	7300	148	68	32.70940	-103.17310
3002530263	NORTH HOBBS G/SA UNIT #313	7300	154	70	32.70978	-103.16973
3002530308	NORTH HOBBS G/SA UNIT #433	7300	773	353	32.70168	-103.14801
3002531662	NORTH HOBBS G/SA UNIT #144	7300	724	331	32.69878	-103.17540
3002534372	NORTH HOBBS G/SA UNIT #523	7300	45	20	32.70566	-103.15405
3002534374	NORTH HOBBS G/SA UNIT #531	7300	947	433	32.70244	-103.16689
3002534375	NORTH HOBBS G/SA UNIT #542	7300	636	291	32.70115	-103.16406
3002534643	NORTH HOBBS G/SA UNIT #521	7300	427	195	32.70844	-103.15715
3002534644	NORTH HOBBS G/SA UNIT #544	7300	81	37	32.71370	-103.16544
3002534869	NORTH HOBBS G/SA UNIT #623	7300	95	43	32.71621	-103.17117
3002534870	NORTH HOBBS G/SA UNIT #624	7300	154	71	32.71432	-103.17291
3002534906	NORTH HOBBS G/SA UNIT #511	7300	145	66	32.70755	-103.16008
3002534907	NORTH HOBBS G/SA UNIT #512	7300	321	147	32.70521	-103.17255
3002534964	NORTH HOBBS G/SA UNIT #541	7300	76	35	32.70871	-103.16393
3002534980	NORTH HOBBS G/SA UNIT #513	7300	563	257	32.70117	-103.15903
3002534983	NORTH HOBBS G/SA UNIT #713	7300	340	155	32.72241	-103.18517
3002534993	NORTH HOBBS G/SA UNIT #524	7300	438	200	32.69958	-103.15657
3002535332	NORTH HOBBS G/SA UNIT #621	7300	635	290	32.72315	-103.18918
3002535370	NORTH HOBBS G/SA UNIT #613	7300	355	162	32.73014	-103.21164
3002535376	NORTH HOBBS G/SA UNIT #643	7300	88	40	32.71768	-103.16598
3002535384	NORTH HOBBS G/SA UNIT #634	7300	127	58	32.71323	-103.16875
3002535385	NORTH HOBBS G/SA UNIT #913	7300	921	421	32.70173	-103.17517
3002535452	NORTH HOBBS G/SA UNIT #834	7300	592	271	32.69926	-103.16970
3002535467	NORTH HOBBS G/SA UNIT #611	7300	1066	487	32.73796	-103.21168
3002535527	NORTH HOBBS G/SA UNIT #814	7300	187	85	32.71341	-103.17846
3002535534	NORTH HOBBS G/SA UNIT #844	7300	573	262	32.69950	-103.16131
3002535541	NORTH HOBBS G/SA UNIT #533	7300	103	47	32.71755	-103.16822
3002535555	NORTH HOBBS G/SA UNIT #614	7300	767	350	32.73438	-103.20120
3002535758	NORTH HOBBS G/SA UNIT #535	7300	574	262	32.70262	-103.15385
3002536149	NORTH HOBBS G/SA UNIT #537	7300	132	60	32.70875	-103.16659
3002536150	NORTH HOBBS G/SA UNIT #548	7300	71	33	32.70578	-103.16682
3002536193	NORTH HOBBS G/SA UNIT #549	7300	536	245	32.73066	-103.19884
3002536213	NORTH HOBBS G/SA UNIT #539	7300	607	277	32.73137	-103.20233
3002536216	NORTH HOBBS G/SA UNIT #525	7300	184	84	32.71651	-103.18925
3002536242	NORTH HOBBS G/SA UNIT #547	7300	253	116	32.71301	-103.18147

3002536245	NORTH HOBBS G/SA UNIT #514	7300	151	69	32.70490	-103.17848
3002536247	NORTH HOBBS G/SA UNIT #527	7300	265	121	32.71289	-103.19041
3002536281	NORTH HOBBS G/SA UNIT #538	7300	253	116	32.71661	-103.18527
3002537102	NORTH HOBBS G/SA UNIT #617	7300	489	224	32.72323	-103.19339
3002537105	NORTH HOBBS G/SA UNIT #642	7300	187	85	32.71569	-103.19781
3002537118	NORTH HOBBS G/SA UNIT #641	7300	525	240	32.72313	-103.19884
3002537120	NORTH HOBBS G/SA UNIT #618	7300	586	268	32.71647	-103.19344
3002537127	NORTH HOBBS G/SA UNIT #615	7300	1071	489	32.73896	-103.19488
3002537128	NORTH HOBBS G/SA UNIT #636	7300	56	26	32.72086	-103.17140
3002537213	NORTH HOBBS G/SA UNIT #625	7300	61	28	32.72087	-103.17606
3002537235	NORTH HOBBS G/SA UNIT #627	7300	414	189	32.73084	-103.19197
3002537428	NORTH HOBBS G/SA UNIT #722	7300	92	42	32.70758	-103.18771
3002537435	NORTH HOBBS G/SA UNIT #943	7300	108	49	32.73344	-103.17999
3002537445	NORTH HOBBS G/SA UNIT #733	7300	182	83	32.73034	-103.18276
3002537474	NORTH HOBBS G/SA UNIT #721	7300	8	4	32.72355	-103.17321
3002537475	NORTH HOBBS G/SA UNIT #742	7300	27	13	32.72110	-103.16727
3002537481	NORTH HOBBS G/SA UNIT #731	7300	694	317	32.72334	-103.20277
3002538023	NORTH HOBBS G/SA UNIT #516	7300	1015	464	32.74160	-103.20930
3002538071	NORTH HOBBS G/SA UNIT #646	7300	761	348	32.74120	-103.21305
3002538087	NORTH HOBBS G/SA UNIT #517	7300	750	343	32.74199	-103.19404
3002538110	NORTH HOBBS G/SA UNIT #529	7300	407	186	32.74239	-103.18987
3002538125	NORTH HOBBS G/SA UNIT #638	7300	671	306	32.73913	-103.18536
3002538518	NORTH HOBBS G/SA UNIT #645	7300	893	408	32.74234	-103.19959
3002538524	NORTH HOBBS G/SA UNIT #628	7300	165	75	32.73944	-103.18742
3002540816	NORTH HOBBS G/SA UNIT #831	7300	510	233	32.74532	-103.20880
3002540822	NORTH HOBBS G/SA UNIT #832	7300	809	370	32.74605	-103.19747
3002540834	NORTH HOBBS G/SA UNIT #833	7300	641	293	32.74584	-103.19344
3002541550	NORTH HOBBS G/SA UNIT #946	7300	1105	505	32.74327	-103.18468
3002541551	NORTH HOBBS G/SA UNIT #947	7300	248	113	32.73947	-103.18291
3002541578	NORTH HOBBS G/SA UNIT #948	7300	160	73	32.70540	-103.15564
3002541643	NORTH HOBBS G/SA UNIT #949	7300	460	210	32.70499	-103.15537
3002542454	NORTH HOBBS G/SA UNIT #958	7300	384	176	32.73490	-103.18167
3002542470	NORTH HOBBS G/SA UNIT #956	7300	224	102	32.74252	-103.18225
3002542471	NORTH HOBBS G/SA UNIT #957	7300	249	114	32.74252	-103.18217
3002542485	NORTH HOBBS G/SA UNIT #955	7300	581	266	32.74250	-103.18669
3002542490	NORTH HOBBS G/SA UNIT #954	7300	777	355	32.74283	-103.18661
3002543026	NORTH HOBBS G/SA UNIT #663	7300	340	155	32.73997	-103.20176
3002543058	NORTH HOBBS G/SA UNIT #673	7300	515	235	32.73436	-103.19797
3002543604	NORTH HOBBS G/SA UNIT #662	7300	211	96	32.73796	-103.20693
3002543846	NORTH HOBBS G/SA UNIT #653	7300	1248	570	32.73980	-103.20350
3002543847	NORTH HOBBS G/SA UNIT #685	7300	774	354	32.72762	-103.20738
3002544718	NORTH HOBBS G/SA UNIT #694	7300	140	64	32.70839	-103.15493
3002544719	NORTH HOBBS G/SA UNIT #695	7300	142	65	32.70853	-103.15493
3002544720	NORTH HOBBS G/SA UNIT #697	7300	592	271	32.70004	-103.15648

3002544721	NORTH HOBBS G/SA UNIT #696	7300	584	267	32.70018	-103.15648
3002544824	NORTH HOBBS G/SA UNIT #671	7300	557	254	32.72888	-103.22271
3002544825	NORTH HOBBS G/SA UNIT #672	7300	299	137	32.72483	-103.21782
3002544827	NORTH HOBBS G/SA UNIT #675	7300	585	267	32.72435	-103.20984
3002507587	SOUTH HOBBS G/SA UNIT #022	5350	926	423	32.69479	-103.13837
3002542540	SOUTH HOBBS G/SA UNIT #249	5350	684	312	32.68133	-103.13064
3002507603	SOUTH HOBBS G/SA UNIT #020	5350	630	288	32.69479	-103.14266
3002512768	SOUTH HOBBS G/SA UNIT #017	5350	604	276	32.69479	-103.15559
3002528975	SOUTH HOBBS G/SA UNIT #177	5350	604	276	32.69499	-103.17786
3002528978	SOUTH HOBBS G/SA UNIT #180	5350	554	253	32.69389	-103.16618
3002526118	SOUTH HOBBS G/SA UNIT #123	5350	540	247	32.69005	-103.17969
3002542592	SOUTH HOBBS G/SA UNIT #251	5350	537	246	32.68297	-103.17326
3002535318	SOUTH HOBBS G/SA UNIT #241	5350	527	241	32.69369	-103.16042
3002507565	SOUTH HOBBS G/SA UNIT #005	5350	519	237	32.69842	-103.14695
3002507619	SOUTH HOBBS G/SA UNIT #015	5350	507	231	32.69480	-103.16417
3002507598	SOUTH HOBBS G/SA UNIT #019	5350	462	211	32.69479	-103.14696
3002528981	SOUTH HOBBS G/SA UNIT #186	5350	458	209	32.68996	-103.16137
3002528352	SOUTH HOBBS G/SA UNIT #149	5350	447	204	32.68168	-103.14610
3002528976	SOUTH HOBBS G/SA UNIT #178	5350	441	201	32.69425	-103.17354
3002507614	SOUTH HOBBS G/SA UNIT #014	5350	436	199	32.69570	-103.16955
3002507572	SOUTH HOBBS G/SA UNIT #006	5350	429	196	32.69842	-103.14266
3002529084	SOUTH HOBBS G/SA UNIT #185	5350	422	193	32.68956	-103.16596
3002526120	SOUTH HOBBS G/SA UNIT #125	5350	419	191	32.69106	-103.14234
3002528980	SOUTH HOBBS G/SA UNIT #183	5350	413	189	32.68964	-103.17457
3002507605	SOUTH HOBBS G/SA UNIT #016	5350	410	188	32.69480	-103.15988
3002528341	SOUTH HOBBS G/SA UNIT #138	5350	385	176	32.68893	-103.14539
3002507629	SOUTH HOBBS G/SA UNIT #018	5350	370	169	32.69479	-103.15125
3002528342	SOUTH HOBBS G/SA UNIT #139	5350	351	160	32.69096	-103.13851
3002529083	SOUTH HOBBS G/SA UNIT #184	5350	349	159	32.69176	-103.17111
3002523530	SOUTH HOBBS G/SA UNIT #021	5350	340	156	32.69478	-103.13852
3002529892	SOUTH HOBBS G/SA UNIT #221	5350	311	142	32.69361	-103.15420
3002528340	SOUTH HOBBS G/SA UNIT #137	5350	288	132	32.68885	-103.14867
3002528985	SOUTH HOBBS G/SA UNIT #195	5350	269	123	32.68300	-103.16534
3002528339	SOUTH HOBBS G/SA UNIT #136	5350	250	114	32.68976	-103.15392
3002531428	SOUTH HOBBS G/SA UNIT #234	5350	250	114	32.68979	-103.15621
3002529054	SOUTH HOBBS G/SA UNIT #194	5350	226	103	32.68301	-103.16962
3002528351	SOUTH HOBBS G/SA UNIT #148	5350	202	93	32.68156	-103.14807
3002528973	SOUTH HOBBS G/SA UNIT #175	5350	199	91	32.69384	-103.18187
3002528350	SOUTH HOBBS G/SA UNIT #147	5350	198	90	32.68190	-103.15377
3002528349	SOUTH HOBBS G/SA UNIT #146	5350	194	89	32.68188	-103.15821
3002528353	SOUTH HOBBS G/SA UNIT #150	5350	158	72	32.68118	-103.14089
3002528362	SOUTH HOBBS G/SA UNIT #159	5350	156	71	32.67567	-103.15666
3002528363	SOUTH HOBBS G/SA UNIT #160	5350	156	71	32.67529	-103.15275
3002539955	SOUTH HOBBS G/SA UNIT #248	5350	154	71	32.68175	-103.16064

3002543099	SOUTH HOBBS G/SA UNIT #262	5350	150	68	32.68977	-103.15862
3002543107	SOUTH HOBBS G/SA UNIT #272	5350	149	68	32.67773	-103.14140
3002529411	SOUTH HOBBS G/SA UNIT #204	5350	143	65	32.68302	-103.17811
3002528364	SOUTH HOBBS G/SA UNIT #161	5350	129	59	32.67486	-103.14919
3002544389	SOUTH HOBBS G/SA UNIT #293	5350	124	57	32.68980	-103.18670
3002531423	SOUTH HOBBS G/SA UNIT #235	5350	103	47	32.68803	-103.15423
3002543097	SOUTH HOBBS G/SA UNIT #265	5350	95	43	32.68701	-103.15927
3002528365	SOUTH HOBBS G/SA UNIT #162	5350	60	27	32.67486	-103.14615
3002543105	SOUTH HOBBS G/SA UNIT #270	5350	55	25	32.68164	-103.15968
3002543106	SOUTH HOBBS G/SA UNIT #269	5350	47	22	32.68164	-103.16001
3002531429	SOUTH HOBBS G/SA UNIT #236	5350	39	18	32.68595	-103.15642
3002543102	SOUTH HOBBS G/SA UNIT #261	5350	31	14	32.68749	-103.15915
3002543098	SOUTH HOBBS G/SA UNIT #266	5350	31	14	32.68702	-103.15911
3002544307	SOUTH HOBBS G/SA UNIT #282	5350	25	11	32.66849	-103.15238
3002528337	SOUTH HOBBS G/SA UNIT #133	5350	18	8	32.69154	-103.14239
3002523415	SOUTH HOBBS G/SA UNIT #086	5350	1	0	32.67392	-103.13950

Appendix 5:

List of Hobbs Area Produced Gas Injection Wells (Active) and 100 and 500 ppm

API Number	Description / Well Number	H2S (ppm)	100 ppm ROE (ft)	500 ppm ROE (ft)	Latitude	Longitude
3002507077	NORTH HOBBS G/SA UNIT #111	9880	668	305	32.72480	-103.19512
3002507358	NORTH HOBBS G/SA UNIT #112	9880	521	238	32.73752	-103.19297
3002529063	NORTH HOBBS G/SA UNIT #112	9880	668	305	32.72515	-103.19194
3002529064	NORTH HOBBS G/SA UNIT #113	9880	668	305	32.72211	-103.19556
3002505476	NORTH HOBBS G/SA UNIT #121	9880	668	305	32.73574	-103.21021
3002507361	NORTH HOBBS G/SA UNIT #131A	9880	668	305	32.73206	-103.19512
3002505484	NORTH HOBBS G/SA UNIT #131	9880	521	238	32.73207	-103.20914
3002507481	NORTH HOBBS G/SA UNIT #131	9880	521	238	32.71751	-103.19513
3002505437	NORTH HOBBS G/SA UNIT #141	9880	521	238	32.74209	-103.21130
3002527138	NORTH HOBBS G/SA UNIT #142	9880	668	305	32.72900	-103.19196
3002529129	NORTH HOBBS G/SA UNIT #212	9880	668	305	32.73679	-103.20496
3002526833	NORTH HOBBS G/SA UNIT #222	9880	668	305	32.72166	-103.19167
3002528555	NORTH HOBBS G/SA UNIT #223	9880	668	305	32.72084	-103.18838
3002507362	NORTH HOBBS G/SA UNIT #231	9880	668	305	32.73205	-103.18868
3002505471	NORTH HOBBS G/SA UNIT #231	9880	668	305	32.73209	-103.22314
3002529172	NORTH HOBBS G/SA UNIT #232	9880	668	305	32.73258	-103.19160
3002526935	NORTH HOBBS G/SA UNIT #232	9880	668	305	32.71501	-103.19175
3002528942	NORTH HOBBS G/SA UNIT #233	9880	668	305	32.71791	-103.19139
3002505436	NORTH HOBBS G/SA UNIT #241	9880	668	305	32.74208	-103.20701
3002507364	NORTH HOBBS G/SA UNIT #241	9880	668	305	32.72661	-103.18868
3002526832	NORTH HOBBS G/SA UNIT #242	9880	668	305	32.72929	-103.20496
3002528886	NORTH HOBBS G/SA UNIT #242	9880	668	305	32.71172	-103.19165
3002507369	NORTH HOBBS G/SA UNIT #311	9880	521	238	32.73664	-103.18677
3002529130	NORTH HOBBS G/SA UNIT #312	9880	668	305	32.74024	-103.20474
3002505463	NORTH HOBBS G/SA UNIT #321	9880	668	305	32.73576	-103.21880
3002505488	NORTH HOBBS G/SA UNIT #331	9880	521	238	32.72934	-103.20050
3002507472	NORTH HOBBS G/SA UNIT #331	9880	668	305	32.71758	-103.18675
3002529195	NORTH HOBBS G/SA UNIT #332	9880	668	305	32.72963	-103.18749
3002528954	NORTH HOBBS G/SA UNIT #332	9880	668	305	32.71795	-103.18444
3002528955	NORTH HOBBS G/SA UNIT #333	9880	668	305	32.71501	-103.18713
3002505475	NORTH HOBBS G/SA UNIT #341	9880	668	305	32.72846	-103.21878
3002507342	NORTH HOBBS G/SA UNIT #342	9880	668	305	32.74115	-103.18677
3002512783	NORTH HOBBS G/SA UNIT #411	9880	668	305	32.73938	-103.21451
3002528414	NORTH HOBBS G/SA UNIT #413	9880	521	238	32.73695	-103.19686
3002528879	NORTH HOBBS G/SA UNIT #414	9880	668	305	32.74023	-103.20035
3002505478	NORTH HOBBS G/SA UNIT #422	9880	668	305	32.73390	-103.19727

3002526933	NORTH HOBBS G/SA UNIT #422	9880	668	305	32.72145	-103.20042
3002505445	NORTH HOBBS G/SA UNIT #431	9880	668	305	32.74476	-103.19943
3002505467	NORTH HOBBS G/SA UNIT #431	9880	668	305	32.73208	-103.21449
3002505492	NORTH HOBBS G/SA UNIT #431	9880	521	238	32.71752	-103.19727
3002529073	NORTH HOBBS G/SA UNIT #432	9880	668	305	32.73253	-103.20036
3002528957	NORTH HOBBS G/SA UNIT #432	9880	668	305	32.71737	-103.17982
3002512732	NORTH HOBBS G/SA UNIT #441	9880	668	305	32.74116	-103.19726
3002505499	NORTH HOBBS G/SA UNIT #441	9880	668	305	32.71389	-103.19728
3002528878	NORTH HOBBS G/SA UNIT #442	9880	668	305	32.74355	-103.19690
3002529098	NORTH HOBBS G/SA UNIT #442	9880	668	305	32.72917	-103.19685
3002528959	NORTH HOBBS G/SA UNIT #444	9880	668	305	32.71175	-103.18331
3002538114	NORTH HOBBS G/SA UNIT #518	9880	668	305	32.74100	-103.19283
3002536286	NORTH HOBBS G/SA UNIT #536	9880	668	305	32.71293	-103.18710
3002537152	NORTH HOBBS G/SA UNIT #622	9880	668	305	32.73254	-103.20464
3002537446	NORTH HOBBS G/SA UNIT #633	9880	668	305	32.73394	-103.18384
3002537101	NORTH HOBBS G/SA UNIT #637	9880	668	305	32.73677	-103.20092
3002544396	NORTH HOBBS G/SA UNIT #654	9880	668	305	32.73604	-103.21756
3002543841	NORTH HOBBS G/SA UNIT #657	9880	668	305	32.73980	-103.20362
3002543842	NORTH HOBBS G/SA UNIT #658	9880	668	305	32.73980	-103.20339
3002543078	NORTH HOBBS G/SA UNIT #659	9880	668	305	32.74012	-103.20176
3002544408	NORTH HOBBS G/SA UNIT #665	9880	668	305	32.73357	-103.21411
3002543605	NORTH HOBBS G/SA UNIT #666	9880	668	305	32.73789	-103.20689
3002543606	NORTH HOBBS G/SA UNIT #667	9880	668	305	32.73783	-103.20689
3002543074	NORTH HOBBS G/SA UNIT #668	9880	668	305	32.73437	-103.19830
3002543039	NORTH HOBBS G/SA UNIT #669	9880	668	305	32.73436	-103.19814
3002544826	NORTH HOBBS G/SA UNIT #674	9880	668	305	32.72746	-103.21082
3002544828	NORTH HOBBS G/SA UNIT #676	9880	668	305	32.72521	-103.20589
3002543579	NORTH HOBBS G/SA UNIT #678	9880	668	305	32.73147	-103.20873
3002543040	NORTH HOBBS G/SA UNIT #679	9880	668	305	32.73430	-103.19830
3002543073	NORTH HOBBS G/SA UNIT #680	9880	668	305	32.73429	-103.19798
3002543580	NORTH HOBBS G/SA UNIT #686	9880	668	305	32.73142	-103.20444
3002543038	NORTH HOBBS G/SA UNIT #687	9880	668	305	32.72774	-103.20096
3002537480	NORTH HOBBS G/SA UNIT #741	9880	668	305	32.72472	-103.20040
3002540859	NORTH HOBBS G/SA UNIT #945	9880	668	305	32.73375	-103.18271
3002542456	NORTH HOBBS G/SA UNIT #950	9880	668	305	32.74128	-103.18287
3002542478	NORTH HOBBS G/SA UNIT #952	9880	668	305	32.74250	-103.18677
3002542469	NORTH HOBBS G/SA UNIT #953	9880	668	305	32.74252	-103.18345
3002542776	NORTH HOBBS G/SA UNIT #959	9880	668	305	32.74283	-103.18677
3002505477	NORTH HOBBS G/SA UNIT #111	9880	665	304	32.73937	-103.21021
3002543840	NORTH HOBBS G/SA UNIT #960	9880	668	305	32.73698	-103.18461
3002528343	SOUTH HOBBS G/SA UNIT #140	7490	562	257	32.6861725	-103.1580429

3002528344	SOUTH HOBBS G/SA UNIT #141	7490	562	257	32.6861534	-103.153656
3002528345	SOUTH HOBBS G/SA UNIT #142	7490	562	257	32.6856918	-103.149292
3002528356	SOUTH HOBBS G/SA UNIT #153	7490	562	257	32.68617	-103.15804
3002528357	SOUTH HOBBS G/SA UNIT #154	7490	562	257	32.68615	-103.15366
3002528358	SOUTH HOBBS G/SA UNIT #155	7490	562	257	32.68569	-103.14929
3002528359	SOUTH HOBBS G/SA UNIT #156	7490	562	257	32.67905	-103.15696
3002528982	SOUTH HOBBS G/SA UNIT #188	7490	562	257	32.67887	-103.15335
3002529085	SOUTH HOBBS G/SA UNIT #189	7490	562	257	32.67891	-103.14996
3002529082	SOUTH HOBBS G/SA UNIT #190	7490	562	257	32.67833	-103.14594
3002528983	SOUTH HOBBS G/SA UNIT #191	7490	562	257	32.68621	-103.17333
3002542593	SOUTH HOBBS G/SA UNIT #252	7490	562	257	32.68673	-103.17013
3002542594	SOUTH HOBBS G/SA UNIT #253	7490	562	257	32.68641	-103.16568
3002542595	SOUTH HOBBS G/SA UNIT #254	7490	562	257	32.68645	-103.16080
3002542596	SOUTH HOBBS G/SA UNIT #255	7490	562	257	32.68867	-103.15985
3002542647	SOUTH HOBBS G/SA UNIT #256	7490	562	257	32.68867	-103.15968
3002542646	SOUTH HOBBS G/SA UNIT #257	7490	562	257	32.68867	-103.15952
3002542648	SOUTH HOBBS G/SA UNIT #258	7490	562	257	32.68868	-103.15930
3002542697	SOUTH HOBBS G/SA UNIT #259	7490	562	257	32.68812	-103.14693
3002542696	SOUTH HOBBS G/SA UNIT #260	7490	562	257	32.68812	-103.14677
3002543103	SOUTH HOBBS G/SA UNIT #263	7490	570	260	32.68812	-103.14661
3002543096	SOUTH HOBBS G/SA UNIT #264	7490	570	260	32.68766	-103.14661
3002543104	SOUTH HOBBS G/SA UNIT #267	7490	570	260	32.68766	-103.14677
3002543100	SOUTH HOBBS G/SA UNIT #268	7490	570	260	32.68748	-103.15931
3002544608	SOUTH HOBBS G/SA UNIT #274	7490	562	257	32.68750	-103.15899
3002544609	SOUTH HOBBS G/SA UNIT #275	7490	562	257	32.68164	-103.15984
3002544311	SOUTH HOBBS G/SA UNIT #277	7490	562	257	32.68160	-103.15595
3002544610	SOUTH HOBBS G/SA UNIT #288	7490	562	257	32.67725	-103.14140
3002544611	SOUTH HOBBS G/SA UNIT #289	7490	562	257	32.67718	-103.14140
3002544612	SOUTH HOBBS G/SA UNIT #290	7490	562	257	32.67189	-103.15039
3002544312	SOUTH HOBBS G/SA UNIT #291	7490	562	257	32.69162	-103.18139
3002544313	SOUTH HOBBS G/SA UNIT #292	7490	562	257	32.68836	-103.17552
3002528343	SOUTH HOBBS G/SA UNIT #140	7490	562	257	32.68892	-103.17112
3002528344	SOUTH HOBBS G/SA UNIT #141	7490	562	257	32.68650	-103.18396
3002528345	SOUTH HOBBS G/SA UNIT #142	7490	562	257	32.68822	-103.17552
3002528356	SOUTH HOBBS G/SA UNIT #153	7490	562	257	32.68617	-103.15804
3002528357	SOUTH HOBBS G/SA UNIT #154	7490	562	257	32.68615	-103.15366
3002528358	SOUTH HOBBS G/SA UNIT #155	7490	562	257	32.68569	-103.14929
3002528359	SOUTH HOBBS G/SA UNIT #156	7490	562	257	32.67905	-103.15696
3002528982	SOUTH HOBBS G/SA UNIT #188	7490	562	257	32.67887	-103.15335
3002529085	SOUTH HOBBS G/SA UNIT #189	7490	562	257	32.67891	-103.14996
3002529082	SOUTH HOBBS G/SA UNIT #190	7490	562	257	32.68641	-103.16568

3002528983	SOUTH HOBBS G/SA UNIT #191	7490	562	257	32.68645	-103.16080
3002542593	SOUTH HOBBS G/SA UNIT #252	7490	562	257	32.68867	-103.15985
3002542594	SOUTH HOBBS G/SA UNIT #253	7490	562	257	32.68867	-103.15968
3002542595	SOUTH HOBBS G/SA UNIT #254	7490	562	257	32.68867	-103.15952
3002542596	SOUTH HOBBS G/SA UNIT #255	7490	562	257	32.68868	-103.15930
3002542647	SOUTH HOBBS G/SA UNIT #256	7490	562	257	32.68812	-103.14693
3002542646	SOUTH HOBBS G/SA UNIT #257	7490	562	257	32.68812	-103.14677
3002542648	SOUTH HOBBS G/SA UNIT #258	7490	562	257	32.68812	-103.14661
3002542697	SOUTH HOBBS G/SA UNIT #259	7490	562	257	32.68766	-103.14661
3002542696	SOUTH HOBBS G/SA UNIT #260	7490	562	257	32.68766	-103.14677
3002543103	SOUTH HOBBS G/SA UNIT #263	7490	570	260	32.68748	-103.15931
3002543096	SOUTH HOBBS G/SA UNIT #264	7490	570	260	32.68750	-103.15899
3002543104	SOUTH HOBBS G/SA UNIT #267	7490	570	260	32.68164	-103.15984
3002543100	SOUTH HOBBS G/SA UNIT #268	7490	570	260	32.68160	-103.15595
3002544608	SOUTH HOBBS G/SA UNIT #274	7490	562	257	32.67725	-103.14140
3002544609	SOUTH HOBBS G/SA UNIT #275	7490	562	257	32.67718	-103.14140
3002544311	SOUTH HOBBS G/SA UNIT #277	7490	562	257	32.67189	-103.15039
3002544610	SOUTH HOBBS G/SA UNIT #288	7490	562	257	32.69162	-103.18139
3002544611	SOUTH HOBBS G/SA UNIT #289	7490	562	257	32.68836	-103.17552
3002544612	SOUTH HOBBS G/SA UNIT #290	7490	562	257	32.68892	-103.17112
3002544312	SOUTH HOBBS G/SA UNIT #291	7490	562	257	32.68650	-103.18396
3002544313	SOUTH HOBBS G/SA UNIT #292	7490	562	257	32.68822	-103.17552

Section V. Emergency Telephone Lists

This current H2S Contingency Plan is sent annually to the following:

- **Carl Chavez: CHMM, NMOCD Santa Fe, NM, (505) 476-3490**
- **Manny Gomez: Fire Chief Hobbs FD Hobbs NM, (575) 392-9265**
- **Lorenzo Velasquez: Department of Homeland Security, Hobbs NM, ((575) 391-2961**
- **John Ortolano: Police Chief, Hobbs PD, Hobbs NM, (575) 397-9265**
- **Gene Strickland: Hobbs School Dean, Hobbs NM, (575) 433-0100**
- **Oxy: Plants HSE, Production HES, Surface Lead, HSE Team Lead, workover/completions Specialist,**
- **Emergency Manager, Hobbs EOR HSE Advisor, Hobbs EOR Asset Lead**

OXY Permian Emergency Answering Service

Midland Call Center	**575-392-8200**

FIELD OPERATIONS
EMERGENCY CALL-OUT LIST

Kris Allen Surface Lead	**Office Cell**	**575-397-8220 575-318-4763**
Alternate: Scott Hodges Lead Asset Manager Hobbs, NM	**Office Cell**	**575-397-8211 432-238-4405**
Alternate: Tony Aguilar HSE Advisor	**Office Cell**	**575-397-8251 575-390-6312**
Alternate: Kris Allen Surface Lead	**Office Cell**	**575-397-8220 575-318-4763**
Joshua Schut Leader Down Hole	**Office Cell**	**575-397-8207 701-690-7053**
Steven Sparks Logistic Coordinator	**Office Cell**	**806-592-6482 806-598-1144**
Nick Reid Logistic Coordinator	**Office Cell**	**806-592-6420 806-891-1476**
Alfredo Ceniceros Workover/Completion Specialist Senior	**Office Cell**	**806-592-6715 806-215-2385**
Merritt Talbott Mgr Comm & Public Affairs	**Office Cell**	**713-552-8676 512-964-4718**
Eric Moses Sr Dir Com & Public Affairs	**Office Cell**	**713-497-2017 310-710-0743**
Brent Raif FDEP Construction Specialist	**Cell**	**832-623-5299**
Jared Tucker Well Performance Specialist	**Office Cell**	**575-397-8223 575-499-4992**

Justin Saxon **Leader Well Surveillance**	**Office** **Cell**	**575-397-8206** **806-215-3636**
Command Center- Field	**Office**	**575-391-4727**
Command Center: Plant	**Office**	**575-391-4728**

PLANT OPERATIONS NHU/SHU RCF
EMERGENCY CALL-OUT LIST – Fax 806-592-7355

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
Jason Sisson	Lead Plant	NA	432-758-8640	806-549-3957
Ricard Alvarado	HSE Ops Specialist	NA	432-758-6808	432-209-2659
Jason Cary	HSE Specialist		432-758-8608	806-620-5501
Carl Morales	HES Team Lead		432-699-8397	325-207-3374
Richard Sanders	Operation Team Lead		575-391-4731	806-893-2233
Sarah Chaffin	Senior Counsel		713-513-6681	713-471-9129
Merritt Talbott	Mgr. Comm. & Public Affairs		713-552-8676	512-964-4718
Eric Moses	Sr Dir Com & Public Affairs		713-497-2017	310-710-0743

ENGINEERING SUPPORT

Name	Title	Office Phone	Home	Cellular
Greg Vencil	**Leader Facility Engineer**	**713-366-5110**	**NA**	**713-560-8064**
Chris Frei	**Engineer Sr. Facility**	**806-597-7363**	**NA**	**806-215-5772**
Braden Pate	**Engineer Process Sr.**	**432-699-4289**	**NA**	**281-896-6355**

HES SUPPORT PERSONNEL

Mark Gary **HES Team Lead**	**Office** **Cell**	**432-699-8374** **806-281-8919**

OXY PERMIAN HOBBS/HOUSTON OFFICE

Scott Hodges **Manager Asset** **Hobbs**	**Office** **Cell**	**575-397-8211** **432-238-4405**
Doug Fife **HES Mgr.** **Houston Greenway**	**Office in Midland** **Cell** **Office in Houston**	**713-366-5650** **432-254-0225** **713-366-0225**
Ryan Radicioni **Director Business Area** **EOR**	**Office** **Cell**	**713-215-7895** **832-580-8333**

OXY PERMIAN HOUSTON OFFICE

Robert Peterson **President and General** **Manager Permian EOR**	**Office** **Cell**	**713-366-5149** **972-693-6428**
Ryan Radicioni **Director Business Area** **EOR**	**Office** **Cell**	**713-215-7895** **832-580-8333**
Doug Fife **HES Mgr.**	**Office** **Cell**	**713-366-5650** **432-254-0225**

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 Hobbs NM 88240 Dispatch Ctr. Response	888-538-6498 or 575-392-0109
AEROCARE Methodist Hospital Lubbock, Texas - Aerocare will respond to a call from any OXY personnel. ***ETA Lubbock to Hobbs 42 minutes. (Seminole Based)***	1-800-627-2376

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 575-397-9265
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, Hobbs, NM	575-391-2961 Office 575-397-7413 Fax 575-605-6561 Cell
OEM – Charlie Pruitt	575-725-8633

AIRPORTS

CITY	PHONE NO.
Lea County Airport - Carlsbad Hwy	575-393-6612
Lubbock Preston Smith International Airport	806-775-2044
Midland International Airport	432-560-2200

POISON CONTROL

POISON CONTROL CENTER	1-800-432-6866

CHEMTREC	1-800-424-9300

District Manager NM Baker Hughes	575-390-8193

HOBBS EOR AREA OPERATIONAL PERSONNEL

EMPLOYEE	CELL PHONE NUMBERS	HOME PHONE NUMBERS
Daniel Schmitt	432-209-9976	NA
Henson, Willie	575-942-1928	NA
King, Jimmy	575-390-0068	NA
Michael Rendon	806-592-6201	NA
Jerry Velasquez	575-631-9054	NA
Baeza, Carlos	575-390-7879	NA
Kelcee Elston	575-390-3626	NA
Timothy Lowe	575-390-7214	NA
Daniel Tucker	575-499-4992	NA
Kris Allen	575-318-4763	NA
Robert Ross	575-390-6360	
Kyle Martin	575-631-0272	NA
Donald Higgins	575-631-9886	NA
Stanley Pridgen	469-417-8948	
Hobbs Area Night Rider Joe Wilks	432-664-8155	NA
Hobbs Area Night rider Juan Aguilar	432-582-5895	NA

Hobbs Treating Facility

Name	Title	Residence Phone	Office Phone	Cellular or Phone patch or Pager
Ricky Sanders	Plant Team Lead	NA	575-391-4731	806-893-2233
Richard Alvarado	HSE Specialist	NA	432-758-6808	432-209-2659
Jason Cary	HSE Specialist	NA	432-758-8608	806-620-5501
RCF Command Center	Office		575-391-4728	

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 1		806-592-6325	806-332-8710
Dillon Hart	Measurement Tech 1			806-215-5531
Todd King	Ops Team Lead		806-592-6274	806-215-0183

CORPORATE SECURITY

Security Representative		
Jim Myers	Office	713-366-5897
Vice President of Security	Cell/Pager	310-739-8763
Alternate	Office	713-215-7157
Frank Munoz	Cell/pager	818-203-2334
Manager Security		
Jerry Byrne		
Manager Security	Office	432-685-5740
	Cell/Pager	432-638-4750
Orlando Munoz		
Sr. Security Investigator	Office	713-350-4861
	Cell/Pager	956-457-1444
Rene Medina		
Security Svcs Investigator	Cell	575-993-2111
Nicolas Jimenez	Cell	575-605-2419
Coord Security Svcs		

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

CONTRACTOR SUPPORT

ELECTRIC SERVICE COMPANIES

COMPANY NAME	PHONE NUMBER(S)
TESSCO Hobbs NM	575-392-2008
Klein Electric – Hobbs, NM	575-393-3167 24 hour
Pyramid Automations/Electrical	432-661-1013

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
Globe Trucking Answering Service	575-391-8858

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
TexMex Rentals LLC – Hobbs, NM	575-492-0888

DIRT WORK EQUIPMENT

Banta Oilfield Service – Hobbs, NM	575-393-3875 24 hour
GCI – Hobbs, NM	575-397-4541 24 hour
Dirt Works	575-631-8866
TexMex Rentals LLC – Hobbs, NM	575-492-0888

WELDERS

Custom Welding - Hobbs, NM	575-393-5904 24 hour
M3 Roustabout Services Denver City TX	806-215-7631
Smith & Sons Hobbs, NM	575-631-5045 or 575-631-6407

SAFETY EQUIPMENT

DXP - Indian Fire and Safety – Hobbs, NM	575-393-3093 24 hour
Legacy Safety – Hobbs, NM	575-393-7233

CO2 SUPPLY

Trinity Pipeline	432-297-1004 24 hour
Billy Trull	432-661-1412
Ty Houston	432-528-7886

OUTSIDE PRODUCING COMPANIES

Apache Corp	**Office Phone** **Answering Service**	**575-394-2743** **1-888-257-6840**
Chevron	**Answering Service**	**Not Available**
CHI Operating	**Emergency Number**	**575-748-1691 24 hour**
Chi Operating	**Sunny Mann**	**432-634-7062**
Conoco/Phillips Pipeline	**Supply/Transportation Goldsmith**	**800-332-9449**
DCP Midstream	**Office Phone After Hours** **Linam Office**	**800-847-6427** **575-391-5793**
Targa	**Office** **Chris Price** **Raul Gibson**	**575-393-2823** **575-602-6005** **432-308-9288**
Enterprise (NGL Line from RCF)	**Chaparral Pipeline Emergency Number**	**1-800-666-0125**
Equilon Shell	**Office Phone**	**Not Available**
Intrepid Operating	**Emergency Number**	**432-699-4304**
Legacy Reserves	**Call for Emergency** **Manuel Sorino Production/Foreman**	**432-269-8806**
NNG (RCF Fuel Gas)	**Emergency Number**	**1-888-367-6671**
Texland Petroleum	**Levelland Emergency After Hours (24 Hours)** **Raul Alvarado Operator** **Ronnie McCracken Foreman**	**806-894-4316** **806-781-5625** **432-894-1466**
Trinity Pipeline (CO2) Supply	**Emergency/office Number** **Ty Houston** **Billy Trull**	**432-297-1004** **432-528-7886** **432-661-1412**
Zia Natural Gas	**Office/Emergency**	**575-392-4277**
Plains Pipeline	**24 hr Answering Serv.** **Tony Puckett Director of Regulatory Safety**	**800-708-5071** **713-306-3298**