EIKON
TRANSFORMING VISION TO REALITY
500 Moseley Road | Crossroads, Texas 76227 | (940) 387-0805

FILED AT _____ M
MAY 05 2023
ALISON HALEY
COUNTY CLERK, MIDLAND COUNTY, TEXAS
By CRISTELLA GONZALEZ Deputy

May 1, 2023

Alison Haley
County Clerk
500 N Loraine Street, 4th Floor
Midland, TX 79701

RE: Notice of Application for a Permit to Operate a Reclamation Plant

Dear County Clerk,

Moonshine Energy, LLC (Moonshine) will be filing an application with the Railroad Commission of Texas (RRC) for a Permit to Operate a Reclamation Plant to reclaim oil from nonhazardous oilfield waste materials through the process of gravity and thermal separation.

The proposed reclamation plant is located in Midland, Midland County, Texas. The northern portion of the plant is in the M. Murphy & M. M. Griffin Survey, Abstract No. 1165 and the southern portion of the plant is in the H. R. Wells Survey, Abstract No. 758. The proposed reclamation plant is located on real property owned by AES Drilling Fluids, LLC.

Affected persons may protest this application. Protests must be in writing and must be received by the 15th day after the date of this notice, which means protests should be received by May 16, 2023. Protests must be sent to:

Technical Permitting Section
Oil and Gas Division
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711
(Telephone 512-463-3840)

Sincerely,

Eric Crews

Eric Crews
Project Manager
EIKON Consulting Group, LLC | Texas Firm F-12759

Attached herein is a copy of the application, including all attachments.

APPLICATION FOR

PERMIT TO OPERATE A RECLAMATION PLANT

(R-9)

PREPARED FOR:

MOONSHINE ENERGY, LLC
3503 EDGEMONT DRIVE
MIDLAND, TEXAS 79707
PHONE: (432) 269-3789

SITE LOCATION:

LATITUDE: 32.025975°
LONGITUDE: -102.018982°
MIDLAND COUNTY, TEXAS

PREPARED BY:

EIKON

500 MOSELEY ROAD
CROSS ROADS, TEXAS 76227
PHONE: (940) 387-0805
WWW.EIKONCG.COM
TEXAS FIRM F-12759

May 1, 2023

EIKON
TRANSFORMING VISION TO REALITY
500 Moseley Road | Crossroads, Texas 76227 | (940) 387-0805

May 1, 2023

Railroad Commission of Texas
Oil & Gas Division, Technical Permitting
1701 N. Congress Avenue
P.O. Box 12967
Austin, TX 78711-2967

Copy: RRC – District 8
10 Desta Dr, Suite 500 E
Midland, TX 79705

Dear Technical Permitting,

EIKON Consulting Group, LLC, on behalf of Moonshine Energy, LLC, is respectfully submitting to the Railroad Commission of Texas an application for a permit to operate a reclamation plant in Midland County, Texas. This document includes the following attachments:

1. Form R-9
2. Process Description & SDS
3. Schematic Diagram & Radius Map
4. Closure Cost Estimate
5. Notifications
6. Lease
7. Maps, Diagrams, Specifications, & SPCC Draft

Thank you for your assistance with this pit permit application. Once you have had a chance to review this information, please do not hesitate to contact us at (940) 387-0805 if you have any questions or require further clarifications regarding this application.

Sincerely,

Eric Crews

Eric Crews
Project Manager
EIKON Consulting Group, LLC | Texas Firm F-12759

ATTACHMENT - 1

FORM R-9

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

READ INSTRUCTIONS ON BACK

APPLICATION FOR PERMIT TO OPERATE A RECLAMATION PLANT

R-9
2/7/90

DRAFT

1. OPERATOR NAME, exactly as shown on P-5, Organization Report	2. OPERATOR P-5 NO.	3. RRC DISTRICT NO.	4. COUNTY OF PLANT LOCATION
Moonshine Energy, LLC	100379	08	Midland

5. OPERATOR ADDRESS, including city, state, and zip code
3503 Edgemont Drive
Midland, TX 79707

6. PURPOSE OF FILING
☒ New permit for new facility. Estimated completion date: July 2023
☐ New permit for existing facility. Name of previous operator: _____
☐ One-time renewal of existing permit serial/registration (R-2) no. _____

7. TYPE OF FACILITY ☒ Permanent ☐ Portable

8. Driving directions from the nearest town (identify town).
From Midland, head east on W Wall St for 0.4 miles. Slight left onto I-20BL E/E Front St and continue to follow I-20BL E for 3.5 miles. Turn left onto N County Rd 1150/Elkins Rd. In 180 feet, turn right at the 1st cross street onto I-20 Frontage Rd. In 423 feet, the facility will be on the left (Lat. 32.025975, Long. -102.018982).

9. Brief description of treating process.
See Attachment 2 for the process description.

10. Material transported to plant in: (see Inst. No. 6) ☐ vehicles owned by applicant ☐ for-hire vehicles ☒ both applicant's and for-hire vehicles

11. Identify all oil and/or gas-related facilities located within 100 yards of facility. (example: well, pipeline, saltwater disposal facility, tank battery, etc.)

TYPE OF FACILITY	OPERATOR	TYPE OF FACILITY	OPERATOR
Crude Oil Transmission Line	Plains Pipeline L.P.	Crude Oil Transmission Lines	Enterprise Crude Pipeline LLC
Crude Oil Gathering Line	Plains Marketing L.P.		

CERTIFICATION. I certify under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that it was prepared by me or under my supervision and direction, and that the data and facts stated herein are true, correct, and complete to the best of my knowledge.

SIGNATURE _____ Managing Member (TITLE)

Sarah Presley (NAME (print or type)) (432) 269-3789 (PHONE) 04/05/2023 (DATE)

TO BE COMPLETED BY RAILROAD COMMISSION PERSONNEL

This permit is valid until cancellation under either of the following conditions:

1. The above named operator requests cancellation in writing, or
2. The commission cancels the permit after notice and opportunity for hearing because
   a. the permit facility has been inactive for 12 months, or
   b. there has been a violation or a violation is threatened of any provision of the permit, the conservation laws of the state, or rules or orders of the Commission.

This permit is non-transferable. The financial assurance filed in support of this application shall be renewed and continued in effect until its conditions have been met or release is authorized by the Commission. The facility schematic diagram is to be kept with this permit. Permit and diagram are to be kept at facility.

Serial/registration no. _____ is issued/renewed effective _____ (date)

by _____ (Signature of RRC representative) _____ (Name (type or print)) _____ (Phone No.)

RAILROAD COMMISSION OF TEXAS

ALL WASTES GENERATED BY RECLAIMING OPERATIONS SHALL BE DISPOSED OF IN ACCORDANCE WITH STATEWIDE RULES, 8, 9, AND 46 (RELATING TO WATER PROTECTION, DISPOSAL WELLS, AND FLUID INJECTION)

INSTRUCTIONS
FORM R-9: APPLICATION FOR PERMIT TO OPERATE A RECLAMATION PLANT

REFERENCE: STATEWIDE RULES 57 and 85

1. FORM P-5, ORGANIZATION REPORT. Before this application can be processed, you must have an active Form P-5, Organization Report, on file with the Commission in Austin. In addition, if your organization is a corporation, a certification that your franchise tax payment is current is also required.

2. R-9 FILING. File the original of your application and attachments with:

   Railroad Commission of Texas
   Oil and Gas Division - Production Allocation
   P. O. Drawer 12967 - Capitol Station
   Austin, Tx 78711-2967

   At the same time, file a copy of the R-9 and the schematic diagram with the Commission district office of the facility location.

3. ATTACHMENTS. Your application must include the following attachments:

   - **schematic diagram** showing the proposed or existing facility, including the location and identification of all treating equipment and tanks with tank capacity noted. Also, show the location of all oil and/or gas-related facilities located within 100 yards of the facility as identified in No. 11 on front.

   - **a bond or letter** of credit in commission –approved format* for the amount of $100,000 with attached power of attorney. See No. 4 below.

   - **proof of publication** of the notice of application, if this application is for a new permit rather than one-time renewal of an existing permit. See No. 5 below.

4. FINANCIAL ASSURANCE. As a condition of the permit to operate a reclamation plant, you are required to submit, renew, and continue in effect a bond or letter of credit in commission-approved format in the amount of $100,000. Prior to the expiration of your financial assurance, you will be sent a renewal notice. In a limited set of circumstances a lesser amount may be accepted. However, you must be able to clearly show that amount will be sufficient to operate and close the facility site in accordance with state law, commission rules, and the conditions of the permit. File your bond or letter of credit in the lesser amount and attach a letter including a complete justification to your application. Include a copy of that letter with your district office filing.

5. NOTICE. When applying for a new permit, you are to give the following notices of the application prior to or at the same time as filing the application with the Commission:

   - mail or deliver a copy of the permit application to the county clerk of the county of facility location and, if the facility is located within the corporate limits of the city, the city clerk.

   - publish notice of the application in commission-approved form* once in a newspaper of general circulation for the county of the facility.

6. TRANSPORTATION OF MATERIAL. Trucks transporting material to the reclamation facility on a "for hire" basis must be permitted by the Railroad Commission's Transportation/Gas Utilities Division.

7. MONTHLY REPORTING. Each month, file a Form R-2, Monthly Report for Reclaiming and Treating Plants, according to the instructions on the reverse of that form.

* Available from the Commission's Supply Department at the above address.

ATTACHMENT - 2

PROCESS DESCRIPTION & SDS

EIKON

PROCESS DESCRIPTION

Waste Receipt

The waste hauling vehicles will connect their offloading hoses to the facility frac tank load lines equipped with PCC load line containers. The hauling vehicles delivering waste to the facility will be properly manifested and approved prior to acceptance at the site. The vehicle and waste data will be entered into the facility computer at the facility office for proper tracking, reporting, and auditing of the records. Types of waste accepted at the site include tank bottoms and other non-hazardous and RCRA-exempt oil and gas wastes with reclaimable oil.

Separation Process

The offloaded waste will flow directly into the ten (10) 500-barrel BS&W frac tanks to begin the separation process. Condensates will be added to the frac tanks and the fluid in the frac tanks will remain undisturbed for two (2) hours to facilitate separation of water, oil, and emulsion. Afterward, the fluids will be pumped to the 80-barrel heater treater, which uses heat to reduce the oil's viscosity and helps break the emulsion. Once the separation process has been completed, the separated water will be pumped to the two (2) 750-barrel saltwater tanks and the separated oil will be pumped to the ten (10) 500-barrel oil tanks.

When sludge buildup in the tanks reaches 12 inches, the tanks will be emptied to remove the solids. The solids will be loaded into a roll-off box for disposal.

Separated Oil and Waste Storage

Separated water will remain in the two (2) 750-barrel saltwater tanks prior to being pumped out for disposal. Separated oil will remain in the ten (10) 500-barrel oil tanks prior to being sold to authorized oil marketers. Solids will remain in the tanks prior to being shoveled out for disposal.

Waste Disposal

Water will be pumped through the saltwater tank load lines equipped with a PCC load line containers to a permitted saltwater haul truck that will haul the water to a permitted saltwater disposal facility. Solids will be disposed of at a landfill permitted to accept oil and gas waste.

Safety Data Sheet

MOONSHINE

According to OSHA HCS 2012 (29 CFR 1910.1200)

Section 1: Identification

Product Identifier: **Condensate**

Other means of identification:
- Crude Oil Condensate Drips
- Natural Gas Condensates, C2-C8
- Sour Condensate
- Field Condensate
- Lease Condensate
- Gas Drip Condensate
- Plant Condensate
- Casinghead Gasoline

SDS Number: H4001

Intended Use: Water/Gas Separation

Uses Advised Against: All others

MOONSHINE ENERGY, LLC
3206 MA MAR AVENUE
Midland, TX 79705
(432) 269-3789

Emergency Health and Safety Number:
Calvin: 575-361-2730 (24 Hours)

Section 2: Hazards Identification

2.1 Classified Hazards:
H224 – Flammable Liquids – Category 1
H361– Suspected of damaging fertility or the unborn child
H315 – Skin corrosion/irritation – Category 2
H340 – May cause genetic defects
H373 – May cause damage to organs through prolonged or repeated exposure
H331 – Acute toxicity, Inhalation – Category 3
H336 – Specific target organ toxicity (single exposure) – Category 3
H350 – Carcinogenicity – Category 1A

Other Hazards: May contain or release poisonous hydrogen sulfide (H2S) gas

This product has not been tested by MOONSHINE ENERGY, LLC for specific health hazards. Therefore, the information provided in this section includes health hazard information based on the product components.

2.2 Label Elements:

Hazard Pictograms:

Signal Word: **DANGER!**

Hazard Statements:
Extremely Flammable Liquid and Vapor (H224)*
May cause genetic defects. (H340)

	Causes skin irritation (H315) Contains poisonous hydrogen sulfide gas, toxic if inhaled (H331) Toxic if inhaled (H331) May cause drowsiness or dizziness (H336) May cause damage to organs through prolonged or repeated exposure. (H373) Suspected of damaging fertility or the unborn child. (H361) May cause cancer. (H350)
Precautionary Statement(s):	Obtain special instructions before use. (P201)*
Prevention:	Do not handle until all safety precautions have been read and understood. (P202)* Keep away from heat, sparks, open flames, hot surfaces, NO SMOKING. (P210) Keep container tightly closed. (P233) Ground/bond container and receiving equipment. (P240) Use explosion-proof electrical, lighting, ventilating equipment. (P241) Use only non-sparking tools. (P242) Take precautionary measures against static discharge. (P243) Do not breathe mist, spray, vapors, dust, fumes, gas. (P260) Avoid breathing fume, gas, mist, spray, vapors. (P261) Wash hands thoroughly after handling. (P264) Use only outdoors in a well-ventilated area. (P271) Wear eye protection, protective clothing, protective gloves. (P280) If on skin: wash with plenty of water. Take off and wash all contaminated clothing before reuse. If irritation occurs, seek medical attention. (P302 +P303+P313+P352 +P362) If inhaled: remove persons to fresh air and keep comfortable for breathing. (P304 + P340) If exposed or concerned: get medical advice/attention. (P308 +P313) Call a doctor or POISON CENTER if you feel unwell. (P311 + P312) Follow specific treatment, see "First Aid Measures" in Section 4. (P321) In case of fire: use carbon dioxide (CO2), dry extinguishing powder to extinguish. (P370+P378)
Response:	Leaking gas fire: Do not extinguish unless leak can be stopped safely. (P377) Eliminate all ignition sources if safe to do so. (P381) Wear protective gloves / protective clothing / eye protection / face protection. (P280)* Use personal protective equipment as required. (P281)*
Storage:	Store in well-ventilated place. Keep container tightly closed. Keep cool. (P403+P233+P235) Store locked-up. (P405)
Disposal:	Dispose of contents/container to comply with applicable local, national, and international regulations. (P501)

**(Applicable GHS hazard code)*

Section 3: Composition/Information on Ingredients

Chemical Name	CASRN	Concentration[1]
Natural Gas Condensate (C2-C8)	68919-39-1	≤100%
n-Hexane	110-54-3	1-40%
Hydrogen Sulfide	7783-06-4	0.1–5%
Benzene	71-43-2	0.01-1%
Toluene	108-88-3	0.01-1%
Ethyl Benzene	100-41-4	0.01-1%
Xylenes	1330-20-7	0.01-1%

NOTE: Composition will vary with geographic location, geologic formation, temperature, and pressure.

1 All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Crude oil, natural gas, and natural gas condensate may contain minor amounts of sulfur, nitrogen, oxygen containing organic compounds and trace amounts of metals such as mercury, nickel, and vanadium. Composition can vary depending on source of crude.

Section 4: First Aid Measures

Eye Contact: For eye contact with product, remove contact lenses, if present. Hold eyelids apart and gently flush the affected eye(s) with lukewarm water. Seek immediate medical attention.

Skin Contact: May be harmful if absorbed through the skin. Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse.

Inhalation (Breathing): Toxic by inhalation. Can act as simple asphyxiant. May contain hydrogen sulfide gas which may be fatal if inhaled. Overexposure may lead to headache, nausea, drowsiness, dizziness, incoordination, light-headedness, blurred vision, pulmonary edema, labored breathing, central nervous depression leading to coma and respiratory arrest. If breathing is difficult, oxygen or artificial respiration should be administered by qualified personnel. Seek immediate medical attention.

Ingestion (Swallowing): Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms and effects:

Acute: Headache, drowsiness, dizziness, loss of coordination, disorientation, and fatigue.
Delayed: Dry skin and possible irritation with repeated or prolonged exposure.

Notes to Physician: At high concentrations hydrogen sulfide may produce pulmonary edema, respiratory depression, and/or respiratory paralysis. The first priority in treatment should be the establishment of adequate ventilation and the administration of 100% oxygen. Animal studies suggest that nitrites are a useful antidote, however, documentation of the efficacy of nitrites in humans is lacking. If the diagnosis of hydrogen sulfide poisoning is confirmed and if the patient does not respond rapidly to supportive care, the use of nitrites may be an effective antidote if delivered within the first few minutes of exposure. For adults the dose is 10 mL of a 3% sodium nitrite ($NaNO_2$) solution (0.5 gm $NaNO_2$ in 15 mL water) I.V. over 2-4 minutes. The dosage should be adjusted in children or in the presence of anemia, and methemoglobin levels, arterial blood gases, and electrolytes should be monitored closely.

Epinephrine and sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (e.g., in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

Federal regulations (29 CFR 1910.1028) specify medical surveillance programs for certain exposures to benzene above the action level or PEL (specified in Section (i) (1) (i) of the Standard). In addition, employees exposed in an emergency situation shall, as described in Section (i) (4) (i), provide a urine sample at the end of the shift for measurement of urine phenol.

Other Comments: Before attempting rescue, first responders should be alert to the possible presence of hydrogen sulfide, a poisonous gas with the smell of rotten eggs, and should consider the need for respiratory protection (see Section 8). Remove person to fresh air as quickly as possible. Immediately begin artificial respiration if breathing has ceased. Consider whether oxygen administration is needed. Obtain medical advice for further treatment.

Section 5: Fire-Fighting Measures

NFPA 704 Hazard Class

Health: 2 **Flammability:** 4 **Instability:** 0

0 (Minimal)
1 (Slight)
2 (Moderate)
3 (Serious)
4 (Severe)

Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Specific hazards arising from the material:

Unusual Fire & Explosion Hazards: Extremely flammable. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazards indoors, in confined spaces, outdoors, or in sewers. If container is not properly cooled, it can rupture in the heat of a fire. Hazardous combustion/decomposition products, including hydrogen sulfide may be released by this material when exposed to heat or fire. Use caution and wear protective clothing, including respiratory protection.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

Special protective actions for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. If this cannot be done, allow fire to burn. Move undamaged containers from immediate hazard area if it can be done safely. Stay away from ends of container. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading of burning liquid with water used for cooling purposes.

See Section 9 for flammable properties, including Flash Point and Upper and Lower Explosive Limits.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Extremely flammable. Spillages of liquid product will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Beware of accumulation of gas in low areas or contained areas, where explosive concentrations may occur. Prevent from entering drains or any place where accumulation may occur. Ventilate area and allow to evaporate. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down-wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards, handling and storage.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled materials from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use foam on spills to minimize vapors. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water, notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable

waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number: 800-424-8802).

Methods and material for Containment and Cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water, remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. All contaminated media used for the purpose of clean-up should be disposed of properly in accordance with all Federal, State, and Local regulations.

Section 7: Handling and Storage

Precautions for Safe Handling: Keep away from ignition sources such as heat/sparks/open flames – No smoking. Take precautionary measures against static discharge. Non-sparking tools should be used. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. May contain or release dangerous levels of hydrogen sulfide. Do not breathe vapors or mists. Use only outdoors or in well-ventilated areas. Wear protective gloves/clothing and eye/face protection. Wear respiratory protection. Wash thoroughly after handling. Use good personal hygienic practices and wear appropriate personal protective equipment (PPE). Extremely Flammable. May vaporize easily at ambient temperatures. The vapor is heavier than air and may create an explosive mixture of vapor and air. Beware of accumulation in confined spaces and low lying areas. Open container slowly to relieve any pressure. Electrostatic charge may accumulate and create a hazardous condition when handling or processing this material. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003 for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29 CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

Static Accumulation Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding of tanks, transfer piping, and storage tank level floats are necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Special care should be given to ensure that special slow load procedures for "switch loading" are followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA) 77, 'Recommended Practice on Static Electricity', and the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Conditions for safe storage: This material may contain or release poisonous hydrogen sulfide gas. In a tank, barge, or other closed container, the vapor space above this material may accumulate hazardous concentrations of hydrogen sulfide. Check atmosphere for oxygen content, hydrogen sulfide, and flammability prior to entry. Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post in area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. Avoid exposing any part of compressed-gas cylinder to temperatures above 125°F(51.6°C). Gas cylinders should be stored outdoors or in well ventilated storerooms at no lower than ground level and should be quickly removable in an emergency.

Section 8: Exposure Controls/Personal Protection

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
Natural Gas Condensate	TWA: 300 ppm (as gasoline)	500 ppm TWA 2000 mg/m^3 TWA as petroleum Distillates (Naphtha)(Rubber Solvent)	0.5 ppm TWA 8hr. (as benzene) 0.25 ppm TWA 12 hr. (as benzene) 2.5 ppm STEL (as benzene)
n-Hexane	TWA: 50 ppm Skin	TWA: 500 ppm TWA 1800 mg/m^3	TWA: 50 ppm
Hydrogen Sulfide	TWA: 1 ppm STEL: 5 ppm	TWA: 1000 ppm TWA: 1800 mg/m^3	TWA: 5 ppm 8hr TWA: 2.5 ppm 12hr STEL: 15ppm
Benzene	TWA: 0.5 ppm STEL: 2.5 ppm Skin	Ceiling: 25 ppm STEL: 5 ppm TWA: 1 ppm	TWA: .1 ppm
Toluene	TWA: 100 ppm	TWA: 100 ppm	TWA: 100 ppm
Ethyl benzene	TWA: 20 ppm	TWA: 100 ppm	TWA: 100 ppm
Xylene	TWA: 100 ppm	TWA: 100 ppm	TWA: 100 ppm

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye protection (such as splash goggles) that meets or exceeds ANSI Z87.1 is recommended when there is potential liquid contact to the eye. Depending on conditions of use, a face shield may be necessary.

Skin/Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls, or encapsulated suits. Suggested protective materials: Nitrilea

Respiratory Protection: A NIOSH approved, self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode should be used in situations of oxygen deficiency (oxygen content less than 19.5 percent), unknown exposure concentrations, or situations that are immediately dangerous to life or health (IDLH).

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

If benzene concentrations equal or exceed applicable exposure limits, OSHA requirements for personal protective equipment, exposure monitoring, and training may apply (29 CFR 1910.1028 - Benzene).

Workplace monitoring plans should consider the possibility that heavy metals such as mercury may concentrate in processing vessels and equipment presenting the possibility of exposure during various sampling and maintenance operations. Implement appropriate respiratory protection and the use of other protective equipment as dictated by monitoring results (See Sections 2 and 7).

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestion provided this Section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the

performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

Section 9: Physical and Chemical Properties

Data represent typical values and are not intended to be specifications. N/A = Not Applicable; N/D = Not Determined

Appearance: Colorless to Amber to Dark Brown	**Flash Point: < -50° F/-46°C.** Varies widely based on hydrocarbon content
Physical Form: Liquid	**Test Method:** Values provided are typical of similar products
Odor: Petroleum/Rotten egg/Sulfurous	**Initial Boiling Point/Range:** -20 to 800°F/-29 to 427°C. Varies widely based on hydrocarbon content
Odor Threshold: N/D	**Vapor Pressure:** 12-145 psia (Reid VP)
pH: N/A	**Partition Coefficient (n-octanol/water) (Kow):** N/D
Vapor Density (air=1): >1	**Melting/Freezing Point:** N/D
Upper Explosive Limits (vol % in air): 6.0	**Auto Ignition Temperature:** 590°F / 310°C
Lower Explosive Limits (vol % in air): <1.1	**Decomposition Temperature:** N/D
Evaporation Rate (nBuAc=1): >1	**Specific Gravity (water=1):** 0.6-0.8 @ 60°F (15.6°C)
Particle Size: N/A	**Bulk Density:** N/D
Percent Volatile: N/D	**Viscosity:** N/D
Flammability (solid, gas): Extremely Flammable	**Solubility in Water:** Negligible

Section 10: Stability and Reactivity

Stability: Stable under normal ambient and anticipated conditions of use.

Conditions to Avoid: Avoid high temperatures and all possible sources of ignition. Prevent vapor accumulation.

Material to Avoid (Incompatible Materials): Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous Decomposition Products: Not anticipated under normal conditions of use.

Hazardous Polymerization: Not known to occur.

Section 11: Toxicological Information

Information on Toxicological Effects of Substance/Mixture: Toxicological data does not exist for condensate mixtures as components vary widely. Toxicological Data is based on the components that may be present.

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	**If hydrogen sulfide gas is present – may be fatal if inhaled**	**May contain poisonous hydrogen sulfide gas. See signs and symptoms below**	**> 5.2mg/L**
Dermal	**Absorption through skin, eye contact**	**Benzene and aromatic hydrocarbons are known carcinogens**	**> 2g/kg**
Oral	**Ingestion is not anticipated**		**> 5 g/kg**

Aspiration Hazard: May be fatal if swallowed and enters airways.

Skin Corrosion/Irritation: May cause skin irritation.

Serious Eye Damage/Irritation: Causes eye irritation.

Symptoms of Overexposure: Effects of overexposure can include slight irritation of the respiratory tract, nausea, vomiting, and signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue). Continued exposure to high concentrations can result in vomiting, cardiac irregularities and sudden loss of consciousness.

This material contains hydrogen sulfide, a poisonous gas with the smell of rotten eggs. The smell disappears rapidly because of olfactory fatigue so odor may not be a reliable indicator of exposure. Effects of overexposure include irritation of the eyes, nose, throat and respiratory tract, blurred vision, photophobia (sensitivity to light), and pulmonary edema (fluid accumulation in the lungs). Severe exposures can result in nausea, vomiting, muscle weakness or cramps, headache, disorientation and other signs of nervous system depression, irregular heartbeats, convulsions, respiratory failure, and death.

Skin Sensitization: May cause skin irritation.

Respiratory Sensitization: May be fatal if inhaled.

Specific Target Organ Toxicity (Single Exposure): eyes, skin, respiratory system, central nervous system.

Specific Target Organ Toxicity (Repeated Exposure): eyes, skin, respiratory system, blood, central nervous system, liver, kidneys, bone marrow.

Carcinogenicity: May cause cancer based on component information.

Germ Cell Mutagenicity: Not expected to cause inheritable genetic effects.

Reproductive Toxicity: Certain components are known reproductive toxicants.

Toxicological Effects of Components

Natural Gas Condensate (C2-8)
Carcinogenicity: Two year inhalation studies of vaporized unleaded gasoline produced an increased incidence of kidney tumors in male rats and liver tumors in female mice. Repeated skin application of various petroleum naphthas in mice for two years resulted in an increased incidence of skin tumors but only in the presence of severe skin irritation. Follow-up mechanistic studies suggest that the occurrence of these tumors may be the consequence of promotional processes and not relevant to human risk assessment. Epidemiology data collected from a study of more than 18,000 petroleum marketing and distribution workers showed no increased risk of leukemia, multiple myeloma, or kidney cancer from gasoline exposure. Unleaded gasoline has been identified as a possible carcinogen by the International Agency for Research on Cancer.
Target Organs: Two year inhalation studies of wholly vaporized unleaded gasoline, and 90 days studies of various petroleum naphthas, did not produce significant target organ toxicity in laboratory animals. Nephropathy in male rats, characterized by the accumulation of alpha-2-u- globulin in epithelial cells of the proximal tubules was observed, however follow-up studies suggest that these changes are unique to the male rat.
Reproductive Toxicity: No evidence of developmental toxicity was found in pregnant laboratory animals (rats and mice) exposed to high vapor concentrations of unleaded gasoline and petroleum naphthas via inhalation. A two-generation reproductive toxicity study of vapor recovery gasoline did not adversely affect reproductive function or offspring survival and development.

n-Hexane
Target Organs: Excessive exposure to n-hexane can result in peripheral neuropathies (nerve damage). The initial symptoms are symmetrical sensory numbness or paresthesia of distal portions of the extremities. Motor weakness is typically observed in muscles of the toes and fingers but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. The neurotoxic properties of n-hexane are potentiated by exposure to methyl ethyl ketone and methyl isobutyl ketone.
Reproductive Toxicity: Prolonged exposure to high concentrations of n-hexane (>1,000 ppm) resulted in decreased sperm count and degenerative changes in the testes of rats but not those of mice.

Benzene
Carcinogenicity: Benzene is a known human carcinogen for all routes of exposure, and is known to produce acute myelogenous leukemia (a form of cancer) in humans. Benzene has been identified as a human carcinogen by IARC, the US National Toxicology Program, and the US Occupational Safety and Health Administration.
Target Organs: Prolonged or repeated exposures to benzene vapors can cause damage to the blood and blood forming organs, including disorders like leucopenia, thrombocytopenia, and aplastic anemia.
Reproductive Toxicity: Some studies in occupationally exposed women have suggested benzene exposure increased risk of miscarriage and stillbirth and decreased birth weight and gestational age. The size of the effects detected in these studies was small, and ascertainment of exposure and outcome in some cases relied on self-reports, which may limit the reliability of these results.
Germ Cell Mutagenicity: Benzene exposure has resulted in chromosomal aberrations in human lymphocytes and

animal bone marrow cells. Exposure has also been associated with chromosomal aberrations in sperm cells in human and animal studies.

Toluene
Carcinogenicity: Exposure of rats and mice to toluene at concentrations ranging from 120-1200 ppm for two years did not demonstrate evidence of carcinogenicity. Toluene has not been listed as a carcinogen by IARC.
Target Organs: Epidemiology studies suggest that chronic occupational overexposure to toluene may damage color vision. Subchronic and chronic inhalation studies with toluene produced kidney and liver damage, hearing loss and central nervous system (brain) damage in laboratory animals. Intentional misuse by deliberate inhalation of high concentrations of toluene has been shown to cause liver, kidney, and central nervous system damage, including hearing loss and visual disturbances.
Reproductive Toxicity: Exposure to toluene during pregnancy has demonstrated limited evidence of developmental toxicity in laboratory animals. Decreased fetal body weight and increased skeletal variations in both inhalation and oral studies, but only at doses that were maternally toxic. No fetal toxicity was seen at doses that were not maternally toxic. Decreased sperm counts have been observed in male rats in the absence of a reduction in fertility. Toluene has been reported to cause mental or growth retardation in the children of solvent abusers who directly inhale toluene during pregnancy.

Hydrogen Sulfide
Target Organs: May be fatal if inhaled.

Section 12: Ecological Information

Toxicity: Acute aquatic toxicity studies on samples of gasoline and naphtha streams show acute toxicity values greater than 1 mg/L and mostly in the range 1-100 mg/L. These tests were carried out on water accommodated fractions, in closed systems to prevent evaporative loss. Results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon composition. These substances should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment. Classification: H411; Chronic Cat 2.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable but are regarded as inherently biodegradable since their hydrocarbon components can be degraded by microorganisms.

Persistence per IOPC Fund definition: Non-Persistent

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material range from 3 to greater than 6 and therefore are regarded as having the potential to bioaccumulate. In practice, metabolic processes or physical properties may prevent this effect or limit bioavailability.

Mobility in Soil: On release to water, hydrocarbons will float on the surface and since they are sparingly soluble, the only significant loss is volatilization to air. In air, these hydrocarbons are photodegraded by reaction with hydroxyl radicals with half lives varying from 6.5 days for benzene to 0.5 days for n-dodecane.

Other Adverse Effects: None anticipated.

Section 13: Disposal Considerations

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations.

This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed, but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

Container contents should be completely used and containers should be emptied prior to discard. Container residues could be considered to be hazardous wastes.

EPA Waste Number(s):
- **D001** (Ignitability characteristic)
- **D018** (Toxicity characteristic (Benzene))

Section 14: Transport Information

U.S. Department of Transportation (DOT)

Shipping Description:
If vapor pressure is > 300 kPa (43.5 psia) at 50°C (122°F) and H2S is > 8.8 molar %, shipping description is: UN3160, Liquefied gas, toxic, flammable, n.o.s., (Hydrogen sulfide, Butane), 2.3; 2.1, Inhalation Hazard Zone X (see Note below)
If vapor pressure is > 300 kPa (43.5 psia) at 50°C (122°F) and H2S is < 8.8 molar %, shipping description is: UN1965, Hydrocarbon gas mixture, liquefied, n.o.s., 2.1
If vapor pressure is <= 300 kPa (43.5 psia) at 50°C (122°F) and H2S is < 8.8 molar %, shipping description is: UN3295, Hydrocarbons, liquid, n.o.s., 3, I or II [I if BP < 35°C (95°F); II if BP > 35°C]
If vapor pressure is < = 300 kPa (43.5 psia) at 50°C (122°F) and H2S is <8.8 molar %, shipping description is: UN1267, Petroleum crude oil, 3, I or II [I if BP <35°C (95°F); II if BP >35°C]

Non-Bulk Package Marking:
Must be consistent with shipping description, either:
Liquefied gas, toxic, flammable, n.o.s., (Hydrogen sulfide, Butane), **UN3160;**
or
Hydrocarbon gas mixture, liquefied, n.o.s., **UN1965;**
or
Hydrocarbons, liquid, n.o.s., **UN3295;**
or
Petroleum Crude Oil, **UN1267**

Non-Bulk Package Labeling:
For UN3160: Poison gas and Flammable gas
For UN1965: Flammable gas
For UN3295: Flammable liquid
For UN1267: Flammable liquid

Bulk Package/Placard Marking:
For UN3160: Poison gas/3160 and Flammable gas
For UN1965: Flammable gas/1965
For UN3295: Flammable/3295
For UN1267: Flammable/1267

Packaging - References:
For UN3160: None; 49 CFR 173.304; 173.314 & .315
For UN1965: 49 CFR: 173.306; 173.304; 173.314 & .315
For UN3295: 49 CFR 173.150; 173.201; 173.243 [PG I]
For UN1267: 49 CFR 173.150; 173.201; 173.243 [PG I]
-or- 49 CFR 173.150; 173.202; 173.242 [PG II] (Exceptions; Non-bulk; Bulk)

Hazardous Substance: See Section 15 for Regulatory Information
Emergency Response Guide: UN3160 - 119; **UN1965** - 115; **UN3295** - 128; **UN1267** - 128

Note: Replace X in shipping description with:
D if Molar % H2S is from 8.8% to 14.8%
C if Molar % H2S is from 14.9% to 44.4%
B if Molar % H2S is from 44.5% to 100.0%

Container(s) greater than 5 liters (liquids) or 5 kilograms (solids), shipped by water mode and ALL bulk shipments may require the shipping description to contain the "Marine Pollutant" notation (49 CFR 172.203(l)) and the container(s) to display the "Marine Pollutant Mark" (49 CFR 172.322).

The following alternate shipping description order may be used until January 1, 2013: Proper Shipping name, Hazard Class or Division, (Subsidiary Hazard if any), UN or NA number, Packing Group

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

Other shipping description elements may be required for DOT compliance.

International Maritime Dangerous Goods (IMDG)

Shipping Description:

If vapor pressure is > 300 kPa (43.5 psia) at 50°C (122°F) and H2S is > 8.8 molar %, shipping description is: UN3160, Liquefied gas, toxic, flammable, n.o.s (Hydrogen Sulfide, Butane), 2.3; 2.1

If vapor pressure is > 300 kPa (43.5 psia) at 50°C (122°F) and H2S is < 8.8 molar %, shipping description is: UN1965, Hydrocarbon gas mixture, liquefied, n.o.s., (Hydrogen Sulfide, Butane), 2.1;

If vapor pressure is <= 300 kPa (43.5 psia) at 50°C (122°F) and H2S is < 8.8 molar %, shipping description is: UN3295, Hydrocarbons, liquid, n.o.s., 3, I or II (46°C cc), Marine Pollutant [I if BP < 35°C (95°F); II if BP > 35°C]

If vapor pressure is < = 300 kPa (43.5 psia) at 50°C (122°F) and H2S is <8.8 molar %, shipping description is: UN1267, Petroleum crude oil, 3, I or II [I if BP <35°C (95°F); II if IBP >35°C] (-46°C)

Labels:
For UN3160: Toxic gas and Flammable gas
For UN1965: Flammable gas
For UN3295: Flammable liquid
For UN1267: Flammable liquid

Placards/Marking (Bulk):
For UN3160: Toxic gas/3160 and Flammable gas
For UN1965: Flammable gas/1965
For UN3295: Flammable/3295 and Marine Pollutant Mark
For UN1267: Flammable/1267

Packaging - Non-Bulk:
For UN3160 & UN1965: P200
For UN3295: P001
For UN1267: P001

EMS:
For UN3160 & UN1965: F-D, S-U
For UN3295: F-E, S-D
For UN1267: F-E, S-E

Note:
U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25. If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL Annex I.

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

UN/ID #:
UN3160 - Forbidden
UN1965 or **UN3295** or **UN 1267**

Proper Shipping Name:
For UN1965: Hydrocarbon gas mixture, liquefied, n.o.s. (Butane, Hydrogen Sulfide)
For UN3295: Hydrocarbons, liquid, n.o.s.
For UN1267: Petroleum Crude Oil

Hazard Class/Division:
For UN1965: 2.1
For UN3295: 3

For UN1267: 3

Subsidiary risk: None

Packing Group:
For UN1965: None
For UN3295: I or II [Determined by IATA 3.3.2]
For UN1267: I or II [Determined by IATA 3.3.2]

Non-Bulk Package Marking:
For UN1965: Hydrocarbon gas mixture, liquefied, n.o.s. (Butane, Hydrogen Sulfide), UN1965
For UN3295: Hydrocarbons, liquid, n.o.s., UN3295
For UN1267: Petroleum crude oil, UN1267

Labels:
For UN1965: Flammable gas, Cargo Aircraft Only
For UN3295: Flammable liquid
For UN1267: Flammable liquid

ERG Code:
For UN1965: 10L
For UN3295: 3H
For UN 1267: 3L

	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:	**UN1965** – Forbidden **UN3295** – Forbidden – **[PG I]** Y341 – **[PG II]** **UN1267** – Forbidden – **[PG I]**	**UN1965** – Forbidden **UN3295** – 351 – **[PG I]** 353 – **[PG II]** **UN1267** – 351 – **[PG I]**	**UN1965** – 200 **UN3295** – 361 – **[PG I]** 364 – **[PG II]** **UN1267 – 361 – [PG I]**
Max. Net. Qty. Per Package:	**UN3295** – Forbidden – **[PG I]** 1L – **[PG II]** **UN1267** – None (PG I)	**UN3295** – 1L – **[PG I]** 5L – **[PG II]** **UN1267** – 1L – **[PG I]**	**UN1965** – 150 kg **UN1267** – 30 L – **[PG I]** 60 L – **[PG II] 0** **UN3295** – 60L – **[PG II]**

Section 15: Regulatory Information

OSHA HAZARD COMMUNICATION STANDARD
This material has been evaluated and determined to be a "Hazardous Chemical" as defined in OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA – Section 302 Extremely Hazardous Substances and TPQs (in pounds)
This material contains the following chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

Components	TPQ	EPCRA RQ
Hydrogen Sulfide	500 lb.	100 lb.

CERCLA/SARA – Section 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	Yes
Fire Hazard:	Yes
Pressure Hazard:	No
Reactive Hazard:	No

CERCLA/SARA – Section 313 and 40 CFR 372
This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372.

Components	Concentration	de minimis

Benzene	<5	0.1%
Ethyl Benzene	1-3	0.1%
Toluene	1-7	1.0%
Xylenes	1-8	1.0%
Toluene	1-7	1.0%
n-Hexane	2-4	1.0%

EPA (CERCLA) Reportable Quantity (in pounds)

EPA's Petroleum Exclusion applies to this material – (CERCLA 101(14)).

California Proposition 65

Warning: This material may contain detectable quantities of the following chemicals, known to the State of California to cause cancer, birth defects, or other reproductive harm, and which may be subject to the requirements of California Proposition 65 (CA Health and Safety Code Section 25249.5):

Components	Type of Toxicity
Toluene	Developmental Toxicant Female Reproductive Toxicant
Benzene	Cancer Developmental Toxicant Male Reproductive Toxicant
Ethyl Benzene	Cancer

Right to Know Information

The recipient of this Safety Data Sheet should review applicable state and local regulations in order to determine whether additional "Right to Know" information is required (see https://www.osha.gov/dcsp/osp/statestandards.html). If applicable, the recipient may contact MOONSHINE ENERGY, LLC (see Section 1) to obtain any such additional information.

International Hazard Classification

Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the Safety Data Sheet contains all the information required by the Regulations.

WHMIS Hazard Class:

B2 – Flammable Liquids
D1B
D2A
D2B

National Chemical Inventories

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA
All components are either on the DSL, or are exempt from DSL listing requirements

U.S. Export Control Classification Number: EAR99

Section 16: Other Information

Date of Issue:	Previous Issue Date:	SDS Number:	Status:
June 1, 2015	March 2012	H4001	FINAL

Revised Sections or Basis for Revision: GHS Updates

Identification (Section 1)
Hazards Identification (Section 2)
Composition/ Information on Ingredients (Section 3)
First Aid Measures (Section 4)
Fire-Fighting Measures (Section 5)
Accidental Release Measures (Section 6)
Handling and Storage (Section 7)

Exposure Controls/Personal Protection (Section 8)
Physical and Chemical Properties (Section 9)
Stability and Reactivity (Section 10)
Toxicological Information (Section 11)
Ecological Information (Section 12)
Disposal Considerations (Section 13)
Transport Information (Section 14)
Regulatory Information (Section 15)
Other Information (Section 16)

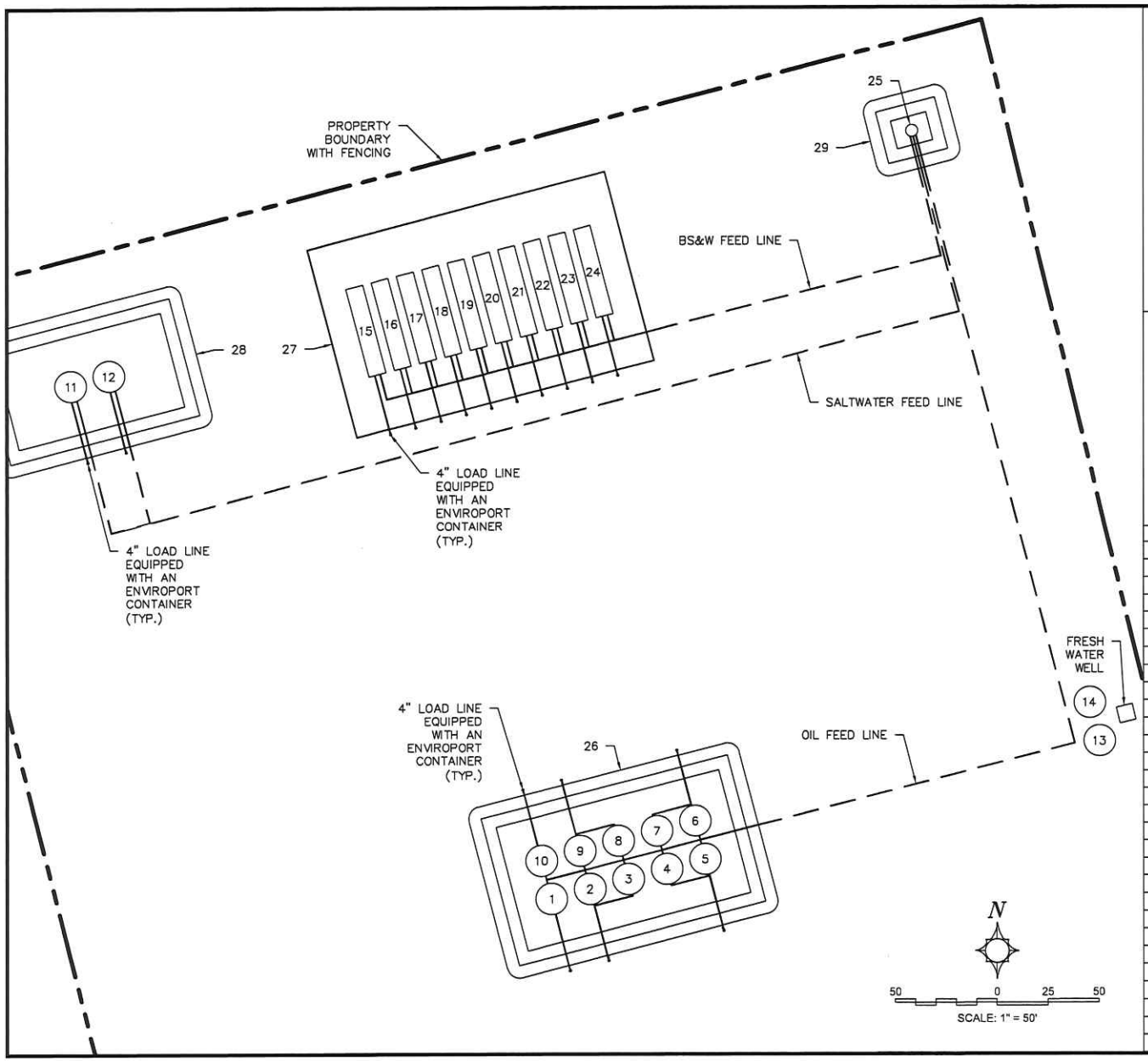
Guide to Abbreviations:
ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = Nation Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIAH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

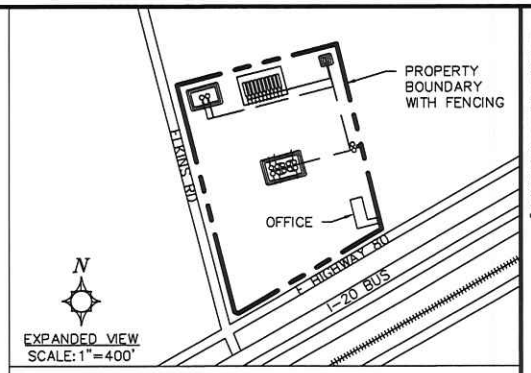
Disclaimer of Expressed and Implied Warranties:
The information presented in this Safety Data Sheet is based upon data reasonably believed to be accurate as of the date this Safety Data Sheet was prepared, and such information is specific only to the product described herein. If the product described herein is used as a component of any other product or process, this information may not be valid. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER REPRESENTATION, WARRANTY OR GUARANTEE IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.

It is the recipient's obligation to evaluate this Safety Data Sheet and to investigate the product in order to make its own determination as to the suitability of the product for its particular purpose, to use this product safely and to comply with all applicable laws and regulations. MOONSHINE ENERGY, LLC shall not be liable or responsible for any personal or property loss, damage, illness, death or injury arising out of or in any way connected to the handling, transportation, storage, disposal or use of the product, which is not the intended product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information contained in this Safety Data Sheet. Employers have a duty to tell employees and others who may be affected or be exposed to the product of any hazards described herein and of any precautions that should be taken. The recipient may contact MOONSHINE ENERGY, LLC (see Section 1) to ensure that this Safety Data Sheet is the most current available. Alteration of this Safety Data Sheet by any party other than MOONSHINE ENERGY, LLC is strictly prohibited.

ATTACHMENT - 3

SCHEMATIC DIAGRAM & RADIUS MAP





#	DESCRIPTION	DIMENSIONS	MATERIAL	VOLUME
1	OIL TANK	15.5'ø x16'	STEEL	500 BBL
2	OIL TANK	15.5'ø x16'	STEEL	500 BBL
3	OIL TANK	15.5'ø x24'	STEEL	500 BBL
4	OIL TANK	15.5'ø x16'	STEEL	500 BBL
5	OIL TANK	15.5'ø x16'	STEEL	500 BBL
6	OIL TANK	15.5'ø x16'	STEEL	500 BBL
7	OIL TANK	15.5'ø x16'	STEEL	500 BBL
8	OIL TANK	15.5'ø x16'	STEEL	500 BBL
9	OIL TANK	15.5'ø x16'	STEEL	500 BBL
10	OIL TANK	15.5'ø x16'	STEEL	500 BBL
11	SALTWATER TANK	15.5'ø x24'	FIBERGLASS	750 BBL
12	SALTWATER TANK	15.5'ø x24'	FIBERGLASS	750 BBL
13	FRESH WATER TANK	15.5'ø x16'	FIBERGLASS	500 BBL
14	FRESH WATER TANK	15.5'ø x16'	FIBERGLASS	500 BBL
15	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
16	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
17	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
18	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
19	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
20	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
21	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
22	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
23	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
24	BS&W FRAC TANK	45'x8.5'x9.7'	STEEL	500 BBL
25	HEATER TREATER	6'ø x20'	STEEL	80 BBL
26	TANK CONTAINMENT	125'x75'x2'	EARTH	--
27	TANK CONTAINMENT	150'x96'x3'	STEEL	--
28	TANK CONTAINMENT	96'x60'x2'	EARTH	--
29	TANK CONTAINMENT	30'x26'x2'	EARTH	--

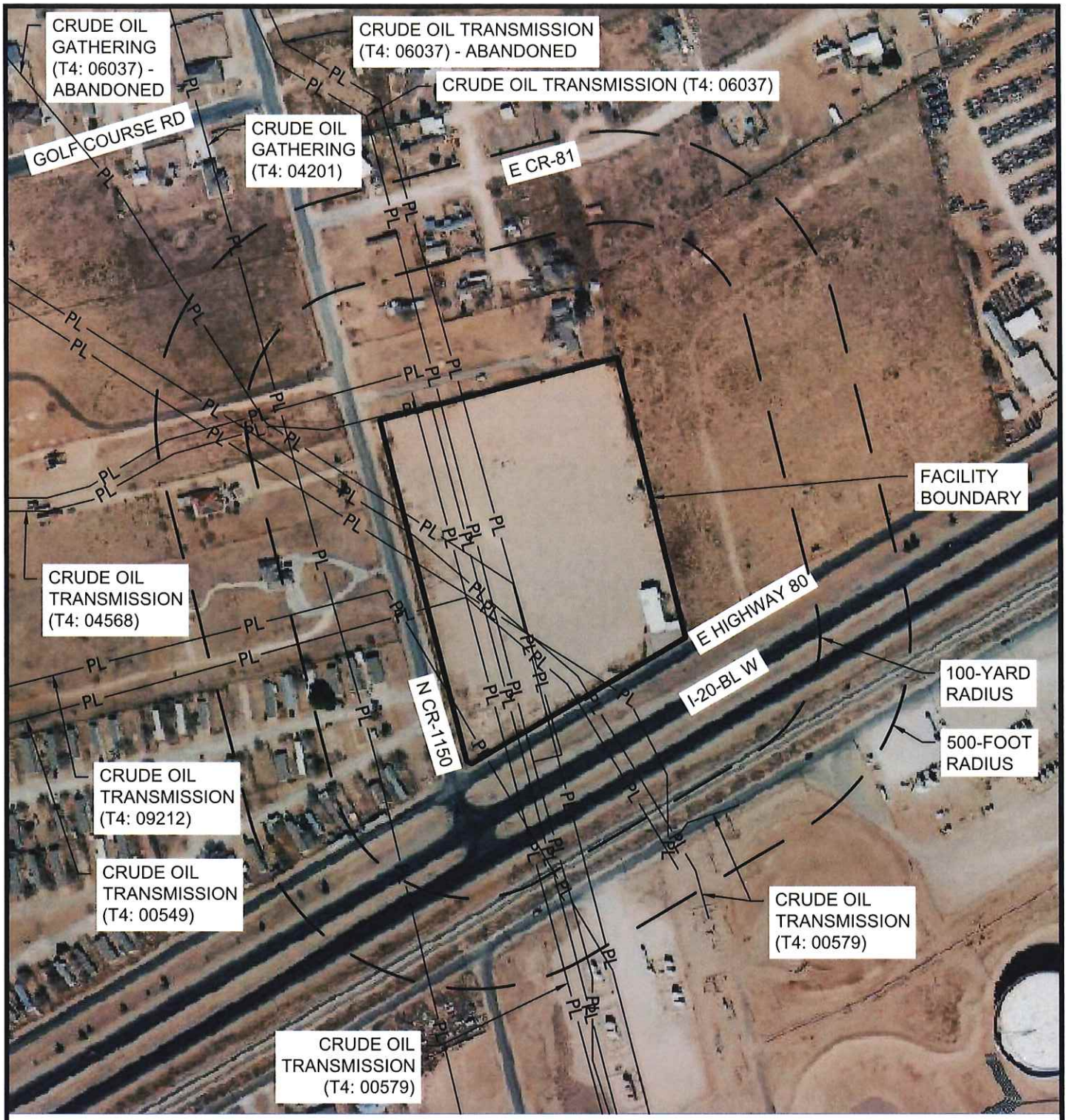
EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759
www.eikoncg.com

FACILITY SCHEMATIC DIAGRAM
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

DATE:
04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

SHEET:
3A



NOTES:

1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. GOOGLE EARTH WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://www.earth.google.com/)

300 0 150 300

SCALE: 1" = 300'

N

SHEET: **3B**

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

RADIUS MAP

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

ATTACHMENT - 4

CLOSURE COST ESTIMATE

Closure Cost Estimate

PREPARED FOR:

MOONSHINE ENERGY, LLC
3503 EDGEMONT DRIVE
MIDLAND, TEXAS 79707
PHONE: (432) 269-3789

SITE LOCATION:

LATITUDE: 32.025975°
LONGITUDE: -102.018982°
MIDLAND COUNTY, TEXAS

PREPARED BY:

500 MOSELEY ROAD
CROSS ROADS, TEXAS 76227
PHONE: (940) 387-0805
WWW.EIKONCG.COM
TEXAS FIRM F-12759

April 26, 2023

EIKON

TABLE OF CONTENTS

EIKON

PROFESSIONAL ENGINEER CERTIFICATION

"I, Kevin J. Ware, a registered professional engineer in the State of Texas, certify that this closure cost estimate was prepared by me or under my direct supervision, and that the data and facts stated herein are true, correct, and complete to the best of my knowledge."

Kevin J. Ware, PE, REM, QEP

Professional Engineer License:

Texas
State

136599
Professional License No.

F-12759
Texas Engineering Firm Registration No.

4-26-2023
Date

LIST OF ASSUMPTIONS

The following assumptions were used to develop this closure cost estimate:

- The facility is in compliance with the conditions of its permit.
- Nothing associated with the facility or its operations is to remain on-site.
- None of the operator's equipment or facilities are available to assist in the closure. All closure activities will be completed by a third-party contractor.
- The facility will be closed in accordance with the permit. All waste will be disposed at authorized off-site commercial waste disposal facilities, all excavated areas will be backfilled, and the site will be contoured and revegetated to as close to its original state as possible.
- The facility closure occurs at a time when all waste storage areas are 100% full of waste, and that 10% of the waste consists of basic sediment and water (BS&W). The waste will be disposed at the following authorized off-site facilities:
  - Saltwater will be disposed at the Pilot Water Solutions Permian, LLC SWD facility (API 32937932), located off North County Road 1148, Midland, Texas (2 miles away)
  - BS&W, solids, and contaminated soil will be disposed at the Petro Waste Environmental, LP commercial disposal facility (TRD STF-082), located off I-20 Frontage Road, Big Spring, Texas (24 miles away)
- Fill dirt is not required as there is sufficient clean fill in the pit berm and ramps.
- Steel tanks and pipes will be recycled, and equipment, controls, and oil have value; therefore, no disposal costs have been accounted for these items. In addition, no salvage revenue from the sale of these items has been assessed.
- A 10% contingency factor has been included in this estimate.
- Unit prices used in this estimate are based on professional judgment, and previous experience with similar projects.

CLOSURE COST ESTIMATE
Moonshine Energy, LLC
Midland Reclamation Facility

TABLE 1: WASTE VOLUMES						
Description	**Dimensions (ft)**	**Volume (bbl)**	**Saltwater (bbl)**	**BS&W (bbl)**	**Solids (yd^3)**	**Contaminated Soil (yd^3)**
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Oil Tank	15.5 Ø x 16	500	--	50	--	--
Saltwater Tank	15.5 Ø x 24	750	675	75	14	--
Saltwater Tank	15.5 Ø x 24	750	675	75	14	--
Fresh Water Tank	15.5 Ø x 16	500	450	50	11	--
Fresh Water Tank	15.5 Ø x 16	500	450	50	11	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
BS&W Frac Tank	45 x 8.5 x 9.7	500	--	500	--	--
Heater Treater	6 Ø x 20	80	72	8	--	--
Tank Containment	125 x 75 x 2	--	--	--	1	451
Tank Containment	150 x 96 x 3	--	--	--	2	693
Tank Containment	96 x 60 x 2	--	--	--	1	277
Tank Containment	30 x 26 x 2	--	--	--	1	38
Wash Water	--	141	141	--	--	--
	Total Volumes	**12,721**	**2,463**	**5,758**	**55**	**1,459**

Notes:

1. The Solids estimate includes the HDPE liner and fiberglass tank shells.
2. The Contaminated Soil estimate accounts for a 30% expansion factor.
3. The Oil Tanks are assumed to be 100% full, and include: Oil - 90% and BS&W - 10%.
4. The Saltwater Tanks, Fresh Water Tanks, and Heater Treater are assumed to be 100% full, and include: Saltwater - 90% and BS&W - 10%.
5. The BS&W Frac Tanks are assumed to be 100% full, and include: BS&W - 100%.
6. The Wash Water includes the estimated amount of water needed to wash all of the concrete structures, equipment, and tanks.

CLOSURE COST ESTIMATE
Moonshine Energy, LLC
Midland Reclamation Facility

TABLE 2: EQUIPMENT & LABOR COSTS		
Description	**Contractor**	**Cost Per Hour**
Vacuum Truck (120 bbl) & Operator	Tierra Lease Service	$87.00
Dump Truck (20 yd^3) & Operator	Tierra Lease Service	$85.00
Front-end Loader & Operator	Tierra Lease Service	$78.00
4-Man Crew w/ Tool Truck	P2 Construction	$164.00
3- Man Crew w/ Washing Equipment	P2 Construction	$129.00
Backhoe w/ Hydraulic Hammer & Operator	Tierra Lease Service	$90.00
Dozer & Operator	Tierra Lease Service	$138.00
Excavator w/ Tank Cutting Attachment & Operator	P2 Construction	$328.00
Motor Grader & Operator	Tierra Lease Service	$103.00

TABLE 3: WASTE LOADING & TRANSPORTATION COST				
Description	**Saltwater (bbl)**	**BS&W (bbl)**	**Solids (yd^3)**	**Contaminated Soil (yd^3)**
Waste Quantity	2,463	5,758	55	1,459
Distance to Disposal Site (miles)	2	24	24	24
Round Trip Time Per Load (hours)	1	1	1	1
Number of Trips	21	48	3	73
Cost	$1,827.00	$4,176.00	$489.00	$11,899.00
			Total Cost	**$18,391.00**

Notes:

1. The Round Trip Time Per Load includes an assumed average truck speed of 50 mph, and an assumed average waste loading/unloading time of 0.25 hr.
2. The Saltwater and BS&W will be transported by a 120 bbl vacuum truck.
3. The Solids and Contaminated Soil will be loaded by a front-end loader, and transported by a 20 yd^3 dump truck.
4. Assumption: metal will be recycled, and oil will be refined; therefore, no transportation costs or revenue from the sale of these materials are accounted.

TABLE 4: WASTE DISPOSAL COST				
Description	**Saltwater (bbl)**	**BS&W (bbl)**	**Solids (yd^3)**	**Contaminated Soil (yd^3)**
Waste Quantity	2,463	5,758	55	1,459
Cost Per Unit	$0.50	$10.00	$30.00	$30.00
Cost Per Waste	$1,232.00	$57,580.00	$1,650.00	$43,770.00
			Total Cost	**$104,232.00**

Notes:

1. Assumption: metal will be recycled, and oil will be refined; therefore, no disposal costs or revenue from the sale of these materials are accounted.

CLOSURE COST ESTIMATE
Moonshine Energy, LLC
Midland Reclamation Facility

TABLE 5: TANK DEMOLITION COST					
Description	**Material**	**Dismantle (hr)**	**Clean (hr)**	**Cut-Up (hr)**	**Cost**
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Oil Tank	Steel	2	3	3	$1,699.00
Saltwater Tank	Fiberglass	2	4	2	$1,500.00
Saltwater Tank	Fiberglass	2	4	2	$1,500.00
Fresh Water Tank	Fiberglass	2	3	1	$1,043.00
Fresh Water Tank	Fiberglass	2	3	1	$1,043.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
BS&W Frac Tank	Steel	2	3	--	$715.00
Heater Treater	Steel	1	1	1	$621.00
				Total Cost	**$29,847.00**

Notes:

1. The tank dismantling will be provided by the 4-Man Crew and their associated equipment.
2. The tank cleaning will be provided by the 3-Man Crew and their associated equipment. The cleaning equipment will include power-washing wands that can clean 100 yd^2/hr. The cleaning equipment will have a pressure rating of 3000 psi and a flow rate of 4 gpm. A minimum of 1 hr. is accounted.
3. The tank cut-up will be provided by the Excavator w/ Tank Cutting Attachment.
4. The Frac Tanks will be recycled as-is; therefore, no cut-up costs are accounted.

TABLE 6: CONTAMINATED SOIL EXCAVATION COST			
Description	**Volume (yd^3)**	**Excavation (hr)**	**Cost**
Tank Containment	347	3	$414.00
Tank Containment	533	5	$690.00
Tank Containment	213	2	$276.00
Tank Containment	29	1	$138.00
		Total Cost	**$1,518.00**

Notes:

1. The Dozer will be used to excavate to a depth of 1-foot beneath all containment structures at a rate of 100 yd^3/hr. A minimum of 1 hr. is accounted.

2. The HDPE liner will be excavated with the contaminated soil.

TABLE 7: DIKE REMOVAL COST				
Description	**Dimensions (ft)**	**Volume (yd^3)**	**Demolition (hr)**	**Cost**
Tank Containment	400 x 12 x 2	231	2	$276.00
Tank Containment	492 x 1 x 3	71	1	$138.00
Tank Containment	312 x 12 x 2	180	2	$276.00
Tank Containment	112 x 12 x 2	65	1	$138.00
			Total Cost	**$828.00**

Notes:

1. The Dozer will be used to remove the dike at a rate of 100 yd^3/hr.
2. The Dike volume accounts for a 30% expansion factor.

TABLE 8: FILL SOIL COST			
Description	**Volume (yd^3)**	**Price ($/$yd^3$)**	**Cost**
Fill Soil	983	$12.00	$11,796.00
		Total Cost	**$11,796.00**

Notes:

1. Assumption: The Tank Containment earthen dikes are clean soil, and available to use as clean fill.

TABLE 9: DISTURBED AREA RESTORATION COST						
Description	**Volume (yd^3)**	**Backfill (hr)**	**Area (yd^2)**	**Grade (hr)**	**Hydroseed ($)**	**Cost**
Tank Containment	451	5	1,042	1	$1,250.00	$2,043.00
Tank Containment	693	7	1,600	1	$1,920.00	$2,989.00
Tank Containment	277	3	640	1	$768.00	$1,285.00
Tank Containment	38	1	87	1	$104.00	$345.00
					Total Cost	**$6,662.00**

Notes:

1. The Dozer will be used to backfill the disturbed areas at a rate of 100 yd^3/hr.
2. The Motor Grader will be used to grade the disturbed areas at a rate of 9,000 yd^2/hr. A minimum of 1 hr. is accounted.
3. The cost of fertilization and vegetation by hydroseeding is $1.20/$yd^2$.

TABLE 10: SAMPLING & WELL PLUGGING COST		
Description	**Quantity**	**Cost**
Soil Samples	13	$2,600.00
Groundwater Samples	3	$600.00
100' Groundwater Well Plugging	3	$5,169.00
	Total Cost	**$8,369.00**

Notes:

1. The unit cost for soil and groundwater samples is estimated to be $200/sample.
2. The unit cost of plugging a monitoring well is estimated to be $1,723/100' well.

CLOSURE COST ESTIMATE
Moonshine Energy, LLC
Midland Reclamation Facility

TABLE 11: TOTAL COSTS	
Description	**Cost**
Waste Loading & Transportation Cost	$18,391.00
Waste Disposal Cost	$104,232.00
Tank & Roof Demolition Cost	$29,847.00
Contaminated Soil Excavation Cost	$1,518.00
Dike Removal Cost	$828.00
Fill Soil	$11,796.00
Disturbed Area Restoration Cost	$6,662.00
Sampling & Well Plugging Cost	$8,369.00
Contingency (10%)	$18,164.00
Total Maximum Closure Cost	**$199,807.00**

ATTACHMENT - 5

NOTIFICATIONS

EIKON
TRANSFORMING VISION TO REALITY
500 Moseley Road | Crossroads, Texas 76227 | (940) 387-0805

May 1, 2023

Marcia Bentley-German
City Secretary
300 N Loraine Street, 3rd Floor
Midland, TX 79702

RE: Notice of Application for a Permit to Operate a Reclamation Plant

Dear City Secretary,

Moonshine Energy, LLC (Moonshine) will be filing an application with the Railroad Commission of Texas (RRC) for a Permit to Operate a Reclamation Plant to reclaim oil from nonhazardous oilfield waste materials through the process of gravity and thermal separation.

The proposed reclamation plant is located in Midland, Midland County, Texas. The northern portion of the plant is in the M. Murphy & M. M. Griffin Survey, Abstract No. 1165 and the southern portion of the plant is in the H. R. Wells Survey, Abstract No. 758. The proposed reclamation plant is located on real property owned by AES Drilling Fluids, LLC.

Affected persons may protest this application. Protests must be in writing and must be received by the 15th day after the date of this notice, which means protests should be received by May 16, 2023. Protests must be sent to:

Technical Permitting Section
Oil and Gas Division
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711
(Telephone 512-463-3840)

Sincerely,

Eric Crews
Project Manager
EIKON Consulting Group, LLC | Texas Firm F-12759

Attached herein is a copy of the application, including all attachments.

EIKON
TRANSFORMING VISION TO REALITY
500 Moseley Road | Crossroads, Texas 76227 | (940) 387-0805

May 1, 2023

Alison Haley
County Clerk
500 N Loraine Street, 4th Floor
Midland, TX 79701

RE: Notice of Application for a Permit to Operate a Reclamation Plant

Dear County Clerk,

Moonshine Energy, LLC (Moonshine) will be filing an application with the Railroad Commission of Texas (RRC) for a Permit to Operate a Reclamation Plant to reclaim oil from nonhazardous oilfield waste materials through the process of gravity and thermal separation.

The proposed reclamation plant is located in Midland, Midland County, Texas. The northern portion of the plant is in the M. Murphy & M. M. Griffin Survey, Abstract No. 1165 and the southern portion of the plant is in the H. R. Wells Survey, Abstract No. 758. The proposed reclamation plant is located on real property owned by AES Drilling Fluids, LLC.

Affected persons may protest this application. Protests must be in writing and must be received by the 15th day after the date of this notice, which means protests should be received by May 16, 2023. Protests must be sent to:

Technical Permitting Section
Oil and Gas Division
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711
(Telephone 512-463-3840)

Sincerely,

Eric Crews
Project Manager
EIKON Consulting Group, LLC | Texas Firm F-12759

Attached herein is a copy of the application, including all attachments.

STATE OF TEXAS

COUNTY OF Midland

Before me, the undersigned authority, on this day personally appeared Sheri Rycerz (Name), the Sr. Acctg. Mgr. (Title) of the Midland Reporter Telegram (Name of Newspaper) a newspaper having general circulation in Midland County, Texas, who being by me duly sworn, deposes and says that the foregoing attached notice was published in said newspaper on the following dates, to wit: 04/26/2023.

Sheri Rycerz

Subscribed and sworn to before me this the 27th day of April, 20 23, to certify which witness my hand and seal of office.

Sandy Diaz
Notary Public in and for

SANDY DIAZ
My Notary ID # 132807578
Expires December 2, 2024

Midland County, Texas

Midland
Reporter-Telegram
Delivering life...every day.

15 Smith Rd., Ste 1004
Midland, Texas 79705

Moonshine Energy, LLC
3503 Edgemont Drive
Midland, TX 79707

Account Number: 10048605
Order Number: 0000383972

Before Me, the undersigned authority, on this day personally appeared

Sheri Rycerz of the Midland Reporter-Telegram, a newspaper of general circulation published in Midland, Ector, Howard, Crane, Glasscock, Martin, Upton, and Andrews Counties, Texas, who stated on oath that the attached instrument was published in said newspaper on each of the following dates to wit:

04-26-2023

A.D.

Sheri Rycerz

Sworn and Subscribed to before me, this Wednesday, April 26, 2023

SANDY DIAZ
My Notary ID # 132807578
Expires December 2, 2024

Notary Public

Order Confirmation

Proof of Ad **Ad Order Number** 0000383972

NOTICE OF APPLICATION
FOR A PERMIT TO OPERATE A RECLAMATION PLANT

Moonshine Energy, LLC (Moonshine) will be filing an application with the Railroad Commission of Texas (RRC) for a Permit to Operate a Reclamation Plant to reclaim oil from nonhazardous oilfield waste materials through the process of gravity and thermal separation.

The proposed reclamation plant is located in Midland, Midland County, Texas. The northern portion of the plant is in the M. Murphy & M. M. Griffin Survey, Abstract No. 1165 and the southern portion of the plant is in the H. R. Wells Survey, Abstract No. 758. The proposed reclamation plant is located on real property owned by AES Drilling Fluids, LLC.

Affected persons may protest this application. Protests must be in writing and must be received by the 15th day after the date of this notice, which means protests should be received by May 11, 2023. Protests must be sent to:

Technical Permitting Section
Oil and Gas Division
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711
(Telephone 512-463-3640)

April 26 2023

Mrt classifieds

Legal and Public Notices

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

DISTRICT 7C
DATE OF ISSUANCE: Apr 24, 2023
NOTICE OF PROTEST DEADLINE: 5:00 PM, May 15, 2023
Address: Railroad Commission of Texas
ATTN: Drilling Permit Unit
P. O. Box 12967
Austin, Texas 78711-2967
Fax: (512) 463-6780
Email: SWR37@RRC.TEXAS.GOV

Rule 37 Case No. 0340026
Status/Permit No. 889284

NOTICE OF APPLICATION

NOTICE IS HEREBY GIVEN that the PIONEER NATURAL RES. USA, INC., [RRC Operator No. 665748] has made application for a spacing exception permit under the provisions of Railroad Commission Statewide Rule 37 (16 Tex. Admin. Code section 3.37). Applicant seeks exceptions to the LEASE LINE requirement for the NEW DRILL permit in Sec. 3, Bk. O, ELIAS RA CO Survey, A-139, SPRABERRY (TREND AREA) Field, UPTON County, being 10.3 miles SW direction from MIDKIFF, Texas.

PURSUANT TO THE TERMS of Railroad Commission rules and regulations, this application may be granted **WITHOUT A HEARING** if no protest to the application is received within the deadline. An affected person is entitled to protest this application. Affected persons include owners of record and the operator or lessee of record of adjacent tracts and tracts reserve to the proposed well from the minimum lease line spacing distance. If you have questions which are specific to the Application or the information set forth in this Notice, please contact the Commission's Drilling Permit Unit at (512)463-6751. If a hearing is called, the applicant has the burden to prove the need for an exception. A Protestant should be prepared to establish standing as an affected person, and to appear at the hearing either in person or by qualified representative and protest the application with cross-examination or presentation of a direct case. The rules of evidence are applicable in the hearing. If you have any questions regarding the hearing procedure, please contact the Commission's Docket Services Department at (512)463-6848.

IF YOU WISH TO REQUEST A HEARING ON THIS APPLICATION, AN INTENT TO APPEAR IN PROTEST MUST BE RECEIVED IN THE RAILROAD COMMISSION'S AUSTIN OFFICE AT THE ADDRESS, FAX NUMBER, OR E-MAIL ADDRESS SET OUT ABOVE BY May 15, 2023 at 5:00 p.m. IF NO PROTEST IS RECEIVED WITHIN SUCH TIME, YOU WILL LOSE YOUR RIGHT TO PROTEST AND THE REQUESTED PERMIT MAY BE GRANTED ADMINISTRATIVELY.

THIS NOTICE OF APPLICATION REQUIRES PUBLICATION

The location and identity of the well is as shown below:

FIELD: SPRABERRY (TREND AREA)

Lease/Unit Name	BROOK O-3C
Lease/Unit Well No.	3H
Lease/Unit Acres	1599.3
Nearest Lease Line (ft)	null
Nearest Well on Lease (ft)	250.0
Lease Lines	1004.0 F FNL, L 1786.0 F FEL L
Survey Lines	1004.0 F FNL, L 1786.0 F FEL L

Wellbore Profile(s): Horizontal

Lateral: TH1
Penetration Point Location
Lease Lines: 401.3 F FNL L
1530.0 F FEL L
Terminus Location
BH County: UPTON
Section: 8 Block: N Abstract: 1505
Survey: HEWT RR CO/GULF, SW
Lease Lines: 100.0 F FNL L
1530.0 F FEL L
Survey Lines: 100.0 F FNL L
1530.0 F FEL L

Field Rules for ALL fields on the permit application are as follows:

SPRABERRY (TREND AREA): Special Rules 33(9): 80.0 acres.

This well is to be drilled to an approximate depth of 10969 feet.

If you have questions regarding this application, please contact the Applicant's representative, Ebony White, at (972)5968758.

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

DISTRICT 7C
DATE OF ISSUANCE: Apr 24, 2023
NOTICE OF PROTEST DEADLINE: 5:00 PM, May 15, 2023
Address: Railroad Commission of Texas
ATTN: Drilling Permit Unit
P. O. Box 12967
Austin, Texas 78711-2967
Fax: (512) 463-6780
Email: SWR37@RRC.TEXAS.GOV

Rule 37 Case No. 0340027
Status/Permit No. 889286

NOTICE OF APPLICATION

NOTICE IS HEREBY GIVEN that the PIONEER NATURAL RES. USA, INC., [RRC Operator No. 665748] has made application for a spacing exception permit under the provisions of Railroad Commission Statewide Rule 37 (16 Tex. Admin. Code section 3.37). Applicant seeks exceptions to the LEASE LINE requirement for the NEW DRILL permit in Sec. 3, Bk. O, ELIAS RA CO Survey, A-139, SPRABERRY (TREND AREA) Field, UPTON County, being 10.3 miles SW direction from MIDKIFF, Texas.

PURSUANT TO THE TERMS of Railroad Commission rules and regulations, this application may be granted **WITHOUT A HEARING** if no protest to the application is received within the deadline. An affected person is entitled to protest this application. Affected persons include owners of record and the operator or lessee of record of adjacent tracts and tracts reserve to the proposed well from the minimum lease line spacing distance. If you have questions which are specific to the Application or the information set forth in this Notice, please contact the Commission's Drilling Permit Unit at (512)463-6751. If a hearing is called, the applicant has the burden to prove the need for an exception. A Protestant should be prepared to establish standing as an affected person, and to appear at the hearing either in person or by qualified representative and protest the application with cross-examination or presentation of a direct case. The rules of evidence are applicable in the hearing. If you have any questions regarding the hearing procedure, please contact the Commission's Docket Services Department at (512)463-6848.

IF YOU WISH TO REQUEST A HEARING ON THIS APPLICATION, AN INTENT TO APPEAR IN PROTEST MUST BE RECEIVED IN THE RAILROAD COMMISSION'S AUSTIN OFFICE AT THE ADDRESS, FAX NUMBER, OR E-MAIL ADDRESS SET OUT ABOVE BY May 15, 2023 at 5:00 p.m. IF NO PROTEST IS RECEIVED WITHIN SUCH TIME, YOU WILL LOSE YOUR RIGHT TO PROTEST AND THE REQUESTED PERMIT MAY BE GRANTED ADMINISTRATIVELY.

THIS NOTICE OF APPLICATION REQUIRES PUBLICATION

The location and identity of the well is as shown below:

FIELD: SPRABERRY (TREND AREA)

Lease/Unit Name	BROOK O-3D
Lease/Unit Well No.	4H
Lease/Unit Acres	1599.3
Nearest Lease Line (ft)	null
Nearest Well on Lease (ft)	250.0
Lease Lines	1004.0 F FNL L, 1786.0 F FEL L
Survey Lines	1004.0 F FNL L, 1786.0 F FEL L

Wellbore Profile(s): Horizontal

Lateral: TH1
Penetration Point Location
Lease Lines: 401.0 F FNL L
1471.0 F FEL L
Terminus Location
BH County: UPTON
Section: 8 Block: N Abstract: 1505
Survey: HEWT RR CO/GULF, SW
Lease Lines: 100.0 F FNL L
1280.0 F FEL L
Survey Lines: 100.0 F FNL L
1280.0 F FEL L

Field Rules for ALL fields on the permit application are as follows:

SPRABERRY (TREND AREA): Special Rules 33(9): 80.0 acres.

This well is to be drilled to an approximate depth of 10968 feet.

If you have questions regarding this application, please contact the Applicant's representative, Ebony White, at (972)5968756.

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

DISTRICT 7C
DATE OF ISSUANCE: Apr 24, 2023
NOTICE OF PROTEST DEADLINE: 5:00 PM, May 15, 2023
Address: Railroad Commission of Texas
ATTN: Drilling Permit Unit
P. O. Box 12967
Austin, Texas 78711-2967
Fax: (512) 463-6780
Email: SWR37@RRC.TEXAS.GOV

Rule 37 Case No. 0340028
Status/Permit No. 889289

NOTICE OF APPLICATION

NOTICE IS HEREBY GIVEN that the PIONEER NATURAL RES. USA, INC., [RRC Operator No. 665748] has made application for a spacing exception permit under the provisions of Railroad Commission Statewide Rule 37 (16 Tex. Admin. Code section 3.37). Applicant seeks exceptions to the LEASE LINE requirement for the NEW DRILL permit in Sec. 3, Bk. O, ELIAS RA CO Survey, A-139, SPRABERRY (TREND AREA) Field, UPTON County, being 10.3 miles SW direction from MIDKIFF, Texas.

PURSUANT TO THE TERMS of Railroad Commission rules and regulations, this application may be granted **WITHOUT A HEARING** if no protest to the application is received within the deadline. An affected person is entitled to protest this application. Affected persons include owners of record and the operator or lessee of record of adjacent tracts and tracts reserve to the proposed well from the minimum lease line spacing distance. If you have questions which are specific to the Application or the information set forth in this Notice, please contact the Commission's Drilling Permit Unit at (512)463-6751. If a hearing is called, the applicant has the burden to prove the need for an exception. A Protestant should be prepared to establish standing as an affected person, and to appear at the hearing either in person or by qualified representative and protest the application with cross-examination or presentation of a direct case. The rules of evidence are applicable in the hearing. If you have any questions regarding the hearing procedure, please contact the Commission's Docket Services Department at (512)463-6848.

IF YOU WISH TO REQUEST A HEARING ON THIS APPLICATION, AN INTENT TO APPEAR IN PROTEST MUST BE RECEIVED IN THE RAILROAD COMMISSION'S AUSTIN OFFICE AT THE ADDRESS, FAX NUMBER, OR E-MAIL ADDRESS SET OUT ABOVE BY May 15, 2023 at 5:00 p.m. IF NO PROTEST IS RECEIVED WITHIN SUCH TIME, YOU WILL LOSE YOUR RIGHT TO PROTEST AND THE REQUESTED PERMIT MAY BE GRANTED ADMINISTRATIVELY.

THIS NOTICE OF APPLICATION REQUIRES PUBLICATION

The location and identity of the well is as shown below:

FIELD: SPRABERRY (TREND AREA)

Lease/Unit Name	BROOK O-3E
Lease/Unit Well No.	5H
Lease/Unit Acres	1599.3
Nearest Lease Line (ft)	null
Nearest Well on Lease (ft)	331.0
Lease Lines	1004.0 F FNL L 1746.0 F FEL L
Survey Lines	1004.0 F FNL L 1746.0 F FEL L

Wellbore Profile(s): Horizontal

Lateral: TH1
Penetration Point Location
Lease Lines: 402.0 F FNL L
753.0 F FEL L
Terminus Location
BH County: UPTON
Section: 8 Block: N Abstract: 1505
Survey: HEWT RR CO/GULF, SW
Lease Lines: 100.0 F FNL L
757.0 F FEL L
Survey Lines: 100.0 F FNL L
757.0 F FEL L

Field Rules for ALL fields on the permit application are as follows:

SPRABERRY (TREND AREA): Special Rules 33(9): 80.0 acres.

This well is to be drilled to an approximate depth of 10969 feet.

If you have questions regarding this application, please contact the Applicant's representative, Ebony White, at (972)5968758.

LEGAL NOTICE

Sealed responses will be accepted by the County Purchasing Agent, located in Suite 1101 of the Midland County Courthouse, 500 N. Loraine Street, Midland, Texas 79701 until 10:00 A.M. Local Time, May 30, 2023. The proposals will be opened and acknowledged at 10:05 A.M., Local Time, May 31, 2023.

Generally, the Commissioners Court advertises to be made within 30 days. Interested parties are invited to attend the proposal acknowledgment and the Commissioners Court meeting.

RFP 23MC0607 – Courthouse 11th Floor Buildout

A mandatory pre-bid walk through meeting will be held on Wednesday, May 3 at 10am, meet at the elevator bank on the 11th Floor of the Midland County Courthouse 500 N Loraine, Midland TX 79701.

Midland County reserves the right to reject any or all of the responses, to waive all formalities, and to withdraw the bid at any time.

The RFP will be available on Wednesday, April 19, 2023. Information may be obtained from the County Purchasing Agent's Office at 432-688-4872 or purchasing@midlandtx.gov or on the Midland County Purchasing webpage http://www.co.midland.tx.us/33/Midland-County-Request-for-Proposal

Kristy Engelskirk
Midland County Purchasing Agent

NOTICE TO CREDITORS

Notice is hereby given that original Letters Testamentary for the Estate of Stephen James McClaine, Deceased, were issued on March 30, 2023, in Cause No. P21275, pending in the County Court of Midland County, Texas to: Jana Lhea McClaine.

All persons having claims against the Estate which is currently being administered are required to present them to the undersigned within the time and in the manner prescribed by law.

DATED the 12th day of April, 2023

/s/ Maria H. Ortiz
Maria H. Ortiz
Attorney for Jana Lhea McClaine
State Bar No. 24104885
Lyda Law Firm
4701 87th Street, #150
Lubbock, Texas 79424
Phone: 833-455-9400
Email: maria@lydagroup.com

NOTICE OF APPLICATION FOR EXCEPTION TO SWR 26/37 SURFACE COMMINGLING PERMIT:

Notice is hereby given that Diamondback E&P LLC (RRC P-5 #237202) has filed with the Texas Railroad Commission the following P-17 Application for the Exception to SWR 26 and/or 37 to surface commingle production from all oil and gas leases: Collingsworth 3625 A (Lease# 57754), Collingsworth 3625 D (Lease# 57755), Collingsworth 3625 C (Lease# 57756), Collingsworth 3625 G (Lease# 57757), Lupin 3748 A (Lease# 58028), Lupin 3748 B (Lease# 58024), Lupin 3748 C (Lease# 58025), Lupin 3748 D (Lease# 58118), Lupin 3748 E (Lease# 58027), Lupin 3748 F (Lease# 58026), Lupin 3748 G (Lease# 58027), Lupin 3748 H (Lease# 58184) , Lupin Dora 3143 A (DP# 887003), Lupin Dora 3143 B (DP# 887006), Lupin Dora 3143 C (DP# 887007), Lupin Dora 3143 D (DP# 887004), Lupin Dora 3143 E (DP# 887009), Lupin Dora 3143 F (DP# 887010), Lupin Dora 3143 G (DP# 887011), Lupin Dora 3143 H (DP# 887012), Lupin Dora 3143 I (DP# 888955) to the Collingsworth Battery. All wells are in the Spraberry (Trend Area) or the Dora Roberts Field in Baker County, Texas. This application is for off lease storage, common separation, common storage and casinghead gas metering by allocation by well test. Production will be allocated by VI-10 Tests. Any royalty or working interest owners who have not received written notification, please consider this your notice of application. If you have objections to the issuance of this permit, you may submit a letter to P-17 Department, Railroad Commission of Texas, PO Box 12967, Austin, Texas 78711, Unless the Railroad Commission receives a protest to this application, the Commission may issue a permit within 21 days following the date of last publication.

NOTICE OF APPLICATION
FOR A PERMIT TO OPERATE A RECLAMATION PLANT

Mountain Energy, LLC (Mountaine) will be filing an application with the Railroad Commission of Texas (RRC) for a Permit to Operate a Reclamation Plant to reclaim oil from nonhazardous oilfield waste materials through the process of gravity and thermal separation.

The proposed reclamation plant is located in Midland, Midland County, Texas. The northern portion of the plant is on the M. Murphy & H. H. Griffin Survey, Abstract No. 1155 and the southern portion of the plant is on the H. R. Wells Survey, Abstract No. 758. The proposed reclamation plant is located on real property owned by AES Drilling Fluids, LLC.

Affected persons may protest this application. Protests must be in writing and must be received by the 15th day after the date of this notice, which means protests should be received by May 11, 2023. Protests must be sent to:

Technical Permitting Section
Oil and Gas Division
Railroad Commission of Texas
P.O. Box 12967
Austin, Texas 78711
(Telephone 512-463-3440)

ATTACHMENT – 6

LEASE

LEASE AGREEMENT

Between

AES DRILLING FLUIDS, LLC
("*AES*")

And

MOONSHINE ENERGY, LLC
("*Lessee*")

LEASE AGREEMENT

This **LEASE AGREEMENT** (the "Lease") is made this _____ day of _____ _____, 2023, by and between **AES DRILLING FLUIDS, LLC,** (hereinafter called "AES"), and Moonshine Energy, LLC, a Texas limited liability company, (hereinafter called "Lessee"). This Lease Agreement together with all renewals, extensions, and modifications is referred to herein as the "Lease Agreement", or the "Lease".

ARTICLE 1
LEASE OF PREMISES

Section 1.01. Description of Premises and Term

AES, in consideration of the rents to be paid and the terms, covenants, and conditions hereinafter set forth, hereby leases to Lessee and Lessee leases from AES for the term of this Lease, the premises located at 4009 East Highway 80, Midland, Texas, 79706, ("Leased Premises").

This Lease shall begin on the 1st day of May 2023, (the "Effective Date") and shall continue until July 31, 2023 (the "Term").

Section 1.02. Holding Over

If Lessee holds over beyond termination of this Lease without the written consent of AES, Lessee is deemed to be occupying the Leased Premises as a tenant at sufferance. During any holdover period, Lessee will pay two (2) times the monthly rent being charged Lessee in the month prior to the commencement of Lessee's holding over, and Lessee will be subject to all other terms of this Lease Agreement applicable to a tenant at sufferance.

ARTICLE 2
INSPECTION OF LEASED PREMISES

Lessee has inspected the Leased Premises and on the date this Lease Agreement is made accepts the Leased Premises As Is, Where Is, and in the condition it existed on that date, as reasonably suited and fit for Lessee's intended uses of the Leased Premises. Lessee acknowledges that AES has made no express warranties with regard to the Leased Premises, unless stated in this Lease Agreement, and to the maximum extent permitted by applicable law, AES hereby disclaims, and Lessee waives the benefit of, any and all implied warranties, including implied warranties of habitability, or fitness or suitability for Lessee's intended uses of the Leased Premises.

ARTICLE 3
RENT

Section 3.01. Base Rent

Subject to adjustments provided for herein, Lessee agrees to pay to AES at its offices at 575 N Dairy Ashford, Suite 800, Houston, Texas, 77079, monthly rent (the "Base Rent") for the Leased Premises of Five Thousand Dollars ($5,000.00).

Each monthly payment of Base Rent is due and payable on or before the first day of each month thereafter. If Lessee should fail to pay AES any sum to be paid by Lessee to AES hereunder within thirty (30) days after such payment is due, interest on the unpaid amount shall accrue at a rate of fifteen percent (15%) per annum or the maximum rate allowed by law, whichever is lesser, from the date payment was due until the date payment is made. AES may also impose a late charge of Twenty-Five Dollars ($25.00) or five percent (5%) of the unpaid amount, whichever is greater, to defray AES' administrative costs incurred as a result of Lessee's failure to timely make such payment. Any such late charge shall be in addition to all other rights and remedies available to AES hereunder or at law or in equity and shall not be construed as liquidated damages or limiting AES' remedies in any manner. Failure to pay such interest or late charge within thirty (30) days after written demand shall be an event of default hereunder. Following the dishonor of any check presented for payment, AES shall have the right, at its option, to require all further payments to be made by certified check, money order or wire transfer. Rent must be paid in legal tender of the United States of America without notice, demand, abatement, deduction or offset.

Section 3.02. Utilities and Taxes

In addition to the Base Rent described hereinabove, Lessee shall pay all ad valorem and other taxes, general and special assessments and other charges of every description which during the Term may be levied on or assessed against the Leased Premises and all interests therein and all improvements and other property thereon; Lessee shall pay and discharge all taxes levied or assessed upon Lessee's personal property located on the Leased Premises. If Lessee shall fail to pay such taxes when due, AES shall have the right to make such payment and collect such amount from Lessee.

Lessee agrees to pay when due all charges it contracts for water, gas, electricity, and other utilities, and garbage service, in connection with the Leased Premises. If at Lessee's request or because of Lessee's failure to pay for services to the Leased Premises it contracted for, AES provides any such services to the Leased Premises or pays the cost for any such services, Lessee will pay to AES the cost of such services as Additional Rent upon receiving AES' invoice therefore, payment to be made pursuant to the terms of said invoice.

ARTICLE 4
USE OF LEASED PREMISES

Section 4.01. Use

The Leased Premises may be used for storing vehicles and other material and equipment used in Lessee's business and for no other purpose, unless written permission for other use is obtained from AES.

Lessee will not:

A. Use, occupy or permit the use or occupancy of the Leased Premises for any purpose or in any manner, which directly or indirectly:

Violates (a) judicial decisions, orders, injunctions, writs, statutes, rulings, rules, regulations, promulgations, directives, permits, certificates or ordinances of any governmental authority in any way applicable to Lessee or the Leased Premises, including zoning, environmental and utility conservation matters; (b) insurance requirements; or (c) other documents, instruments or agreements relating to the Leased Premises or to which the Leased Premises may be bound or encumbered; is dangerous to life or property or a public or private nuisance; or disruptive to the activities of any other tenant or occupant of property adjacent to the Leased Premises;

B. Bring or permit to remain on the Leased Premises any asbestos, petroleum or petroleum products, explosives or toxic materials except for commercially reasonable amounts of materials used in the ordinary course of Lessee's business, nor commit or permit to remain any waste or damage to the Leased Premises; or

C. Commit, or permit to be committed, any action or circumstance on or about the Leased Premises which, directly or indirectly, would or might justify any insurance carrier in increasing the rate of or canceling the insurance policies maintained by Lessee or AES on the Leased Premises or improvements thereon.

Section 4.02. Environmental Representations

Lessee hereby represents and warrants to AES:

That Lessee's construction, occupancy, operation or use of the Leased Premises will not violate any applicable law, statute, ordinance, rule, regulation, order or determination of any governmental authority or any board of fire underwriters (or other body exercising similar functions), or any restrictive covenant or deed restriction (recorded or otherwise) affecting the Leased Premises, including but not limited to all applicable zoning ordinances and building codes, flood disaster laws and health and environmental laws and regulations (hereinafter sometimes collectively called "Applicable Laws").

In the event of a release of any environmental contaminants by Lessee which exceed permitted levels as defined by any city, state or federal law or regulation, Lessee must immediately

stop the release and cease any prohibited activities which may be resulting in such release; and immediately notify the proper environmental and safety agencies, federal, state, and local, as well as AES, in writing, of the date, time, and nature of the release, including, but not limited to, a description of the environmental contaminants discharge or released, and provide a MSDS for each of the said environmental contaminants.

In addition, upon receipt from any agency or department of the state of Texas or the federal government, Lessee will immediately furnish AES written information concerning any citation, notice of violation, enforcement action or penalty regarding any safety or environmental violation sent to Lessee, or any entity consulting or working on the Lessee's behalf relative to or at the Leased Premises.

Lessee must clean up, remove, remediate and repair any soil or ground water contamination or damage caused by the presence or release of any Hazardous Substance or Hazardous or Solid Waste (or any other materials or substances regulated by Applicable Environmental Laws) in, on, under, or about the Leased Premises during Lessee's occupancy of the Leased Premises in conformance with the requirements of Applicable Laws or Applicable Environmental Laws. The obligations of Lessee hereunder shall survive the expiration of this Lease.

All of the foregoing representations and warranties made by Lessee are continuing and must be true and correct for the entire Term of this Lease, and all of such representations and warranties will survive expiration or termination of this Lease Agreement.

ARTICLE 5
IMPROVEMENTS OR ALTERATIONS AND MAINTENANCE

Section 5.01. Maintenance and Return of Leased Premises

Lessee will, throughout the Lease Term, at its own expense and risk, maintain the Leased Premises in good order and condition, including but not limited to making all repairs and replacements necessary to keep the premises in that condition. All maintenance, repairs, and replacements required by this Section must be performed promptly when required and so as not to cause depreciation in the value of the Leased Premises.

If Lessee fails to perform its obligation to repair, replace, or maintain, as set forth above, within a reasonable time after notice from AES of the need for repair, replacement, or maintenance, AES may enter the Leased Premises and make the repairs or replacements, or perform the maintenance, or have the repairs or replacements made or maintenance performed, at its own expense. Upon AES' notice to Lessee of the performance and cost of any maintenance, repairs, or replacements under this Section, Lessee must immediately reimburse AES for the costs incurred by AES pursuant to this Section, together with interest on the sum at the highest legal rate from the date of the notice until the date paid by Lessee to AES.

At the expiration or termination of the Lease Term, Lessee will surrender the Leased Premises in good order and repair.

Section 5.03. No Liens

Unless otherwise agreed, Lessee may not grant, place or suffer, or permit to be granted, placed or suffered, against all or any part of the Leased Premises or Lessee's leasehold estate created hereby, any lien, security interest, pledge, conditional sale contract, claim, charge or encumbrance (whether constitutional, contractual or otherwise) and if any of the aforesaid should occur or be asserted, Lessee will, promptly upon demand by AES and at Lessee's expense, cause same to be released.

Section 5.04. Permits

Lessee must obtain and maintain in effect at all times during the Term of this Lease Agreement all permits, licenses and consents required or necessary for Lessee's use and occupancy of, and operations at, the Leased Premises.

Section 5.05. Ownership or Removal of Alterations, Modifications or Improvements by Lessee

At the expiration or termination of this Lease Agreement, all permanent improvements, modifications or alterations situated upon the Leased Premises, including all buildings, rail spurs and tracks, paneling, decorations, partitions, heating, ventilating and air-conditioning machinery and equipment, lighting fixtures, plumbing equipment, sprinkler system, and the like, are the property of AES and shall remain upon and be surrendered with the Leased Premises as a part thereof at the expiration or termination of this Lease Agreement. All processing equipment, non-permanent equipment and trade fixtures, furnishings and equipment, except for those referred to above, which are installed by Lessee may be removed by Lessee, at its expense, provided Lessee removes the same and repairs any damage caused by such removal within thirty (30) days after the date of expiration or termination of this Lease Agreement. AES has no obligation to protect any personal property of Lessee located on the Leased Premises after the expiration or termination of the Lease Agreement. Any trade fixtures or personal property not removed by Lessee when this Lease Agreement expires or terminates are considered abandoned by Lessee, and will automatically become AES' property.

ARTICLE 6
SUBLETTING OR TRANSFER

Lessee may not assign or sublet this Lease Agreement in whole or in part nor any interest therein nor sublet the Leased Premises nor any part thereof nor grant any license, concession or other right of occupancy of any portion of the Leased Premises, nor permit the transfer of this Lease by operation of law or otherwise without the prior written consent of AES.

ARTICLE 7
DEFAULT

Section 7.01. Default of Lessee

The occurrence of any one or more of the following shall constitute an Event of Default under this Lease Agreement:

A. The failure of Lessee to pay any Rent as and when due under this Lease Agreement.

B. The failure of Lessee to perform, comply with or observe any of the other covenants or conditions contained in this Lease Agreement and the continuance of such failure for a period of ten (10) days after written notice to Lessee.

C. The abandonment of the Leased Premises by Tenant for a period of thirty (30) days.

D. A general assignment by Lessee for the benefit of creditors or the filing of a voluntary petition in bankruptcy by Lessee.

E. Receivership, attachment or other judicial seizure of substantially all of Lessee's assets on the Leased Premises.

Section 7.02. Remedies of AES

Upon any continuing Event of Default after delivery of written notice of the Event of Default to Lessee and lapse of ten business days to cure the applicable Event of Default, AES may exercise any one or more of the following described remedies, in addition to all other rights and remedies provided at law or in equity:

A. Terminate this Lease Agreement by written notice to Lessee and forthwith repossess the Leased Premises.

B. Terminate Lessee's right of possession but not this Lease Agreement by written notice to Lessee. Taking of possession by AES shall not release Lessee from any liability hereunder. Upon entering and taking possession, AES may relet the Leased Premises without working a forfeiture of the Rent to be paid by Lessee. AES may accelerate the future rent and additional rent due under this Agreement and seek recovery of such rent and additional rent and any other damages provide for in this Lease Agreement, at law or in equity.

C. Cure any default for Lessee at Lessee's expense.

ARTICLE 8
LIEN AND SECURITY INTEREST

In consideration for the mutual benefits arising under this Lease Agreement, and as security for Lessee's performance of all its obligations under this Lease Agreement, Lessee hereby grants to AES a lien and security interest in and on all property of Lessee now or hereafter placed in or upon the Leased Premises, and such property shall be and remain subject to such lien and security interest of AES for payment of all rent and other sums agreed to be paid by Lessee herein.

ARTICLE 9
INSURANCE

Lessee agrees to indemnify and hold harmless AES from any liability for damages to any person or property in, on or about the Leased Premises from any cause resulting from Lessee's use or occupancy of said premises. Lessee will procure and keep in effect during the term of this Lease, public liability and property damage insurance for the benefit of the AES in the sum of $1,000,000 for damages resulting to one person, and $1,000,000 for damages resulting from one casualty, and $500,000 property damage insurance resulting from any one occurrence. Lessee shall deliver proof of said policies to AES and Lessee's failure to do so, will be considered an event of default hereunder. All such insurance shall name AES as an additional insured and to the extent permitted by insurance policies which may be owned by the parties, AES and Lessee waive any and all rights of subrogation against each other which might otherwise exist.

The minimum insurance protection amounts may be increased from time to time upon request by AES to an amount that is commercially reasonable at the time.

ARTICLE 10
PROPERTY LOSS

Section 10.01. Obligation to Restore

If all or any part of the improvements located on (or constituting a part of) the Leased Premises are destroyed or damaged by any casualty during any Term of this Lease Agreement, Lessee will promptly commence and thereafter prosecute diligently to completion the restoration of the same to the condition in which the destroyed or damaged portion existed prior to the casualty. Lessee will perform such restoration with at least as good workmanship and quality as the improvements being restored and in compliance with the provisions of Article 5 hereof. Notwithstanding the foregoing provisions of this paragraph to the contrary, if all of such improvements are wholly destroyed by any casualty or are so damaged or destroyed that, in Lessee's good faith judgment reasonably exercised, it would be uneconomic to cause the same to be restored (and Lessee shall give written notice of such determination to AES within ninety (90) days after the date the casualty occurred), then Lessee shall not be obligated to restore such improvements and this Lease Agreement shall terminate as of the date of the casualty, and AES shall be entitled to receive and retain the insurance proceeds for the loss.

If a property loss affecting the Leased Premises occurs, all insurance proceeds arising from policies maintained by Lessee for the damages arising from such casualty shall be distributed and paid directly to AES, and AES shall distribute such insurance proceeds to Lessee to the extent necessary to reimburse Lessee for costs incurred by Lessee in restoring the damaged Leased Premises in satisfaction of this **Section 10.01**, and any balance of such proceeds remaining after such restoration is complete shall be paid to Lessee within sixty (60) days after the restoration is complete and approved by AES.

Section 10.02. Notice of Damage

Lessee shall immediately notify AES of any destruction of or damage to the Leased Premises.

ARTICLE 11
QUIET ENJOYMENT

Lessee, on paying the rent and all other sums called for herein and performing all of Lessee's other obligations contained herein, shall and may peaceably and quietly have, hold, occupy, use and enjoy the Leased Premises during the Term of this Lease Agreement, subject to the provisions of this Lease Agreement.

ARTICLE 12
GENERAL PROVISIONS

Section 12.01. Inspection

Lessee will permit AES and AES's agents, representatives or employees to enter on the Leased Premises for the purpose of inspection to determine whether Lessee is in compliance with the terms of this Lease Agreement, for purposes of maintaining, repairing or altering the Leased Premises, or for the purposes of showing the Leased Premises to prospective lessees, purchasers, mortgagees or beneficiaries under deeds of trust.

Section 12.02. Notices

All notices, demands or requests shall be given:

To AES:
AES Drilling Fluids, LLC,
575 N Dairy Ashford, Suite 800
Houston, Texas 77079
Attn: Legal

To Lessee:

_____

_____

_____

Any notice required or permitted under this Lease Agreement must be in writing. Any notice required by this Lease Agreement will be deemed to be delivered (whether actually received or not) when deposited with the United States Postal Service, postage paid, certified mail, return receipt requested, and addressed to the intended recipient at the address shown in this Lease

Agreement. Notice may also be given by regular mail, personal delivery, courier delivery, facsimile transmission, or other commercially reasonable means and will be effective when actually received.

Section 12.03. Abatement

Lessee's covenant to pay rent and AES' covenants are independent. Except as otherwise provided herein, Lessee is not entitled to abatement of rent for any reason.

ARTICLE 13
MISCELLANEOUS

Section 13.01. Parties Bound

This agreement binds and inures to the benefit of the parties and their respective legal representatives, heirs, distributees, successors and assigns where assignment is permitted by this Lease Agreement.

Section 13.02. Applicable Law

This agreement must be construed and its performance enforced under Texas law. Venue of any action arising out of this Lease Agreement will be in Harris County, Texas.

Section 13.03. Severability

If any part of this Lease Agreement is for any reason found to be unenforceable, all other portions nevertheless remain enforceable.

Section 13.04. Time of Essence

Time is of the essence with respect to each date or time specified in this Lease Agreement by which an event is to occur.

Section 13.05. Rights and Remedies Cumulative

The rights and remedies provided by this Lease Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its right to use any or all other remedies. Said rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance or otherwise. All the rights and remedies may be exercised and enforced concurrently or whenever occasion for the exercise arises.

Section 13.06. Attorneys' Fees

In the event AES or Lessee breach or default upon any of the terms of this Lease Agreement and the party not in default employs attorneys to protect or enforce its rights hereunder and prevails, then the defaulting party agrees to pay the reasonable attorneys' fees and expenses incurred by the prevailing party.

Section 13.07. Captions

All captions in this Lease Agreement are for reference and convenience only and shall not modify or affect the provisions of this Lease Agreement in any manner.

Section 13.08. Authority

The person executing this Lease Agreement on behalf of the Lessee personally warrants and represents unto AES that (a) (if applicable) Lessee is a duly organized and existing legal entity, in good standing in the state of Texas, (b) Lessee has full right and authority to execute, deliver and perform this Lease Agreement, (c) the person executing this Lease Agreement on behalf of Lessee was authorized to do so, and (d) upon request of AES, such person will deliver to AES satisfactory evidence of his or her authority to execute this Lease Agreement on behalf of Lessee.

Section 13.09 Interpretation

Both AES and Lessee and their respective legal counsel have reviewed and have participated in the preparation of this Lease Agreement. Accordingly, no presumption will apply in favor of either AES or Lessee in the interpretation of this Lease Agreement or in the resolution of the ambiguity of any provision hereof.

Section 13.10. Entire Agreement

This Lease Agreement, including any exhibits, constitutes the parties' final and mutual agreement. There are no written or oral representations or understandings that are not fully expressed in this Lease Agreement. No change, waiver or discharge is valid unless in a writing that is signed by the party against whom it is sought to be enforced.

(Signatures on Next Page)

IN TESTIMONY WHEREOF, **the parties hereto have caused this Lease Agreement to be executed the day and year first written above.**

AES DRILLING FLUIDS, LLC

By: _____
Name:
Title:

"AES"

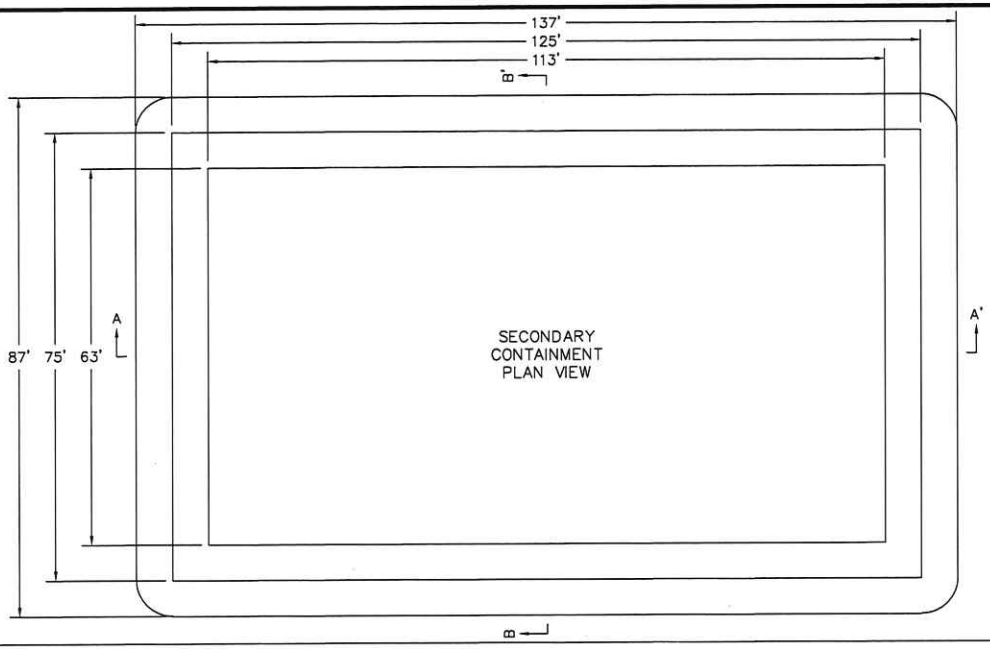
MOONSHINE ENERGY, LLC

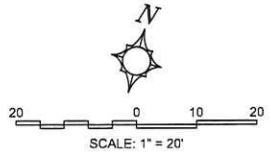
DocuSigned by:
By: Sarah Presley
Name: 31EAC9E74373442... Sarah Presley
Title: Member

"Lessee"

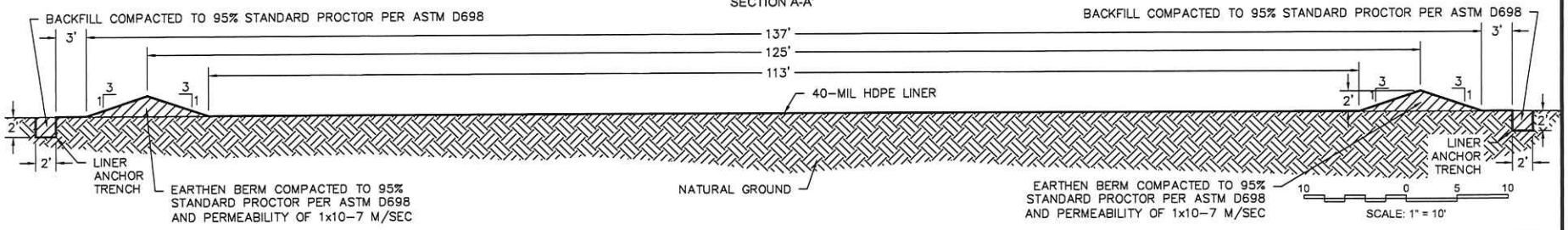
ATTACHMENT – 7

MAPS, DIAGRAMS, SPECIFICATIONS, & SPCC DRAFT

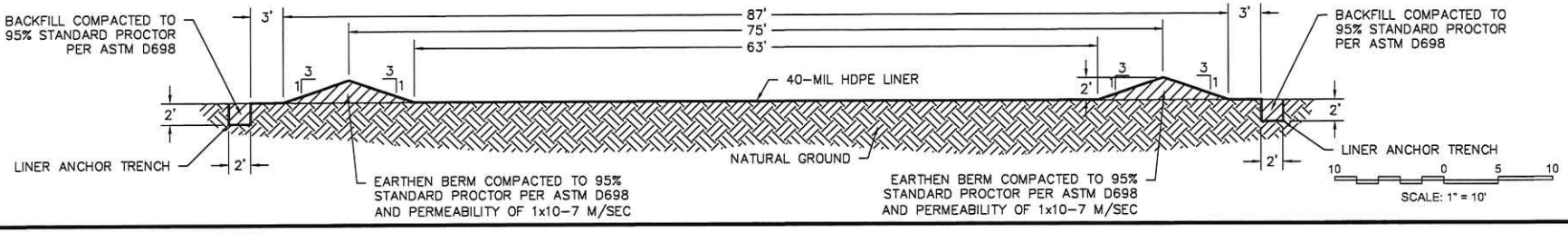




SECTION A-A'



SECTION B-B'



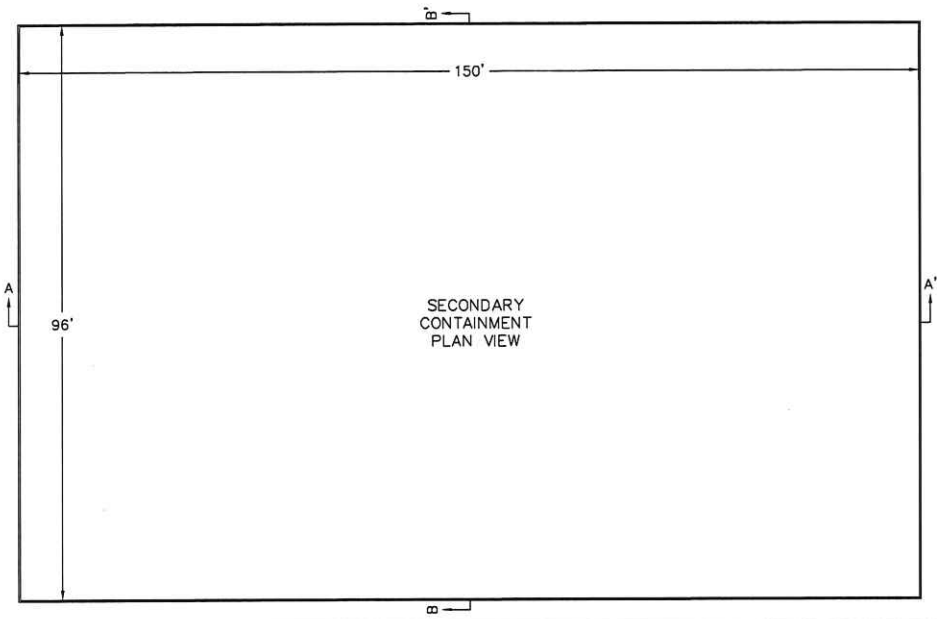
EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759
www.eikoncg.com

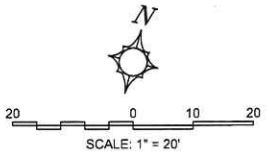
SECONDARY CONTAINMENT DIAGRAM (ITEM 26)
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

DATE:
04/26/2023

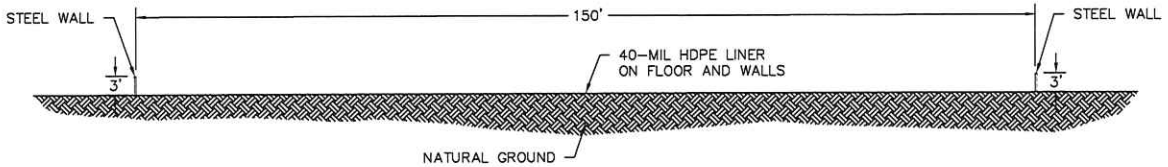
THIS DRAWING IS FOR PERMIT PURPOSES ONLY

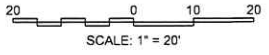
SHEET:
7A



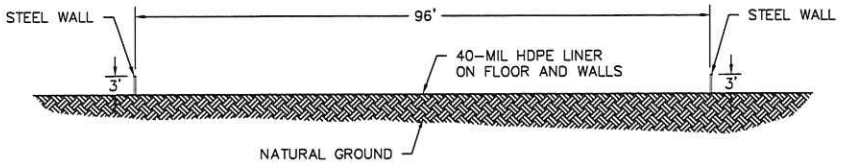


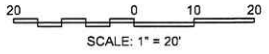
SECTION A-A'





SECTION B-B'





EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759
www.eikoncg.com

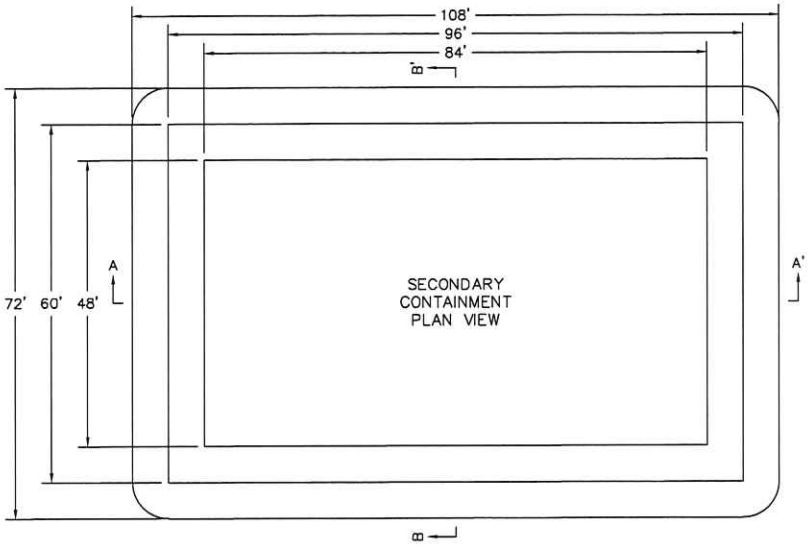
SECONDARY CONTAINMENT DIAGRAM (ITEM 27)

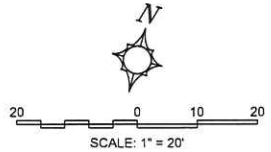
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

DATE:
04/26/2023

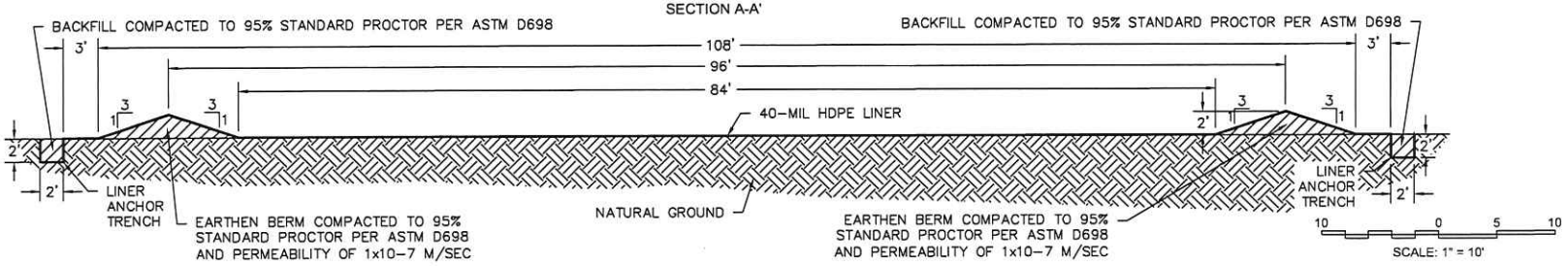
THIS DRAWING IS FOR PERMIT PURPOSES ONLY

SHEET:
7A.1

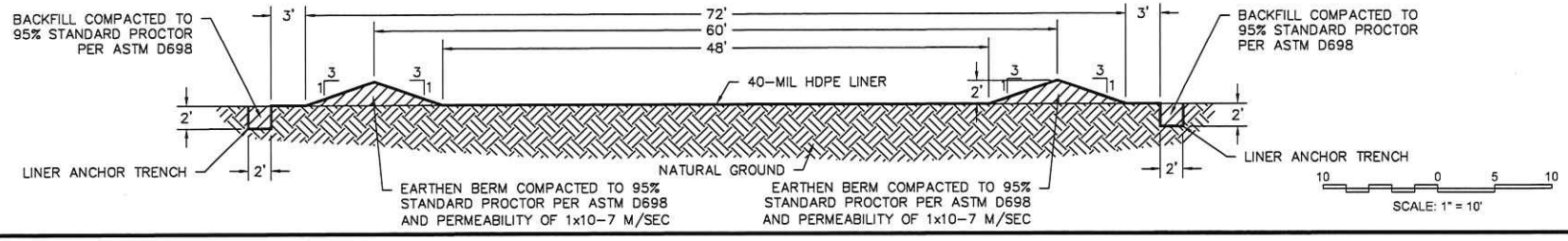




SECTION A-A'



SECTION B-B'



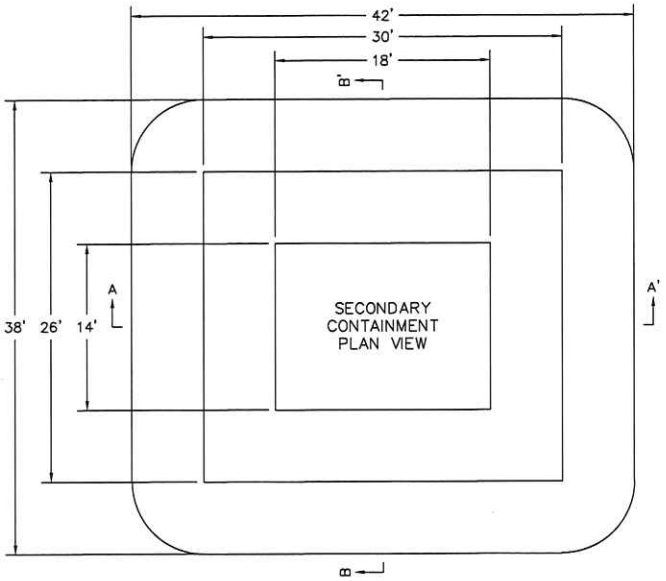
EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759
www.eikoncg.com

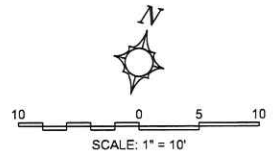
SECONDARY CONTAINMENT DIAGRAM (ITEM 28)
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

DATE:
04/26/2023

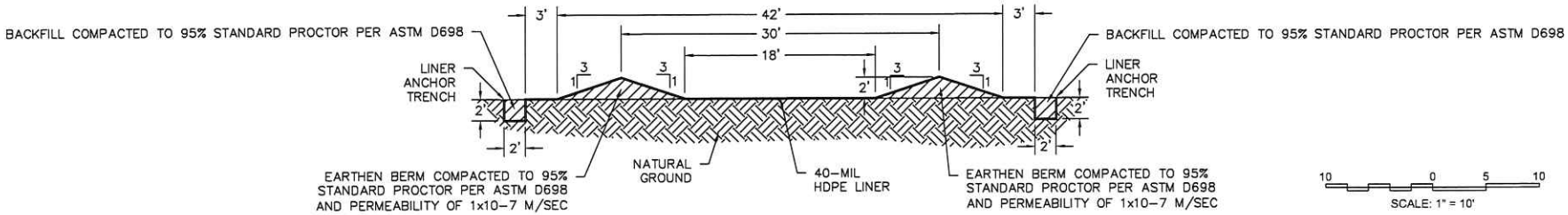
THIS DRAWING IS FOR PERMIT PURPOSES ONLY

SHEET:
7A.2

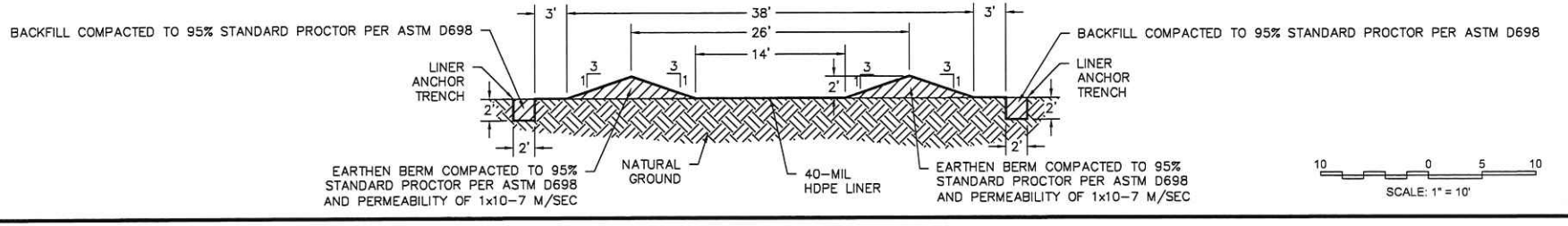




SECTION A-A'



SECTION B-B'



EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759
www.eikoncg.com

SECONDARY CONTAINMENT DIAGRAM (ITEM 29)

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

DATE:
04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

SHEET:
7A.3

PRODUCT DATA SHEET

GSE HD Textured Geomembrane

GSE HD Textured is a co-extruded textured high density polyethylene (HDPE) geomembrane available on one or both sides. It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased frictional resistance, excellent chemical resistance and endurance properties.

AT THE CORE:
An HDPE geomembrane used in applications that require increased frictional resistance, excellent chemical resistance and endurance properties.

Product Specifications

These product specifications meet GRI GM13

Tested Property	Test Method	Frequency	Minimum Average Value				
			30 mil	40 mil	60 mil	80 mil	100 mil
Thickness, mil Lowest individual reading	ASTM D 5994	every roll	30 27	40 36	60 54	80 72	100 90
Density, g/cm³	ASTM D 1505	200,000 lb	0.940	0.940	0.940	0.940	0.940
Tensile Properties (each direction) Strength at Break, lb/in-width Strength at Yield, lb/in-width Elongation at Break, % Elongation at Yield, %	ASTM D 6693, Type IV Dumbell, 2 ipm G.L. 2.0 in G.L. 1.3 in	20,000 lb	 45 63 100 12	 60 84 100 12	 90 126 100 12	 120 168 100 12	 150 210 100 12
Tear Resistance, lb	ASTM D 1004	45,000 lb	21	28	42	56	70
Puncture Resistance, lb	ASTM D 4833	45,000 lb	45	60	90	120	150
Carbon Black Content, % (Range)	ASTM D 1603*/4218	20,000 lb	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	45,000 lb	Note(1)	Note(1)	Note(1)	Note(1)	Note(1)
Asperity Height, mil	ASTM D 7466	second roll	16	18	18	18	18
Notched Constant Tensile Load(2), hr	ASTM D 5397, Appendix	200,000 lb	500	500	500	500	500
Oxidative Induction Time, mins	ASTM D 3895, 200°C; O_2, 1 atm	200,000 lb	>100	>100	>100	>100	>100
TYPICAL ROLL DIMENSIONS							
Roll Length(3), ft	Double-Sided Textured Single-Sided Textured		830 1,010	700 780	520 540	400 410	330 330
Roll Width(3), ft			22.5	22.5	22.5	22.5	22.5
Roll Area, ft²	Double-Sided Textured Single-Sided Textured		18,675 22,725	15,750 17,550	11,700 12,150	9,000 9,225	7,425 7,425

NOTES:
- (1)Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 3.
- (2)NCTL for GSE HD Textured is conducted on representative smooth membrane samples.
- (3)Roll lengths and widths have a tolerance of ±1%.
- GSE HD Textured is available in rolls weighing approximately 4,000 lb.
- All GSE geomembranes have dimensional stability of ±2% when tested according to ASTM D 1204 and LTB of <-77°C when tested according to ASTM D 746.
- *Modified.

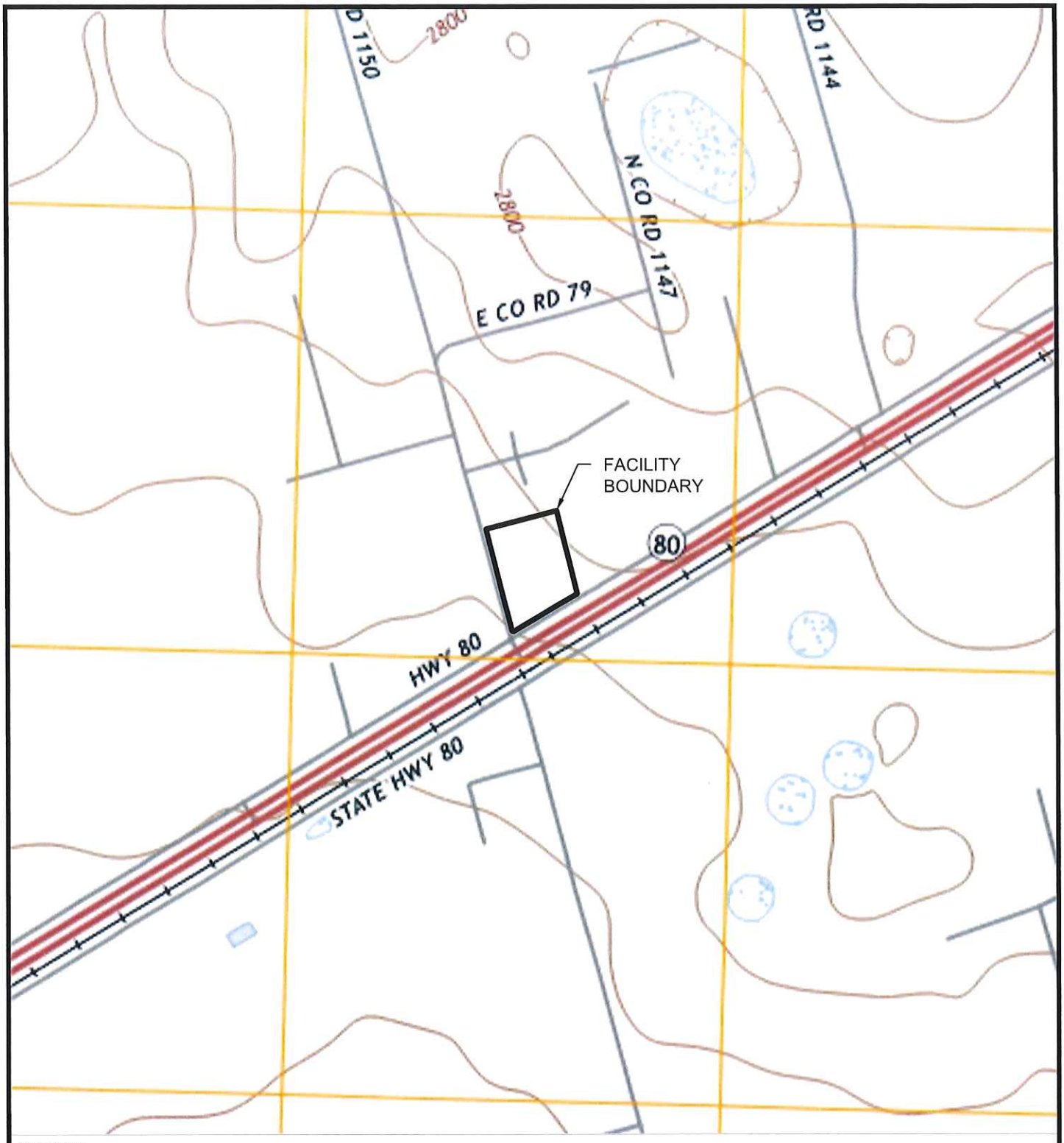
GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.

DURABILITY RUNS DEEP

For more information on this product and others, please visit us at GSEworld.com, call 800.435.2008 or contact your local sales office.

GSE ENVIRONMENTAL™



NOTES:

1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. THE USGS NORTHEAST MIDLAND, TX, 2019, 7.5' QUADRANGLE WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP.
   (http://www.usgs.gov/)

1000 0 500 1000

SCALE: 1" = 1000'

N

SHEET: **7B**

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

TOPOGRAPHIC MAP

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AfA	Amarillo fine sandy loam, 0 to 1 percent slopes	5.9	64.4%
AfB	Amarillo fine sandy loam, 1 to 3 percent slopes	3.3	35.6%

NOTES:
1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. THE USDA'S WEB SOIL SURVEY MAP VIEWER WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP.
   (http://www.websoilsurvey.sc.egov.usda.gov/)

200 0 100 200
SCALE: 1" = 200'

N

SHEET: 7C

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

SOIL MAP
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

Midland County, Texas

AfA—Amarillo fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: f5r6
Elevation: 2,600 to 5,100 feet
Mean annual precipitation: 16 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Amarillo and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Amarillo

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy eolian deposits

Typical profile

Ap - 0 to 10 inches: fine sandy loam
Bt - 10 to 41 inches: sandy clay loam
Btkk - 41 to 56 inches: sandy clay loam
Btk - 56 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 65 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B
Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Minor Components

Arvana
Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Posey
Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Sharvana
Percent of map unit: 2 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Midland County, Texas
Survey Area Data: Version 21, Aug 24, 2022

Midland County, Texas

AfB—Amarillo fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: f5r7
Elevation: 2,600 to 5,100 feet
Mean annual precipitation: 16 to 21 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 185 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Amarillo and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Amarillo

Setting

Landform: Plains, playa slopes
Down-slope shape: Convex, concave
Across-slope shape: Linear
Parent material: Loamy eolian deposits

Typical profile

Ap - 0 to 10 inches: fine sandy loam
Bt - 10 to 41 inches: sandy clay loam
Btkk - 41 to 56 inches: sandy clay loam
Btk - 56 to 85 inches: sandy clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 65 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B
Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Minor Components

Arvana

Percent of map unit: 4 percent
Landform: Plains, playa slopes
Down-slope shape: Convex, concave
Across-slope shape: Linear
Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Posey

Percent of map unit: 4 percent
Landform: Plains, playa slopes
Down-slope shape: Convex, concave
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Sharvana

Percent of map unit: 2 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Midland County, Texas
Survey Area Data: Version 21, Aug 24, 2022

NOTES:

1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. THE FEMA FIRM PANEL 48329C0094F WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://msc.fema.gov/)

600 0 300 600

SCALE: 1" = 600'

N

SHEET: **7D**

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

FEMA FLOOD MAP

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

NOTES:

1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. DISTANCE MEASURED FROM THE FACILITY BOUNDARY.
3. THE US FISH & WILDLIFE SERVICE'S NATIONAL WETLAND INVENTORY MAPPER - V2 WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (https://fws.gov/wetlands/data/mapper.html)

1000 0 500 1000

SCALE: 1" = 1000'

N

SHEET: **7E**

DATE: 04/26/2023

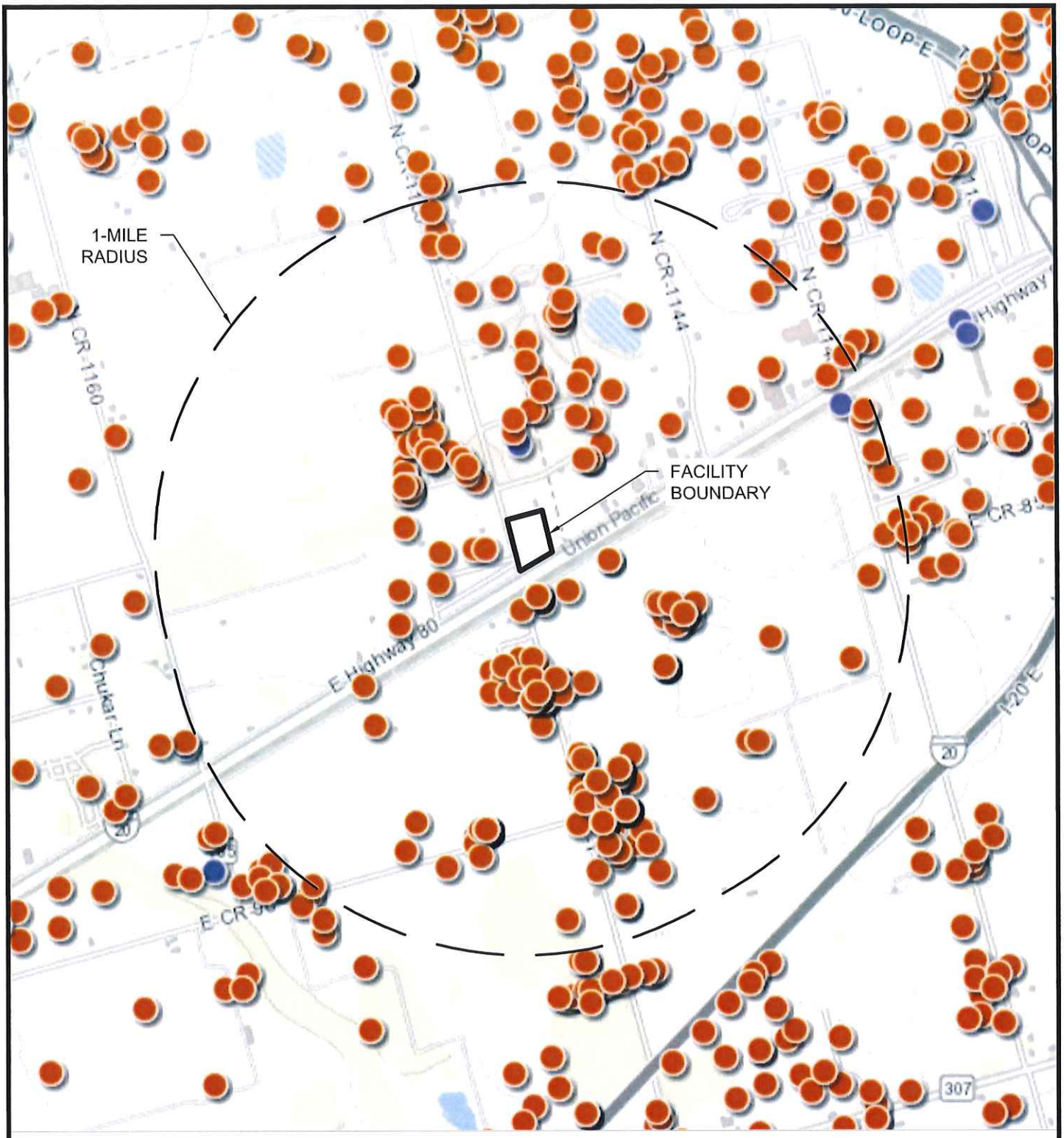
THIS DRAWING IS FOR PERMIT PURPOSES ONLY

WETLANDS MAP

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759



NOTES:

1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)
2. THE TWDB'S WATER INFORMATION INTEGRATION & DISSEMINATION MAP VIEWER WAS USED AS AN UNDERLAY IMAGE FOR THIS MAP. (http://www.twdb.texas.gov/)

2000 0 1000 2000

SCALE: 1" = 2000'

N

SHEET: **7F**

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

WATER WELL MAP

R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

EIKON

LIST OF ACTIVE DOMESTIC WATER WELLS WITHIN ONE MILE

Well Report Tracking Number	Latitude (DD)	Longitude (DD)	Borehole Depth (ft)
20627	32.034722	-102.017500	80
73301	32.031944	-102.015001	105
78999	32.033889	-102.003334	80
90128	32.021944	-102.007501	320
107961	32.038889	-102.028611	80
122757	32.022500	-102.025278	99
122769	32.023889	-102.025278	120
123686	32.032500	-102.018611	95
161143	32.032778	-102.016389	95
161144	32.032222	-102.016667	90
168138	32.025555	-102.021667	94
177148	32.025555	-102.021111	90
180488	32.028889	-102.002223	90
180489	32.029444	-102.002501	90
195476	32.030555	-102.012223	90
195733	32.038334	-102.023333	87
221743	32.026111	-102.001945	60
221795	32.031111	-102.018611	64
230032	32.030278	-102.019722	90
236905	32.013334	-102.025000	76
236908	32.014445	-102.024444	68
242410	32.026389	-102.025000	80
269599	32.035834	-102.007778	130
269600	32.032778	-102.007501	103
269602	32.032500	-102.004723	103
275026	32.035556	-102.017500	87
276000	32.035000	-102.017500	83
276003	32.035000	-102.017778	85
276005	32.035000	-102.017500	81
282639	32.031111	-102.025555	156
284046	32.034167	-102.020833	85
284574	32.031111	-102.025278	120
289258	32.030833	-102.023889	105
291403	32.027778	-102.025000	80
291404	32.027778	-102.024722	80

Well Report Tracking Number	Latitude (DD)	Longitude (DD)	Borehole Depth (ft)
291405	32.028055	-102.024722	80
293919	32.031667	-102.008889	75
294325	32.028055	-102.024722	80
294326	32.028055	-102.025000	80
294327	32.028055	-102.025000	80
296696	32.029722	-102.015556	70
300078	32.033334	-102.025278	90
308376	32.040834	-102.020000	114
308405	32.029167	-102.016389	120
308411	32.029167	-102.016112	80
308412	32.029167	-102.016112	80
313017	32.030833	-102.025278	120
313365	32.029444	-102.023889	97
313390	32.031667	-102.024167	160
315327	32.030278	-102.025000	145
315571	32.033889	-102.019167	92
319790	32.035000	-102.013889	160
322991	32.029444	-102.023889	110
322993	32.029722	-102.024167	90
328098	32.031111	-102.023889	105
328099	32.030278	-102.023611	97
328114	32.030000	-102.024167	100
329293	32.035834	-102.021944	90
338291	32.030555	-102.025000	150
355219	32.028889	-102.025000	90
355320	32.037500	-102.007778	102
358548	32.029722	-102.024722	150
362711	32.031111	-102.024167	110
362737	32.029722	-102.024722	120
362740	32.028611	-102.025000	90
365383	32.031944	-102.018333	70
366298	32.040556	-102.013334	90
377199	32.024167	-102.023333	120
381968	32.040278	-102.014167	80
448719	32.030800	-102.015933	70
451231	32.041444	-102.017389	75
464759	32.035581	-102.017353	80

Well Report Tracking Number	Latitude (DD)	Longitude (DD)	Borehole Depth (ft)
492722	32.031118	-102.002918	90
500447	32.033104	-102.019129	100
505597	32.020131	-102.016364	80
505601	32.020061	-102.017003	80
518403	32.023075	-102.019426	90
527235	32.028317	-102.021547	120
534738	32.030790	-102.019738	86
548613	32.012651	-102.023040	71
560268	32.018417	-102.018417	98
566317	32.020597	-102.020896	65
579756	32.036583	-102.017750	80
584588	32.037605	-102.015034	79
616687	32.030899	-102.016729	75
630201	32.026695	-102.001270	65
631986	32.015380	-102.010610	103

WATER WELL WITH SHALLOWEST GROUNDWATER WITHIN ONE MILE

Well Report Tracking Number	Latitude (DD)	Longitude (DD)	Borehole Depth (ft)	Water Level (ft bls)
85950	32.034722	-102.017500	40	19

STATE OF TEXAS WELL REPORT for Tracking #85950

Owner:	**Shell Oil Company**	Owner Well #:	**MW-34**
Address:	**1270 AveoftheAmericas,Ste 2320 New York, NY 10020**	Grid #:	**27-64-9**
		Latitude:	**32° 00' 48" N**
Well Location:	**Midland Tank Farm Midland, TX**	Longitude:	**102° 00' 54" W**
Well County:	**Midland**	Elevation:	**No Data**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Start Date: **4/12/2006** Drilling End Date: **4/12/2006**

	Diameter (in.)	*Top Depth (ft.)*	*Bottom Depth (ft.)*
Borehole:	**7**	**0**	**40**

Drilling Method: **Air Rotary**

Borehole Completion: **Filter Packed**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Filter Material*	*Size*
Filter Pack Intervals:	**13**	**40**	**Gravel**	**20/40 Sand**

	Top Depth (ft.)	*Bottom Depth (ft.)*	*Description (number of sacks & material)*
Annular Seal Data:	**0**	**2**	**1 Cement**
	2	**13**	**3 Bentonite**

Seal Method: **Topload Pelletized Bentonite**

Sealed By: **Driller**

Distance to Property Line (ft.): **No Data**

Distance to Septic Field or other concentrated contamination (ft.): **No Data**

Distance to Septic Tank (ft.): **No Data**

Method of Verification: **No Data**

Surface Completion: **Alternative Procedure Used**

Water Level: **19 ft.** below land surface on **2006-04-12** Measurement Method: **Unknown**

Packers: **No Data**

Type of Pump: **No Data**

Well Tests: **No Test Data Specified**

	Strata Depth (ft.)	Water Type
Water Quality:	**No Data**	**No Data**

Chemical Analysis Made: **No**

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the report(s) being returned for completion and resubmittal.

Company Information: **Straub Corporation**

P.O. Box 192
Stanton, TX 79782

Driller Name: **Martin Straub** License Number: **4653**

Comments: **No Data**

Lithology:
DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	2	Brown Silty Clay/Sand
2	3	Hard Caliche Layers
3	6	Caliche Layers/Tan Silty Sand
6	11	Medium Caliche Layers
11	13	Hard Caliche Layers
13	18	Hard Caliche/Tan Silty Sand
18	31	Tan-Yellow Silty Sand/Sandstone
31	32	Pink Silty Sand/Sandstone
32	35	Pink Sandy Clay/Small Gravel
35	40	Red Clay

Casing:
BLANK PIPE & WELL SCREEN DATA

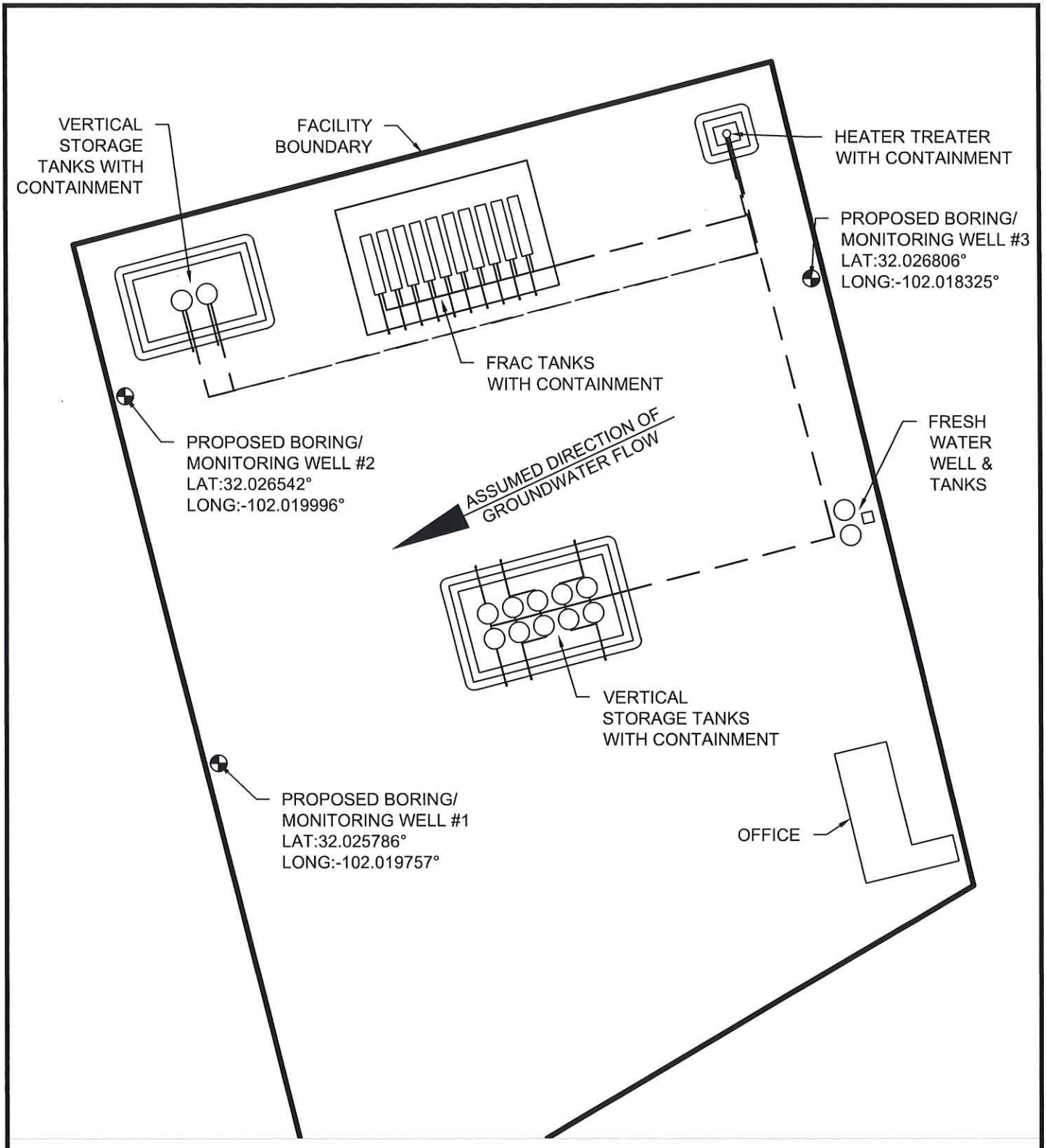
Dia. (in.)	New/Used	Type	Setting From/To (ft.)
4" New FJ PVC Screen 40-15 .010			
4" New FJ PVC Riser 15-+4			

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation
P.O. Box 12157
Austin, TX 78711
(512) 334-5540



NOTES:
1. LAT: 32.025975°, LONG: -102.018982°
   (COORDINATES REFER TO THE CENTER OF THE FACILITY)

100 0 50 100
SCALE: 1" = 100'

N

SHEET: **7G**

DATE: 04/26/2023

THIS DRAWING IS FOR PERMIT PURPOSES ONLY

MONITORING WELL MAP
R-9 PERMIT APPLICATION
MOONSHINE ENERGY, LLC
MIDLAND COUNTY, TEXAS

EIKON
www.eikoncg.com

EIKON Consulting Group
500 Moseley Road
Cross Roads, Texas 76227
Phone (940) 387-0805
Texas Firm F-12759

Soil Boring/Monitoring Well Installation Plan

Three (3) soil borings will be drilled at the proposed locations shown on the Proposed Monitoring Well Locations Map to characterize the subsurface. The borings will be advanced to 100 feet or the first encountered groundwater or saturated soils, if less than 100 feet. If groundwater is not observed during drilling, the borings will be left open for 24 hours to determine if groundwater is present. If groundwater is present within 100 feet of the ground surface, the soil borings will be converted into monitoring wells.

All geologic work products will be prepared under seal of a registered Professional Geologist (P.G.), as required by the Occupations Code Chapter 1002.

1. Each soil boring or groundwater monitoring well drilled will conform to the following:
    - The wells will be completed by a certified water well driller in accordance with 16 TAC Part 4, Chapter 76 (Water Well Drillers and Water Well Pump Installers).
    - The wells will be completed to penetrate the shallowest groundwater zone, and the completion will isolate that zone from any deeper groundwater zone.
    - The screened interval of the wells will be designed to intercept at least 5 feet of groundwater. The well screen will extend above the static water level.
    - Provisions will be made to protect the well heads from damage by vehicles and heavy equipment.
    - The wells will be maintained in good condition with a lockable watertight expansion cap.
    - The following information will be submitted after the new wells are completed:
        - A soil boring lithological log for the well, with the soils described using the Unified Soil Classification System (USCS) (equivalent to ASTM D 2487 and ASTM D 2488). The log will also include the method of drilling, well specifications, slotted screen type and slot size, riser and screen length, bentonite and cement intervals, total depth, and the depth of the first encountered groundwater or saturated soils. The sand pack size should be compatible with the well screen slot size, as well as the local lithology.
        - A well installation diagram, detailing construction specifications for each well.
        - A survey elevation for each well head reference point (top of casing) relative to a real or arbitrary on-site benchmark relative to mean sea level.
        - A table with recorded depth to water, top of casing, and adjusted depth to water data.
        - An updated Site Plan and a potentiometric surface map showing static water levels, the calculated gradient, and the estimated direction of groundwater flow.
2. The groundwater monitor wells will be able to provide a sample that is representative of the groundwater underlying the site for the duration of facility operations. If a monitor well is not capable of providing a representative sample, the permittee will notify Technical Permitting in Austin and install a replacement monitor well that is acceptable to the RRC.

3. All monitor wells will be monitored and/or sampled for the following parameters after installation, and quarterly thereafter:

PARAMETER	UNITS
Static Water Level	Feet (ft)
Total Depth	ft
pH *EPA Method 150.1, 150.2, or equivalent*	s.u.
Total Dissolved Solids (TDS) *EPA Method 2540C or equivalent*	mg/L
Total Petroleum Hydrocarbon (TPH) *Method TX1005*	mg/L
Benzene *EPA Method 602 or equivalent*	mg/L
Soluble Cations: Calcium, Magnesium, Potassium, and Sodium *EPA Method 6010/6020 or equivalent*	mg/L
Soluble Anions: Bromides, Carbonates, Chlorides, Nitrates, and Sulfates *EPA Method 300/9056 or equivalent*	mg/L

4. All chemical laboratory analyses required to be performed in accordance with this plan will be performed using appropriate Environmental Protection Agency (EPA) methods or Standard Methods by an independent, National Environmental Laboratory Accreditation Program (NELAP) certified laboratory neither owned nor operated by the permittee. Any sample collected for laboratory analysis will be collected and preserved in a manner appropriate for that analytical method as specified by 40 CFR, Part 136.
5. If any of the parameters listed show potential impacts from operations at the facility, or if a liner system failure occurs, an appropriate sampling frequency determined by Technical Permitting will be initiated.
6. All groundwater monitoring wells will remain operational, and monitoring requirements will continue as specified in this plan until written approval from Technical Permitting in Austin is granted for plugging and abandoning the wells.

MOONSHINE ENERGY, LLC

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC)

M2

A-1165, BLK 38, T&P RR CO SURVEY #40

LAT. N32.025886 LONG. W102.0189652

MIDLAND COUNTY, TEXAS

SPILL PLAN DESIGN, LLC
PAUL PARTLOW
11201 SUNDANCE DR YUKON OK 73099
405-202-2080

fletcher lewis engineering, inc.

605 N SWEETGUM AVE
OKLAHOMA CITY OK 73127
405-840-5675

Introduction

The purpose of this Spill Prevention Control and Countermeasure (SPCC) Plan is to describe measures implemented to prevent oil discharges from occurring, and to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge from this production facility. This SPCC Plan has been prepared and implemented in accordance with the SPCC requirements contained in 40 CFR part 112.

In addition to fulfilling requirements of 40 CFR part 112, this SPCC Plan is used as a reference for oil storage information and reporting records, as a tool to communicate practices on preventing and responding to discharges with employees and contractors, as a guide on facility inspections, and as a resource during emergency response.

TABLE OF CONTENTS

CROSS REFERENCE WITH SPCC RULE

112.3 (d)	Professional Engineer Certification	5
112.3 (e)	Location of SPCC Plan	7
112.5	Plan Review	7 & 32
112.7	Management Approval	5
112.7	Cross-Reference with SPCC Rule	4
112.7 (a) (3)	General Information and Facility Diagram	8- 12
112.7 (a) (3)	Facility Diagrams	9
112.7 (a) (3)	Discharge Discovery and Reporting	13
112.7 (a) (4)	Discharge Notification – Appendix B	13 & 20
112.7 (a) (5)	Spill Mitigation Procedures	15
112.7 (a) (5)	Oil Spill Contingency Plan - Appendix C Check List for Reporting and Correcting Spills - Appendix D	21-25 26
112.7 (a) (5)	Spill Report Form	36
112.7 (b)	Potential Discharge Volume and Direction of Flow	15 & 21
112.7 (c)	Containment and Diversionary Structures	15-18
112.7 (d)	Practicability of Secondary Containment Written Commitment of manpower, equipment, and materials - Appendix H	21-22 30
112.7 (e)	Inspections, Tests and Records	17, 31-36
112.7 (f)	Personnel, Training, and Discharge Prevention Procedures	14,25,39-45
112.7 (g)	Security - N/A (does not apply to production facilities)	
112.7 (h)	Loading/Unloading Rack	22
112.7 (i)	Brittle Fracture Evaluation - N/A (no field-erected aboveground tank at this facility)	
112.7 (j)	Conformance with Applicable State and Local Requirements	13
112.9 (b)	Oil Production Facility Drainage	15
112.9 (b)	Record of Diked Drainage - Appendix I	31
112.9 (c) (1)	Production Equipment - N/A	
112.9 (c) (2)	Secondary Containment for Bulk Storage Containers	15
112.9 (c) (3)	Inspections, Tests, and Records Quarterly Inspection Checklist	33-35
112.9 (c) (4)	Bulk Storage Containers Overflow Prevention	16
112.9 (d) (1)	Transfer Operations and Saltwater Disposal System	17
112.9 (d) (3)	Flowline Maintenance Program	17 & 18
	Only relevant rule provisions are indicated. For a complete list of SPCC requirements, refer to the full text of 40 CFR part 112, Version 1.0, 11128/2005	

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

PREPARED FOR:

MOONSHINE ENERGY, LLC

NAME OF FACILITY	M2
OPERATOR	**MOONSHINE ENERGY, LLC**
LOCATION OF FACILITY	A-1165, BLK 38, T&P RR CO SURVEY #40
	LAT N32.025886 LONG W102.0189652 MIDLAND COUNTY, TEXAS

CERTIFICATION

40 CFR 112.3 (d)

I CERTIFY THAT I AM FAMILIAR WITH THE REQUIREMENTS OF **40 CFR PART 112**; THAT I OR MY AGENTS HAVE VISITED AND EXAMINED THE FACILITY; THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH GOOD ENGINEERING PRINCIPLES, INCLUDING CONSIDERATION OF APPLICABLE INDUSTRY STANDARDS AND WITH THE REQUIREMENTS OF **40 CFR PART 112**; THE EPA PROCEDURES FOR REQUIRED INSPECTIONS AND TESTING HAVE BEEN ESTABLISHED; AND THAT THIS PLAN IS ADEQUATE FOR THIS FACILITY. I HAVE PREPARED THIS PLAN BASED ON MY UNDERSTANDING OF **40 CFR PART 112**, HOWEVER, THIS LAW IS SUBJECT TO FREQUENT REVISIONS AND CHANGES IN INTERPRETATION.

April 10, 2023
DATE

Wilbur Eugene Hammock, P.E.
TEXAS REGISTRATION #39362

FOR THIS PLAN TO BE EFFECTIVE, A SPILL HISTORY FOR THE FACILITY MUST BE ADDED BY THE OWNER/OPERATOR AND THE FOLLOWING ATTACHMENT "A" MUST BE COMPLETED IN ACCORDANCE WITH **40 CFR PART 112** AS WELL AS ANY ADDITIONAL FEDERAL, STATE OR LOCAL LAWS WHICH MAY APPLY.

MANAGEMENT APPROVAL

40 CFR 112.7

THIS SPCC PLAN HAS BEEN PREPARED FOR THE OPERATOR OF THE ABOVE MENTIONED FACILITY WHICH PRODUCED OIL AND ASSOCIATED BY-PRODUCTS WITH MY CONSENT. I HAVE REVIEWED THE PLAN AND APPROVED OF ITS CONTENT. THE SPCC PLAN WILL BE IMPLEMENTED AS DESCRIBED.

OPERATIONS MANAGER _____ 4/10/2023
DATE

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

40 CFR 112.20 (e), 40 CFR 112.20 (f) (1)

NAME OF FACILITY M2

LOCATION OF FACILITY **MOONSHINE ENERGY, LLC**
A-1165, BLK 38, T&P RR CO SURVEY #40

DIRECTIONS

LAT N32.025886 LONG W102.0189652 MIDLAND COUNTY, TEXAS

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

YES [ ] **NO** [X]

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

YES [ ] **NO** [X]

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

YES [ ] **NO** [X]

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-HI, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

YES [ ] **NO** [X]

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

YES [ ] **NO** [X]

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

April 10, 2023

Wilbur Eugene Hammock, P.E. — DATE

Plan Review
40 CFR 112.5

In accordance with 40 CFR 112.5, the Operator periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge. The Operator reviews this SPCC Plan at least once every five years. Revisions to the Plan, if any are needed, are made within six months of this five-year review. The Operator will implement any amendment as soon as possible, but not later than six months following preparation of any amendment. A registered PE certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3(d).

Scheduled five-year reviews and Plan amendments are recorded in the following table. This log must be completed even if no amendment is made to the Plan. Unless a technical or administrative change prompts an earlier review, the next scheduled review of this Plan must occur before five years from the date hereof.

Record of Plan Review and Changes

DATE	AUTHORIZED INDIVIDUAL	REVIEW TYPE	P.E. CERTIFICATION	SUMMARY OF CHANGES
		INITIAL PLAN	YES	N/A
		FIVE YEAR		
		FIVE YEAR		

Location of SPCC Plan
40 CFR 112.3(e)

In accordance with 40 CFR 112.3(e), and because the facility is staffed 24 hours per day, a complete copy of this SPCC is maintained at the facility.

GENERAL INFORMATION
ONSHORE OIL PRODUCTION FACILITY
40 CFR 112.7 (a)(3)

M2

TYPE OF FACILITY	RECLAMATION
COMPANY INFORMATION	**MOONSHINE ENERGY, LLC** 3206 MA MAR AVE. MIDLAND, TEXAS 79705
CONTACT INFORMATION	The designated person accountable for overall oil spill prevention and response at the facility, also referred to as the Regulatory Compliance Coordinator, in the facility contact information as shown below, and with 24-hour contact information provided in Appendix A (page 19).

FACILITY CONTACT INFORMATION

MIKE MCCURDY	RCC	432-312-5251 432-312-5251
CALVIN BROWN	ATTENDANT	575-631-2730 575-631-2730

FACILITY LAYOUT DIAGRAM

Page 9 shows a general site plan for the facility. The site plan shows the site topography and the location of the facility relative to waterways, roads and inhabited areas. This site plan also contains the detailed facility diagram that shows the wells, flowlines, tank battery and transfer areas for the facility. The diagram shows the location, capacity and contents of all storage containers greater than 55 gallons in capacity. Additional detail of roads and terrain are also shown in the maps (page 10).

TRANSFER ACTIVITIES

Crude oil from the lease is transported from the facility by the purchaser's tanker truck. All transfer operations are attended by the trucker or by field operations personnel. Produced water is transported to the unloading dock by tanker truck. All transfer operations are attended by the trucker or by field operations personnel.

Well Name: M2

Operator: MOONSHINE ENERGY, LLC

SPILL PLAN DESIGN, LLC

By: Paul Partlow (405) 202-2080

Tank Information: Tank, Sep, or Prod Unit Number: (matched to sketch)	1	2	3	4	5	6
Oil, Sw, GB, HT, PU, Sep, etc.	OIL	OIL	OIL	OIL	OIL	OIL
Manufacturer						
Diameter (FT)	15.5	15.5	15.5	15.5	15.5	15.5
Height (FT)	16	16	16	16	16	16
Serial Number						
Year Manufactured						
Thickness - Bottom (Inches)						
Thickness - Shell (Inches)						
Thickness - Deck (Inches)						
Welded, Molded or Bolted (w, m, b)	W	W	W	W	W	W
Steel, Fiberglass, or Wood (st, fg, wd)	ST	ST	ST	ST	ST	ST
Open Top or Closed Top (op, cl)	CL	CL	CL	CL	CL	CL
Foundation for Tanks (earth, gravel, sand, etc)	PAD	PAD	PAD	PAD	PAD	PAD
Oil Transported via (Tr, Inj, PL)	TR	TR	TR	TR	TR	TR
R = Raised, H = Horizontal, FC = Field Constructed						
BERM #	1	1	1	1	1	1

Check here if 2nd sheet is attached: **Latitude:** N32.025886 **Longitude:** W102.0189652

Facility Sketch (NOT TO SCALE)

N

See Map for detailed directions

Dotted lines represent proposed dikes or below ground piping

All dimensions are in feet unless specified

"Drain" indicates potential direction of spill migration

"BKR" = Electrical panel or break "CM" = Chemical storage

"B" =Breach on dike "COMP" = Compressor

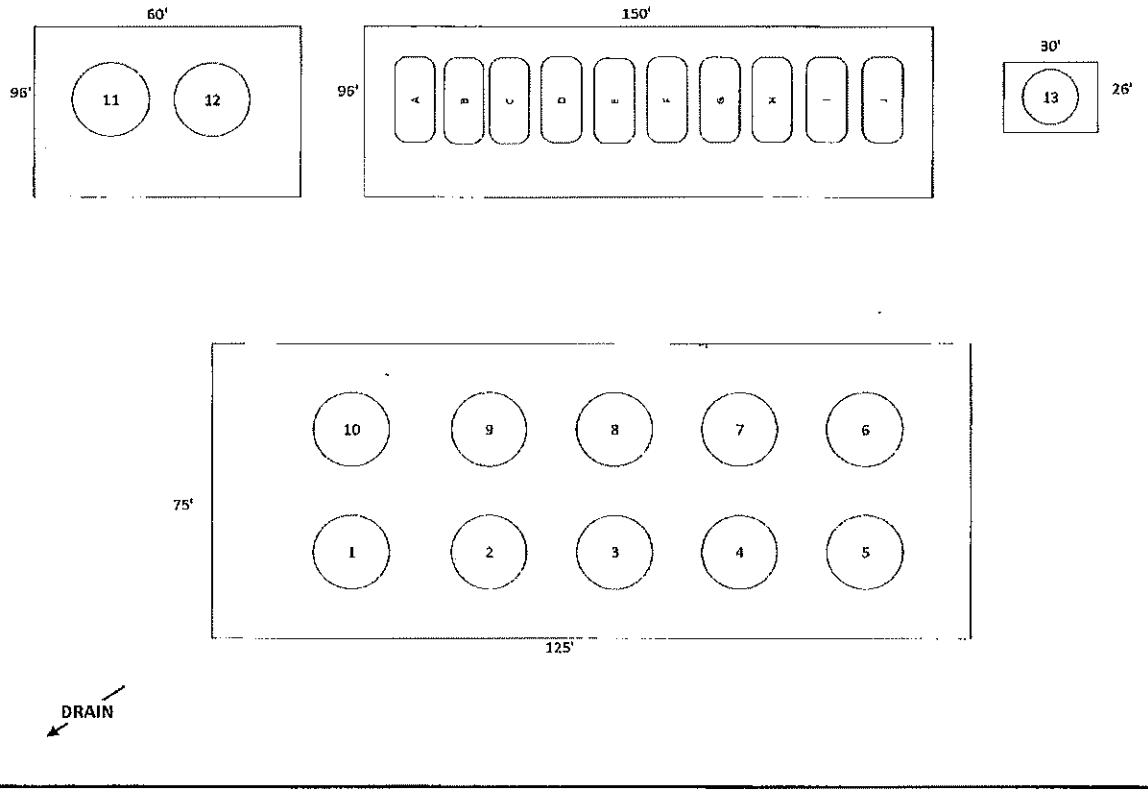
Solid lines for existing dikes or above ground piping

Arrows indicate flow path of fluids

"WH" =Well head "P" = Pump "M" = Meter

"LS" lowest point measured on dike (inches)

"ST" = Steel containment height (inches)



I, the undersigned, have visited the above mentioned facility. This facility sketch has been prepared and assembled for a registered, P.E. with site specific measurements and equipment details in order to develop a quality Plan in compliance with the provisions as set forth in 40 CFR Part 112. I further certify that the above sketch accurately depicts those details of the facility relevant for the preparation of the SPCC Plan.

Paul W. Partlow
Signature of Independent Field Agent

4/10/2023
Date

Well Name: M2

Operator: MOONSHINE ENERGY, LLC

SPILL PLAN DESIGN, LLC

By: Paul Partlow (405) 202-2080

Tank Information: Tank, Sep, or Prod Unit Number: (matched to sketch)	7	8	9	10	11	12
Oil, Sw, GB, HT, PU, Sep, etc.	OIL	OIL	OIL	OIL	SW	SW
Manufacturer						
Diameter (FT)	15.5	15.5	15.5	15.5	15.5	15.5
Height (FT)	16	16	16	16	24	24
Serial Number						
Year Manufactured						
Thickness - Bottom (Inches)						
Thickness - Shell (Inches)						
Thickness - Deck (Inches)						
Welded, Molded or Bolted (w, m, b)	W	W	W	W	M	M
Steel, Fiberglass, or Wood (st, fg, wd)	ST	ST	ST	ST	FG	FG
Open Top or Closed Top (op, cl)	CL	CL	CL	CL	CL	CL
Foundation for Tanks (earth, gravel, sand, etc)	PAD	PAD	PAD	PAD	PAD	PAD
Oil Transported via (Tr, Inj, PL)	TR	TR	TR	TR	TR	TR
R = Raised, H = Horizontal, FC = Field Constructed						
BERM #	1	1	1	1	3	3

Tank Information: Tank, Sep, or Prod Unit Number: (matched to sketch)	13	14	A	B	C	D
Oil, Sw, GB, HT, PU, Sep, etc.	HT		OIL/SW	OIL/SW	OIL/SW	OIL/SW
Manufacturer			FRAC TK	FRAC TK	FRAC TK	FRAC TK
Diameter (FT)	8		45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42
Height (FT)	20		9.58	9.58	9.58	9.58
Serial Number						
Year Manufactured						
Thickness - Bottom (Inches)						
Thickness - Shell (Inches)						
Thickness - Deck (Inches)						
Welded, Molded or Bolted (w, m, b)	W		W	W	W	W
Steel, Fiberglass, or Wood (st, fg, wd)	ST		ST	ST	ST	ST
Open Top or Closed Top (op, cl)	CL		CL	CL	CL	CL
Foundation for Tanks (earth, gravel, sand, etc)	E&G		LINER	LINER	LINER	LINER
Oil Transported via (Tr, Inj, PL)			TR	TR	TR	TR
R = Raised, H = Horizontal, FC = Field Constructed						
BERM #	4		2	2	2	2

I, the undersigned, have visited the above mentioned facility. This facility sketch has been prepared and assembled for A Registered P.E. with site specific measurements and equipment details in order to develop a quality Plan In compliance with the provisions as set forth In 40 CFR Part 112. I further certify that the above sketch accurately depicts those details of the facility relevant for the preparation of the SPCC.

Paul W. Partlow

Signature of Independent Field Agent

4/10/2023

Date

Well Name: M2

Operator: MOONSHINE ENERGY, LLC

SPILL PLAN DESIGN, LLC

By: Paul Partlow (405) 202-2080

Tank Information: Tank, Sep, or Prod Unit Number: (matched to sketch)	E	F	G	H	I	J
Oil, Sw, GB, HT, PU, Sep, etc.	OIL/SW	OIL/SW	OIL/SW	OIL/SW	OIL/SW	OIL/SW
Manufacturer	FRAC TK	FRAC TK	FRAC TK	FRAC TK	FRAC TK	FRAC TK
Diameter (FT)	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42
Height (FT)	9.58	9.58	9.58	9.58	9.58	9.58
Serial Number						
Year Manufactured						
Thickness - Bottom (Inches)						
Thickness - Shell (Inches)						
Thickness - Deck (Inches)						
Welded, Molded or Bolted (w, m, b)	W	W	W	W	W	W
Steel, Fiberglass, or Wood (st, fg, wd)	ST	ST	ST	ST	ST	ST
Open Top or Closed Top (op, cl)	CL	CL	CL	CL	CL	CL
Foundation for Tanks (earth, gravel, sand, etc)	LINER	LINER	LINER	LINER	LINER	LINER
Oil Transported via (Tr, Inj, PL)	TR	TR	TR	TR	TR	TR
R = Raised, H = Horizontal, FC = Field Constructed						
BERM #	2	2	2	2	2	2

Tank Information: Tank, Sep, or Prod Unit Number: (matched to sketch)	25	26	27	28	29	30
Oil, Sw, GB, HT, PU, Sep, etc.						
Manufacturer						
Diameter (FT)						
Height (FT)						
Serial Number						
Year Manufactured						
Thickness - Bottom (Inches)						
Thickness - Shell (Inches)						
Thickness - Deck (Inches)						
Welded, Molded or Bolted (w, m, b)						
Steel, Fiberglass, or Wood (st, fg, wd)						
Open Top or Closed Top (op, cl)						
Foundation for Tanks (earth, gravel, sand, etc)						
Oil Transported via (Tr, Inj, PL)						
R = Raised, H = Horizontal, FC = Field Constructed						
BERM #						

I, the undersigned, have visited the above mentioned facility. This facility sketch has been prepared and assembled for A Registered P.E. with site specific measurements and equipment details in order to develop a quality Plan in compliance with the provisions as set forth in 40 CFR Part 112. I further certify that the above sketch accurately depicts those details of the facility relevant for the preparation of the SPCC.

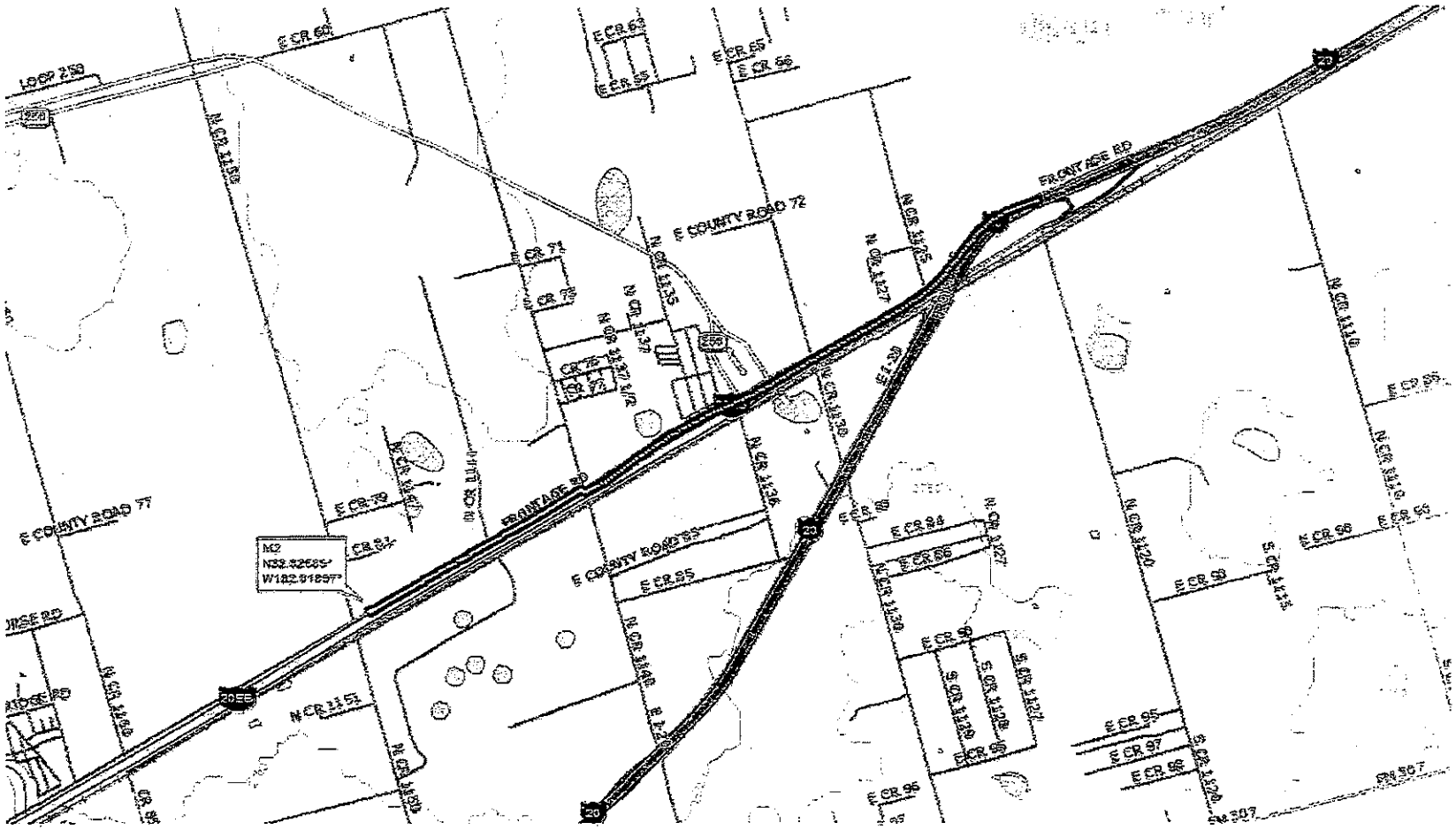
Paul W. Partlow

Signature of Independent Field Agent

4/10/2023

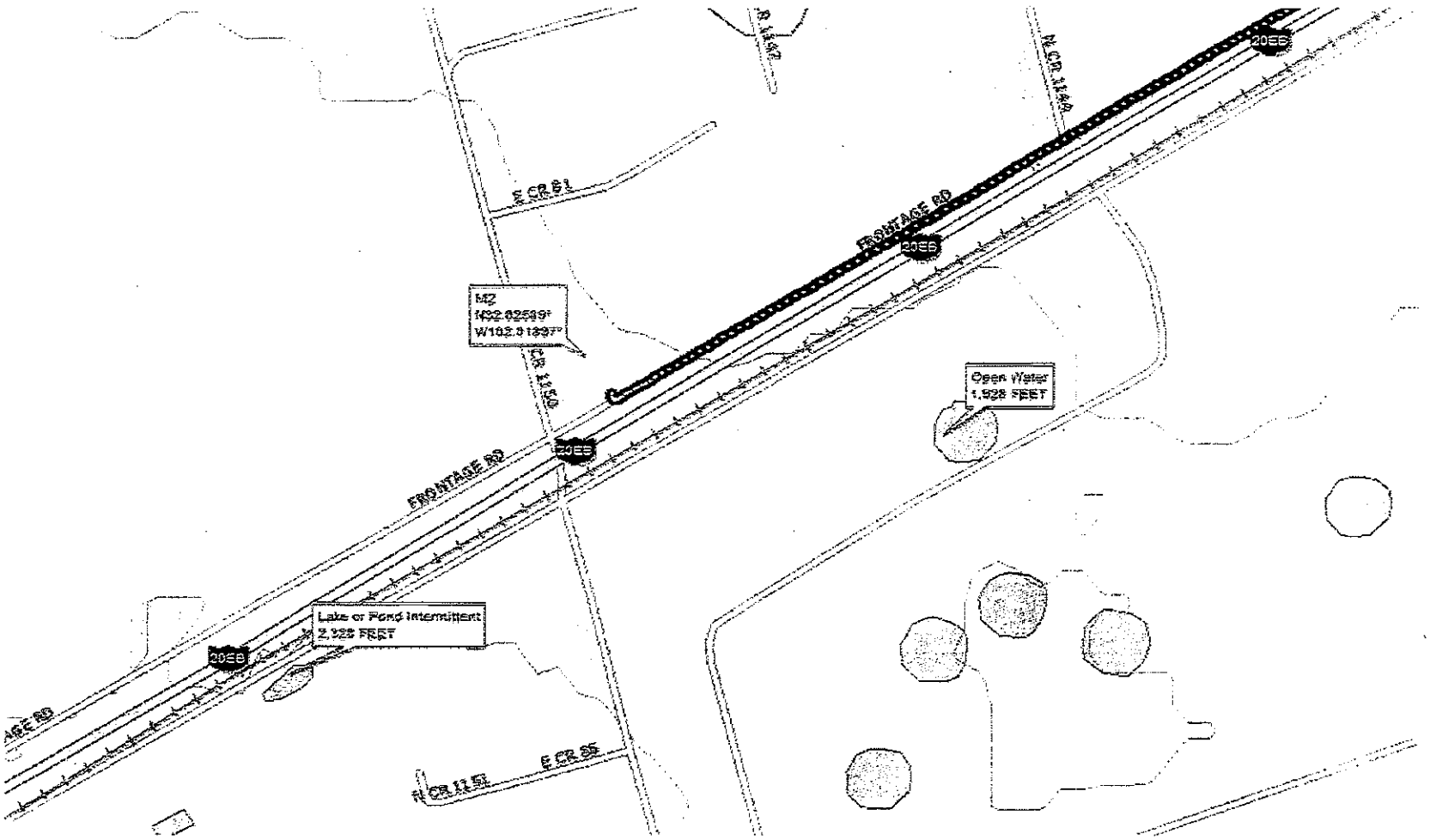
Date

M2



JCT I-20 & I-20BE (MIDLAND, TX), EXIT TO I-20BE CONTINUE E 3.15 MILES TO 4009 E HWY 80, THEN N INTO.

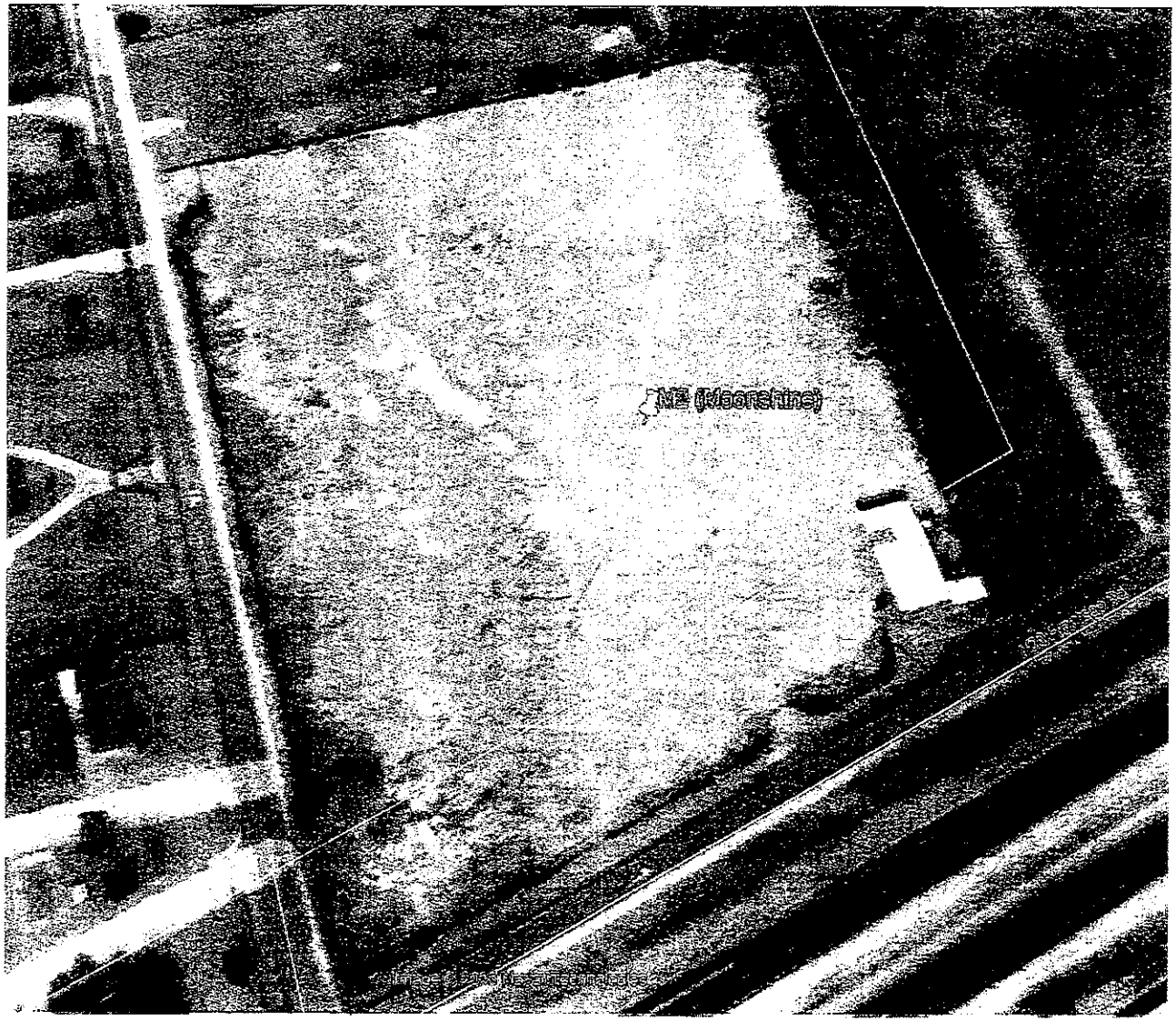
M2



JCT I-20 & I-20BE (MIDLAND, TX), EXIT TO I-20BE CONTINUE E 3.15 MILES TO 4009 E HWY 80, THEN N INTO.

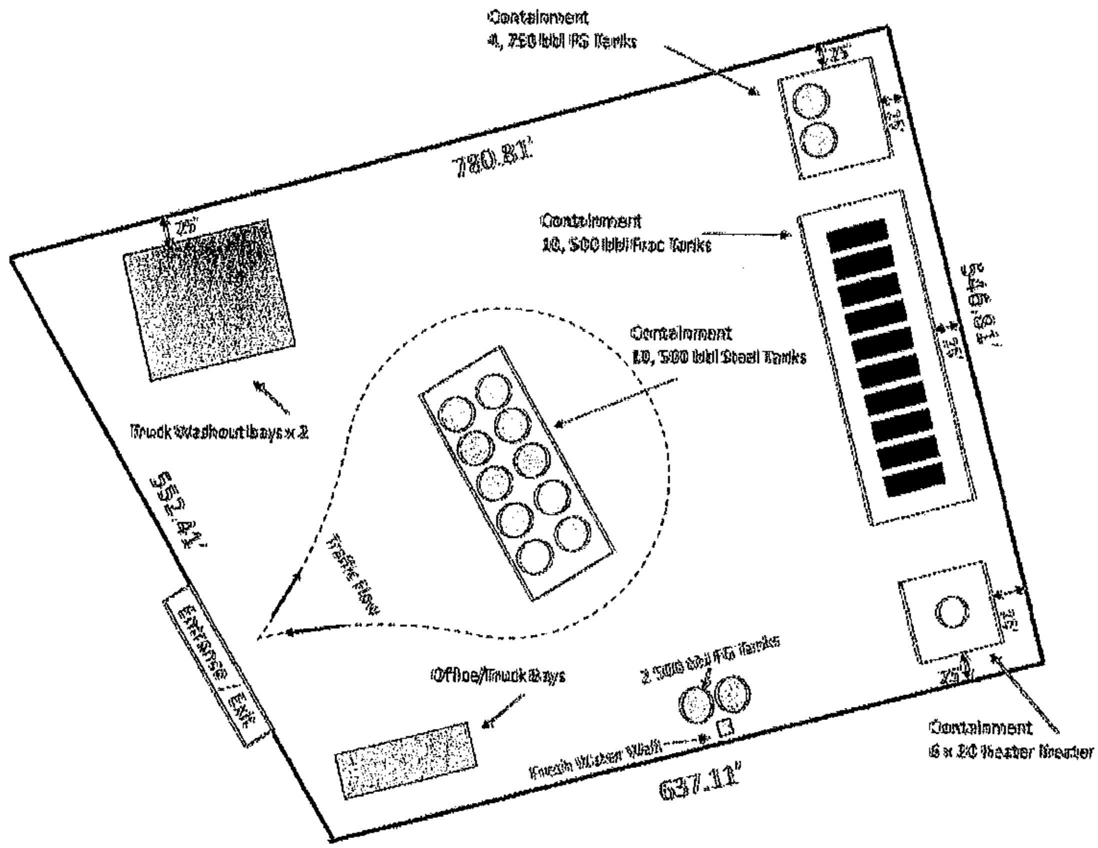
10A

M2



10B

M2


Containment
4, 750 bbl FG Tanks
780.81'
25'
Containment
10, 500 bbl Frac Tanks
546.81'
Containment
10, 500 bbl Steel Tanks
Truck Washout bays x 2
552.41'
Traffic Flow
Entrance / Exit
Office/Truck Bays
2 500 bbl FG Tanks
Fresh Water Well
637.11'
Containment
6 x 20 Heater Treater

10C

M2

INSERT AS BUILT DRAWING

10D

DESCRIPTION OF VESSELS, TANKS AND EQUIPMENT

M2

	VESSEL #1	VESSEL #2	VESSEL #3	VESSEL #4	VESSEL #5	VESSEL #6
USE OF TANK - O,SW,GB,SEP,HT	OIL	OIL	OIL	OIL	OIL	OIL
MANUFACTURER						
NOMINAL CAPACITY (BBL)	538	538	538	538	538	538
NOMINAL CAPACITY (CU FT)	3,019	3,019	3,019	3,019	3,019	3,019
EFFECTIVE CAPACITY (BBL)	538	538	538	538	538	538
EFFECTIVE CAPACITY (CU FT)	3,019	3,019	3,019	3,019	3,019	3,019
NOMINAL DIAMETER (FT)	15.5	15.5	15.5	15.5	15.5	15.5
NOMINAL HEIGHT (FT)	16	16	16	16	16	16
SERIAL NUMBER						
YEAR BUILT						
BOTTOM THICKNESS (INCHES)						
SHELL THICKNESS (INCHES)						
DECK THICKNESS (INCHES)						
TYPE - B,W,M	W	W	W	W	W	W
MATERIAL - ST, FG, OT	ST	ST	ST	ST	ST	ST
TOP - C, OP	CL	CL	CL	CL	CL	CL
BERM #	1	1	1	1	1	1

	VESSEL #7	VESSEL #8	VESSEL #9	VESSEL #10	VESSEL #11	VESSEL #12
USE OF TANK - O,SW,GB,SEP,HT	OIL	OIL	OIL	OIL	SW	SW
MANUFACTURER						
NOMINAL CAPACITY (BBL)	538	538	538	538	806	806
NOMINAL CAPACITY (CU FT)	3,019	3,019	3,019	3,019	4,528	4,528
EFFECTIVE CAPACITY (BBL)	538	538	538	538	806	806
EFFECTIVE CAPACITY (CU FT)	3,019	3,019	3,019	3,019	4,528	4,528
NOMINAL DIAMETER (FT)	15.5	15.5	15.5	15.5	15.5	15.5
NOMINAL HEIGHT (FT)	16	16	16	16	24	24
SERIAL NUMBER						
YEAR BUILT						
BOTTOM THICKNESS (INCHES)						
SHELL THICKNESS (INCHES)						
DECK THICKNESS (INCHES)						
TYPE - B,W,M	W	W	W	W	M	M
MATERIAL - ST, FG, OT	ST	ST	ST	ST	FG	FG
TOP - C, OP	CL	CL	CL	CL	CL	CL
BERM #	1	1	1	1	3	3
VESSEL SHEET TOTAL STORAGE	6,990 BBLS			293,564	GALS	
TOTAL FACILITY STORAGE	**13,555 BBLS**			**569,306**	**GALS**	

ST-STEEL FG-FIBERFLASS W-WOOD O-OIL SW-SALTWATER

GB-GUNBARREL SEP-SEPARATOR HT-HEATER TREATER CL-CLOSED TOP OP-OPEN TOP

OT-OTHER B-BOLTED W-WELDED M-MOLDED

DESCRIPTION OF VESSELS, TANKS AND EQUIPMENT

M2

	VESSEL #13	VESSEL #14	VESSEL # A	VESSEL # B	VESSEL # C	VESSEL # D
USE OF TANK - O,SW,GB,SEP,HT	HT		OIL/SW	OIL/SW	OIL/SW	OIL/SW
MANUFACTURER			FRAC TK	FRAC TK	FRAC TK	FRAC TK
NOMINAL CAPACITY (BBL)	101		646	646	646	646
NOMINAL CAPACITY (CU FT)	565		3,630	3,630	3,630	3,630
EFFECTIVE CAPACITY (BBL)	101		646	646	646	646
EFFECTIVE CAPACITY (CU FT)	565		3,630	3,630	3,630	3,630
NOMINAL DIAMETER (FT)	6		45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42
NOMINAL HEIGHT (FT)	20		9.58	9.58	9.58	9.58
SERIAL NUMBER						
YEAR BUILT						
BOTTOM THICKNESS (INCHES)						
SHELL THICKNESS (INCHES)						
DECK THICKNESS (INCHES)						
TYPE - B,W,M	W		W	W	W	W
MATERIAL - ST, FG, OT	ST		ST	ST	ST	ST
TOP - C, OP	CL		CL	CL	CL	CL
BERM #	4		2	2	2	2

	VESSEL # E	VESSEL # F	VESSEL # G	VESSEL # H	VESSEL # I	VESSEL # J
USE OF TANK - O,SW,GB,SEP,HT	OIL/SW	OIL/SW	OIL/SW	OIL/SW	OIL/SW	OIL/SW
MANUFACTURER	FRAC TK	FRAC TK	FRAC TK	FRAC TK	FRAC TK	FRAC TK
NOMINAL CAPACITY (BBL)	646	646	646	646	646	646
NOMINAL CAPACITY (CU FT)	3,630	3,630	3,630	3,630	3,630	3,630
EFFECTIVE CAPACITY (BBL)	646	646	646	646	646	646
EFFECTIVE CAPACITY (CU FT)	3,630	3,630	3,630	3,630	3,630	3,630
NOMINAL DIAMETER (FT)	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42	45 x 8.42
NOMINAL HEIGHT (FT)	9.58	9.58	9.58	9.58	9.58	9.58
SERIAL NUMBER						
YEAR BUILT						
BOTTOM THICKNESS (INCHES)						
SHELL THICKNESS (INCHES)						
DECK THICKNESS (INCHES)						
TYPE - B,W,M	W	W	W	W	W	W
MATERIAL - ST, FG, OT	ST	ST	ST	ST	ST	ST
TOP - C, OP	CL	CL	CL	CL	CL	CL
BERM #	2	2	2	2	2	2
VESSEL SHEET TOTAL STORAGE	6,565 BBLS			**275,742** GALS		
TOTAL FACILITY STORAGE	**13,555 BBLS**			**569,306 GALS**		

ST-STEEL FG-FIBERFLASS W-WOOD O-OIL SW-SALTWATER

GB-GUNBARREL SEP-SEPARATOR HT-HEATER TREATER CL-CLOSED TOP OP-OPEN TOP

OT-OTHER B-BOLTED W-WELDED M-MOLDED

SECONDARY CONTAINMENT CALCULATIONS

FACILITY NAME: M2

DIKED AREA #: 1

CATCH BASIN FOR FACILITY

	LENGTH, FT
	WIDTH, FT
	HEIGHT,FT
0	CU FT

MAIN TANK BATTERY

DIMENSIONS OF SECONDARY CONTAINMENT

	SIDE 1	SIDE 2	SIDE 3	SIDE 4		
						SQ FT
RECTANGULAR	125	75			9375	SQ FT
RECTANGULAR					0	SQ FT
						SQ FT
			TOTAL SQ FT		9375	SQ FT

DIP ____ FT

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL #1	15.5		189
VESSEL #2	15.5		189
VESSEL #3	15.5		189
VESSEL #4	15.5		189
VESSEL #5	15.5		189
VESSEL #6	15.5		189
VESSEL #7	15.5		189
VESSEL #8	15.5		189
VESSEL #9	15.5		189
			1698

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL #10	15.5		189
VESSEL #11			
VESSEL #12			
VESSEL #13			
VESSEL #14			
VESSEL #15			
VESSEL #16			
VESSEL #17			
VESSEL #18			
			189

TOTAL AREA OF VESSELS:	1887	SQ FT	TOTAL AREA OF FACILITY	9375 SQ FT
LESS AREA LARGEST VESSEL:	189	SQ FT	LESS VESSEL OCCUPIED AREA	1698 SQ FT
VESSEL OCCUPIED AREA	1698	SQ FT	TOTAL AVAILABLE AREA	7677 SQ FT

24 HR OIL PRODUCTION	327	LARGEST TANK	538	BBLS X	5.615 CU FT/BBL=	3019 CU FT
24 HR SW PRODUCTION	327	TOTAL FLUIDS	654	BBLS X	5.615 CU FT/BBL =	3672 CU FT
24 HR PRODUCTION	654					
					MINUS 1/2 CATCH BASIN VOLUME	0 CU FT
24 HR - 25 YR RAIN	7					
FREEBOARD	3				TOTAL DIKED CAPACITY REQUIRED BY 40 CFR PART 112	3019 CU FT
					TOTAL DIKED CAPACITY REQUIRED WITH 24 HR PRODUCTION	6691 CU FT

FORMULA [(TOTAL DIKE CAPACITY CU FT) X 12) / (DIKED AREA - VESSEL OCCUPIED AREA)] + RAINFALL + FREEBOARD

RECOMMENDED BERM HEIGHT (PRODUCTION)
20 INCHES

RECOMMENDED BERM HEIGHT
15 INCHES

REMARKS

1 - CONTAINMENT DIMENSIONS ARE INTERIOR DIMENSIONS MEASURED AT THE BASE OF THE BERM
2 - ALL VESSELS WITH A POTENTIAL SPILL CAPACITY OF 55 GALLONS OR MORE IN A 24 HR PERIOD MUST BE INSIDE THE SECONDARY CONTAINMENT AREA
3 - ALTERNATE DIMENSIONS FOR SECONDARY CONTAINMENT OR CATCH BASIN MAY BE USED INSTEAD OF THE DIMENSIONS ABOVE.
ALTERNATE SECONDARY CONTAINMENT CAPACITY MUST EXCEED 3019 CUBIC FEET
4 - NEW RULES DO NOT REQUIRE 24 HOUR PRODUCTION TO BE IN THE CALCULATIONS - PRODUCTION VOLUMES ARE LISTED BUT DO NOT EFFECT CALCULATIONS

SECONDARY CONTAINMENT CALCULATIONS

FACILITY NAME: M2

DIKED AREA #: 2

CATCH BASIN FOR FACILITY

	LENGTH, FT
	WIDTH, FT
	HEIGHT,FT
0	CU FT

FRAC TANK BATTERY

DIMENSIONS OF SECONDARY CONTAINMENT

	SIDE 1	SIDE 2	SIDE 3	SIDE 4		
						SQ FT
RECTANGULAR	150	96			14400	SQ FT
RECTANGULAR					0	SQ FT
						SQ FT
				TOTAL SQ FT	14400	SQ FT

DIP ____ FT

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL #A	45	8.42	379
VESSEL #B	45	8.42	379
VESSEL #C	45	8.42	379
VESSEL #D	45	8.42	379
VESSEL #E	45	8.42	379
VESSEL #F	45	8.42	379
VESSEL #G	45	8.42	379
VESSEL #H	45	8.42	379
VESSEL # I	45	8.42	379
			3410

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL # J	45	8.42	379
VESSEL # K			
VESSEL # L			
VESSEL # M			
VESSEL # N			
VESSEL # O			
VESSEL # P			
VESSEL # Q			
VESSEL # R			
			379

TOTAL AREA OF VESSELS:	3789	SQ FT	TOTAL AREA OF FACILITY	14400 SQ FT
LESS AREA LARGEST VESSEL:	379	SQ FT	LESS VESSEL OCCUPIED AREA	3410 SQ FT
VESSEL OCCUPIED AREA	3410	SQ FT	TOTAL AVAILABLE AREA	10990 SQ FT

24 HR OIL PRODUCTION	327	LARGEST TANK	646	BBLS X	5.615 CU FT/BBL=	3630	CU FT
24 HR SW PRODUCTION	327	TOTAL FLUIDS	654	BBLS X	5.615 CU FT/BBL =	3672	CU FT
24 HR PRODUCTION	654						
					MINUS 1/2 CATCH BASIN VOLUME	0	CU FT
24 HR - 25 YR RAIN	7						
FREEBOARD	3				TOTAL DIKED CAPACITY REQUIRED BY 40 CFR PART 112	3630	CU FT
					TOTAL DIKED CAPACITY REQUIRED WITH 24 HR PRODUCTION	7302	CU FT

FORMULA ((TOTAL DIKE CAPACITY CU FT) X 12) / (DIKED AREA - VESSEL OCCUPIED AREA)) + RAINFALL + FREEBOARD

RECOMMENDED BERM HEIGHT (PRODUCTION)
18 INCHES

RECOMMENDED BERM HEIGHT
14 INCHES

REMARKS

1 - CONTAINMENT DIMENSIONS ARE INTERIOR DIMENSIONS MEASURED AT THE BASE OF THE BERM
2 - ALL VESSELS WITH A POTENTIAL SPILL CAPACITY OF 55 GALLONS OR MORE IN A 24 HR PERIOD MUST BE INSIDE THE SECONDARY CONTAINMENT AREA
3 - ALTERNATE DIMENSIONS FOR SECONDARY CONTAINMENT OR CATCH BASIN MAY BE USED INSTEAD OF THE DIMENSIONS ABOVE
ALTERNATE SECONDARY CONTAINMENT CAPACITY MUST EXCEED 3630 CUBIC FEET
4 - NEW RULES DO NOT REQUIRE 24 HOUR PRODUCTION TO BE IN THE CALCULATIONS - PRODUCTION VOLUMES ARE LISTED BUT DO NOT EFFECT CALCULATIONS

SECONDARY CONTAINMENT CALCULATIONS

FACILITY NAME: M2

DIKED AREA #: 3

CATCH BASIN FOR FACILITY

	LENGTH, FT
	WIDTH, FT
	HEIGHT,FT
0	CU FT

SW BATTERY

DIMENSIONS OF SECONDARY CONTAINMENT

	SIDE 1	SIDE 2	SIDE 3	SIDE 4		
						SQ FT
RECTANGULAR	96	60			5760	SQ FT
RECTANGULAR					0	SQ FT
						SQ FT
			TOTAL SQ FT		5760	SQ FT

DIP [ ] FT

	LENGTH DIAMETER	WIDTH	SQ FT
VESSEL #1			
VESSEL #2			
VESSEL #3			
VESSEL #4			
VESSEL #5			
VESSEL #6			
VESSEL #7			
VESSEL #8			
VESSEL #9			
			0

	LENGTH DIAMETER	WIDTH	SQ FT
VESSEL #10			
VESSEL #11	15.5		189
VESSEL #12	15.5		189
VESSEL #13			
VESSEL #14			
VESSEL #15			
VESSEL #16			
VESSEL #17			
VESSEL #18			
			377

TOTAL AREA OF VESSELS:	377	SQ FT	TOTAL AREA OF FACILITY	5760 SQ FT
LESS AREA LARGEST VESSEL:	189	SQ FT	LESS VESSEL OCCUPIED AREA	189 SQ FT
VESSEL OCCUPIED AREA	189	SQ FT	TOTAL AVAILABLE AREA	5571 SQ FT

24 HR OIL PRODUCTION	327	LARGEST TANK	806	BBLS	X	5.615 CU FT/BBL=	4528 CU FT
24 HR SW PRODUCTION	327	TOTAL FLUIDS	654	BBLS	X	5.615 CU FT/BBL =	3672 CU FT
24 HR PRODUCTION	654						
						MINUS 1/2 CATCH BASIN VOLUME	0 CU FT
24 HR - 25 YR RAIN	7						
FREEBOARD	3					TOTAL DIKED CAPACITY REQUIRED BY 40 CFR PART 112	4528 CU FT
						TOTAL DIKED CAPACITY REQUIRED WITH 24 HR PRODUCTION	8201 CU FT

FORMULA ((TOTAL DIKE CAPACITY CU FT) X 12) / (DIKED AREA - VESSEL OCCUPIED AREA)] + RAINFALL + FREEBOARD

RECOMMENDED BERM HEIGHT (PRODUCTION)
28 INCHES

RECOMMENDED BERM HEIGHT
20 INCHES

REMARKS

1 - CONTAINMENT DIMENSIONS ARE INTERIOR DIMENSIONS MEASURED AT THE BASE OF THE BERM

2 - ALL VESSELS WITH A POTENTIAL SPILL CAPACITY OF 55 GALLONS OR MORE IN A 24 HR PERIOD MUST BE INSIDE THE SECONDARY CONTAINMENT AREA

3 - ALTERNATE DIMENSIONS FOR SECONDARY CONTAINMENT OR CATCH BASIN MAY BE USED INSTEAD OF THE DIMENSIONS ABOVE.
ALTERNATE SECONDARY CONTAINMENT CAPACITY MUST EXCEED 4528 CUBIC FEET

4 - NEW RULES DO NOT REQUIRE 24 HOUR PRODUCTION TO BE IN THE CALCULATIONS - PRODUCTION VOLUMES ARE LISTED BUT DO NOT EFFECT CALCULATIONS

SECONDARY CONTAINMENT CALCULATIONS

FACILITY NAME: M2

DIKED AREA #: 4

CATCH BASIN FOR FACILITY

	LENGTH, FT
	WIDTH, FT
	HEIGHT,FT
0	CU FT

HEATER-TREATER BATTERY

DIMENSIONS OF SECONDARY CONTAINMENT

	SIDE 1	SIDE 2	SIDE 3	SIDE 4		
						SQ FT
RECTANGULAR	30	26			780	SQ FT
RECTANGULAR					0	SQ FT
						SQ FT
			TOTAL SQ FT		780	SQ FT

DIP ____ FT

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL #1			
VESSEL #2			
VESSEL #3			
VESSEL #4			
VESSEL #5			
VESSEL #6			
VESSEL #7			
VESSEL #8			
VESSEL #9			
			0

	LENGTH	WIDTH	
	DIAMETER		SQ FT
VESSEL #10			
VESSEL #11			
VESSEL #12			
VESSEL #13	6		28
VESSEL #14			
VESSEL #15			
VESSEL #16			
VESSEL #17			
VESSEL #18			
			28

TOTAL AREA OF VESSELS:	28	SQ FT
LESS AREA LARGEST VESSEL:	28	SQ FT
VESSEL OCCUPIED AREA	0	SQ FT

TOTAL AREA OF FACILITY	780	SQ FT
LESS VESSEL OCCUPIED AREA	0	SQ FT
TOTAL AVAILABLE AREA	780	SQ FT

24 HR OIL PRODUCTION	327	LARGEST TANK	101	BBLS	X	5.615 CU FT/BBL=	565 CU FT
24 HR SW PRODUCTION	327	TOTAL FLUIDS	654	BBLS	X	5.615 CU FT/BBL =	3672 CU FT
24 HR PRODUCTION	654						
						MINUS 1/2 CATCH BASIN VOLUME	0 CU FT
24 HR - 25 YR RAIN	7						
FREEBOARD	3					TOTAL DIKED CAPACITY REQUIRED BY 40 CFR PART 112	565 CU FT
						TOTAL DIKED CAPACITY REQUIRED WITH 24 HR PRODUCTION	4238 CU FT

FORMULA [(TOTAL DIKE CAPACITY CU FT) X 12) / (DIKED AREA - VESSEL OCCUPIED AREA)] + RAINFALL + FREEBOARD

RECOMMENDED BERM HEIGHT (PRODUCTION)
75 INCHES

RECOMMENDED BERM HEIGHT
19 INCHES

REMARKS

1 - CONTAINMENT DIMENSIONS ARE INTERIOR DIMENSIONS MEASURED AT THE BASE OF THE BERM

2 - ALL VESSELS WITH A POTENTIAL SPILL CAPACITY OF 55 GALLONS OR MORE IN A 24 HR PERIOD MUST BE INSIDE THE SECONDARY CONTAINMENT AREA

3 - ALTERNATE DIMENSIONS FOR SECONDARY CONTAINMENT OR CATCH BASIN MAY BE USED INSTEAD OF THE DIMENSIONS ABOVE.
ALTERNATE SECONDARY CONTAINMENT CAPACITY MUST EXCEED 565 CUBIC FEET

4 - NEW RULES DO NOT REQUIRE 24 HOUR PRODUCTION TO BE IN THE CALCULATIONS - PRODUCTION VOLUMES ARE LISTED BUT DO NOT EFFECT CALCULATIONS

PROXIMITY TO NAVIGABLE WATERS

The site is shown in facility diagram (page 9) and shows the direction of flow from the facility as well as the topo maps (page 10) showing the location of the facility relative to nearby waterways. The facility diagram indicates the general direction of drainage.

CONFORMANCE WITH APPLICABLE STATE AND LOCAL REQUIREMENTS [112.7(j)]

This SPCC Plan was written to conform with 40 CFR part 112 requirements. The facility thereby conforms with general requirements for oil production facilities and all discharge notifications are made in compliance with local, state and federal requirements.

SPILL RESPONSE AND REPORTING

40 CFR 112.7

DISCHARGE DISCOVERY AND REPORTING [112.7(a)(3)]

Several individuals and organizations must be contacted in the event of an oil discharge. The Regulatory Compliance Coordinator (RCC) is responsible for ensuring that all required discharge notifications have been made and all discharges should be reported to him. The summary table included in Appendix B (page 19) to the SPCC Plan provides a list of agencies to be contacted under different circumstances. The Form included in Appendix D & E of this Plan summarizes the information that must be provided when reporting a discharge, including contact lists and phone numbers.

VERBAL NOTIFICATION REQUIREMENTS (STATE AND FEDERAL (40 CFR PART 110))

Any unauthorized discharge into air, land or water must be reported immediately to the State Police and the Emergency Planning Commission as soon as the discharge is detected.

WRITTEN NOTIFICATION REQUIREMENTS (STATE AND FEDERAL (40 CFR PART 112))

A written notification will be made to EPA for any single discharge of oil to a navigable waters or adjoining shoreline waterway of more than 1,000 gallons, or for two discharges of 1 bbl (42 gallons) of oil to a waterway in any 12-month period. This written notification must be made within 60 days of the qualifying discharge, and a copy will be sent to the state agency in charge of oil pollution control activities. This reporting requirement is separate and in addition to reporting under 40 CFR part 110 discussed above.

Spill Response Materials

Spill response materials are available at oilfield supply business and are not stocked at the facility. The attendant carries mobile phone and list of emergency contacts for ordering out equipment to repair and clean up the facility after a spill.

Spill Mitigation Procedures

A complete outline of actions to be performed in the event of a discharge from flowlines reaching or threatening to reach navigable waters is included in the facility Contingency Plan (Appendix C of this SPCC Plan). In the event of a discharge, field personnel and the production supervisor shall be responsible for the following:

Shut Off Ignition Sources

Field personnel must shut off all ignition sources, including motors, electrical circuits, and open flames. See Appendix F (page 28) for more information about shut-off procedures.

Stop Oil Flow

Field personnel should determine the source of the discharge, and if safe to do so, immediately shut off the source of the discharge.

Stop the Spread of Oil and Call the production supervisor

If safe to do so, field personnel must use all resources available to stop the spilled material from spreading. Measures that may be implemented, depending on the location and size of the discharge, include placing barriers in the path of the discharge or constructing earthen berms or trenches. In the event of a significant discharge, field personnel must immediately contact the RCC, who will direct the response and cleanup activities.

Gather Spill Information

The RCC will ensure that the *Discharge Notification Form* is filled out (Appendix E, page 27, of this Plan), and that notifications have been made to the appropriate authorities.

Notify Agencies Verbally

Some notifications must be completed *immediately* upon discovering the discharge. It is important to immediately contact the RCC so that timely notifications can be made. Section 2.1 of this Plan describes the required notifications to government agencies. The Notification List is included in Appendix B of this SPCC Plan.

Disposal Plan

The cleanup contractor, as directed by the RCC, will handle the disposal of any recovered product, contaminated soil, contaminated materials and equipment, decontamination solutions, sorbents, and spent chemicals collected during a response to a discharge incident.

During normal operations, saltwater waste will be loaded to a haul truck that will haul the water to a permitted saltwater disposal facility. Solids will be disposed of at a landfill permitted to accept oil and gas waste.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PROVISIONS

40 CFR 112.7 and 112.9

Potential Discharge Volume and Direction of Flow [112.7(b)] and Containment [112.7(a)(3)(iii)]

Discharge volume and direction of flow are shown in the facility diagram, the topographic map (page10) and the berm calculation sheet (page 12).

Containment and Diversionary Structures [112.7(c) and 112.7(a)(3)(iii)]

The facility is configured to minimize the likelihood of a discharge reaching navigable waters. Secondary containment for the oil storage tanks, saltwater tank and separation vessels are provided by a berm constructed of relatively impermeable material. These measures are described in more details in the following sections.

Oil Production Facility Drainage [112.9(b)]

The ditches are visually examined by facility personnel daily during routine facility rounds, during inspections, and after rain events, to detect any discoloration or staining that would indicate the presence of oil from small leaks within the facility. Any accumulation of oil is promptly removed and disposed. Natural drainage around the facility is through natural depressions or ditches, as shown in the facility diagram.

The secondary containment areas are designed to contain extreme 24-hour rainfall events. Rainwater accumulations within the containment areas are removed by either sump or vacuum truck. A portable pump is available to remove rainwater accumulation in the event sump or vacuum truck solutions are not sufficient. Rainwater discharges outside secondary containment areas are required to meet local and state regulations.

Secondary Containment for Bulk Storage Containers [112.9(c)(2)J

To further minimize the potential for a discharge to navigable waters, bulk storage containers such as all tank battery, separation, and treating equipment are placed inside steel containment walls or earthen berms. The berm capacity exceeds the capacity of the largest tank within the containment area and exceeds the 10 percent freeboard recommended by API for firewalls around production tanks (API-12R1). The amount of freeboard also exceeds the maximum amount of 24-hour precipitation anticipated at this facility.

The floor of the berm is constructed of fabricated liner that ensures that the berm can contain the potential release of oil from the storage tanks until the discharge can be detected and addressed by field operations personnel. Facility personnel inspect the secondary containment areas daily for the presence of oil.

All rain water is closely inspected by field operations personnel prior to draining water accumulation to ensure that no free oil is present. Free oil is promptly removed and disposed of in accordance with waste regulations. Drainage events are recorded on the form provided in Appendix I, including the time, date, and name of the employee who performed the drainage.

Practicability of Secondary Containment [112.7(d)]

Flowlines adjacent to the production equipment and storage tanks are located within the berm, and therefore have secondary containment. Flowlines between storage containment berms, however, lack adequate secondary containment.

The installation of double-wall piping, berms, or other permanent structures (e.g., remote impoundment) are impracticable at this facility due to the long distances involved. Other measures listed under 40 CFR .112.7(c) such as the use of sorbents are also impracticable as means of secondary containment since the volumes involved may exceed the sorbent capacity. But the facility is attended 24 hours each day and maintains limited quantities of sorbents.

Because secondary containment for flowlines outside of the tank battery is impracticable, the following provisions are included in this Plan as required under 40 CFR 112.7(d):

- A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful (see Appendix H).
- An Oil Spill Contingency Plan following the provisions of 40 CFR 109 (see Appendix C).

Bulk Storage Containers Overflow Prevention [112.9(c)(4)]

The tank battery is designed to prevent discharge, as follows:

The facility is monitored 24 hours per day and oil/saltwater/waste unloading is monitored/restricted by the on-site operator.

Transfer Operations [112.9(d)]

The waste hauling vehicles will connect their offloading hoses to the facility tank load lines equipped with catch buckets. The hauling vehicles delivering oil/saltwater/waste to the facility will be properly manifested and approved prior to acceptance at the site. The vehicle and waste data will be entered into the facility computer at the facility office for proper tracking, reporting, and auditing of the records. Types of waste accepted at the site include tank bottoms and other non-hazardous and RCRA-exempt oil and gas wastes with reclaimable oil.

All aboveground valves and piping associated with transfer operations are inspected daily by the attendant and/or tank truck driver and components of the reclamation system are inspected monthly by field operation personnel.

Inspections, Tests, and Records [112.7(e)]

Each container is regularly inspected by field operation personnel to identify signs of deterioration and maintenance needs, including the foundation and support of each container and individual flowlines. The inspection program is comprised of informal daily examinations, detailed monthly and annual inspections.

Daily Examinations

The facility is staffed by field operations personnel. Daily visual examination consists of a walkthrough of the facility. Field operations personnel check the production equipment for leaks and proper operation. They examine all aboveground valves, pumps, fittings, gauges, and piping. Personnel inspect pumps to verify proper function and check for damage and leakage. They look for accumulation of water within the tank battery berms and verify the condition and position of valves. A daily production report is maintained which includes a report of all malfunctions, improper operation of equipment or evidence off leakage.

Monthly Inspections

The monthly inspection covers all processing equipment. Storage tanks are inspected for signs of deterioration, leaks, or accumulation of oil inside the containment area, or other signs that maintenance or repairs are needed. The secondary containment area is checked for proper drainage, general conditions, evidence of oil, or signs of leakage. The monthly inspection also involves visually inspecting all aboveground valves and pipelines.

Flowline Maintenance Program [112.9(d)(3)]

This facility relies on a contingency plan to address discharges outside of secondary containment areas This is limited to transfer lines between containment areas of short distances. The flowline maintenance program is specifically implemented to maintain the integrity of the primary container (in this case piping) to minimize releases of oil from this part of the production facility. The facility's flowlines are regularly inspected and maintained to minimize the potential for a discharge. Lines are visually inspected for leaks and corrosion as part of the monthly rounds by field personnel and the buried portions of flowlines are visually observed for damage whenever they are repaired, replaced, or otherwise exposed Any leak in the flowline or appurtenances is promptly addressed by isolating the damaged portion and repairing or replacing the faulty piece of equipment.

Personnel, Training, and Discharge Prevention Procedures [112.7(f)]

All field personnel receive training on proper handling of oil products and procedures to respond to a discharge prior to supervising any production facility. The training ensures that all facility personnel understand the procedures described in this SPCC Plan and are informed of the requirements under applicable pollution control laws, rules and regulations.

All contractor personnel are made familiar with the facility operations, safety procedures, and spill prevention and control procedures described in this Plan prior to working at the facility. Management holds briefings with field operations personnel (including contractor personnel as appropriate) at least once a year, as described below.

Spill Prevention Briefing

Spill Prevention Briefings are conducted to ensure adequate understanding and effective implementation of this SPCC Plan. These briefings highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures. They also include a review of policies and procedures relating to spill prevention, control, cleanup, and reporting, procedures for routine handling of products, SPCC inspections and spill prevention procedures, spill reporting procedures, spill response, and disposal of spilled material. Personnel are instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable federal, state, and local pollution laws, rules, and regulations.

Contractor Instructions

In order that there will be no misunderstanding on joint and respective duties and responsibilities to perform work in a safe manner, contractor personnel shall also receive instructions on the procedures outlined in this SPCC Plan.

APPENDIX A

ADDITIONAL CONTACT LIST

FIRST CALL		PHONE NUMBERS
LOCAL EMERGENCY PLANNING COMMITTEE	JUSTIN BUNCH, EMC	432-688-4160
FIRE DEPARTMENT	911	911
POLICE DEPARTMENT	911	911
COUNTY SHERIFF'S DEPARTMENT	MIDLAND	432-742-7777
STATE HIGHWAY PATROL	911	911
STATE DEPARTMENT OF PUBLIC SAFETY	MIDLAND	432-498-2140
LOCAL AMBULANCE	911	911
LOCAL HOSPITAL	MIDLAND MEMORIAL	(432) 447-3551
STATE DEPARTMENT OF ENVIRONMENTAL QUALITY	REGION 7 (MIDLAND)	432-570-1359
STATE DEPARTMENT OF WILDLIFE CONSERVATION	GAME WARDEN DEREK BEAN	432-230-6584

24 HOUR PHONE NATIONAL RESPONSE CENTER - 1-800-424-8802

EMERGENCY RESPONSE CONTRACTORS	COMPANY NAME	PHONE NUMBER
ENVIRONMENTAL SERVICES	SPILL PLAN DESIGN	405-202-2080
ALTERNATE ENVIRONMENTAL SERVICES	LONE STAR HAZMAT	888-942-9628
BACKHOE/DOZER/HEAVY EQUIPMENT	LONE STAR HAZMAT	888-942-9628
ALTERNATE BACKHOE/DOZER/HEAVY EQUIPMENT	ADMONT OILFIELD SERVICES	918-471-5902
VACUUM TRUCK/TANKERS/FRAC TANKS	ML CONSTRUCTION INC.	432-445-1717
ALTERNATE VACUUM TRUCKS/TANKS/ETC	SB WEED CONTROL, LLC	575-885-2066
ROUSTABOUT CREWS	ADMONT OILFIELD SERVICES	918-471-5902

APPENDIX B
SPILL NOTIFICATION

CONTACTS	PHONE NUMBERS	
SPILL COORDINATOR (SC) CALVIN BROWN	575-631-2730 575-631-2730	BUSINESS HOURS AFTER BUSINESS HOURS
REGULATORY COMPLIANCE COORDINATOR (RCC) MIKE MCCURDY	432-312-5251 432-312-5251	BUSINESS HOURS AFTER BUSINESS HOURS
IN THE EVENT THESE PEOPLE CAN NOT BE REACHED CALVIN BROWN	575-361-2730 575-361-2730	BUSINESS HOURS AFTER BUSINESS HOURS

REPORT SPILLS

24 HOUR PHONE NATIONAL RESPONSE CENTER - 1-800-424-8802

MINIMUM SPILL NOTIFICATION REQUIREMENTS (TO EPA REGIONAL ADMINISTRATOR) WITHIN SIXTY (60) DAYS

WHENEVER A FACILITY HAS DISCHARGED MORE THAN 24 BBLS IN A SINGLE INCIDENT

OR

WHENEVER A FACILITY HAS HAD TWO (2) DISCHARGES IN A TWELVE (12) MONTH PERIOD OF 1 BBL OR MORE

HARMFUL DISCHARGES INTO NAVIGABLE/COMMERCIAL WATERS HAVE NO MINIMUM AND MUST BE REPORTED AS SOON AS POSSIBLE

WRITTEN REPORTS SHALL BE REQUIRED OF ALL WITNESSES AND MOST RESPONDENTS TO THE RELEASE.

AGENCIES TO CONTACT

STATE REGULATORY AGENCY:	DISTRICT:	PHONE NUMBER
RAILROAD COMMISSION	8	432-684-5581
FEDERAL – EPA REGION : 6	SPILL RESPONSE NUMBER	866-372-7745

OTHER HELPFUL AGENCIES

NATIONAL RESPONSE CENTER (SUB FOR EPA NUMBER)	1-800-424-8802	(24 HOURS)
US ARMY CORPS OF ENGINEERS	1-202-272-0001	(24 HOURS)

FILL OUT "SPILL REPORTING FORM" PRIOR TO CONTACTING ANY AGENCY

APPENDIX C: OIL SPILL CONTINGENCY PLAN

PART I
Introduction

Purpose and Scope

This Oil Spill Contingency Plan is prepared in accordance with 40 CFR 112.7(d) to address areas of the facility where secondary containment is impracticable, as documented in the facility Spill Prevention, Control, and Countermeasure (SPCC) Plan.

The purpose of this Oil Spill Contingency Plan (Contingency Plan") is to define procedures and tactics for responding to discharges of oil into navigable waters or adjoining shorelines of the United States, originating from flowlines. The Contingency Plan is implemented whenever a discharge of oil has reached, or threatens, navigable waters or adjoining shorelines. Areas lacking adequate containment include the flowlines that run between the extraction wells and the tank battery area and between the tank battery area and the saltwater disposal area.

Resources at Risk

The facility diagram shows the flowlines lacking secondary containment.

Risk Assessment

The total flowline length is 0 feet and the production rate at the facility is 327 barrels barrels oil per day and 327 barrels water per day. The facility is staffed twenty four hours per day, seven days per week. For planning purposes, the worst-case discharge is the volume of oil within the flowline plus 24 hours of production, or approximately 654 barrels. A discharge of this quantity of oil would not reach navigable waters.

Worst Case Scenario

In the worse case scenario all of the tanks would rupture (this is highly unlikely, but possible), and the fluid breaches the secondary containment system. Under this scenario the fluids would most likely spill on the facility or migrate in the direction indicated on the facility drawing. Should such an event occur, booms or back hoe equipment to construct temporary dikes to contain the fluid should be used until a vacuum truck can be brought in to remove the fluid.

Most Likely Scenario

A release to the environment outside the berm would most likely come from the transfer to/from the transport or transfer to/from vessels in different containment areas.

The waste hauling vehicles will connect their offloading hoses to lines equipped with load line containers

The loading/unloading area is monitored twenty-four hours a day, seven days a week.

LOADING/UNLOADING DOCK

This facility is staffed 24 hours per day.

The loading/unloading area is monitored by both field personnel and drivers during the transfer process. After loading/unloading, the field personnel inspect the loading/unloading area and transfer valves and piping.

Unloading: The waste hauling vehicles will connect their offloading hoses to the facility load lines equipped with catch buckets. The hauling vehicles delivering waste to the facility will be properly manifested and approved prior to acceptance at the site. The vehicle and waste data will be entered into the facility computer at the facility office for proper tracking, reporting, and auditing of the records. Types of waste accepted at the site include tank bottoms and other non-hazardous and RCRA-exempt oil and gas wastes with reclaimable oil.

Loading: oil/water will be pumped through the load lines equipped with catch buckets to a permitted transport truck.

Solids will be disposed of at a landfill permitted to accept oil and gas waste.

Response Strategy

Company personnel and contractors are equipped and trained to respond to certain "minor discharges" confined within the facility. Minor discharges can generally be described as those where the quantity of product discharged is small, the discharged material can be easily stopped and controlled, the discharge is localized, and the product is not likely to seep into groundwater or reach surface water or adjoining shorelines.
This Contingency Plan addresses all discharge incidents, including those that could affect navigable waters or during which the oil cannot be safely controlled by facility personnel and confined within the boundaries of the facility. Response to such incidents may necessitate the assistance of outside contractors or other responders to prevent imminent impact to navigable waters.

Spill Discovery and Response

Distribution of Responsibilities

The Authorized Facility Representative is designated as the qualified oil discharge Response Coordinator (RC) in the event of an oil discharge. The RC has the authority to commit the necessary services and equipment to respond to the discharge and to request assistance from contractors or other responders, as appropriate. The Response Coordinator (RC) is responsible for contacting the Regulatory Compliance Coordinator (RCC) for additional guidance.

The RC/RCC will direct notifications and initial response actions in accordance with training and capabilities. In the event of a fire or emergency that threatens the health and safety of those present at the site, the RC will direct evacuations and contact the fire and police departments.

In the event of an emergency involving outside response agencies, the RC's primary responsibility is to provide information regarding the characteristics of the materials and equipment involved and to provide access to company resources as requested. The RC, providing the following information:

- Exact location
- Material involved
- Quantity involved
- Topographic and environmental conditions
- Circumstances that may hinder response
- Injuries, if any

Turn off all sources of ignition.

Turn off pumps that charge or provide flow to the flowline.

Locate the leak.

If safe to do so, isolate the affected section of piping by closing off the closest valves upstream and downstream from the break.

Assessment, control and Recovery

The RC or RCC directs the initial control of the oil flow and the actions taken will depend on whether the oil has reached water or is still on land. All effort will be made to prevent oil from reaching water.

Disposal of Recovered Product and Contaminated Response Material

The RC or RCC ensures that all contaminated materials classified as hazardous waste are disposed of in accordance with all applicable solid and hazardous waste regulations.

Termination

The RC ensures that cleanup has been completed and that the contaminated area has been treated or mitigated according to the applicable regulations and state/federal cleanup action levels. The RC and/or Regulatory Compliance Coordinator (RCC) collaborates with the local, state and federal authorities regarding the assessment of damages.

Discharge Notification

Instructions and phone numbers for reporting a discharge to the National Response Center and other federal, state, and local authorities are provided in the SPCC Plan.
Any discharge to water must be reported immediately to the National Response Center.

The Response Compliance Coordinator must ensure that details of the discharge are recorded on the Discharge Notification Form provided in Appendix B.

If the discharge qualifies under 40 CFR part 112, the RCC is responsible for ensuring that all pertinent information is provided to the EPA Regional Administrator.

Response Resources and Preparedness Activities

Equipment, Supplies, Services, and Manpower

All facility employees are familiar with the layout and response strategies, and with the SPCC and Oil Spill Contingency Plans for this facility.

Access to Receiving Waterbody

Facility employees will maintain adequate access to any potential receiving waterbody and report any problem in this area to the RCC.

Communications and Control

The RCC is responsible for communicating the status of the response operations and for sharing relevant information with involved parties, including local, state, and federal authorities.

Training Exercises and Updating Procedures

Following a response to an oil discharge, the RCC will evaluate the actions taken and identify procedural areas where improvements are needed. The RCC or RC will conduct a briefing with field personnel, contractors, and local emergency responders to discuss lessons learned and will integrate the outcome of the discussion in subsequent SPCC briefings and employee training seminars. As necessary, the RCC will amend this Contingency Plan or the SPCC Plan to reflect changes made to the facility equipment and procedures. A Professional Engineer will certify any technical amendment to the SPCC Plan.

APPENDIX D

The person reporting the discharge must provide the following information:

- Name, location, organization, and telephone number;
- Name and address of the owner/operator;
- Date and time of the incident
- Location of the incident;
- Source and cause of discharge;
- Types of material(s) discharged;
- Total quantity of materials discharged;
- Quantity discharged in harmful quantity (to navigable waters or adjoining shorelines);
- Danger or threat posed by the release or discharge;
- Description of all affected media (e.g., water, soil);
- Number and types of injuries (if any) and damaged caused
- Weather conditions;
- Actions used to stop, remove, and mitigate effects of the discharge;
- Whether an evacuation is needed;
- Name of individuals and/or organizations contacted; and
- Any other information that may help emergency personnel respond to the incident.

Whenever the facility discharges more than 1,000 gallons of oil in a single event, or discharges more than 42 gallons of oil in each of two discharge incidents within a 12-month period, the Manager of Field Operations must provide the following information to the U.S. Environmental Protection Agency's Regional Administrator within 60 days:

- Name of the facility;
- Name of the owner or operator;
- Location of the facility;
- Maximum storage or handling capacity and normal daily throughput;
- Corrective actions and countermeasures taken, including a description of equipment repairs and replacements;
- Description of facility, including maps, flow diagrams, and topographical maps;
- Cause of the discharge(s) to navigable waters, including a failure analysis of the system and subsystems in which the failure occurred;
- Additional preventive measures taken or contemplated to minimize possibility of recurrence; and
- Other pertinent information requested by the Regional Administrator.

APPENDIX E: DISCHARGE NOTIFICATION FORM

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the Natiional Response Center.

FACILITY NAME: M2

FACILITY LOCATION: A-1165, BLK 38, T&P RR CO SURVEY #40

DISCHARGE DISCOVERY DATE:

LONGITUDE: N32.025886

TIME:

LONGITUDE: W102.0189652

COUNTY: MIDLAND

STATE: TEXAS

NAME OF REPORTING INDIVIDUAL:

PHONE #:

TYPE OF MATERIAL DISCHARGED:

SOURCE OF DISCHARGE:

ESTIMATED TOTAL QUANTITY DISCHARGED GALLONS/BARRELS:

EVACUATION NEEDED YES NO SPECIFY:

DAMAGE OR INJURIES YES NO SPECIFY:

ACTIONS TAKEN:

MEDIA AFFECTED

- ☐ OTHER (SPECIFY) TIME/DATE
- ☐ OTHER (SPECIFY) TIME/DATE
- ☐ OTHER (SPECIFY) TIME/DATE

ORGANIZATIONS/INDIVIDUALS CONTACTED

- ☐ NATIONAL RESPONSE CENTER 800-424-8802 TIME/DATE
- ☐ CLEANUP CONTRACTOR (SPECIFY) TIME/DATE
- ☐ FACILITY PERSONNEL (SPECIFY) TIME/DATE
- ☐ STATE AGENCY (SPECIFY) TIME/DATE
- ☐ OTHER (SPECIFY) TIME/DATE

APPENDIX F: Equipment Shut-off Procedures

- Manifold, transfer pumps, or hose failure
  - Shut in the well supplying oil to the tank battery.
  - If appropriate, immediately close the header/manifold or appropriate valve(s).
  - Shut off transfer pumps.

- Tank overflow
  - Shut in the well supplying oil to the tank battery.
  - Close header/manifold or appropriate valve(s)

- Tank failure
  - Shut in the well supplying oil to the tank battery.
  - Close inlet valve to the storage tanks.

- Flowline rupture
  - Shut in the well supplying oil to the flowline.
  - . Immediately close the nearest valve to stop the flow of oil to the leaking section.

- Explosion or fire
  - Immediately evacuate personnel from the area until the danger is over.
  - Immediately shut in wells if safe to do so.
  - If possible, close all manifold valves.
  - If the fire is small enough such that it is safe to do so, attempt to extinguish.

- Equipment failure
  - Immediately close the nearest valve to stop the flow of oil into the leaking equipment.

APPENDIX G: EMERGENCY RESPONSE EQUIPMENT LIST

This is a partial list of equipment and supplies to be supplied by spill response contractors.

Company personnel carry only personal tools.

- Hand tools (shovels, pliers, screwdrivers, pick axes, hammers, saws, etc.)
- Absorbent (pads, booms, sheets, granules, etc.)
- Pumps and hoses
- Vacuum trucks, tanker trucks, bob tail trucks
- Portable containment booms
- Buckets, salvage drums, pails
- Boots, waders, special gloves, coveralls, special masks
- Foaming agents and fire suppressors
- Bulldozers, back hoes, scrappers, dump trucks, etc.
- Roll off boxes, frac tanks, and storage tanks
- Boats, skiffs, barges and rafts
- Portable light set(s)
- Electric generator(s)
- Portable breathing apparatus
- Plastic sheeting
- Sand bags
- Communication equipment
- Decontamination equipment

This is a partial list. Should other items be needed, the Emergency Response Contractor shall procure the equipment and manpower necessary to contain, control and clean up any spill or discharge. Full management authority has been given to this contractor to affect these steps.

APPENDIX H: Written Commitment of Manpower, Equipment and Materials

In the event of a discharge, in addition to implementing the preventive measures described in this Plan we will also specifically:

- Make available all trained field personnel to perform response actions.
- Obtain assistance from its main operations contractors.
- Collaborate fully with local, state and federal authorities on response and cleanup operations.
- Maintain all on-site oil spill control equipment described in this Plan and in the attached Oil Spill Contingency Plan. The equipment is estimated to contain oil spills of up to 500 gallons.
- Maintain all communications equipment in operating condition at all times.
- Ensure that staging area to be used in the event of a discharge are accessible by field vehicles.
- Review the adequacy of on-site and third-party response capacity with preestablished response/cleanup contractors on an annual basis and update response/cleanup contractor list as necessary.
- Maintain formal agreements/contracts with response and cleanup contractors who will aid in responding to an oil discharge and/or completing cleanup.

Authorized Facility Representative: _____

Signature: _____

Title: _____

APPENDIX I: RECORD OF DIKE DRAINAGE

This record must be completed when rainwater from diked areas is drained into a storm drain or into an open watercourse, lake, or pond and bypasses the water treatment system. The bypass valve must normally be sealed (locked) in closed position. All State and local regulations for water testing must be met.

MOONSHINE ENERGY, LLC

M2

DATE	AREA	PRESENCE OF OIL	TIME STARTED	TIME FINISHED	SIGNATURE

SPILL PREVENTION CONTROL AND

COUNTERMEASURE

COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, management will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

The SPCC plan should be reviewed on an annual basis for any administrative changes. These changes would include any changes in personnel, the RCC and phone numbers and addresses. It will also include any changes in Appendix A (page 19) that may have happened in the prior year. This annual review should be recorded in the below table.

REVIEW DATES	SIGNATURE
1	
2	
3	
4	
5	

SPCC PLAN AMENDED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER PER 40 CFR 112.3(d)

MANAGEMENT APPROVAL

REVIEW AND EVALUATION OF THE SPCC PLAN FOR THIS FACILITY WAS COMPLETED AS NOTED ABOVE UNDER MY DIRECTION AND THE PLAN SHALL BE AMENDED AS NOTED ABOVE.

AUTHORIZED FACILITY REPRESENTATIVE:

NAME _____ SIGNATURE _____

MONTHLY INSPECTION

MOONSHINE ENERGY, LLC

Lease Name:	M2	Date		
Inspector Name:				
Inspector (signature):			Yes	No	NA
1	Is the lease road easily passable by emergency vehicles?			
2	Is the facility kept free of trash, debris, and abandoned equipment?			
3	Has excessive vegetation been removed from around and at least twenty feet away from all production equipment?			
4	Are secondary containment areas free of leaked or spilled oil, saltwater, and standing rain water?			
5	Are secondary containment liners in good working condition and without tears or breaches?			
6	Are valves, fittings, connections, vessels and pipelines free from corrosion?			
7	Is the loading/unloading area, pumps, and piping free of corrosion and in good working condition.			
8	Are barricades in place to prevent truck traffic from damaging equipment.			
9	Are lines outside of secondary containment areas free of corrosion and leaks?			
10	Are tranfer pumps and sump pumps in good working order?			
11	Has any equipment been added or removed since last inspection? (New SPCC required.)			
12				

INSPECTION NOTES

RECORD OF MONTHLY INSPECTIONS

MOONSHINE ENERGY, LLC

M2

Date	Company	Name of Inspector	Corrective Action Required	Date Corrective Action Complete

MOONSHINE ENERGY, LLC RECORD OF ANNUAL INSPECTION

Lease: M2

Location: A-1165, BLK 38, T&P RR CO SURVEY #40

County, State: MIDLAND, TEXAS

Latitude: N32.025886

Longitude: W102.0189652

Date	Company	Name of Inspector	Corrective Action Required	Date Corrective Action Complete
4/10/2023	Spill Plan Design, LLC	Paul Partlow		

OIL SPILL HISTORY REPORT

LEASE:	M2
LOCATION:	A-1165, BLK 38, T&P RR CO SURVEY #40
COUNTY, STATE	MIDLAND COUNTY, TEXAS

Any spill or discharge, regardless of size or location on the lease, shall be reported to either the field engineer in charge of the lease or to the company offices. If an oil or saltwater spill occurs that is greater than two barrels it shall be documented below and a Spill Report Form submitted to the company office. In addition, sporadic oil spills, containing leaks and evidence of oil pollution shall be reported and noted on this report form.

Spill events shall be given report numbers if the spill event description is too long to fit in the box below. This number shall be affixed to the Spill Report Form that is attached to this plan.

DATE	REPORT NUMBER OR SPILL EVENT	CAUSE FOR EVENT
4/10/2023	NO SPILLS	

Use extra pages if necessary, but indicate that extra pages were used on the space above.

TRAINING PROCEDURES FOR AN ONSHORE OIL PRODUCTION FACILITY

In general, this type of oil production facility is simple and pollution free. However, to realize this pollution free status, the most careful attention to details is necessary. Because of the many control parts, joints, valves, unions, and flanges, which must be manipulated manually and at frequent intervals during production, the operating personnel must handle these operations with precision. The essence of maintaining their precision and dedication to Spill Prevention results from the following:

1. Training
2. Inspecting
3. Recording

The existence of a formal program in each of the following areas will demonstrate the commitment of management to these activities:

1. TRAINING:

Personnel are to be properly instructed in the following:

1. Operation and maintenance of facility equipment to prevent liquid discharges.
2. Applicable pollution control laws, rules, and regulations.
    a. All personnel associated with this facility are required to read this plan.
    b. All personnel associated with this facility, daily, must have a copy of this plan available.
    c. All personnel are to receive additional SPCC training at least annually.
    d. All personnel associated with this facility must have access to briefs of federal, state, & local rules and regulations.
3. All new employees will, prior to the completion of his first month, undergo a training session conducted by his supervisor or management personnel.

Scheduled Spill Prevention briefings for the operating personnel are to be conducted frequently enough to assure adequate understanding of the SPCC Plan.

All employees are to be briefed annually and are thoroughly familiar with the SPCC Plan for each location. The supervisor is responsible for briefing employees on a regular basis on the importance of spill prevention. The supervisor is responsible to see that the facility is maintained in good condition and remedial action is taken when necessary. Records shall be maintained for the period of 5 years in which the SPCC is valid.

2. INSPECTION:

This facility is checked regularly by the field staff. The supervisor shall check this facility as well at least monthly for visual indicators of leaks or deterioration of the tanks and dike and flow lines. All leaks are to be repaired immediately when found. The repairs are to be noted on the attached inspection sheet. The compliance with the scheduled inspection of this facility is an integral part of this SPCC Plan and is an indicator of management's commitment to comply with this Plan.

3. RECORDING:

Details of this SPCC inspection program includes:

1) Frequency of each inspection

2) Name of inspector

3) Any described comments and

4) Corrective measures taken because of the inspections.

These details shall become a part of the SPCC record (see Record of Inspection, Maintenance and Drainage) and must be maintained in the central office SPCC file for a period of 3 years with current copies of the details of inspections maintained in all copies of the SPCC at the battery or the centrally located facility office.

TRAINING CHECK LIST

Inspection of facility equipment	
Inspection of facility processes	
Oil pollution prevention and control measures	
Emergency notification procedures	
Health and safety regulations	
Applicable federal regulations	
Equipment maintenance procedures	
History of spills or malfunctions at the facility	
Hands on demonstration of remediation and prevention techniques	
Reporting procedures and record keeping	
Review the SPCC	

Training of all employees will be done no less than yearly

Each new employee shall be trained prior to the end of the first month of employment.

All records must be kept for 3 years

Facility checks shall be done by supervisor at least annually

Each SPCC shall be reviewed for accuracy at least annually

TRAINING REPORT
ONSHORE OIL PRODUCTION FACILITY

I have reviewed and understand Management's policy towards Spill Prevention. I have been instructed in the procedures in handling and working with crude oil and saltwater at this facility. The training topics included the inspection of the facility processes and its functional equipment, oil pollution prevention and control measures, emergency notification procedures, and health and safety regulations. The following list of topics within this SPCC Plan has increased my knowledge and awareness of spill prevention and, when necessary, provides a means to remedy any harmful discharge of oil and saltwater:

- General Information
- Design and Operating Information
- Training Procedure
- Instructions to Contractors
- Spill Response Procedure
- Emergency Response Equipment List
- Contact List

On a periodic basis, we conduct discussions of the current plan, inspection procedures, maintenance procedure, rules and regulations, any spills or malfunctions which may have occurred at facility, emergency response plan and the employee's role, as well as hands on demonstration of remediation and prevention techniques.

Employee Training Date: _____

Trainee: _____

Spill Coordinator: _____

RECORD OF EMPLOYEE TRAINING

LEASE _____

DATE	TYPE OF TRAINING	PERSONNEL PRESENT	SIGNATURE

Operator Training Checklist

The following is a list of facility problem areas which are seen repeatedly, and which can potentially lead to fines or penalties from the EPA. You, as the owner/operator should discuss all these areas with your employees as part of your training procedures to ensure proper understanding and compliance with your **SPCC** Plan and EPA regulations.

1. **Leaking Tanks** — All tanks leaking fluid pose a threat to have fines assessed even if the leak is in the containment area. You must drain and permanently patch or replace any or all tanks which are leaking and immediately clean up any spillage.

2. **Unlevel Tanks** — All tanks need to be on solid footing. Any operators with animal burrows underneath their tanks will be assessed fines. There must be kept at least 8 inches of soil, gravel or other suitable foundation material out from the sides of your tanks at all times or they can be classified as unlevel. Of course, if your tank is noticeably crooked, it must be straightened.

3. **Rusty or Dirty Tanks** — These tanks will cause the EPA to investigate your facility. In a flyover they can be easily spotted from the air and can cause you problems if during the EPA investigation, the EPA detects old spillage which was not cleaned properly, and then you can be fined for having a spill in a contained area. Tanks and equipment dirty with oil is a sure sign to the EPA that they have found an operator who may be having equipment problems and is not taking the necessary steps to correct the problems. The EPA will be glad to help motivate you to correct any such problems.

4. **Soil** - The soil in the containment area needs to be kept cleaned up. While the EPA may not fine you for some small patches in the containment area, they can fine if they want to. This is a spill in a contained area. The soil also must be kept even with the bases of your tanks and not piled up high on the sides. The EPA will demand that you remove any soil obscuring this area of the tanks as this area is very prone to showing leakage. They want to see it and want you to be able to see it. Your soil also must be of some sort of impermeable material such as clay, caliche, etc. Sand or plain dirt is not an EPA approved subsoil foundation material for a tank battery. There are some approved methods to mitigate the damage to contaminated soil at your facility either from salt water or oil, either inside or outside your containment area, that are neither costly or that require specialists when needed on a small scale.

5. **Berms. Dikes, Firewalls** — Your secondary containment area is of utmost importance to the EPA. All these need to be made of impermeable material and maintained to at least the minimum height on your SPCC plan. They also need to be level all around the containment area. It is your responsibility to make sure the dike's builder considered that there is a slope around your facility site and they

compensated for it. Dike height measurements are all taken from the base of the tanks, so if you have put your tanks 3-feet up on a pile of gravel, your dike height is going to be extreme or you may have to have a lined catchment pit. If you watch the big operators you will see that they put their tanks slightly below ground level so as to minimize their dike height. In periods of heavy rain you are responsible to keep the fresh water drained out of your containment area so that if there is a spill there is sufficient free area to contain the spill. If the EPA sees that you have not maintained your berm's recommended height, you may be fined if there is no active spill, but you absolutely will be fined if you have an active spill because you have not followed your SPCC recommendations.

6. **Livestock and Fences** — Although there is no current legislation that says you must fence off your containment area — to keep livestock out, etc., you must remember that it is your responsibility to maintain the berm height around your facility. Failure to do so will result in a fine at your facility. If you allow livestock access to the equipment at your facility, they can damage your equipment resulting in a spill and fines accessed. Failure to properly secure your site in residential areas is also considered negligence and can result in a fine.

7. **Trash** — All trash must be removed from the containment area. This means all jugs, barrels, litter, abandoned equipment, pipe, fittings, etc. While all non-flammable materials just need to be placed in one central area outside the containment area, all flammable materials and trash containers need to be kept 75 feet away from your containment area.

8. **Barrels** — Any barrel not being used as a trash barrel either needs to be removed if empty or put on pallets or racks. There are no exceptions.

9. **Catch Buckets** — All load lines penetrating the bermed containment area must have some type of catch bucket underneath the valve / open end. These buckets must have a lid and must be kept sucked dry by the haulers. There is no mandatory type of bucket. You can use any catch bucket you want if you understand that the operator is responsible for any spills that get out of it. That is why 5 gal. buckets are not recommended.

10. **Load Lines** — All load lines whether inside or outside the secondary containment area must have a Bull Plug installed. It is also recommended that you keep your valves locked to keep unscrupulous individuals from opening the valves and causing a spill at your facility. Pending legislation may require all load lines to be inside the bermed area so you may want to prepare for the future now.

11. **Dike Drains** — Federal law says you can have a dike drain, but you must have a bull plug in the drain and you must document your drainage. You must also be aware that you can only drain fresh water with no sheen and the salt content of the standing

water must be below EPA mandated requirements. You are responsible to check with the EPA and know what those current requirements are. Dead vegetation below your drain area is a sure sign to the EPA you are not checking the Salt content and you can be fined.

12. **Signs** — Lease signs must be up at each facility as well as on the lease road entry. If you must turn down some private road, etc., before reaching the lease entry, you must have a sign of some sort indicating that your lease begins down this road. Signs need to have the facility name, operator name, emergency phone numbers, RRC# in Texas (or other States ID #) and the legal location.

13. **Hazard Signs** — Legislation is pending that would require you to label your Tanks and Above Ground Lines- every 100 ft., so you might as well start now. You can get placards for your tanks and lines or you can use paint to indicate what is in each tank or line. In an emergency the personnel on site need to know and it is your responsibility to let them know.

14. **Open Tanks or Pits** — Open Tanks, Pits, Salt Pots, etc., must have some type of net over the tank or pit. Vent hatches on enclosed tanks must be kept closed! There are no exceptions! Devices meant to "scare away" birds, etc., are not approved methods of keeping wildlife out of your facility. The Federal Wildlife officials will use nets to dredge out the tanks and pits while inspecting your facility. Remember that any animal found will cost you money be it a Frog. Owl, Bat, or Rat.

15. **Separators and Well Heads** — Separators that have very little fluid flowing through them (less than 43 Gal. in 24 hrs) did not require a secondary containment area around them, however, this has changed, and a berm calculated in the same manner as the normal battery is required. It is the responsibility of the operator to prevent a spill outside a contained area. If you don't have a small dike around your well heads (to prevent spray, etc), and you have any spillage, you can get fined since it is a spill outside a contained area. This is especially true if any fluid gets into any drainage area.

16. **Electric Panels** — New construction mandates electric outside the diked area. If you are redoing your area now, put it outside. Eventually the EPA will make everyone have it outside the containment area. Remember, from an engineering standpoint it is not a good engineering practice to put an electric panel in a pond of oil or salt water.

17. **Brush and Trees** —All brush and trees and overhanging limbs must be kept out of the containment area and away from your tanks and equipment. These are fire hazards. You will be fined for an unlevel tank if there are trees or shrubs growing out from underneath your tanks. Dead trees, brush, or grass in or around your containment area is evidence of pollution or salt intrusion to the EPA and you can be fined.

Pits – Pits used to contain oil, sludge, etc., must have a rubber liner. If you have a non-lined pit full of oil that has been dug out in the dirt next to your tanks it is considered an active spill and you will be fined. Concrete tanks are grandfathered in right now but if the EPA comes to your facility they may require you to drain and clean them, so they can be inspected for leakage and cracks. If the soil around them is full of oil you can get fined. You should, from an engineering viewpoint, replace them with an approved above ground tank and clean up any contaminated soils.

18. **High Volume Salt Water Facilities** - All facilities that flow or dispose of large volumes of salt water should take special precautions to prevent the discharge of these fluids out of your containment area. This means keeping your dikes up to your SPCC specifications and installing failsafe emergency cutoffs. You are responsible for the 24 hr flow at your facility and a limited containment area simply is not big enough to handle 2,000 bbls of flow per day. Remember, you cannot drain or otherwise let this salt water out of your containment area as you can fresh water. To the EPA, a salt water spill is worse in many ways than an oil spill. You must pump it back into your system or haul it. If you have a salt water spill, find out the approved methods to mitigate the damage and implement them.

EPA TIER II REPORTING

Submission of the Tier II form is required by Title III of the Superfund Amendments and Reauthorization Act of 1986, Section 312. Public Law 99-499 codified at 42 U.S.C. Section 11022. the purpose of this Tier II form is to provide state and local officials and the public with specific information on hazardous chemicals present at your facility during the past year.

This Tier II form is required to be filed on each facility or battery which has a total capacity of 1320 gallons (31.4 BBLS). This does not apply to 55-gallon drums. In practice this will cover all oil and gas batteries except for low volume, dry gas wells that may have only a small separator with no oil or salt water storage on site.

Note that the reporting requirements vary from state to state and are filed with each states Department of Environmental Quality (DEQ) several states will not accept a written form but must be submitted electronically.

The contact information for various states are as follows:

Kansas	785-296-1688	moestrei@kdheks.gov
New Mexico	505-476-9695	Daniela.bowman@state.nm.us
Oklahoma	405-702-5137 or 800-869-1400	Matthew.wormus@deq.ok.gov
Texas	512-834-6603 ex 2480 or 800-452-2791 ex 2480	Bernardine.zimmerman@dshs.state.tx.us