Santa Fe Main Office Phone: (505) 476-3441 General Information Phone: (505) 629-6116

Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/contact-us/ State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For State Use Only: Registration #

> Form C-137 EZ Revised October 11, 2022

File via OCD Permitting

REGISTRATION/ FINAL CLOSURE REPORT FOR SMALL LANDFARM

Section 7 of 19.15.36 NMAC defines a small landfarm as a centralized landfarm of two acres or less that has a total capacity of 2000 cubic yards or less in a single lift of eight inches or less, remains active for a maximum of three years from the date of its registration and that receives only petroleum hydrocarbon-contaminated soils (excluding drill cuttings) that are exempt or non-hazardous waste. The operator shall operate only one active small landfarm per governmental section at any time.

GENERAL INFORMATION

| 1. [| Х | Small Landfarm | Registration |
|------|---|----------------|--------------|
|------|---|----------------|--------------|

Small Landfarm Final Closure Report*

| fust be submitted within three years f | from the registration date) |
|--|-----------------------------|
|--|-----------------------------|

| 2. | Operator: | Hilcorp E | nergy C | ompany | | | | | | | |
|----|-----------------|-----------|------------|-------------|------|--------|---------|---------|-------|-----|--|
| | Address: 1111 | Travis S | Street, Ho | uston, TX 7 | 7002 | | | | | | |
| | Contact Person: | Mitch I | Killough | | | | Phone: | 713-757 | -5247 | | |
| 3. | Location: SW | /4 | SE | _/4 Section | 25 | Townsł | nip 32N |] | Range | 12W | |

(*N

REGISTRATION

1. As operator, are you the surface estate owner of the proposed site? \Box Yes \bigtriangledown No If no, please attach a certification statement that demonstrates a written agreement is established with the surface estate owner authorizing the use of the site for the proposed small landfarm.

Will the proposed small landfarm comply with the siting requirements of Subsections A and B of 19.15.36.13 NMAC?
 ✓ Yes □ No

- A. Depth to ground water.
 - No small landfarm shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.
- **B.** No surface waste management facility shall be located:
 - within 200 feet of a watercourse, lakebed, sinkhole or playa lake;
 - within an existing wellhead protection area or 100-year floodplain;
 - within, or within 500 feet of, a wetland;
 - within the area overlying a subsurface mine;
 - within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or
 - within an unstable area, unless the operator demonstrates that engineering measures have been incorporated into the surface waste management facility design to ensure that the surface waste management facility's integrity will not be compromised.

3. Attach a plat and topographic map showing the small landfarm's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the small landfarm site; watercourses; fresh water sources, including wells and springs; oil and gas wells or other production facilities; and inhabited buildings within one mile of the site's perimeter.

Based on the information provided with this submittal, registration of a small landfarm can only be granted if the operator complies with the following understandings and conditions:

• The operator shall operate only one active small landfarm per governmental section at any time. No small landfarm shall be located more than one mile from the operator's nearest oil or gas well or other production facility.

• The operator shall accept only exempt or non-hazardous wastes consisting of soils (excluding drill cuttings) generated as a result of accidental releases from production operations, that are predominantly contaminated by petroleum hydrocarbons, do not contain free liquids, would pass the paint filter test and where testing shows chloride concentrations are 500 mg/kg or below.

• The operator shall berm the landfarm to prevent rainwater run-on and run-off.

• The operator shall post a sign at the site readable from a distance of 50 feet and listing the operator's name; small landfarm registration number; location by unit letter, section, township and range; expiration date; and an emergency contact telephone number.

• The operator shall spread and disk contaminated soils in a single eight inch or less lift within 72 hours of receipt. The operator shall conduct treatment zone monitoring to ensure that the TPH concentration, as determined by EPA SW-846 method

8015M or EPA method 418.1 or other EPA method approved by the division, does not exceed 2500 mg/kg; and that the chloride concentration, as determined by EPA method 300.1, does not exceed 500 mg/kg. The operator shall treat soils by disking at least once a month and by watering and adding bioremediation enhancing materials when needed.

• The operator shall maintain records reflecting the generator, the location of origin, the volume and type of oil field waste, the date of acceptance and the hauling company for each load of oil field waste received. The division shall post on its website each small landfarm's location, operator and registration date. In addition, the operator shall maintain records of the small landfarm's remediation activities in a form readily accessible for division inspection. The operator shall maintain all records for five years following the small landfarm's closure.

• The operator shall submit a final closure report on a form C-137 EZ, together with photographs of the closed site, to the environmental bureau in the division's Santa Fe office.

CERTIFICATION

I hereby certify that the information submitted with this registration is true, accurate and complete to the best of my knowledge and belief and agree to the understandings and conditions of this registration.

| Name: Mitch Killough | Title: Environmental Specialist |
|--|---|
| Signature: | Date: 1/2/2025 |
| E-mail Address: mkillough@hilcorp.com | |
| OCD REGISTRATION: Approved. Date : | Denied. Date: |
| Comments: | |
| OCD Representative Signature: | |
| Title: | OCD Registration Number: |
| FINAL CLOSURE REPORT | |
| chlorides, as determined by EPA method 300.1, shall not exceed If yes, were the additional closure requirements listed below satisfied The operator shall re-vegetate soils remediated to the closure per Paragraph (6) of Subsection A of 19.15.36.18 NMAC. If the operator returns remediated soils to the original site, or with in with native soil to the standards in Paragraph (6) of Subsection The operator shall remove berms on the small landfarm and buit The operator shall clean up the site and collect one vadose zone treatment zone, or in an area where liquids may have collected of collected and analyzed using the methods specified above for T | sults) 0B, shall not exceed 0.2 mg/kg; 8260B, shall not exceed 50 mg/kg; A method approved by the division, shall not exceed 2500 VEPA SW-846 method 8015M, shall not exceed 500 mg/kg; and d 500 mg/kg. P Yes No (Please provide photos) reformance standards if left in place in accordance with th division permission, recycles them, re-vegetate the cell filled on A of 19.15.36.18 NMAC; Idings, fences, roads and equipment; and soil sample from three to five feet below the middle of the thue to rainfall events; the vadose zone soil sample shall be PH, BTEX and chlorides. |
| If no, were the landfarmed soils that have not or cannot be remediated removed to a division-approved surface waste management facility, a (6) of Subsection A of 19.15.36.18 NMAC and re-vegetated? | nd the cell filled in with native soil to the standards in Paragraph |
| CERTIFICATION I hereby certify that the information submitted with this final closure and belief. | report is true, accurate and complete to the best of my knowledge |
| Name: | Title: |
| Signature: | Date: |
| E-mail Address: | |
| OCD CLOSURE REVIEW: Closure Approved. Date : | Closure Denied. Date: |
| Comments: OCD Representative Signature: | |

Title:

OCD Registration Number:



January 16, 2025

Hilcorp Energy Company

1111 Travis Street Houston, Texas 77002

Re: Small Landfarm Work Plan Moore LS 6B San Juan County, New Mexico Hilcorp Energy Company

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Small Landfarm Work Plan* summarizing the proposed activities to be performed at the Moore LS 6B (API # 30-045-30564) well pad (Site). The Site is located on private surface in Unit O, Section 25, Township 32 North, Range 12 West, rural San Juan County, New Mexico (Figure 1). Landowner approval for the small landfarm is attached as Appendix A.

As defined in Title 19, Chapter 15, Part 36, Section 7 (19.15.36.7) of the New Mexico Administrative Code (NMAC), a small landfarm cannot exceed 2 acres in size and has a total capacity of 2,000 cubic yards or less of soil. Hilcorp has identified the Site to have sufficient space to construct a small landfarm. A plat map of the landfarm is attached as Appendix B. The proposed small landfarm will be used to treat petroleum-hydrocarbon impacted soil originating from Hilcorp-operated facilities that are classified as exempt or non-hazardous waste by the New Mexico Oil Conservation Division (NMOCD).

NMOCD SMALL LANDFARM SITING CRITERIA

In accordance with 19.15.36.16 NMAC, the following siting requirements presented in Subsections A and B of 19.15.36.13 apply to the small landfarm location at the Site:

- No small landfarm shall be located:
 - where groundwater is less than 50 feet below ground surface (bgs) of the lowest elevation of the proposed small landfarm;
 - o within 200 feet of a watercourse, lakebed, sinkhole, or playa lake;
 - o within an existing wellhead protection area or 100-year floodplain;
 - within 500 feet of a wetland;
 - o within the area overlying a subsurface mine;
 - within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or
 - within an unstable area.

Moore LS 6B

Small Landfarm Work Plan

Based on the siting for the proposed small landfarm, the proposed location meets the applicable siting requirements of the regulation. Figures 1 through 9 present siting information and applicable receptors in the vicinity of the Site as required by Subsections A and B of 19.15.36.13 NMAC.

SMALL LANDFARM CONSTRUCTION AND OPERATIONAL REQUIREMENTS

As specified in Subsections B, C, and D of 19.15.36.16 NMAC, the following construction and operational requirements will be followed at the Site:

- The landfarm cannot exceed a maximum size of 2 acres;
- The landfarm can remain active for a maximum period of three years from the date of its registration and can only receive petroleum hydrocarbon contaminated soils (excluding drill cuttings) that are exempt or non-hazardous waste;
- Berms must be constructed around the landfarm perimeter to prevent the run-on and runoff of rainwater.
- A sign must be posted within 50 feet of the landfarm that includes the operator's name, landfarm registration number, location by unit letter, township and range, permit expiration date, and emergency contact telephone number;
- Soil must be placed in a single lift of 8 inches or less, not to exceed 2,000 cubic yards of soil;
- No small landfarm can accept soil with chloride concentrations greater than 500 milligrams per kilogram (mg/kg);
- Soil must not contain free liquids;
- The operator must spread and disk contaminated soil within 72 hours of receipt;
- The operator must treat soil by disking at least once a month and by watering and adding bioremediation enhancing materials when needed;
- The operator must maintain records reflecting the generator, location of soil origin, volume and type of oilfield waste, date of acceptance, and hauling company for each load of oilfield waste received;
- The operator must maintain records of the small landfarm's remediation activities in a form readily accessible for division inspection and must maintain records for five years following the landfarm's closure.

SMALL LANDFARM CLOSURE

As specified in Subsection E of 19.15.36.16 NMAC, the closure performance standards for the Site will be as follows:

- Benzene as determined by Environmental Protection Agency (EPA) Methods 8021B or 8260B: <u>0.2 mg/kg</u>.
- Total benzene, toluene, ethylbenzene, and xylenes (BTEX) as determined by EPA Methods 8021B or 8260B: <u>50 mg/kg</u>.
- **Total Petroleum Hydrocarbons (TPH)**, as determined by EPA Method 418.1 or the sum of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO) as determined by EPA Method 8015M: <u>2,500 mg/kg</u>.



ENSOLUM

- TPH-GRO and DRO combined fraction as determined by EPA Method 8015M: <u>500 mg/kg</u>.
- Chloride as determined by EPA Method 300.1: 500 mg/kg.

In order to achieve closure, treated soil will be assessed by collecting one composite soil sample, consisting of four discrete samples from the small landfarm, for laboratory analysis. If the analytical results indicate the treated soil is compliant with the above closure performance standards, the operator may return the soil to the original generation site, leave the treated soil in place at the small landfarm, or with prior NMOCD approval, dispose or reuse the treated soil in an alternative manner. If soil cannot be remediated to the above standards within three years after the registration date, the operator must remove contaminated soil from the landfarm and properly dispose of it at a permitted landfill, unless the division authorizes a specific alternative disposition.

Upon closure, any berms, buildings, fences, roads, and equipment associated with the small landfarm must be removed. Once cleared, the operator must collect one vadose zone soil sample from 3 feet to 5 feet below the middle of the treatment zone, or in an area where liquids may have collected due to rainfall events, to be analyzed for TPH, BTEX, and chloride by the methods described above. Additionally, the landfarm area must be revegetated in accordance with Paragraph 6, Subsection A of 19.15.36.18 NMAC. If soil is removed, the landfarm area must be filled in with native soil prior to revegetation activities. Lastly, Hilcorp will submit a final closure report on NMOCD Form C-137 EZ, together with photographs of the closed Site, to the NMOCD.

We appreciate the opportunity to provide this work plan to Hilcorp. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,

Ensolum, LLC

Stuart Hyde Senior Managing Geologist (970) 903-1607 shyde@ensolum.com

Attachments:

| Figure 1: | Site Map |
|-------------|---|
| Figure 2: | Proximity to Watercourse, Lakebed, Sinkhole, or Playa Lake |
| Figure 3: | Proximity to 100-Year Floodplain |
| Figure 4: | Proximity to Wetlands |
| Figure 5: | Proximity to Subsurface Mine |
| Figure 6: | Proximity to Permanent Residence, School, Hospital, Institution or Church |
| Figure 7: | Proximity to Unstable Area |
| Figure 7A: | Proximity to Unstable Area – Seismic |
| Figure 7B: | Proximity to Unstable Area – Faults |
| Figure 8: | Proximity to Wellhead Protection Area |
| Figure 9: | Local Depth to Water |
| | |
| Δnnondiv Δ· | Landowner Annroval |

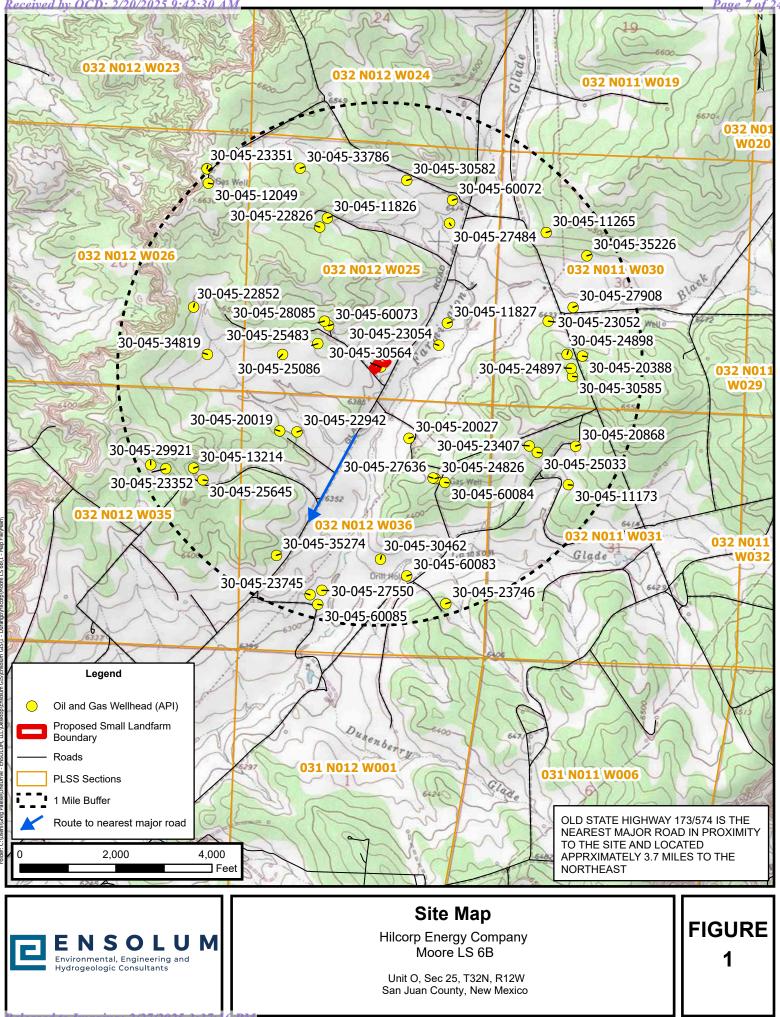
Appendix A: Landowner Approval Appendix B: Plat Map

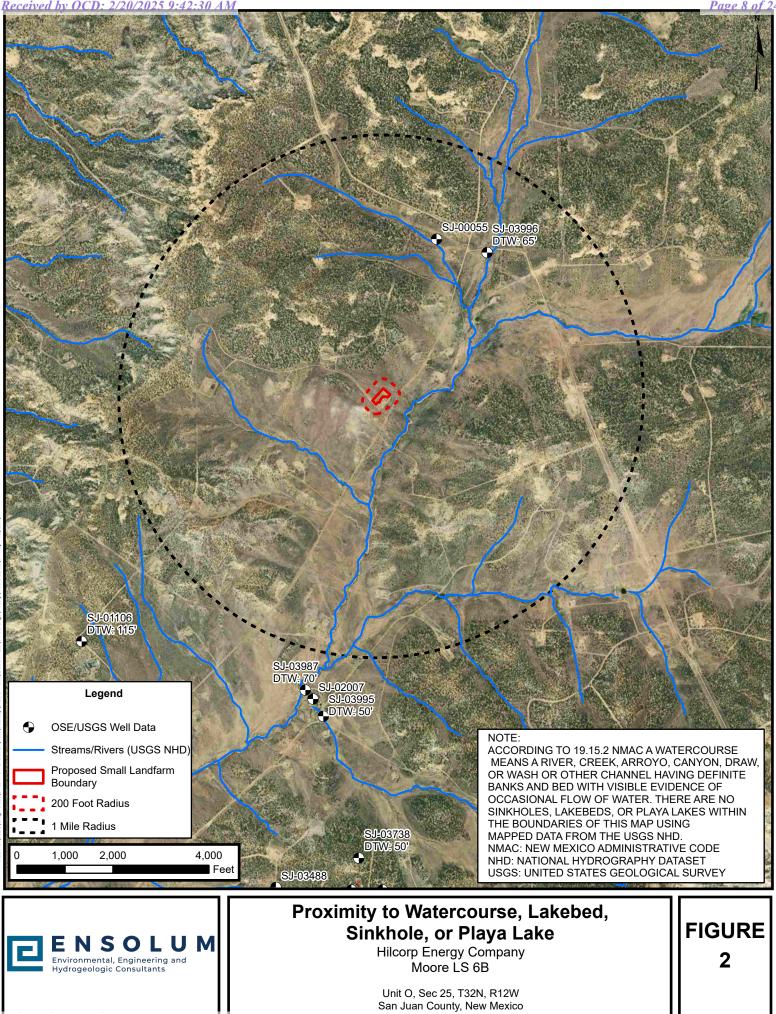


FIGURES



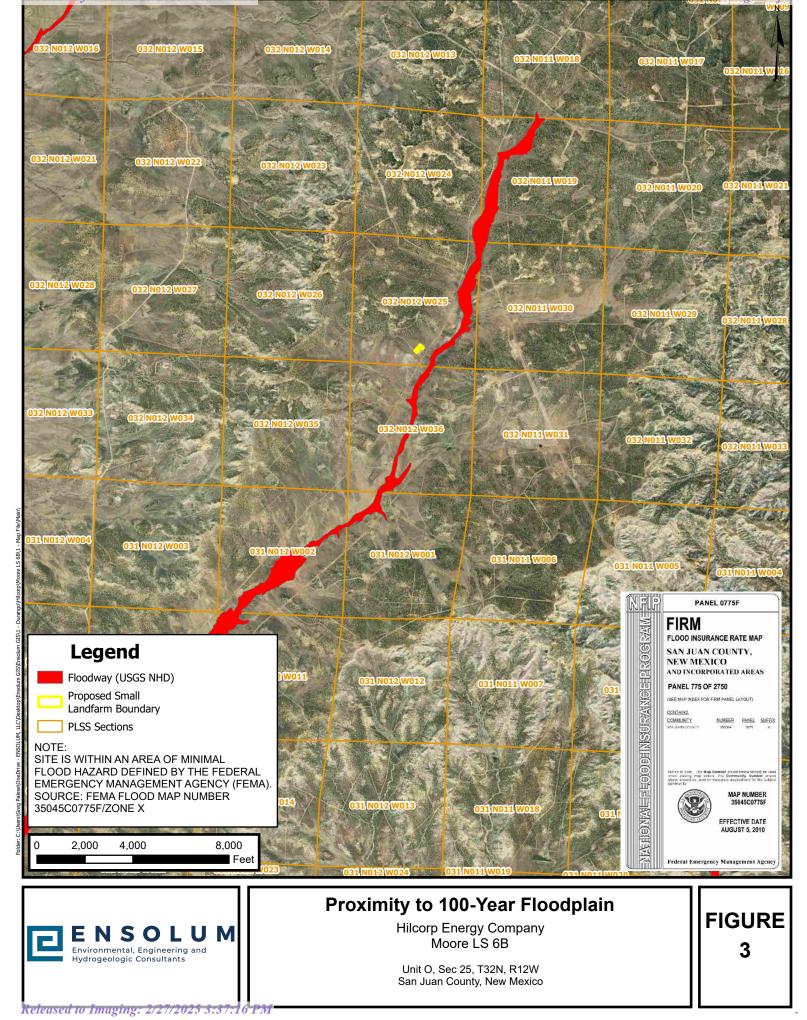
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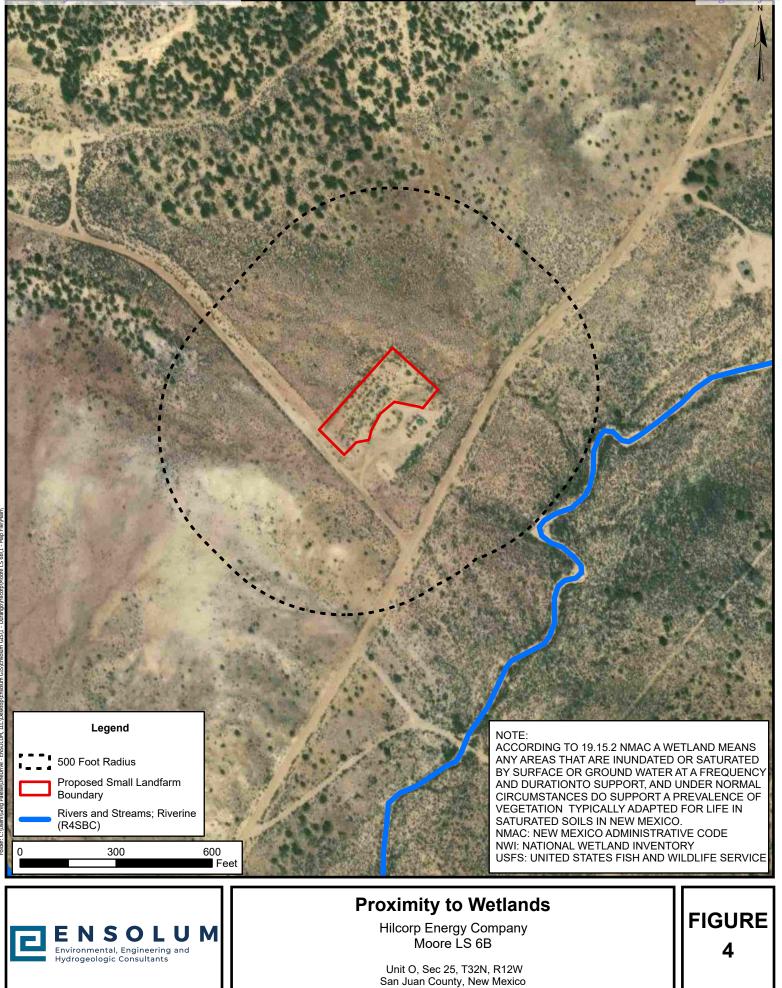


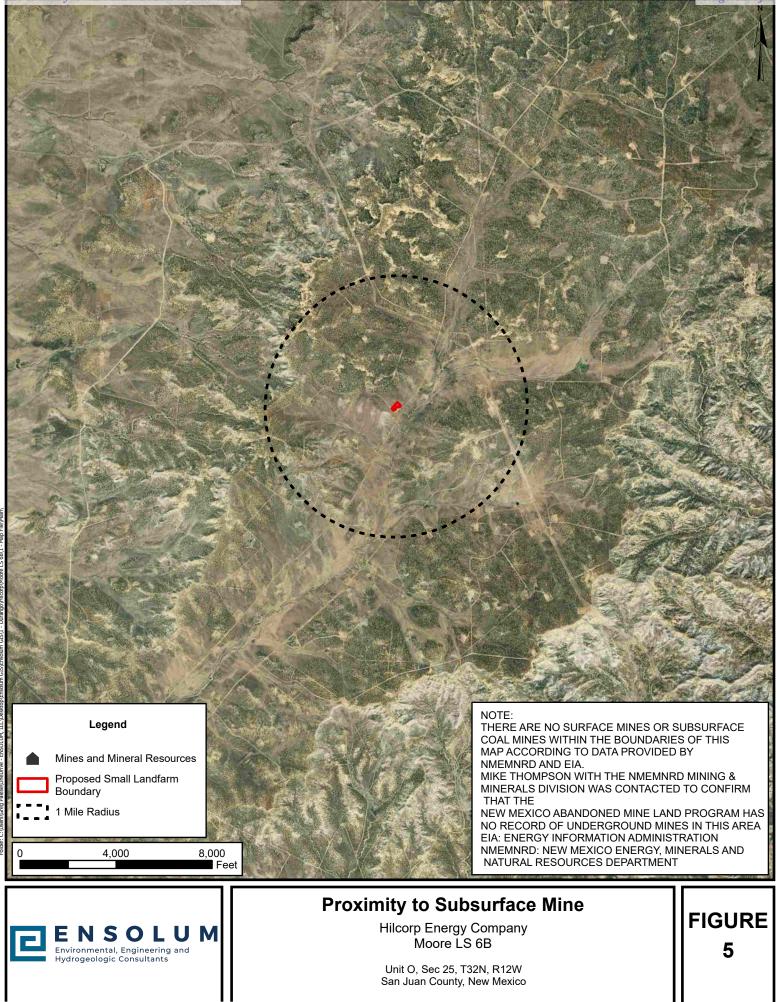


Received by OCD: 2/20/2025 9:42:30 AM

Page 9 of 24







| From: | Tompson, Mike, EMNRD |
|--------------|---|
| То: | Stuart Hyde |
| Cc: | Wes Weichert |
| Subject: | RE: Abandoned Mine Question for Small Landfarm Permit |
| Date: | Monday, May 6, 2024 1:19:21 PM |
| Attachments: | image001.png image002.png image003.png |

[**EXTERNAL EMAIL**]

Hi Stuart,

The New Mexico Abandoned Mine Land Program does not know of any abandoned mines at those two locations.

Please let me know if you have any follow up questions.

Mike Tompson

Manager - New Mexico Abandoned Mine Land Program Energy, Minerals and Natural Resources Department Mining and Minerals Division 1220 South St. Francis Drive, Santa Fe, NM 87505 Cell: (505) 690-8063 Mike.Tompson@emnrd.nm.gov

From: Stuart Hyde <shyde@ensolum.com>
Sent: Monday, May 6, 2024 1:07 PM
To: Tompson, Mike, EMNRD <Mike.Tompson@emnrd.nm.gov>
Cc: Wes Weichert <wweichert@ensolum.com>
Subject: [EXTERNAL] Abandoned Mine Question for Small Landfarm Permit

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments. Mike,

I am currently working on siting criteria for two proposed small landfarm facilities for a client and we need to confirm that there are no abandoned mines at the proposed locations. One location is the Grenier 001B gas well pad located at coordinates 36.929933, -108.023772. The other is the Moore LS 6B well pad located at coordinates 36.951031, -108.045980.

Can you please respond and confirm that there are no abandoned mines at these locations? Thank you, your help is much appreciated.

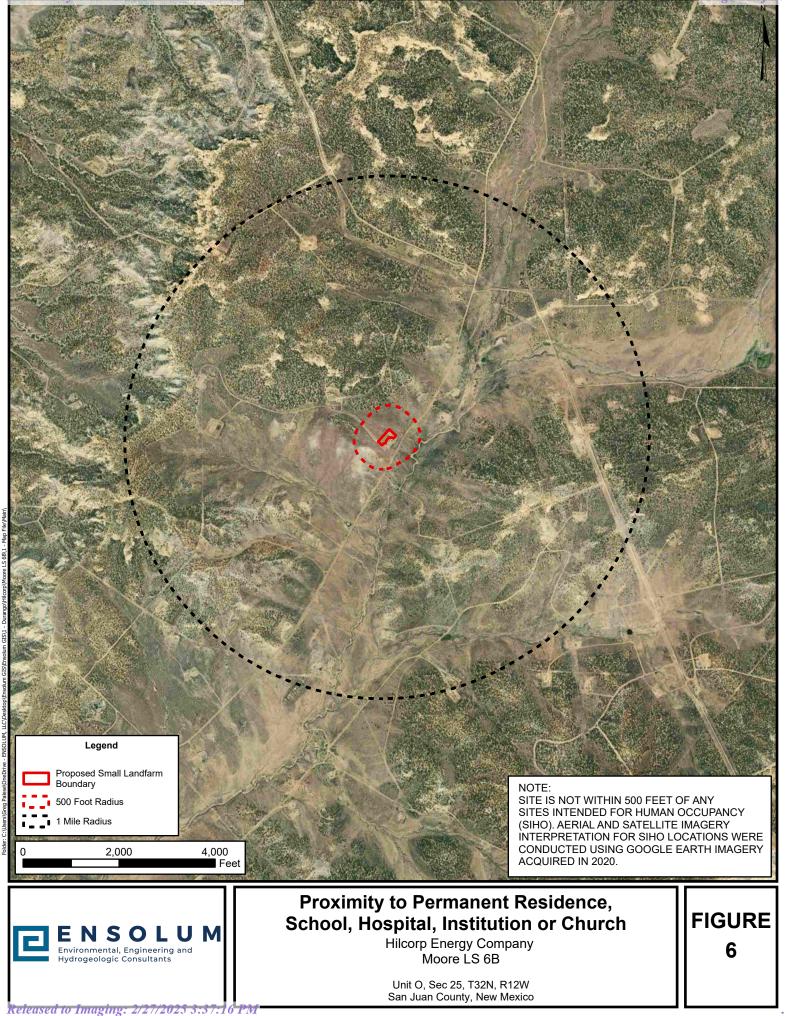


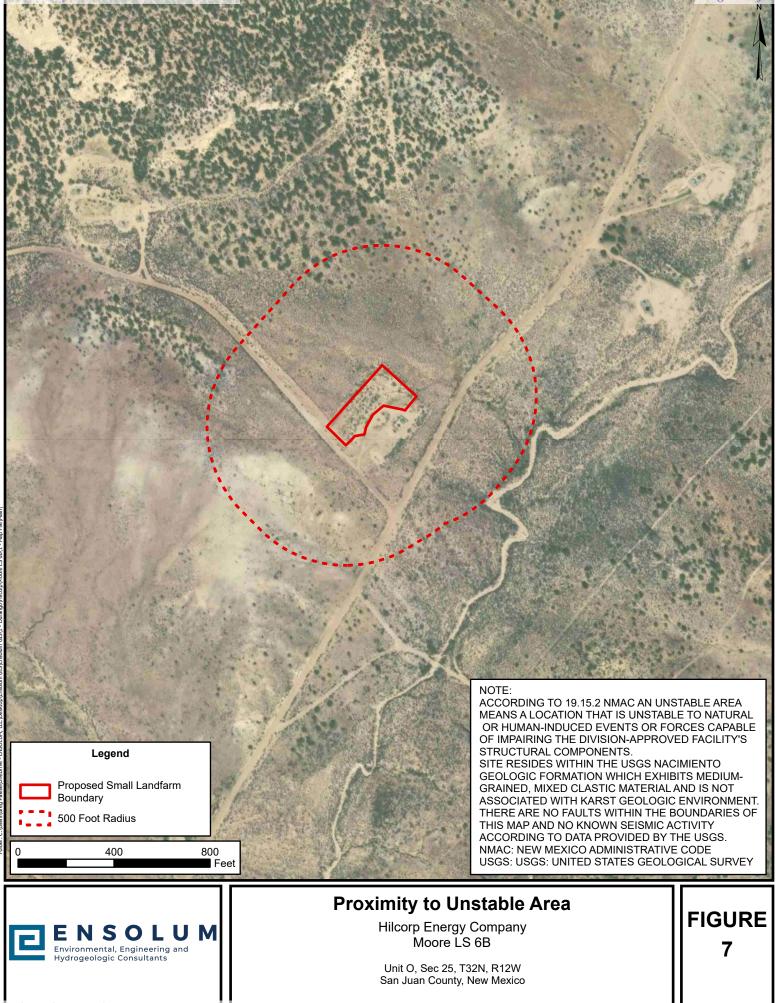


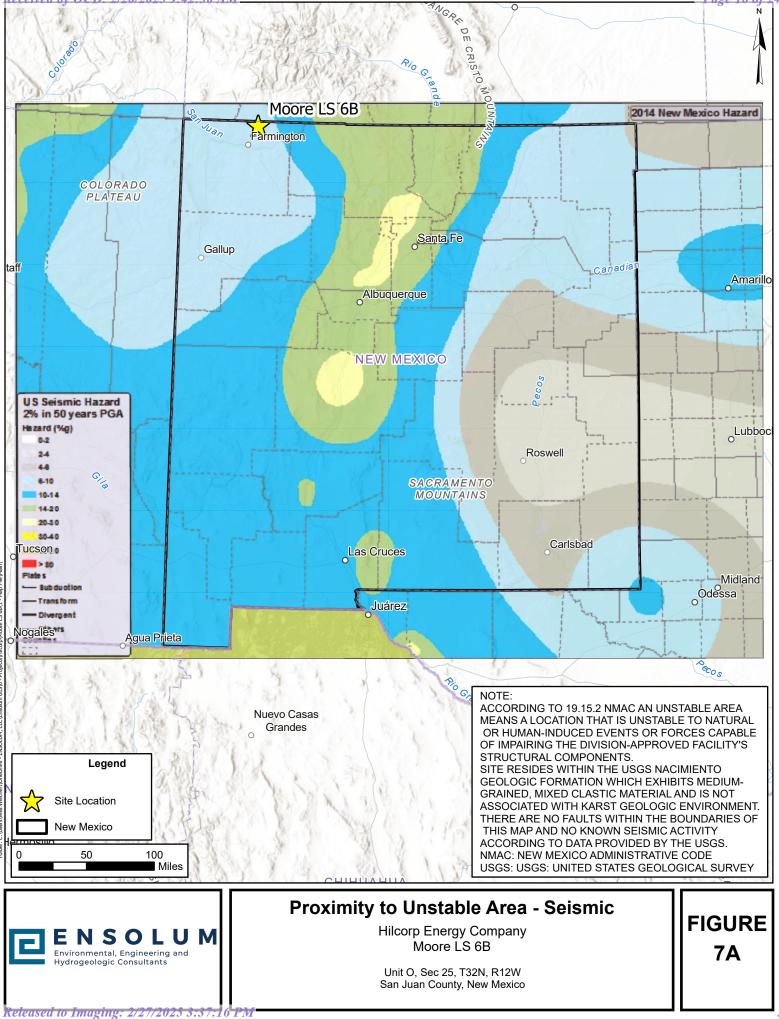


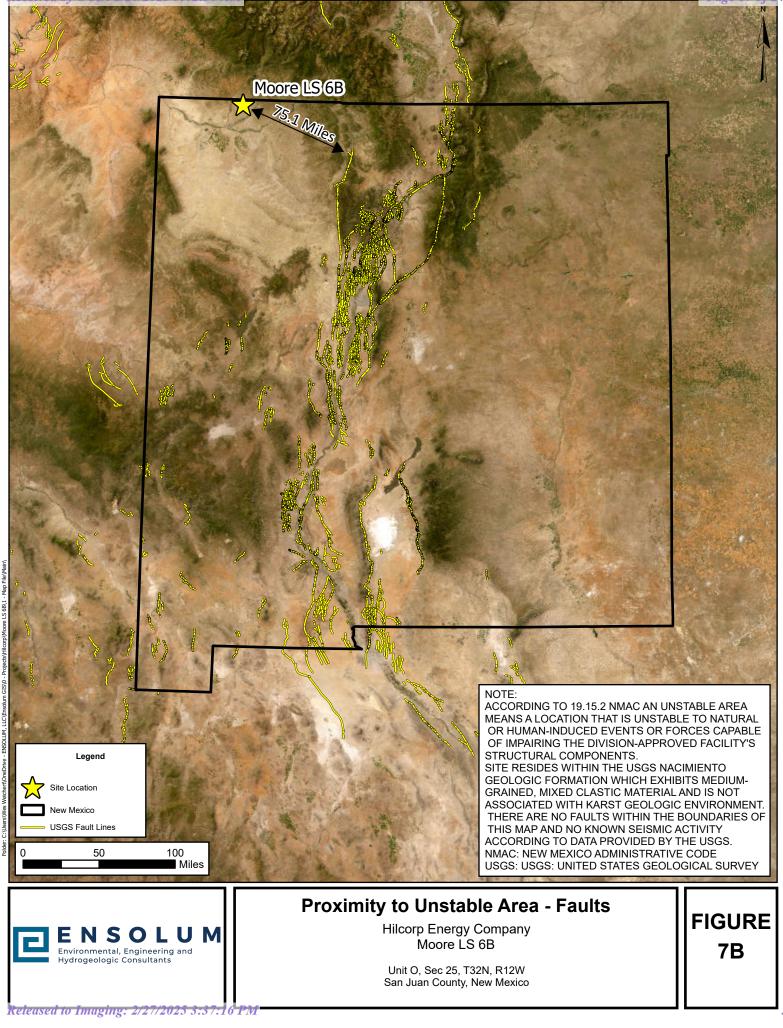
(Licensed in WA/TX) Senior Managing Geologist 970-903-1607 <u>Ensolum, LLC</u> **in f** X

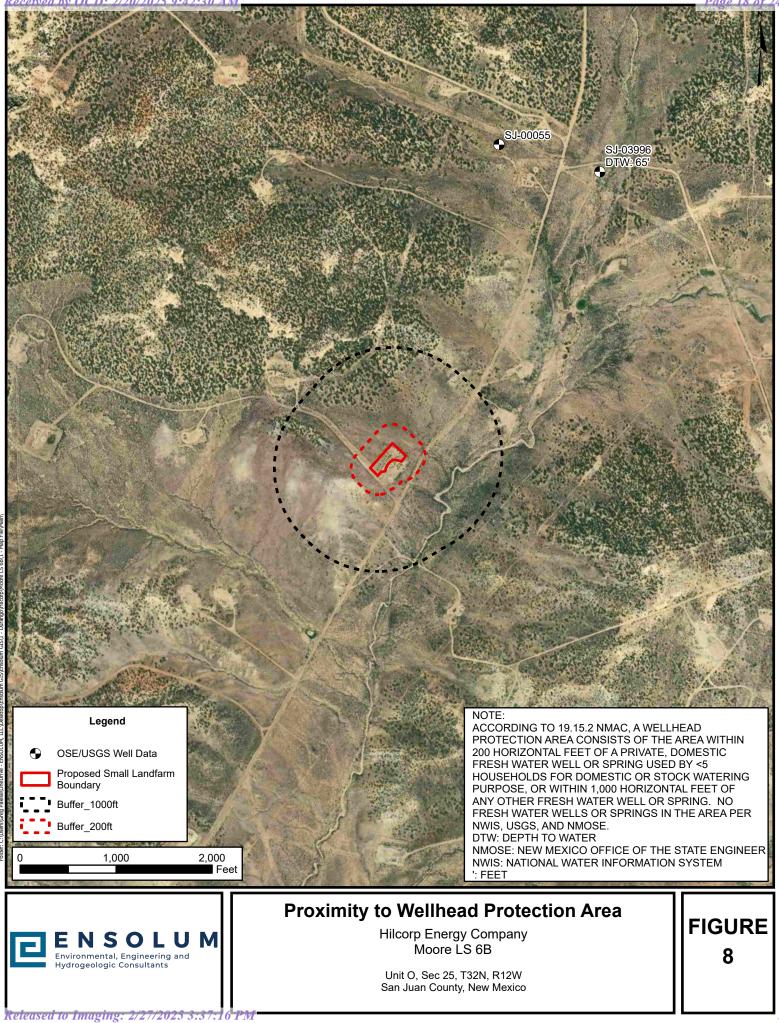
"If you want to go fast, go alone. If you want to go far, go together." – African Proverb



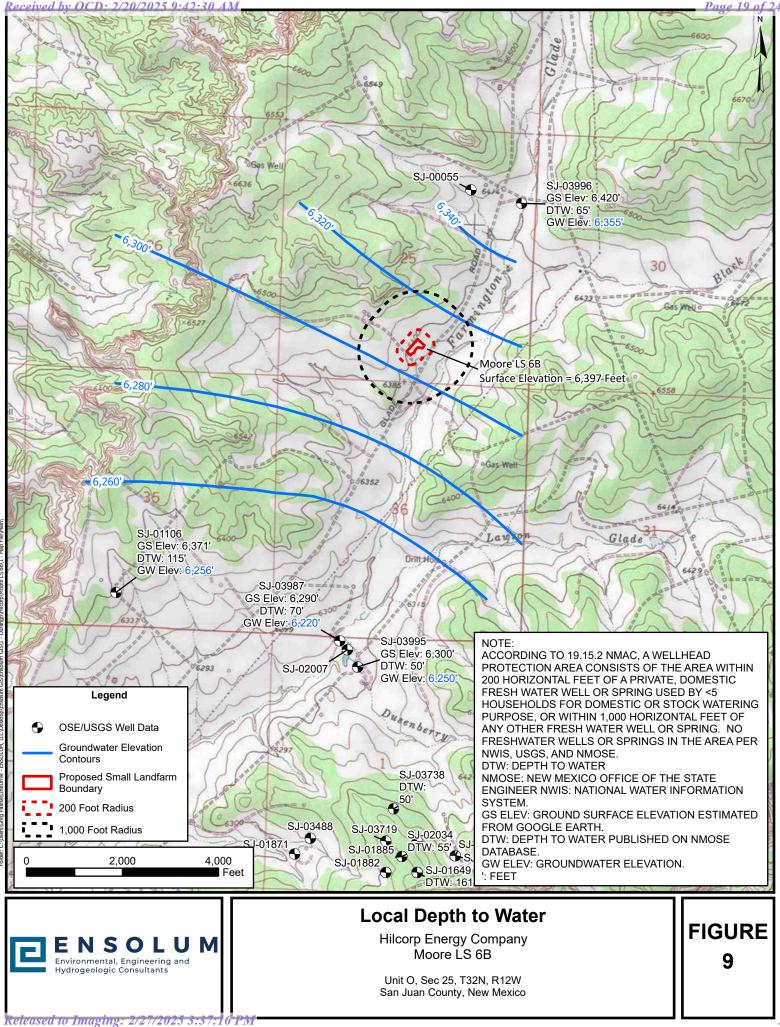








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APPENDIX A

Landowner Approval



November 4, 2024

Certified Mail: 7022-2410-0003-1570-5896

Donna R. Marcotte Trust 2024 S. Melrose St. Casper, Wyoming 82601

Subject: <u>Small Landfarm Work Plan</u> Moore LS 6B San Juan County, New Mexico

Donna R. Marcotte Trust:

Hilcorp Energy Company (Hilcorp) has experienced a 42-barrel condensate release on the Moore LS #6B due to vandalism. Bullet holes were found in the condensate tank that were the source of the spill.

Hilcorp has determined that the best way to remediate the contaminated soil is through a small land farm located on the existing Moore LS #6B well pad. Hilcorp proposed plan is to dig the contaminated soil (approximately 500 cubic yards) and utilize two (2) acres of the existing well pad for the land farm. Hilcorp will then on a monthly basis disc the soil to incorporate soil amendments and allow for aeration. I have enclosed the Small Land Farm Work plan for your review.

In order for the New Mexico Oil Conservation Division to approve the Land Farm we are required to get the surface owner approval. If Hilcorp has your approval, please sign below and return in the provided postage paid envelope.

For all general questions, please feel free to contact me. For technical questions please contact Mitch Killough (Sr. Environmental Specialist) at 713-757-5247.

The Donna R. Marcotte Trust hereby grants Hilcorp approval to conduct the above-described Land Farm on the Moore LS #6B well pad.

Marcotte Inust

Donna R. Marcotte Trust Dated: H/8/24

Best Regards,

annon Hancon Ramon Hancock

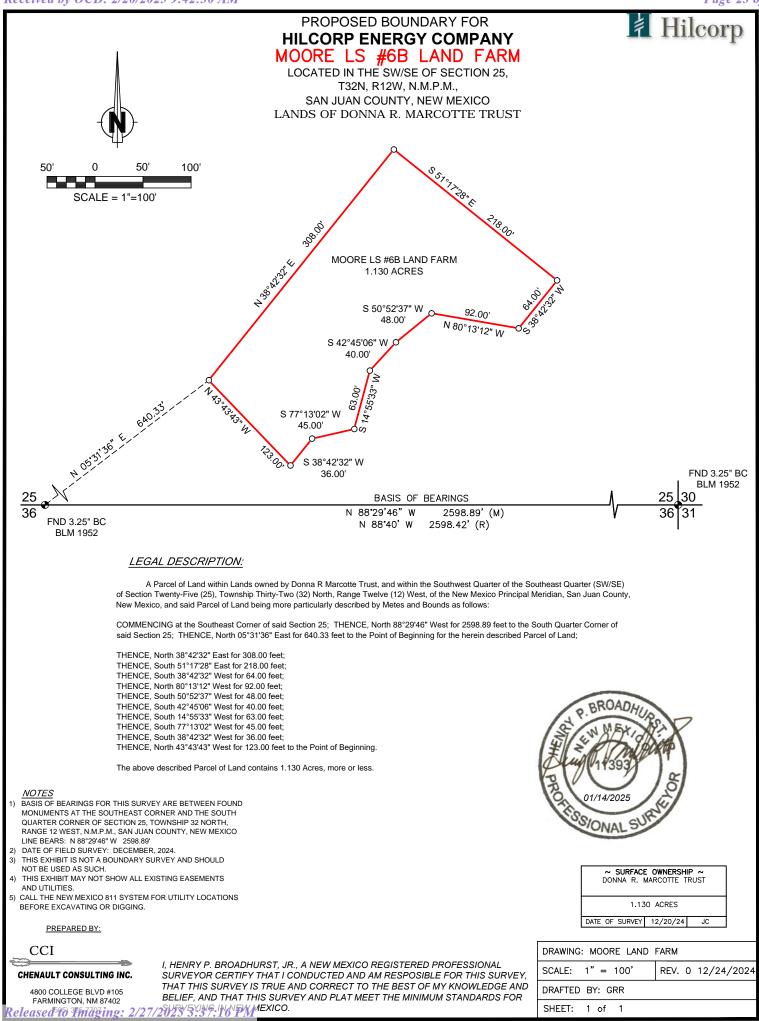
Sr. Landman – San Juan North Hilcorp San Juan, L.P. 505-324-5140

382 Road 3100, Aztec, NM 87410 Phone: 505/599-3400 hilcorp.com



APPENDIX B

Small Landfarm Plat Map



Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

CONDITIONS

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

| Operator: | OGRID: |
|------------------------|-----------------------------------|
| HILCORP ENERGY COMPANY | 372171 |
| 1111 Travis Street | Action Number: |
| Houston, TX 77002 | 433832 |
| | Action Type: |
| | [C-137] Small Landfarm (C-137EZA) |

| Created By | Condition | Condition Date |
|---------------|---|-------------------|
| lbarr | Hilcorp must meet the requirements of Subsections A and B of 19.15.36.13 NMAC and 19.15.36.16 NMAC and the commitments/demonstrations included in the application. Registration expires on 2/27/2028. | 2/27/2025 |

CONDITIONS

Action 433832