BW – 38

PERMIT APPLICATIONS, RENEWALS, & MODS

(1 of 2)

2018

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, Division Director
Oil Conservation Division

NOVEMBER 7, 2018

Mr. Darr Angell
Llano Disposal, LCC
P.O. Box 190
Lovington, NM 88260

Re: Discharge Permit (BW-038), Llano Disposal, LCC (Llano), UIC Class III Brine Well "State '27' Brine Supply Well No. 1" (API No. 30-025-20592) UL: L Section 27 Township 16 South, Range 33 East, 1980 FSL, 660 FWL, Lat. 32.89096°, Long. -103.65762°, NMPM, Lea County, New Mexico

Dear Mr. Angell,

The discharge permit (BW-038) for the Class III Brine Well "State '27' Brine Supply Well No. 1" is hereby approved under the terms and conditions specified in the enclosed discharge permit.

The New Mexico Oil Conservation Division (OCD) approves this new discharge permit pursuant to 20.6.2.3109A NMAC. Please note 20.6.2.3109 NMAC, which provides for possible future amendment of the permit. Please be advised that approval of this discharge permit does not relieve Llano of liability if operations result in pollution of surface water, groundwater, or the environment.

Please note that 20.6.2.3104 NMAC specifies "When a permit has been issued, discharges must be consistent with the terms and conditions of the permit." Pursuant to 20.6.2.3107C NMAC, Llano is required to notify the Director of any increase in the injection volume or injection pressure, or process modification that would result in any change in the water quality or volume of the discharge.

This discharge permit will expire on **November 7, 2023**, and Llano should submit a discharge permit renewal application in ample time before this date. Note that under 20.6.2.3106F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved discharge permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

The discharge permit application for the State '27' Class III Brine Well is subject to 20.6.2.3114 NMAC. Every billable facility submitting a discharge permit application is assessed a non-refundable filing fee of $100.00. OCD has already received the required $100.00 filing fee but the $1,700.00 permit fee for a Class III Brine Well is now required by check made payable to the "Water Quality Management Fund."

If you have any questions, please contact Carl Chavez of my staff at 505-476-3490 or email: Carl.J.Chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Heather Riley
OCD Director

HR/cc

Enclosure: Discharge Permit BW-38

cc: Hobbs District Office

DISCHARGE PERMIT APPROVAL CONDITIONS

All discharge permits are subject to Water Quality Control Commission regulations.

1. GENERAL PROVISIONS:

1.A. PERMITTEE AND PERMITTED FACILITY : The Director of the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department issues a Discharge Permit BW-38 to Llano Disposal, LCC (Permittee) to operate a Underground Injection Control (UIC) Class III Well for the solution mining of salt (State '27' Brine Supply Well No. 1 API # 30-025-20592) is located 1,980 FSL, and 660 FWL, Unit Letter L (NW/4 SW/4) of Section 27, Township 16S Range 33E, Lat. N 32.89096°, Long. W -103.65762°, NMPM, Lea County, New Mexico. This brine well is located approximately 17.8 miles west of the City of Lovington on Hwy. 82, then south 0.62 mile on Rooney Rd, then east 0.3 miles on lease road to well location. The proposed "Hummingbird" brine station location is: NW/4 SW/4. UL 'L', Section 28, T16S, R33E. A new fresh water supply well shall be drilled 75 ft. southeast (Lat. 32.890782°, Long. -103.657470°) of the brine well. Fresh water will be transported via a buried polyethylene pipeline northwest to the brine well. The brine station shall consist of one 500 bbl. fiberglass catch/flush tank, and three 1000 bbl. fiberglass tanks with OCD approved containments for brine storage. Pipelines shall be buried a minimum of 3 ft. deep (below frost line).

The Permittee is permitted to inject water into the subsurface salt layers and produce brine for use in the oil and gas industry. Ground water that may be affected by a spill, leak, or accidental discharge of brine occurs at a depth of approximately 155 ft. below ground surface and has a total dissolved solids (TDS) concentration of approximately 400 mg/L.

1.B. SCOPE OF PERMIT: OCD has been granted the authority by statute and by delegation from the Water Quality Control Commission (WQCC) to administer the Water Quality Act (Chapter 74, Article 6 NMSA 1978) as it applies to Class III wells associated with the oil and gas industry (See Section 74-6-4, 74-6-5 NMSA 1978).

The Water Quality Act and the rules promulgated pursuant to the Act protect ground water and surface water of the State of New Mexico by providing that, unless otherwise allowed by 20.6.2 NMAC, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless such discharge is pursuant to an approved discharge plan (See 20.6.2.3104 NMAC, 20.6.2.3106 NMAC, and 20.6.2.5000 through 20.6.2.5299 NMAC).

This Discharge Permit for a Class III Brine Well is issued pursuant to the Water Quality Act and WQCC rules, 20.6.2 NMAC. This Discharge Permit does not authorize any treatment of, or on-site disposal of, any materials, product, by-product, or oil-field waste.

Pursuant to 20.6.2.5004A NMAC, the following underground injection activities are prohibited:

1. The injection of fluids into a motor vehicle waste disposal well is prohibited.
2. The injection of fluids into a large capacity cesspool is prohibited.
3. The injection of any hazardous or radioactive waste into a well is prohibited except as provided by 20.6.2.5004A(3) NMAC.
4. Class IV wells are prohibited, except for wells re-injecting treated ground water into the same formation from which it was drawn as part of a removal or remedial action.
5. Barrier wells, drainage wells, recharge wells, return flow wells, and motor vehicle waste disposal wells are prohibited.

This Discharge Permit does not convey any property rights of any sort nor any exclusive privilege, and does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state, federal, or local laws, rules or regulations.

The Permittee shall operate in accordance with the terms and conditions specified in this Discharge Permit to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (see 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream

standard to be violated (see 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a hazard to public health, (see 20.6.2.3109H(3) NMAC); so that the numerical standards specified of 20.6.2.3103 NMAC are not exceeded; and, so that the technical criteria and performance standards (see 20.6.2.5000 through 20.6.2.5299 NMAC) for Class III wells are met. Pursuant to 20.6.2.5003B NMAC, the Permittee shall comply with 20.6.2.1 through 20.6.2.5299 NMAC.

The Permittee shall not allow or cause water pollution, discharge, or release of any water contaminant that exceeds the Water Quality Control Commission (WQCC) standards specified at 20.6.2.3101 NMAC and 20.6.2.3103 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams). Pursuant to 20.6.2.5101A NMAC, the Permittee shall not inject non-hazardous fluids into ground water having 10,000 mg/l or less total dissolved solids (TDS).

The issuance of this permit does not relieve the Permittee from the responsibility of complying with the provisions of the Water Quality Act, any applicable regulations or water quality standards of the WQCC, or any applicable federal laws, regulations or standards (See Section 74-6-5 NMSA 1978).

1.C. DISCHARGE PERMIT: This Discharge Permit is a new permit application. Future replacement of a prior permit does not relieve the Permittee of its responsibility to comply with the terms of that prior permit while that permit was in effect.

1.D. DEFINITIONS: Terms not specifically defined in this Discharge Permit shall have the same meanings as those in the Water Quality Act or the rules adopted pursuant to the Act, as the context requires.

1.E. FILING FEES AND PERMIT FEES: Pursuant to 20.6.2.3114 NMAC, every facility that submits a Discharge Permit application for initial approval or renewal shall pay the permit fees specified in Table 1 and the filing fee specified in Table 2 of 20.6.2.3114 NMAC. OCD has already received the required $100.00 filing fee. The Permittee is now required to submit the $1,700.00 permit fee for a Class III well. Please remit payment made payable to the "Water Quality Management Fund" in care of OCD at 1220 South St. Francis Drive in Santa Fe, New Mexico 87505.

1.F. EFFECTIVE DATE, EXPIRATION, RENEWAL CONDITIONS, AND PENALTIES FOR OPERATING WITHOUT A DISCHARGE PERMIT: This Discharge Permit becomes effective immediately from the date that the Permittee receives this discharge permit or until the permit is terminated or expires. This Discharge Permit will expire on **November 7, 2023.** The Permittee shall submit an application for renewal no later than 120 days before that expiration date, pursuant to 20.6.2.5101F NMAC. If a Permittee submits a renewal application at least 120 days before the Discharge Permit expires and is in compliance with the approved Discharge Permit, then the existing Discharge Permit will not expire until OCD has approved or disapproved the renewal application. A discharge permit continued under this provision remains fully effective and enforceable. Operating with an expired Discharge Permit may subject the Permittee to civil and/or criminal penalties (See Section 74-6-10.1 NMSA 1978 and Section 74-6-10.2 NMSA 1978).

1.G. MODIFICATIONS AND TERMINATIONS: The Permittee shall notify the OCD Director and OCD's Environmental Bureau of any Facility expansion or process modification (See 20.6.2.3107C NMAC). The OCD Director may require the Permittee to submit a Discharge Permit modification application pursuant to 20.6.2.3109E NMAC and may modify or terminate a Discharge Permit pursuant to Sections 74-6-5(M) through (N) NMSA 1978.

1. If data submitted pursuant to any monitoring requirements specified in this Discharge Permit or other information available to the OCD Director indicate that 20.6.2 NMAC is being or may be violated, then the OCD Director may require modification or, if it is determined by the OCD Director that the modification may not be adequate, may terminate this Discharge Permit for a Class III well that was approved pursuant to the requirements of 20.6.2.5000 through 20.6.2.5299 NMAC for the following causes:

    a. Noncompliance by Permittee with any condition of this Discharge Permit; or,
    b. The Permittee's failure in the discharge permit application or during the discharge permit review process to disclose fully all relevant facts, or Permittee's misrepresentation of any relevant facts at any time; or,

c. A determination that the permitted activity may cause a hazard to public health or undue risk to property and can only be regulated to acceptable levels by discharge permit modification or termination (See Section 75-6-6 NMSA 1978; 20.6.2.5101I NMAC; and, 20.6.2.3109E NMAC).

2. This Discharge Permit may also be modified or terminated for any of the following causes:
   a. Violation of any provisions of the Water Quality Act or any applicable regulations, standard of performance or water quality standards;
   b. Violation of any applicable state or federal effluent regulations or limitations; or
   c. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge (See Section 75-6-5M NMSA 1978).

1.H. TRANSFER OF CLASS III WELL DISCHARGE PERMIT:

1. The transfer provisions of 20.6.2.3111 NMAC do not apply to a discharge permit for a Class III well.

2. Pursuant to 20.6.2.5101H NMAC, the Permittee may request to transfer its Class III well discharge permit if:

   a. The OCD Director receives written notice 30 days prior to the transfer date; and
   b. The OCD Director does not object prior to the proposed transfer date. OCD may require modifications to the discharge permit as a condition of transfer, and may require demonstration of adequate financial responsibility.

3. The written notice required in accordance with Permit Condition 1.H.2.a shall:

   a. Have been signed by the Permittee and the succeeding Permittee, and shall include an acknowledgement that the succeeding Permittee shall be responsible for compliance with the Class III well discharge permit upon taking possession of the facility; and
   b. Set a specific date for transfer of the discharge permit responsibility, coverage and liability; and
   c. Include information relating to the succeeding Permittee's financial responsibility required by 20.6.2.5210B(17) NMAC.

1.I. COMPLIANCE AND ENFORCEMENT: If the Permittee violates or is violating a condition of this Discharge Permit, OCD may issue a compliance order that requires compliance immediately or within a specified time period, or assess a civil penalty, or both (See Section 74-6-10 NMSA 1978). The compliance order may also include a suspension or termination of this Discharge Permit. OCD may also commence a civil action in district court for appropriate relief, including injunctive relief (See Section 74-6-10(A)(2) NMSA 1978). The Permittee may be subject to criminal penalties for discharging a water contaminant without a discharge permit or in violation of a condition of a discharge permit; making any false material statement, representation, certification or omission of material fact in a renewal application, record, report, plan or other document filed, submitted or required to be maintained under the Water Quality Act; falsifying, tampering with or rendering inaccurate any monitoring device, method or record required to be maintained under the Water Quality Act; or failing to monitor, sample or report as required by a Discharge Permit issued pursuant to a state or federal law or regulation (See Section 74-6-10.2 NMSA 1978).

2. GENERAL FACILITY OPERATIONS:

2.A. SEMI-ANNUAL MONITORING REQUIREMENTS FOR CLASS III WELLS: The Permittee may use either or both fresh water or water from otherwise non-potable sources. Pursuant to 20.6.2.5207C, the Permittee shall provide analysis of the injected fluids and brine at least semi-annually to yield data representative of their characteristics. The Permittee shall analyze both the injected fluids and brine for the following characteristics: pH; density, concentration of total dissolved solids (TDS); chloride concentration; and sodium concentration (for brine only).

1. **Monitor Well:** In **advance of start-up** of brine well operations, the Permittee shall install a downgradient monitor well within 50 feet southeast of the brine well into the water table aquifer and collect a background groundwater sample for general chemistry and WQCC 20.6.2.3103 NMAC groundwater constituents.

Groundwater quality data shall comply with EPA Quality Assurance/Quality Control (QA/QC) and Data Quality Objectives (DQOs) and be **submitted to OCD for approval before start-up** of brine production. The monitor well construction shall comply with EPA Standards and be required to be sampled and monitored **semi-annually** thereafter for the following characteristics:

- pH (Method 9040);
- Eh;
- Specific conductance;
- Specific gravity;
- Temperature; and
- General ground water quality parameters (general chemistry/cations and anions, including: fluoride, calcium, potassium, magnesium, sodium bicarbonate, carbonate, chloride, sulfate, total dissolved solids, cation/anion balance, pH, and bromide using the methods specified in 40 CFR 136.3).

The environmental data results shall be reported in the Annual Report (Section 2.J).

2.B. SOLUTION CAVERN MONITORING PROGRAM:

1. **Surface Subsidence Monitoring Plan:** The Permittee shall submit a Surface Subsidence Monitoring Plan to OCD within 180 days of the effective date of this permit. The Surface Subsidence Monitoring Plan shall specify that the Permittee will install at least three survey monuments and shall include a proposal to monitor the elevation of the monuments and top of well casing at least semi-annually.

   The Permittee shall survey each survey monument and top of well casing at least semiannually to monitor for possible surface subsidence and shall tie each survey to the nearest USGS geodetic benchmark. The Permittee shall employ a licensed professional surveyor to conduct the subsidence monitoring program with proper instrument accuracy assessment at the conclusion of each survey. The Permittee shall submit the results of all subsidence surveys with summary of results and any recommendations to OCD within 15 days of survey completion. If the monitored surface subsidence survey at any measuring point deviates 0.10 ft. or more compared to its baseline elevation, then the Permittee shall notify OCD within 30 days of survey completion for further instructions. If survey results continue to demonstrate subsidence over time, and the Permittee cannot demonstrate the integrity of the cavern and well to the satisfaction of OCD, then it shall cease all brine production and submit a corrective action plan to mitigate the subsidence.

   The Permittee shall include the above information in the Annual Report (Section 2.J).

2. **Solution Cavern Characterization Program:** The Permittee shall submit a Solution Cavern Characterization Plan to characterize the size and shape of the solution cavern using geophysical methods within 180 days of the effective date of this permit. The Permittee shall characterize the size and shape of the solution cavern using a geophysical methods approved by OCD at least once before the expiration date of the permit. The Permittee shall demonstrate that at least 90% of the calculated volume of salt removed based upon injection and production volumes has been accounted for by the approved geophysical method(s) for such testing to be considered truly representative.

   a. The Permittee shall provide an estimate of the size and shape of the solution cavern at least annually in the Annual Report (Section 2.J), based on fluid injection and brine production data.
   b. The Permit shall compare the ratio of the volume of injected fluids to the volume of produced brine monthly. If the average ratio of injected fluid to produced brine varies is less than 90% or greater than 110%, the Permittee shall report this to OCD and cease injection and production operations of its Class III well within 24 hours. The Permittee shall begin an investigation to determine the cause of this abnormal ratio within 72 hours. The Permittee shall submit to OCD a report of its investigation within 15 days of cessation of injection and production operations of its Class III well for further instructions.

3. **Annual Certification:** The Permittee shall certify annually in the Annual Report (Section 2.J) that continued salt solution mining will not cause cavern collapse, surface subsidence, property damage, or otherwise threaten public health and the environment, based on geologic and engineering data.

   If the solution cavern is determined by either OCD or the Permittee to be potentially unstable by either direct or indirect means, then the Permittee shall cease all fluid injection and brine production within 24 hours. If the Permittee ceases operations because it or OCD has determined that the solution cavern is unstable, then it shall submit a plan to stabilize the solution cavern within 30 days. OCD may require the Permittee to implement additional subsidence monitoring and to conduct additional corrective action.

2.C. CONTINGENCY PLANS: The Permittee shall implement its proposed contingency plan(s) included in its Permit Application to cope with failure of a system(s) in the Discharge Permit.

2.D. CLOSURE: The Permittee shall submit as a condition of C-103 Sundry approval, and for OCD approval, a facility closure plan with third-party cost estimate for its well pursuant to 20.6.2.5209 NMAC and as specified in Permit Conditions 2.I and 5.B to address: well plug and abandonment, land surface restoration; environmental groundwater monitoring (if applicable); pipeline abandonment; and five years of surface subsidence monitoring.

1. **Pre-Closure Notification:** Pursuant to 20.6.2.5005A NMAC, the Permittee shall submit a pre-closure notification to OCD's Environmental Bureau at least 30 days prior to the date that it proposes to close or to discontinue operation of its Class III well. Pursuant to 20.6.2.5005B NMAC, OCD's Environmental Bureau must approve all proposed well closure activities before Permittee may implement its proposed closure plan.

2. **Required Information:** The Permittee shall provide OCD's Environmental Bureau with the following information:

- Name of facility;
- Address of facility;
- Name of Permittee (and owner or operator, if appropriate);
- Address of Permittee (and owner or operator, if appropriate);
- Contact person;
- Phone number;
- Number and type of well(s);
- Year of well construction;
- Well construction details;
- Type of discharge;
- Average flow (gallons per day);
- Proposed well closure activities (e.g., sample fluids/sediment, appropriate disposal of remaining fluids/sediments, remove well and any contaminated soil, clean out well, install permanent plug, conversion to other type of well, ground water and vadose zone investigation, other);
- Proposed date of well closure;
- Proposed method and date of surface restoration;
- Proposed method and date of pipeline abandonment;
- Name of preparer; and
- Date.

2.E. PLUGGING AND ABANDONMENT PLAN: Pursuant to 20.6.2.5209A NMAC, when the Permittee proposes to plug and abandon its Class III well, it shall submit to OCD a plugging and abandonment plan that meets the requirements of 20.6.2.3109C NMAC, 20.6.2.5101C NMAC, and 20.6.2.5005 NMAC for protection of ground water. If requested by OCD, Permittee shall submit for approval prior to closure, a revised or updated plugging and abandonment plan. The obligation to implement the plugging and abandonment plan as well as the requirements of the plan survives the termination or expiration of this Discharge Permit. The Permittee shall comply with 20.6.2.5209 NMAC.

2.F RECORD KEEPING: The Permittee shall maintain records of all inspections, surveys, investigations, etc., required by this Discharge Permit at its Facility office for a minimum of five years and shall make those records available for inspection at the request of an OCD Representative.

2.G. RELEASE REPORTING: The Permittee shall comply with the following permit conditions, pursuant to 20.6.2.1203 NMAC, if it determines that a release of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, has occurred. The Permittee shall report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan. If the Permittee determines that any constituent exceeds the standards specified at 20.6.2.3103 NMAC, then it shall report a release to OCD's Environmental Bureau.

1. **Oral Notification:** As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, the Permittee shall notify OCD's Environmental Bureau. The Permittee shall provide the following:

   - The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;
   - The name and location of the facility;
   - The date, time, location, and duration of the discharge;
   - The source and cause of discharge;
   - A description of the discharge, including its chemical composition;
   - The estimated volume of the discharge; and,
   - Any corrective or abatement actions taken to mitigate immediate damage from the discharge.

2. **Written Notification:** Within one week after the Permittee has discovered a discharge, the Permittee shall send written notification (may use form C-141 with attachments) to OCD's Environmental Bureau verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

   The Permittee shall provide subsequent corrective actions and written reports as required by OCD's Environmental Bureau.

2.H. OTHER REQUIREMENTS:

1. **Inspection and Entry:** Pursuant to Section 74-6-9 NMSA 1978 and 20.6.2.3107A NMAC, the Permittee shall allow any authorized representative of the OCD Director, to:

   - Upon the presentation of proper credentials, enter the premises at reasonable times;
   - Inspect and copy records required by this Discharge Permit;
   - Inspect any treatment works, monitoring, and analytical equipment;
   - Sample any injection fluid or produced brine;
   - Conduct various types environmental media sampling, and
   - Use the Permittee's monitoring systems and wells in order to collect groundwater samples.

2. **Advance Notice:** The Permittee shall provide OCD's Environmental Bureau and Hobbs District Office with at least five (5) working days advance notice of any environmental sampling to be performed pursuant to this Discharge Permit, or any well plugging, abandonment or decommissioning of any equipment associated with its Class III well.

3. **Environmental Monitoring:** The Permittee shall ensure that any environmental sampling and analytical laboratory data collected meets the standards specified in 20.6.2.3107B NMAC or EPA QA/QC Standards. The Permittee shall ensure that all environmental samples are analyzed by an accredited "National Environmental Laboratory Accreditation Conference" (NELAC) Laboratory. The Permittee shall submit environmental sampling data summary tables, all raw analytical data, and laboratory QA/QC.

a. A monitor well shall be installed hydrogeologically downgradient from the Brine Well and sampled in accordance with Section 2.A.1.

2.I. BONDING OR FINANCIAL ASSURANCE: Pursuant to 20.6.2.5210B(17) NMAC, the Permittee shall maintain financial assurance, at a minimum, in the amount that Permittee shall estimate and the Director shall approve, in accordance with Permit Conditions 2.D and 5.B, to cover potential costs associated with plugging and abandonment of the Class III well, surface restoration, environmental ground water monitoring (if applicable), pipeline abandonment, along with five years of surface subsidence monitoring thereafter. OCD may require additional financial assurance to ensure adequate funding is available to plug and abandon the well and/or for any required environmental related corrective actions. The Permittee's cost estimate shall be based on third person estimates.

Acceptable financial assurance mechanisms include: (1) a surety bond; (2) a trust fund with a New Mexico bank in the name of the State of New Mexico, with the State as Beneficiary; (3) a non-renewable letter of credit made out to the State of New Mexico; (4) liability insurance specifically covering the contingencies listed in this paragraph; or (5) a performance bond, generally in conjunction with another type of financial assurance. If an adequate bond is posted by the Permittee to a federal or another state agency, and this bond covers all of the measures specified above, the OCD Director shall consider this bond as satisfying the bonding requirements of Sections 20.6.2.5000 through 20.6.2.5299 NMAC wholly or in part, depending upon the extent to which such bond is adequate to ensure that the Permittee will fully perform the measures required hereinabove.

2.J. ANNUAL REPORT: The Permittee shall submit its annual report pursuant to 20.6.2.3107 NMAC to OCD's Environmental Bureau by June 1st of the following year. The annual report shall include the following:

- Cover sheet marked as "Annual Class III Well Report, Name of Permittee, Discharge Permit Number, API number of well(s), date of report, and person submitting report;
- Summary of Class III well operations for the year including a description and reason for any remedial or major work on the well with a copy of form C-103;
- Monthly fluid injection and brine production volume, including the cumulative total carried over each year;
- Semi-annual monitor well analytical data results;
- Injection pressure data;
- Pipeline hydrostatic test results;
- Pipeline visual leak inspection monitoring results at joints;
- A copy of the quarterly chemical analyses shall be included with data summary and all QA/QC information;
- Copy of any mechanical integrity test chart, including the type of test, i.e., duration, gauge pressure, etc.;
- Brief explanation describing deviations from the normal operations;
- Results of any leaks and spill corrective action reports;
- An Area of Review (AOR) update summary;
- A summary with interpretation of MITs, surface subsidence surveys, estimated cavern size and shape, cavern volume and geometry measurements with conclusion(s) and recommendation(s);
- A summary of the ratio of the monthly volume of injected fluids to the volume of produced brine;
- A summary of all major Facility activities or events, which occurred during the year with any conclusions and recommendations;
- Annual Surface Subsidence Monitoring Plan data results in accordance with Permit Condition 2.B.1;
- Annual Solution Cavern Characterization data results in accordance with Permit Condition 2.B.2; and
- The Permittee shall file its Annual Report in an electronic format with a hard copy submittal to OCD's Environmental Bureau.

3. CLASS III WELL OPERATIONS:

3. **Owner/Operator Commitments.** Once a permit is issued, the owner/operator must ensure all operations are consistent with the terms and conditions of the permit and in conformance with all pertinent rules and regulations under both the Water Quality Act. The owner/operator shall abide by all commitments submitted in its discharge permit application including any attachments and/or amendments along with these approval conditions. Applications which reference previously approved plans on file with the OCD shall be incorporated into this permit and the owner/operator shall abide by all commitments of such plans.

3.A. OPERATING REQUIREMENTS: The Permittee shall comply with the operating requirements specified in 20.6.2.5206A NMAC and 20.6.2.5206A NMAC to ensure that:

1. **Brine Production Method:** During the brine well design, cavern development process, and daily brine production, a reverse flow configuration consisting of fresh water injection shall occur through the annulus and 2-7/8 fiberglass (FG) pipe angled through the window at 1,780 ft. bgl to a depth of about 2,300 ft. in the Salado Salt Fm. Brine production is through the window and 3-1/2 in. fiberglass pipe at 1,760 ft. bgl to surface. The window is set at the proper depth between the 9-5/8 in. dual port packer at 1,760 ft. bgl and 9-5/8 in. CIBP at 1,800 ft. bgl. within the 9-5/8 in. casing string, which is backed by cement to surface. The angled FG injection tube at depth allows for proper salt cavern development to prevent cavern ceiling collapse. Injection and production flow may temporarily be reversed as required periodically to clean the tubing and annulus.

2. **Injection Out of Zone:** Injection between the outermost casing and the well bore is prohibited in a zone other than the authorized injection zone. If the Permittee determines that its Class III well is discharging or suspects that it is discharging fluids into a zone or zones other than the permitted injection zone specified in Permit Condition 3.B.1., then the Permittee shall within 24 hours notify OCD's Environmental Bureau and Hobbs District Office of the circumstances and action(s) taken. The Permittee shall cease operations until proper repairs are made and it has received approval from OCD to re-start injection operations.

3. **Pipeline:** Initial hydrostatic testing of brine pipeline is required for any pressure loss, leakage, etc. at joints. The hydrostatic test report with "as-built" pipeline transect and associated construction information shall be submitted to OCD for approval before pipeline activation. Mandatory Hydrostatic Testing of the pipeline is required after leakage and/or before the expiration date of the Permit. Daily pipeline inspection and monitoring is required at a minimum for the first week and each time the pipeline is brought back into service after shut-down, service work, etc. The pipeline shall be inspected within 8-hours of pipeline pressure loss, upset, etc. Weekly inspection and monitoring at a minimum is required thereafter. Inspection record keeping is required and shall include the date and time of each inspection, inspectors name and contact information, weather conditions with inspection summary, any conclusion on pipeline condition with any recommendations. Spills or release locations shall include GPS Coordinates and be handled in accordance with Permit Condition 2.G Release Reporting herein.

3.B. INJECTION OPERATIONS:

1. **Well Injection Pressure Limit:** The Permittee shall ensure that the maximum wellhead or surface injection pressure on its Class III well shall not exceed the fracture pressure of the injection salt formation and will not cause new fractures or propagate any existing fractures of cause damage to the system and underground source of drinking water.

2. **Pressure Limiting Device:** The Permittee shall equip and operate its Class III well or system with a pressure limiting device which shall, at all times, limit surface injection pressure to the maximum allowable pressure for its Class III well. The Permittee shall monitor the pressure-limiting device daily and shall report all pressure exceedances within 24 hours of detecting an exceedance to OCD's Environmental Bureau.

   The Permittee shall take all steps necessary to ensure that the injected fluids enter only the proposed injection interval and is not permitted to escape to other formations, fresh water zones, or onto the ground surface. The Permittee shall report to OCD's Environmental Bureau within 24 hours of discovery any indication that new fractures or existing fractures have been propagated, or that damage to the well, the injection zone, or formation has occurred.

3.C. CONTINUOUS MONITORING DEVICES: The Permittee shall use continuous monitoring devices to provide a record of injection pressure, flow rate, flow volume, and pressure on the annulus between the tubing and the long string of casing.

3.D. MECHANICAL INTEGRITY FOR CLASS III WELLS:

1. Pursuant to 20.6.2.5204 NMAC, the Permittee shall demonstrate mechanical integrity for its Class III well at least once every five years or more frequently as the OCD Director may require for good cause during the life of the well. The Permittee shall demonstrate mechanical integrity for its Class III well every time it performs a well workover, including when it pulls the tubing. A Class III well has mechanical integrity if there is no detectable leak in the casing or tubing which OCD considers to be significant at maximum operating temperature and pressure; and no detectable conduit for fluid movement out of the injection zone through the well bore or vertical channels adjacent to the well bore which the OCD Director considers to be significant. The Permittee shall conduct a casing Mechanical Integrity Test (MIT) from the surface to the approved injection depth to assess casing integrity. The MIT shall consist of a 30-minute test at a minimum pressure of 500 psig measured at the surface when tubing is removed and a plug is installed within 20 ft. of the casing shoe depth. Alternatively, the MIT may consist of a casing/cavern 4-hr. test at a minimum pressure of 300 psig measured at the surface when the cavern and casing are full and tubing remains in the well. More work is required in the "casing/cavern" test in the event of failure to determine the actual cause.

   The Permittee shall notify OCD's Environmental Bureau and Hobbs District Office at least 5 days prior to conducting any MIT to allow OCD Hobbs the opportunity to witness the MIT.

2. The following criteria will determine if the Class III well has passed the MIT:

   a. Passes MIT if zero bleed-off during the test;
   b. Passes casing MIT if final test pressure is within +/- 10% of starting pressure, if approved by OCD (Note: Passes +/- 1% of starting pressure for casing/cavern test due to the massive volume of fluid required in the cavern and casing during this test);
   c. When the MIT is not witnessed by OCD and fails, the Permittee shall notify OCD within 24 hours of the failure of the MIT.
   d. All chart recorder information, charts containing appropriate information, calibration sheets, etc. shall be provided to OCD within 5 working days of completing an MIT.

3. Pursuant to 20.6.2.5204C NMAC, the OCD Director may consider the use by the Permittee of equivalent alternative test methods to determine mechanical integrity. The Permittee shall submit information on the proposed test and all technical data supporting its use. The OCD Director may approve the Permittee's request if it will reliably demonstrate the mechanical integrity of the well for which its use is proposed.

4. Pursuant to 20.6.2.5204D NMAC, when conducting and evaluating the MIT(s), the Permittee shall apply methods and standards generally accepted in the oil and gas industry. When the Permittee reports the results of all MIT(s) to the OCD Director, it shall include a description of the test(s), the method(s) used, and the test results.

3.E. WELL WORKOVER OPERATIONS: Pursuant to 20.6.2.5205A(5) NMAC, the Permittee shall provide notice to and shall obtain approval from OCD's District Office in Hobbs and the Environmental Bureau in Santa Fe prior to commencement of any remedial work or any other workover operations to allow OCD the opportunity to witness the operation. The Permittee shall request approval using form C-103 (Sundry Notices and Reports on Wells) with copies sent to OCD's Environmental Bureau and Hobbs District Office. Properly completed Forms C-103 and/or C-105 must be filed with OCD upon completion of workover activities and copies included in that year's Annual Report.

3.F. FLUIDS INJECTION AND BRINE PRODUCTION VOLUMES AND PRESSURES: The Permittee shall continuously monitor the volumes of water injected and brine production. The Permittee shall submit monthly reports of its injection and production volumes on or before the 10th day of the following month. The Permittee shall suspend injection if the monthly injection volume is less than 110% or greater than 120% of associated brine production. If such an event occurs, the Permittee shall notify OCD within 24 hours.

3.G. AREA OF REVIEW (AOR): The Permittee shall report within 72 hours of discovery any new wells, conduits, or any other device that penetrates or may penetrate the injection zone within a 1-mile radius from its Class III

well. OCD shall be notified within 24 hours of having knowledge of any wells lacking cement within the cavern interval within a ½-mile radius from the Class III well.

4. CLASS V WELLS: Pursuant to 20.6.2.5002B NMAC, leach fields and other waste fluids disposal systems that inject non-hazardous fluid into or above an underground source of drinking water are UIC Class V injection wells. This Discharge Permit does not authorize the use of a Class V injection well for the disposal of industrial waste. Pursuant to 20.6.2.5005 NMAC, the Permittee shall close any Class V industrial waste injection well that injects non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (e.g., septic systems, leach fields, dry wells, etc.) within 90 calendar days of the issuance of this Discharge Permit. The Permittee shall document the closure of any Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes other than contaminated ground water in its Annual Report. Other Class V wells, including wells used only for the injection of domestic wastes, shall be permitted by the New Mexico Environment Department.

5. SCHEDULE OF COMPLIANCE:

5.A. PRE-INJECTION SUBMITTALS: No injection is permitted under this Permit until the OCD Director has approved the following submittals:

1. **BONDING OR FINANCIAL ASSURANCE:** The Permittee shall submit financial assurance in the amount approved by the OCD Director under Permit Condition 2.I.

2. **SURFACE SUBSIDENCE MONITORING PLAN:** The Permittee shall submit the Surface Subsidence Monitoring Plan required in accordance with Permit Condition 2.B.1 within 180 days of permit issuance for OCD approval.

3. **SOLUTION CAVERN CHARACTERIZATION PLAN:** The Permittee shall submit the Solution Cavern Characterization Plan required in accordance with Permit Condition 2.B.2 within 180 days of permit issuance for OCD approval.

4. **MONITOR WELL:** The Permittee shall install a downgradient monitor well within 50 feet southeast of the brine well into the water table aquifer, collect a background groundwater sample and submit the sample results in accordance with Permit Condition 2.A.1.

5.B. PERMIT SUBMITTALS:

1. **ANNUAL REPORT:** The Permittee shall submit its annual report to OCD by June 1st of each year.

2. **MIT:** The Permittee shall demonstrate mechanical integrity for its Class III well at least once every five years or more frequently as the OCD Director may require for good cause during the life of the well. The Permittee shall demonstrate mechanical integrity for its Class III well every time it performs a well workover, including when it pulls the tubing.

3. **INJECTION VOLUMES:** The Permittee shall submit monthly reports of its injection and production volumes on or before the 10th day of the following month.

Chavez, Carl J, EMNRD

From: Estes, Bob, DCA
Sent: Thursday, November 1, 2018 9:54 AM
To: Marvin
Cc: Chavez, Carl J, EMNRD; darrangell@gmail.com
Subject: RE: [EXT] Llano Disposal, LLC, BSW38

OFFICIAL RESPONSE OF THE NEW MEXICO STATE HISTORIC RPESERVATION OFFICER (SHPO)

Dear Mr. Burrows,

Thank you for the additional information. It is unlikely that the project will affect historic properties and no additional work is necessary.

If you have any questions or comments please feel free to call me directly at 505-827-4225 or email me.

Sincerely,

Bob Estes Ph.D.
HPD Staff Archaeologist
New Mexico State Historic Preservation Division
407 Galisteo St., Suite 236
Santa Fe, New Mexico 87501

-----Original Message-----
From: Marvin [mailto:burrowsmarvin@gmail.com]
Sent: Thursday, November 01, 2018 9:39 AM
To: Estes, Bob, DCA
Cc: Chavez, Carl J, EMNRD; darrangell@gmail.com
Subject: [EXT] Llano Disposal, LLC, BSW38

> Dear Mr. Estes :
>
> This email is in response to the communication you addressed to us concerning our NMOCD brine well application (NMOCD BSW38). Please find your note included below.
>
> As you know, this project is located on fee surface, approximately 21 miles west of Lovington, NM, and 4 miles east of Maljamar, NM along State Hwy 82. The well we are using was originally drilled over 20 years ago, then was plugged and abandoned as a noncommercial producer. Because this well was deep, the existing well pad was large enough to more than accommodate our operations. At the time the well was drilled, a arch survey should have been conducted. We used an ordinary service rig to accomplish the re-entry, so used only a small part of the original pad.
> The tank battery/sales facility, will be located less than one mile due west of the brine well, on Hummingbird Road. We will be using a pipeline to carry product from the well to the sales facility. The fee

Chavez, Carl J, EMNRD

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Sent: Thursday, November 1, 2018 9:39 AM
To: Estes, Bob, DCA
Cc: Chavez, Carl J, EMNRD; darrangell@gmail.com
Subject: [EXT] Llano Disposal, LLC, BSW38
Attachments: image1.png; ATT00001.txt

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> The tank battery/sales facility, will be located less than one mile due west of the brine well, on Hummingbird Road. We will be using a pipeline to carry product from the well to the sales facility. The fee land this project is located on has been used for agriculture purposes for many decades, well over 100 years now. Uses have been for both cultivation and livestock grazing. The land our site is on, is just west of the western escarpment of the High Plains ("the Caprock"), and is nearly all solid rock to surface.
> As you noted in your response to public notice concerning this project, there are no known historic cultural sites. We do realize that something of importance could be seen during our activities. Please know that we will be vigilant in watching for that, and would be eager to report such a find to your office.
>
> Sincerely,
> Marvin L. Burrows
> Agent for Llano Disposal, LLC
> Lovington, NM

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> Sincerely,
> Marvin L. Burrows
> Agent for Llano Disposal, LLC
> Lovington, NM

Susana Martinez
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

October 16, 2018

Carl Chavez
Environmental Engineer
Oil Conservation Bureau-Environmental Bureau Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Discharge permit (BW-038) Llano Disposal "State 27", Well No. 1. (HPD Log:108843)

Dear Mr. Chavez:

This letter is in response to the above referenced discharge permit application received at the Historic Preservation Division (HPD) on April 2, 2018. According to the application, the proposed project is within Township 16 South, Range 33 East, Sections 26 and 28. State Land Office records show that the site is on split estate with State Trust mineral estates.

I reviewed our records to determine if cemeteries, burial grounds or cultural resources listed on the State Register of Cultural Properties or the National Register of Historic Places exist within or near the permit area. Our records show that there are no cultural resources listed on the National Register or State Register within or near the proposed permit area and no known cemeteries or burial grounds.

Although there are no cultural resources listed on the State or National Register, our records show that the area has not been surveyed for cultural resources and there is no information about previously recorded archaeological sites near the project area of potential effect. Recent aerial photography shows that the well location and brine station have been subjected to ground disturbance.

The application states that the surface estate is privately owned. Although a cultural resources survey is not required for permits on private land, HPD recommends that a qualified archaeologist conduct a survey of the area where the new well will be drilled and the corridor where flow lines will be installed to ensure ensure that cultural resources are not inadvertently damaged by construction. A list of qualified archaeological consultants can be obtained from our website at www.nmhistoricpreservation.org.

Please do not hesitate to contact me if you have any questions regarding these comments. I can be reached by telephone at (505) 827-4225 or by email at bob.estes@state.nm.us .

Sincerely,

Bob Estes

Bob Estes Ph.D.
HPD Staff Archaeologist

Llano Disposal, LLC
c/o Holcomb Consultants
6900 Spring Cherry Lane
Amarillo, Texas 79124

October 17, 2018

New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Carl Chavez

Re: Discharge Plan Permit (BW-38)
Llano Disposal, LLC
UIC Class III Brine Well - State 27 BSW #1 (30-025-20592)
UL 'L', Sec 27, T16S, R33E, 1980 FSL x 660 FWL, Lea County, New Mexico

Dear Mr. Chavez,

Pursuant to 20.6.2.3108.D NMAC, Llano Disposal, LLC is hereby providing proof of notice in compliance with Subsections B and C of 20.6.2.3108 NMAC for the above referenced discharge plan permit. Attached to this letter are the original affidavits of publication, mailings and postings. Copies of these affidavits were previously submitted in my email to you dated today.

If you have any questions concerning these notice documents, please let me know. Thank you in advance for your consideration of this permit application.

Sincerely,

DJHolcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

Attachments

Affidavit of Public Notice

State of New Mexico

County of Lea

I, Marvin Burrows, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that the required public notice by signage (2' x 3' minimum size) in a conspicuous place on or near the proposed discharge site was posted by me on 10/2/18, 2018 on Hummingbird Road at the entrance to the proposed brine station in unit letter 'L', section 28, T16S, R33E, Lea County New Mexico. Additionally, I solemnly swear that the sign will remain posted and maintained legible for a minimum of 30 days.

Marvin Burrows

Marvin Burrows
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 2nd day of October, 2018.

Kelli Ferguson

Notary

My commission expires 4-11-2020.

(Seal)

OFFICIAL SEAL
Kelli Ferguson
Notary Public - New Mexico

Affidavit of Public Notice

State of New Mexico

County of Lea

I, Marvin Burrows, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that the required public notice by posting in a conspicuous place off the proposed discharge site was posted on a public bulletin board at the Lea County Courthouse by County Manager staff on 10/2/18, 2018. The posting is scheduled to be posted for a minimum of 30 days.

Marvin Burrows
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 2nd day of October, 2018.

Kelli Ferguson
Notary

My commission expires 4-11-2020.

(Seal)

OFFICIAL SEAL
Kelli Ferguson
Notary Public - New Mexico

Affidavit of Public Notice

State of Texas

County of Potter

I, Danny J. Holcomb, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that required public notices to the adjoining property/mineral owner and mineral lessee were certified mailed to recipients by me on September 26, 2018.

D Holcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 17th day of October, 2018.

Madelynn Vandagriff

Notary

My commission expires 11/28/2021.

(Seal)

MADELYNN D. VANDAGRIFF
Notary Public, State of Texas
Notary ID #1316375-4
My Commission Expires 11-28-2021

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Manager of THE LOVINGTON LEADER, a once a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Public Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of October 4, 2018 and ending with the issue of October 4 , 2018.

And that the cost of publishing said notice is the sum of $ 506.76 which sum has been (Paid) as Court Costs.

Joyce Clemens

Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 8th day of October , 2018.

Gina Fort

Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2022

Official Seal
GINA FORT
Notary Public
State of New Mexico
My Comm Expires 6/30/22

Public Notice
Per Water Quality Control Commission Regulations 20.6.2.310

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM an application to the New Mexico Oil Conservation Division (NMOCD) fo ation of a Class III brine well to be located in Unit Letter L of Section 27 Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, N posed brine injection well is located approximately 17.8 miles west of L on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 well location.

The application proposes to produce fresh water from a proposed water s in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat 103.657470°), Lea County, New Mexico. From time to time when brine water would be transported via a buried polyethylene pipeline approxima to the brine well. The fresh water would be pumped down the well's cas depth of 1780 feet to 2300 feet below ground level at a rate of approximat a normal operating pressure of 200 to 250 psig. The maximum allowable sure would be 356 psig. Dissolution brine water (NaCl) would then be pro ing to surface.

The produced brine water would be metered then transported via a secon pipeline approximately 5928 feet west to three 1000 barrel fiberglass sto posed Hummingbird Brine Station located in Unit Letter L of Section 28 Range 33 East (Lat. 32.890740°, Long. -103.676520°), Lea County, Ne station is located approximately 18.7 miles west of Lovington, New Mexic the intersection of US Hwy 82 and County Road L-122 (Hummingbird would be transferred/sold by delivery into water trucks on a concrete loa ment curbing and a sump to prevent spills. There would be a synthetic lin tainment underneath the brine storage tanks. All of this infrastructure is l owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt w with a total dissolved concentration of approximately 320,000 mg/l and higher than fresh water. Typical brine water is 10 pounds per gallon (pp weight due to dissolved NaCl. Heavy brine water is essential in prevent pressure gas wells and prevents loss of circulation when drilling throug found in southeastern New Mexico.

The brine well will be designed to produce approximately 13 million barre a 20 year life period. The anticipated cavern radius will not exceed 150 fe located on private land and provides a minimum of 2150 feet separatio features, such as houses, water supplies, buildings, schools, businesses,

Groundwater possibly affected by an unintentional spill or leak is located mately 140 – 190 feet below ground level. Typical groundwater in this area solids concentration of approximately 400 mg/l. According to the Office average water well depth in the area is 223 feet below ground level. The b signed and permitted to have no intentional water contaminants dischar subsurface for the protection of groundwater. The brine station will have a for trucks and will have a synthetic liner underneath tanks areas to preve from reaching the ground surface. The brine well will have cemented cas to protect groundwater.

The owner and operator of the proposed facility will be:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comments and inquiries about the application may be directed to Llano Danny Holcomb at 806-471-5628 or email danny@pwllc.net. Mr. Holco Llano Disposal, LLC providing assistance obtaining the regulatory permits

The New Mexico Oil Conservation Division (OCD) will accept comments terest regarding this application and will create a facility-specific mailing list to receive future notices. Persons interested in obtaining further informa ments or requesting to be on a facility-specific mailing list for future notice

Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

Anuncios de Pantalla de Aviso Público

Por Reglamento de Comisión de Control de Calidad de Agua 20.6.2.3108.B.4 NMAC

Llano Disposal, L.L.C. (Sr. Darr Angell), 783 Highway 483, Lovington, NM 88260 ha presentado una solicitud para La División de Conservación de Petroléo de Nuevo Méxicano (NMOCD) para la instalación y operación de una clase III de la salmuera bien que se encuentra en la unidad letra E de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32.8909645°, Long. -103.6576157°), Condado Lea, Nuevo México. La inyección de salmuera propuesto está bien situada aproximadamente 17,8 millas al oeste de Lovington, Nuevo México en Highway 82, entonces del sur 0,62 millas en Rooney Road, entonces este 0,3 millas en carretera arrendamiento de ubicación bien.

La aplicación propone producir agua fresca de una fuente de agua propuesta para taladrarse en unidad letra L de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32,890782°, Long. -103.657470°), Condado Lea, Nuevo México. De vez en cuando se necesita salmuera, el agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 75 pies del noroeste a la salmuera bien. El agua se bombea al pozo de cubierta a una profundidad aproximada de 1780 pies a 2300 pies debajo de nivel del suelo a una tasa de aproximadamente 40-120 GPM y una presión normal de 200 a 250 psi. La presión de inyección superficial permisible máxima sería 356 psi. Agua de disolución salmuera (NaCl) entonces se produciría por el bien de la tubería a la superficie.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 5928 pies al oeste a tres 1000barril tanques de almacenamiento de fibra de vidrio en la propuesta estación de salmuera Colibrí ubicado en la unidad letra L de la sección 28, municipio de 16 sur, gama 33 este (Lat. 32,890740°, Long. -103.676520°), Condado Lea, Nuevo México. Esta estación de salmuera está situados a aproximadamente 18,7 millas al oeste de Lovington, Nuevo México o 0,2 millas al sur de la intersección de Highway 82 y County Road L-122 (Hummingbird Road). El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de hormigón y un colector de aceite para evitar derrames. Habría un forro sintético y contención secundaria debajo de los tanques de almacenamiento de la salmuera. Toda esta infraestructura se encuentra en terrenos privados propiedad de la demandante.

Agua de la salmuera se utiliza en el aceite y la industria del gas para suministrar concentrado sal agua (es decir, salmuera) con una concentración disuelta total de aproximadamente 320.000 mg/l y una densidad que es 20% mayor de agua dulce. Salmuera típica está 10 libras por galón (ppg) con el aumento de peso debido a NaCl disuelto. Agua de salmuera pesada es esencial en la prevención de salidas de golpe en pozos de gas de alta presión y previene la pérdida de circulación durante la perforación a través de zonas de sal suelen encontradas en el sureste de Nuevo México.

Bien la salmuera se diseñará para producir aproximadamente 13 millones de barriles de salmuera durante un período de vida de 20 años. El radio caverna anticipada no excederá de 150 pies. El pozo se ha situado en terrenos privados y un mínimo de separación de 2150 pies de cualquier características importantes, tales como casas, suministros de agua, edificios, escuelas, empresas, etc.

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 140 – 190 pies debajo de nivel del suelo. Típico agua subterránea en esta área tiene una concentración de sólidos disueltos totales de aproximadamente 400 mg/l. Según la oficina del ingeniero de estado, profundidad media del agua en la zona es 223 pies debajo de nivel del suelo. La instalación de la salmuera será diseñada y puede no tener contaminantes intencional de agua descargadas a la superficie o subsuperficie para la protección de las aguas subterráneas. La estación de salmuera tendrá una plataforma de carga de cemento para camiones y tendrá un revestimiento sintético debajo de áreas de depósitos para evitar cualquier vertido o derrame accidental de llegar a la superficie de la tierra. La salmuera bien habremos cementado carcasa y tubos cadenas para proteger las aguas subterráneas.

El propietario y operador de la instalación propuesta será:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comentarios y consultas sobre la aplicación pueden ser dirigidas a Llano Disposal, LLC c/o Sr. Danny Holcomb en 806-471-5628 o por correo electrónico danny@pwllc.net . El Sr. Holcomb es consultor para proporcionar asistencia de Llano Disposal, LLC obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petroléo de Nuevo Méxicano (NMOCD) se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. Puede contactar a las personas interesadas en obtener más información, enviar comentarios o solicitar estar en una lista de correo de instalaciones específicas para futuros avisos:

Jefe de la Oficina Ambiental
División de Conservación de Petroléo de Nuevo Méxicano
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Teléfono: 505-476-3440

Chavez, Carl J, EMNRD

From: danny@pwllc.net
Sent: Wednesday, October 17, 2018 2:59 PM
To: Chavez, Carl J, EMNRD
Cc: Marvin Burrows
Subject: [EXT] Applicant Proof of Notification - State 27 BSW #1 (BW-38)
Attachments: State 27 BSW #1 (BW-38) Applicant Proof of Notice 101718.pdf

Carl,
Attached is Llano Disposal, LLC's proof of notice documentation for the State 27 BSW #1 (BW-38) discharge plan application. The attached file is 17.2 MB in size. It includes a cover letter, an index of exhibits and twelve exhibits (including photos).

Under separate cover, I will be mailing you the originals of the four signed affidavits (Exhibits A.1, B.1, C.1, D.1) via USPS tomorrow.

Thank you for allowing us to email this documentation. If you have any questions, please let me know.
Thank you,
Danny J. Holcomb
Cell: 806-471-5628
Email: danny@pwllc.net

Llano Disposal, LLC
c/o Holcomb Consultants
6900 Spring Cherry Lane
Amarillo, Texas 79124

October 17, 2018

New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Carl Chavez

Re: Discharge Plan Permit (BW-38)
Llano Disposal, LLC
UIC Class III Brine Well - State 27 BSW #1 (30-025-20592)
UL 'L', Sec 27, T16S, R33E, 1980 FSL x 660 FWL, Lea County, New Mexico

Dear Mr. Chavez,

Pursuant to 20.6.2.3108.D NMAC, Llano Disposal, LLC is hereby providing proof of notice in compliance with Subsections B and C of 20.6.2.3108 NMAC for the above referenced discharge plan permit. Attached to this letter are the original affidavits of publication, mailings and postings. Copies of these affidavits were previously submitted in my email to you dated today.

If you have any questions concerning these notice documents, please let me know. Thank you in advance for your consideration of this permit application.

Sincerely,

DJ Holcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

Attachments

State '27' BSW #1 (BW-38) Public Notices

Proof of Notice Exhibits

Onsite Public Notice Sign

Exhibit A.1 – Affidavit of Onsite Public Notice Sign Installation

Exhibit A.2 – Photos of Onsite Public Notice Sign

Exhibit A.3 – Wording of Onsite Public Notice Sign (English)

Exhibit A.4 – Wording of Onsite Public Notice Sign (Spanish)

Offsite Public Notice Posting

Exhibit B.1 – Affidavit of Offsite Public Notice Posting at Lea County Courthouse

Exhibit B.2 – Photos of Offsite Public Notice Posting at Lea County Courthouse

Exhibit B.3 – Wording of Offsite Public Notice Posting at Lea County Courthouse (English)

Exhibit B.4 – Wording of Offsite Public Notice Posting at Lea County Courthouse (Spanish)

Notice Letters to Adjoining Property Owners, Mineral Owner and Mineral Lessee

Exhibit C.1 – Affidavit of Certified Mail Notices

Exhibit C.2 – List of Letter Noticees

Exhibit C.3 – Copies of Letters to Noticees with Certified Mail Receipts

Public Notice in Local Newspaper Display Ad

Exhibit D.1 – Affidavit of Publication for Newspaper Display Ad in Lovington Leader (English/Spanish)

State 27 BSW #1 (BW-38)
EXHIBIT "A.1" – Affidavit of Onsite Public Notice Sign Installation

Affidavit of Public Notice

State of New Mexico

County of Lea

I, Marvin Burrows, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that the required public notice by signage (2' x 3' minimum size) in a conspicuous place on or near the proposed discharge site was posted by me on 10/2/18, 2018 on Hummingbird Road at the entrance to the proposed brine station in unit letter 'L', section 28, T16S, R33E, Lea County New Mexico. Additionally, I solemnly swear that the sign will remain posted and maintained legible for a minimum of 30 days.

Marvin Burrows
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 2nd day of October, 2018.

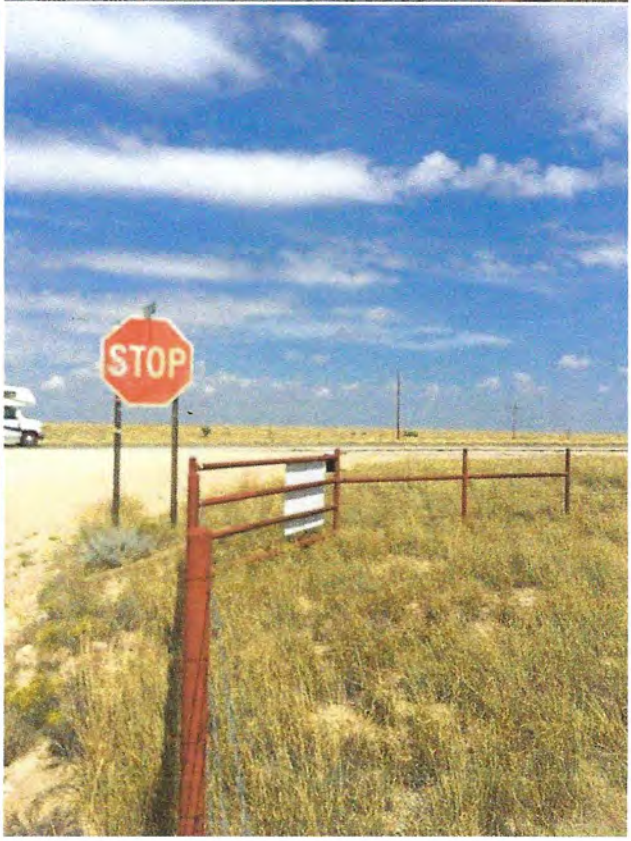
Kelli Ferguson
Notary

My commission expires 4-11-2020.

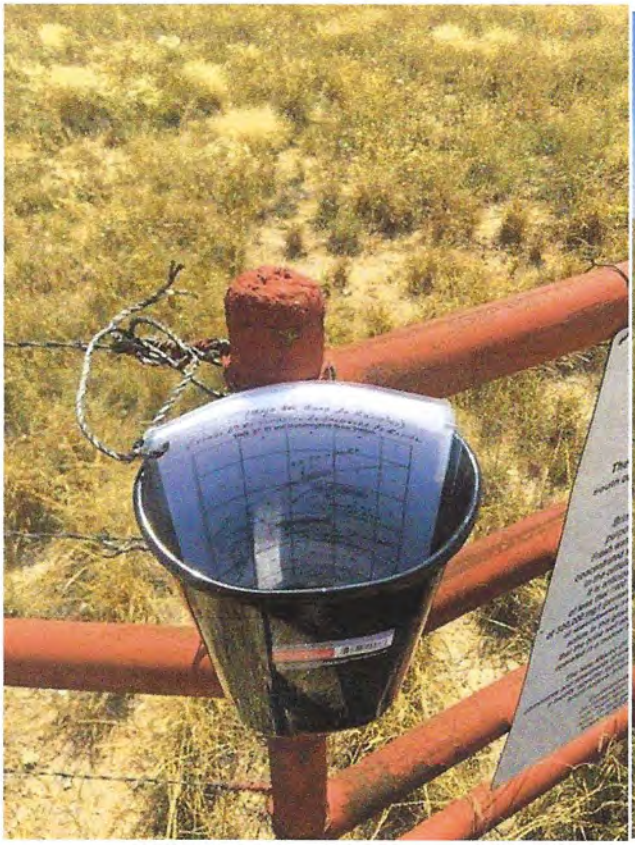
(Seal)

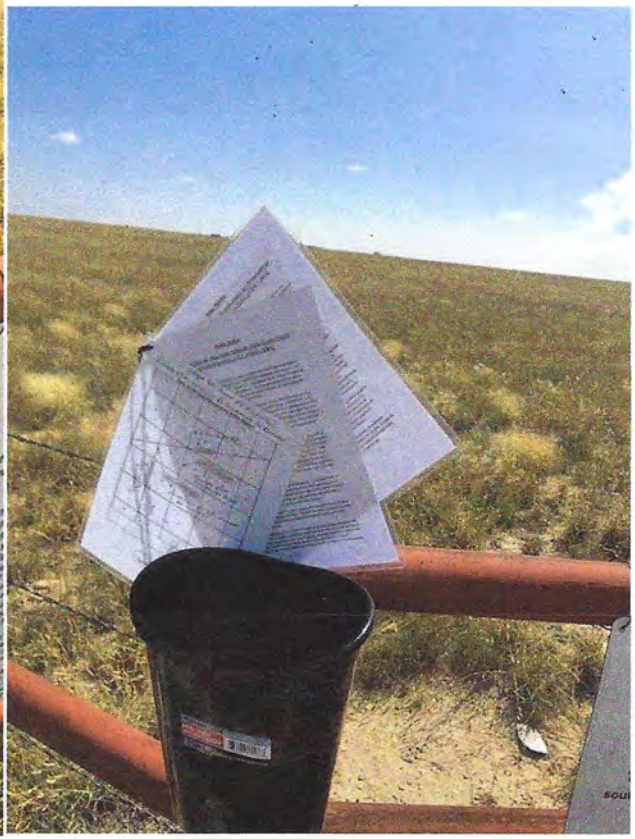
OFFICIAL SEAL
Kelli Ferguson
Notary Public - New Mexico

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.2" – Photos of Onsite Public Notice Sign



State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.2" – Photos of Onsite Public Notice Sign





State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.3" – Wording of Onsite Public Notice Sign (English)

Public Notice

Legal notification for 2' X 3' (min) signage per Water Quality Control Commission Regulations 20.6.2.3108.B.1 NMAC

Llano Disposal, LLC, 783 highway 483, Lovington, NM 88260, Mr. Darr Angell has filed an application with the New Mexico Oil Conservation Division (OCD) to install and operate a Class III brine well and brine station.

The new brine station will be located approximately 1140 feet south of this sign. A detailed description and map of the proposed facilities are hereby attached below.

Brine wells are wells completed into salt formations for the purpose of solution mining the salt to create brine water. Fresh water is pumped into deep salt zones thereby producing concentrated salt water called "brine water". This brine water is used in the oilfield primarily for drilling and completion operations. It is anticipated that brine water will be produced at a rate of less than 1900 barrels per day with a total dissolved concentration of 320,000 mg/l (primarily NaCl). Groundwater in this area is present at depths of approximately 140 – 190 feet. The concentration of total dissolved solids in this groundwater is generally about 400 mg/l. The permit requires that the brine well and associated operations must be constructed and operated in a matter that will not adversely affect groundwater quality.

The New Mexico Oil Conservation Division (OCD) will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Interested persons may contact:

Environmental Bureau Chief
Oil Conservation Division (OCD)
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.3" – Wording of Onsite Public Notice Sign (English)

Laminated Attachments (8-1/2" x 11" ea) Posted to Bottom of Sign

Page 1 of Detailed Notification

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, New Mexico. The proposed brine injection well is located approximately 17.8 miles west of Lovington, New Mexico on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 miles on lease road to well location.

The application proposes to produce fresh water from a proposed water source well to be drilled in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.890782°, Long. -103.657470°), Lea County, New Mexico. From time to time when brine is needed, the fresh water would be transported vi buried polyethylene pipeline approximately 75 feet northwest to the brine well. The fresh water would b pumped down the well's casing to an approximate depth of 1780 feet to 2300 feet below ground level a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psig. The maximur allowable surface injection pressure would be 356 psig. Dissolution brine water (NaCl) would then be produced up the well tubing to surface.

The produced brine water would be metered then transported via a second buried polyethylene pipelin approximately 5928 feet west to three 1000 barrel fiberglass storage tanks at the proposed Hummingbi Brine Station located in Unit Letter L of Section 28, Township 16 South, Range 33 East (Lat. 32.890740 Long. -103.676520°), Lea County, New Mexico. This brine station is located approximately 18.7 miles west of Lovington, New Mexico or 0.2 miles south of the intersection of US Hwy 82 and County Road L 122 (Hummingbird Rd). The brine water would be transferred/sold by delivery into water trucks on a concrete loading pad with containment curbing and a sump to prevent spills. There would be a synthet liner and secondary containment underneath the brine storage tanks. All of this infrastructure is locate on private land owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt water (i.e. brine water) with a total dissolved concentration of approximately 320,000 mg/l and a density that is 20% higher than fresh water. Typical brine water is 10 pounds per gallon (ppg) with the increased weight due to dissolved Na Heavy brine water is essential in preventing blow-outs in high pressure gas wells and prevents loss of circulation when drilling through salt zones typically found in southeastern New Mexico.

The brine well will be designed to produce approximately 13 million barrels of brine water over a 20 yea life period. The anticipated cavern radius will not exceed 150 feet. The well has been located on privat land and provides a minimum of 2150 feet separation from any significant features, such as houses, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 1 – 190 feet below ground level. Typical groundwater in this area has a total dissolved solids concentrat of approximately 400 mg/l. According to the Office of the State Engineer, average water well depth in t area is 223 feet below ground level. The brine facility will be designed and permitted to have no intentional water contaminants discharged to the surface or subsurface for the protection of groundwat

Page 2 of Detailed Notification

The brine station will have a concrete loading pad for trucks and will have a synthetic liner underneath tanks areas to prevent any spills or leaks from reaching the ground surface. The brine well will have cemented casing and tubing strings to protect groundwater.

The owner and operator of the proposed facility will be:

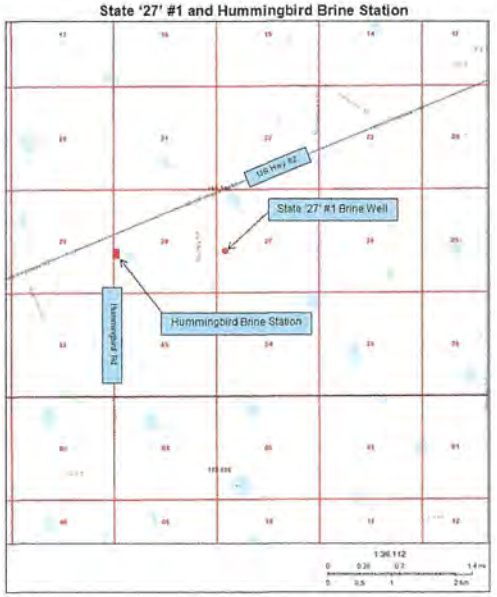
Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comments and inquiries about the application may be directed to Llano Disposal, LLC c/o Mr. Danny Holcomb at 806-471-5628 or email danny@pwllc.net. Mr. Holcomb is a consultant to Llano Disposal, LLC providing assistance obtaining the regulatory permits for this project.

The New Mexico Oil Conservation Division (OCD) will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact:

Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

Map of Area of Review



T16S, R33E
Lea County, New Mexico

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.4" – Wording of Onsite Public Notice Sign (Spanish)

Notificación Aviso

Notificación legal de 2' X 3' (min) señalización por Reglamento de Comisión de Control de Calidad de Agua 20.6.2.3108.B.1 NMAC

Llano Disposal, LLC, 783 Highway 483, Lovington, NM 88260, Sr. Darr Angell ha presentado una solicitud con el División de Conservación de Petroléo de Nuevo Méxicano para instalar y operar así una salmuera de clase III y estación de la salmuera.

La nueva estación de salmuera será situados aproximadamente 1140 pies sur de este signo. Una descripción detallada y un mapa de las instalaciones propuestas por este medio se unen por debajo.

Pozos de salmuera son pozos completados en formaciones de sal con el propósito de la solución de minería de la sal para crear agua de la salmuera. Agua dulce es bombeado en zonas profundas sal tal modo produciendo concentrado agua salada llamado "agua de la salmuera". Esta agua de la salmuera se utiliza en el campo petrolífero principalmente para operaciones de perforación y terminación. Se prevé que se producirán salmuera agua a una velocidad de menos de 1900 barriles por día con una concentración disuelta total de 320.000 mg/l (principalmente NaCl). Agua subterránea en esta área está presente en aproximadamente 140 a 190 pies de profundidad. La concentración de sólidos totales disueltos en esta agua subterránea es generalmente cerca de 400 mg/l. El permiso requiere que la salmuera bien y asociados las operaciones deben ser construidas y operadas en un asunto que no afectará negativamente la calidad de las aguas subterráneas.

El División de Conservación de Petroléo de Nuevo Méxicano se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. Las personas interesadas podrán en contacto con:

Jefe de la Oficina Ambiental
División de Conservación de Petroléo de Nuevo Méxicano
1220 South Saint Francis Drive
Santa Fe, New México 87505
Teléfono: 505-476-3440

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "A.4" – Wording of Onsite Public Notice Sign (Spanish)

Laminado los archivos adjuntos (8-1/2 "x 11") publicado a parte inferior de la señal

Página 1 de notificación detallada

Llano Disposal, L.L.C. (Sr. Darr Angell), 783 Highway 483, Lovington, NM 88260 ha presentado una solicitud para La División de Conservación de Petróleo de Nuevo Méxicano (NMOCD) para la instalación y operación de una clase III de la salmuera bien que se encuentra en la unidad letra E de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32.8909645°, Long. -103.6576157°), Condado Lea, Nuevo México. La inyección de salmuera propuesto está bien situada aproximadamente 17,8 millas al oeste de Lovington, Nuevo México en Highway 82, entonces del sur 0,62 millas en Rooney Road, entonces este 0,3 millas en carretera arrendamiento de ubicación bien.

La aplicación propone producir agua fresca de una fuente de agua propuesta para taladrar se en unidad letra L de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32,890782°, Long. -103.657470°), Condado Lea, Nuevo México. De vez en cuando se necesita salmuera, el agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 75 pies del noroeste a la salmuera bien. El agua se bombea al pozo de cubierta a una profundidad aproximada de 1780 pies a 2300 pies debajo de nivel del suelo a una tasa de aproximadamente 40-120 GPM y una presión normal de 200 a 250 psi. La presión de inyección superficial permisible máxima sería 356 psi. Agua de disolución salmuera (NaCl) entonces se produciría por el bien de la tubería a la superficie.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 5928 pies al oeste a tres 1000barril tanques de almacenamiento de fibra de vidrio en la propuesta estación de salmuera Colibrí ubicado en la unidad letra L de la sección 28, municipio de 16 sur, gama 33 este (Lat. 32,890740°, Long. -103.676520°), Condado Lea, Nuevo México. Esta estación de salmuera está situados a aproximadamente 18,7 millas al oeste de Lovington, Nuevo México o 0,2 millas al sur de la intersección de Highway 82 y County Road L-122 (Hummingbird Road). El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de hormigón y un colector de aceite para evitar derrames. Habría un forro sintético y contención secundaria debajo de los tanques de almacenamiento de la salmuera. Toda esta infraestructura se encuentra en terrenos privados propiedad de la demandante.

Agua de la salmuera se utiliza en el aceite y la industria del gas para suministrar concentrado sal agua (es decir, salmuera) con una concentración disuelta total de aproximadamente 320.000 mg/l y una densidad que es 20% mayor de agua dulce. Salmuera típica está 10 libras por galón (ppg) con el aumento de peso debido a NaCl disuelto. Agua de salmuera pesada es esencial en la prevención de salidas de golpe en pozos de gas de alta presión y previene la pérdida de circulación durante la perforación a través de zonas de sal suelen encontradas en el sureste de Nuevo México.

Bien la salmuera se diseñará para producir aproximadamente 13 millones de barriles de salmuera durante un período de vida de 20 años. El radio caverna anticipado no excederá de 150 pies. El pozo se ha situado en terrenos privados y un mínimo de separación de 2150 pies de cualquier características importantes, tales como casas, suministros de agua, edificios, escuelas, empresas, etc.

Página 2 de notificación detallada

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 140 – 190 pies debajo de nivel del suelo. Típico agua subterránea en esta área tiene una concentración de sólidos disueltos totales de aproximadamente 400 mg/l. Según la oficina del ingeniero de estado, profundidad media del agua en la zona es 223 pies debajo de nivel del suelo. La instalación de la salmuera será diseñada y puede no tener contaminantes intencional de agua descargadas a la superficie o subsuperficie para la protección de las aguas subterráneas. La estación de salmuera tendrá una plataforma de carga de cemento para camiones y tendrá un revestimiento sintético debajo de áreas de depósitos para evitar cualquier vertido o derrame accidental de llegar a la superficie de la tierra. La salmuera bien habremos cementado carcasa y tubos cadenas para proteger las aguas subterráneas.

El propietario y operador de la instalación propuesta será:

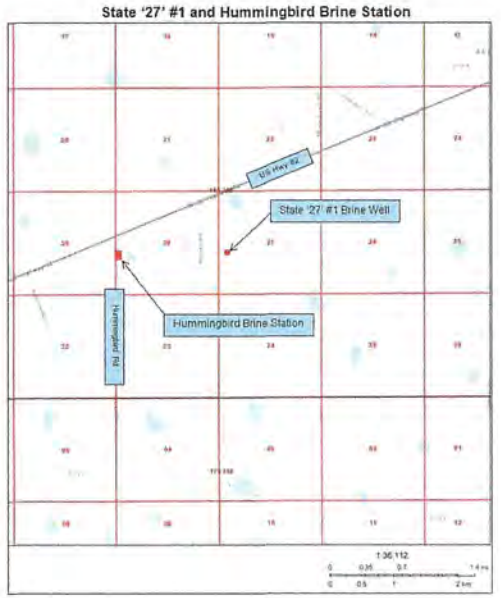
Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comentarios y consultas sobre la aplicación pueden ser dirigidas a Llano Disposal, LLC c/o Sr. Danny Holcomb en 806-471-5628 o por correo electrónico dannyl@pwllc.net. El Sr. Holcomb es consultor para proporcionar asistencia de Llano Disposal, LLC obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petróleo de Nuevo Méxicano (NMOCD) se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. Puede contactar a las personas interesadas en obtener más información, enviar comentarios o solicitar estar en una lista de correo de instalaciones específicas para futuros avisos:

Jefe de la Oficina Ambiental
División de Conservación de Petróleo de Nuevo Méxicano
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Teléfono: 505-476-3440

Mapa del área de revisión



T16S, R33E
Lea County, New Mexico

State 27 BSW #1 (BW-38)
EXHIBIT "B.1" – Affidavit of Offsite Public Notice Posting
at Lea County Courthouse

Affidavit of Public Notice

State of New Mexico

County of Lea

I, Marvin Burrows, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that the required public notice by posting in a conspicuous place off the proposed discharge site was posted on a public bulletin board at the Lea County Courthouse by County Manager staff on 10/2/18, 2018. The posting is scheduled to be posted for a minimum of 30 days.

Marvin Burrows
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 2nd day of October, 2018.

Kelli Ferguson
Notary

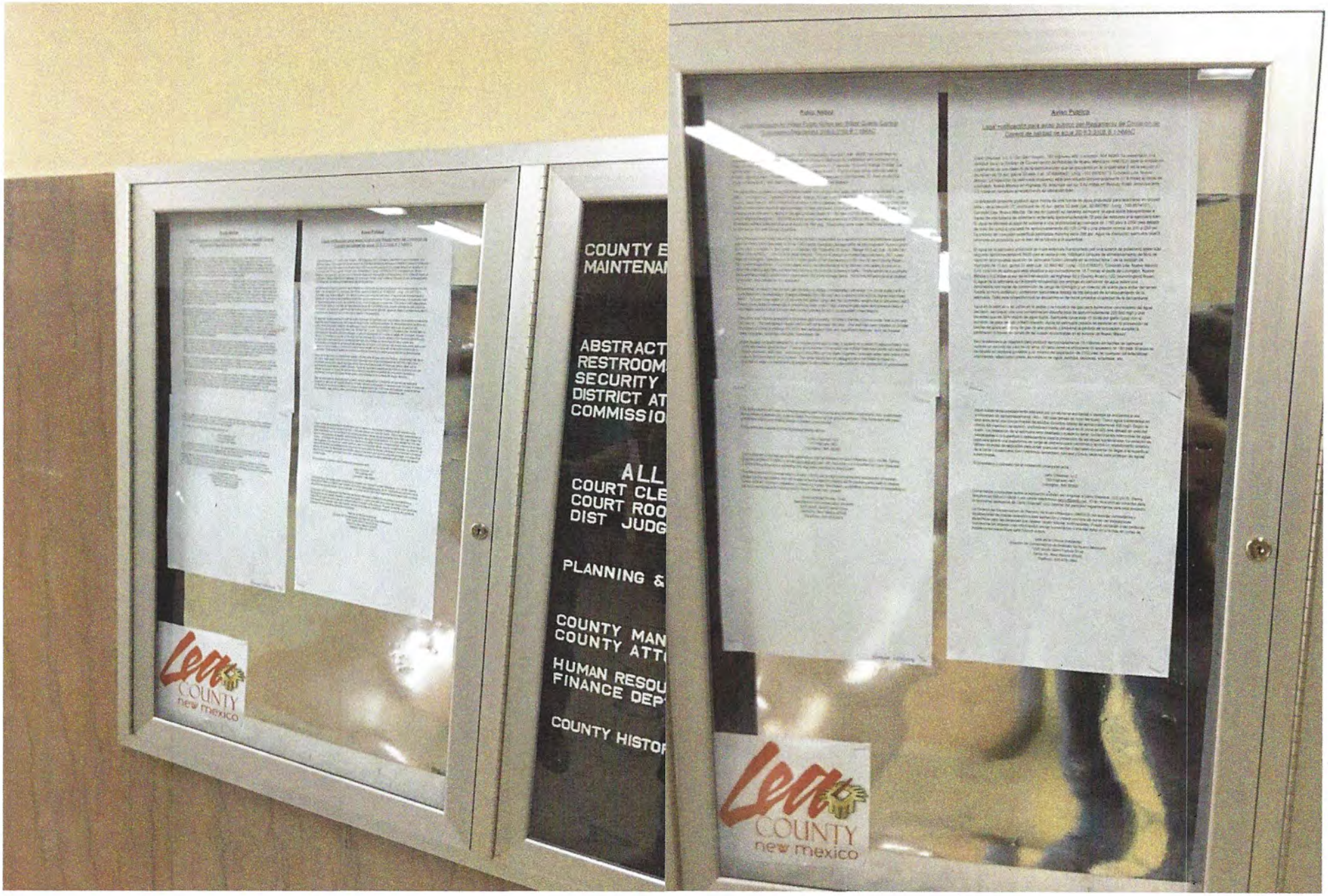
My commission expires 4-11-2020.

(Seal)

OFFICIAL SEAL
Kelli Ferguson
Notary Public - New Mexico

State 27 BSW #1 (BW-38) Public Notice

EXHIBIT "B.2" – Photos of Offsite Public Posting (Lea County Courthouse)



State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "B.3" – Wording of Offsite Public Notice Posting at Lea County Courthouse (English)

Public Notice

Legal notification for offsite Public Notice per Water Quality Control Commission Regulations 20.6.2.3108.B.1 NMAC

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, New Mexico. The proposed brine injection well is located approximately 17.8 miles west of Lovington, New Mexico on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 miles on lease road to well location.

The application proposes to produce fresh water from a proposed water source well to be drilled in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.890782°, Long. -103.657470°), Lea County, New Mexico. From time to time when brine is needed, the fresh water would be transported via a buried polyethylene pipeline approximately 75 feet northwest to the brine well. The fresh water would be pumped down the well's casing to an approximate depth of 1780 feet to 2300 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psig. The maximum allowable surface injection pressure would be 356 psig. Dissolution brine water (NaCl) would then be produced up the well tubing to surface.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 5928 feet west to three 1000 barrel fiberglass storage tanks at the proposed Hummingbird Brine Station located in Unit Letter L of Section 28, Township 16 South, Range 33 East (Lat. 32.890740°, Long. -103.676520°), Lea County, New Mexico. This brine station is located approximately 18.7 miles west of Lovington, New Mexico or 0.2 miles south of the intersection of US Hwy 82 and County Road L-122 (Hummingbird Rd). The brine water would be transferred/sold by delivery into water trucks on a concrete loading pad with containment curbing and a sump to prevent spills. There would be a synthetic liner and secondary containment underneath the brine storage tanks. All of this infrastructure is located on private land owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt water (i.e. brine water) with a total dissolved concentration of approximately 320,000 mg/l and a density that is 20% higher than fresh water. Typical brine water is 10 pounds per gallon (ppg) with the increased weight due to dissolved NaCl. Heavy brine water is essential in preventing blow-outs in high pressure gas wells and prevents loss of circulation when drilling through salt zones typically found in southeastern New Mexico.

The brine well will be designed to produce approximately 13 million barrels of brine water over a 20 year life period. The anticipated cavern radius will not exceed 150 feet. The well has been located on private land and provides a minimum of 2150 feet separation from any significant features, such as houses, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 140 – 190 feet below ground level. Typical groundwater in this area has a total dissolved solids concentration

of approximately 400 mg/l. According to the Office of the State Engineer, average water well depth in the area is 223 feet below ground level. The brine facility will be designed and permitted to have no intentional water contaminants discharged to the surface or subsurface for the protection of groundwater. The brine station will have a concrete loading pad for trucks and will have a synthetic liner underneath tanks areas to prevent any spills or leaks from reaching the ground surface. The brine well will have cemented casing and tubing strings to protect groundwater.

The owner and operator of the proposed facility will be:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comments and inquiries about the application may be directed to Llano Disposal, LLC c/o Mr. Danny Holcomb at 806-471-5628 or email danny@pwllc.net. Mr. Holcomb is a consultant to Llano Disposal, LLC providing assistance obtaining the regulatory permits for this project.

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Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "B.4" – Wording of Offsite Public Notice Posting at Lea County Courthouse (Spanish)

Aviso Público

Legal notificación para fuera del sitio aviso público por Reglamento de Comisión de Control de Calidad de Agua 20.6.2.3108.B.1 NMAC

Llano Disposal, L.L.C. (Sr. Darr Angell), 783 Highway 483, Lovington, NM 88260 ha presentado una solicitud para La División de Conservación de Petroléo de Nuevo Méxicano (NMOCD) para la instalación y operación de una clase III de la salmuera bien que se encuentra en la unidad letra E de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32.8909645°, Long. -103.6576157°), Condado Lea, Nuevo México. La inyección de salmuera propuesto está bien situada aproximadamente 17,8 millas al oeste de Lovington, Nuevo México en Highway 82, entonces del sur 0,62 millas en Rooney Road, entonces este 0,3 millas en carretera arrendamiento de ubicación bien.

La aplicación propone producir agua fresca de una fuente de agua propuesta para taladrarse en unidad letra L de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32,890782°, Long. -103.657470°), Condado Lea, Nuevo México. De vez en cuando se necesita salmuera, el agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 75 pies del noroeste a la salmuera bien. El agua se bombea al pozo de cubierta a una profundidad aproximada de 1780 pies a 2300 pies debajo de nivel del suelo a una tasa de aproximadamente 40-120 GPM y una presión normal de 200 a 250 psi. La presión de inyección superficial permisible máxima sería 356 psi. Agua de disolución salmuera (NaCl) entonces se produciría por el bien de la tubería a la superficie.

El agua de la salmuera producid 5928 pies al oeste a tres 1000barril tanques de almacenamiento de fibra de vidrio en la propuesta estación de salmuera Colibrí ubicado en la unidad letra L de la sección 28, municipio de 16 sur, gama 33 este (Lat. 32,890740°, Long. -103.676520°), Condado Lea, Nuevo México. Esta estación de salmuera está situados a aproximadamente 18,7 millas al oeste de Lovington, Nuevo México o 0,2 millas al sur de la intersección de Highway 82 y County Road L-122 (Hummingbird Road). El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de hormigón y un colector de aceite para evitar derrames. Habría un forro sintético y contención secundaria debajo de los tanques de almacenamiento de la salmuera. Toda esta infraestructura se encuentra en terrenos privados propiedad de la demandante.

Agua de la salmuera se utiliza en el aceite y la industria del gas para suministrar concentrado sal agua (es decir, salmuera) con una concentración disuelta total de aproximadamente 320.000 mg/l y una densidad que es 20% mayor de agua dulce. Salmuera típica está 10 libras por galón (ppg) con el aumento de peso debido a NaCl disuelto. Agua de salmuera pesada es esencial en la prevención de salidas de golpe en pozos de gas de alta presión y previene la pérdida de circulación durante la perforación a través de zonas de sal suelen encontradas en el sureste de Nuevo México.

Bien la salmuera se diseñará para producir aproximadamente 13 millones de barriles de salmuera durante un período de vida de 20 años. El radio caverna anticipada no excederá de 150 pies. El pozo se ha situado en terrenos privados y un mínimo de separación de 2150 pies de cualquier características importantes, tales como casas, suministros de agua, edificios, escuelas, empresas, etc.

State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "B.4" – Wording of Offsite Public Notice Posting at Lea County Courthouse (Spanish)

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 140 – 190 pies debajo de nivel del suelo. Típico agua subterránea en esta área tiene una concentración de sólidos disueltos totales de aproximadamente 400 mg/l. Según la oficina del ingeniero de estado, profundidad media del agua en la zona es 223 pies debajo de nivel del suelo. La instalación de la salmuera será diseñada y puede no tener contaminantes intencional de agua descargadas a la superficie o subsuperficie para la protección de las aguas subterráneas. La estación de salmuera tendrá una plataforma de carga de cemento para camiones y tendrá un revestimiento sintético debajo de áreas de depósitos para evitar cualquier vertido o derrame accidental de llegar a la superficie de la tierra. La salmuera bien habremos cementado carcasa y tubos cadenas para proteger las aguas subterráneas.

El propietario y operador de la instalación propuesta será:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comentarios y consultas sobre la aplicación pueden ser dirigidas a Llano Disposal, LLC c/o Sr. Danny Holcomb en 806-471-5628 o por correo electrónico danny@pwllc.net . El Sr. Holcomb es consultor para proporcionar asistencia de Llano Disposal, LLC obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petroléo de Nuevo Méxicano (NMOCD) se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. Puede contactar a las personas interesadas en obtener más información, enviar comentarios o solicitar estar en una lista de correo de instalaciones específicas para futuros avisos:

Jefe de la Oficina Ambiental
División de Conservación de Petroléo de Nuevo Méxicano
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Teléfono: 505-476-3440

State 27 BSW #1 (BW-38)
EXHIBIT "C.1" – Affidavit of Certified Mail Public Notices

Affidavit of Public Notice

State of Texas

County of Potter

I, Danny J. Holcomb, Agent for Llano Disposal, LLC, an applicant to the NMOCD for a UIC Class III brine well permit, solemnly swear that required public notices to the adjoining property/mineral owner and mineral lessee were certified mailed to recipients by me on September 26, 2018.

DJHolcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC

Sworn and subscribed to before me this 17th day of October, 2018.

Madelynn Vandagriff

Notary

My commission expires 11/28/2021.

(Seal)

MADELYNN D. VANDAGRIFF
Notary Public, State of Texas
Notary ID #1316375-4
My Commission Expires 11-28-2021

State 27 BSW #1 (BW-38)
Exhibit "C.2" - List of Letter Noticees

NOTIFICATION LIST - SITE PROPERTY OWNER AND ADJOINING PROPERTY OWNER

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
	Angell #2 Family LP c/o Mr. Darr Angell	P. O. Box 190	Lovington, NM 88260	Surface Owner/Applicant

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
1	State of New Mexico Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Adjoining Property Owner

NOTIFICATION LIST - MINERAL OWNER AND LESSEE

#	NAME	ADDRESS	CITY STATE ZIP	TYPE
	State of New Mexico Commissioner of Public Land	P. O. Box 1148	Santa Fe, NM 87504	Mineral Owner
2	Cimarex Energy Company	600 N. Marienfeld St, Suite 600	Midland, TX 79701	Mineral Lessee (VC-0071-0000)

State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts

UNITED STATES POSTAL SERVICE

September 28, 2018

Dear Danny Holcomb:

The following is in response to your request for proof of delivery on your item with the tracking number: **7017 2680 0000 8751 1980.**

Item Details

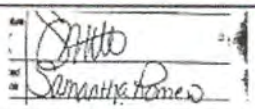
Status:	Delivered, Individual Picked Up at Postal Facility
Status Date / Time:	September 28, 2018, 6:56 am
Location:	SANTA FE, NM 87501
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic

Shipment Details

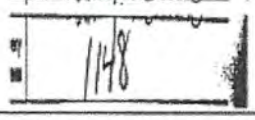
Weight:	1.0oz

Recipient Signature

Signature of Recipient:



Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts

Public Notice Letter

Certified Mail

September 26, 2018

Property Owner of Record
New Mexico State Land Office
P. O. Box 1148
Santa Fe, New Mexico 87504

Public Notice

Legal notification per Water Quality Control Commission Regulations 20.6.2.3108.B.2 NMAC to property owner(s) of record that adjoin the property owned by the applicant.

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, New Mexico. The proposed brine injection well is located approximately 17.8 miles west of Lovington, New Mexico on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 miles on lease road to well location.

The application proposes to produce fresh water from a proposed water source well to be drilled in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.890782°, Long. -103.657470°), Lea County, New Mexico. From time to time when brine is needed, the fresh water would be transported via a buried polyethylene pipeline approximately 75 feet northwest to the brine well. The fresh water would be pumped down the well's casing to an approximate depth of 1780 feet to 2300 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psig. The maximum allowable surface injection pressure would be 356 psig. Dissolution brine water (NaCl) would then be produced up the well tubing to surface.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 5928 feet west to three 1000 barrel fiberglass storage tanks at the proposed Hummingbird Brine Station located in Unit Letter L of Section 28, Township 16 South, Range 33 East (Lat. 32.890740°, Long. -103.676520°), Lea County, New Mexico. This brine station is located approximately 18.7 miles west of Lovington, New Mexico or 0.2 miles south of the intersection of US Hwy 82 and County Road L-122 (Hummingbird Rd). The brine water would be transferred/sold by delivery into water trucks on a concrete loading pad with containment curbing and a sump to prevent spills. There would be a synthetic liner and secondary containment underneath the brine storage tanks. All of the infrastructure is located on private land owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt water (i.e. brine water) with a total dissolved concentration of approximately 320,000 mg/l and a density that is 20% higher than fresh water. Typical brine water is 10 pounds per gallon (ppg) with the increased weight due to dissolved NaCl. Heavy brine water is essential in preventing blow-outs in high pressure gas wells and prevents loss of circulation when drilling through salt zones typically found in southeastern New Mexico.

The brine well will be designed to produce approximately 13 million barrels of brine water over a 20 year life period. The anticipated cavern radius will not exceed 150 feet. The well has been located on private land and provides a minimum of 2150 feet separation from any significant features, such as houses, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 140 – 190 feet below ground level. Typical groundwater in this area has a total dissolved solids concentration of approximately 400 mg/l. According to the Office of the State Engineer, average water well depth in the area is 223 feet below ground level. The brine facility will be designed and permitted to have no intentional water contaminants discharged to the surface or subsurface for the protection of groundwater. The brine station will have a concrete loading pad for trucks and will have a synthetic liner underneath tanks areas to prevent any spills or leaks from reaching the ground surface. The brine well will have cemented casing and tubing strings to protect groundwater.

The owner and operator of the proposed facility will be:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comments and inquiries about the application may be directed to Llano Disposal, LLC c/o Mr. Danny Holcomb at 806-471-5628 or email danny@pwllc.net. Mr. Holcomb is a consultant to Llano Disposal, LLC providing assistance obtaining the regulatory permits for this project.

The New Mexico Oil Conservation Division (OCD) will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact:

Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

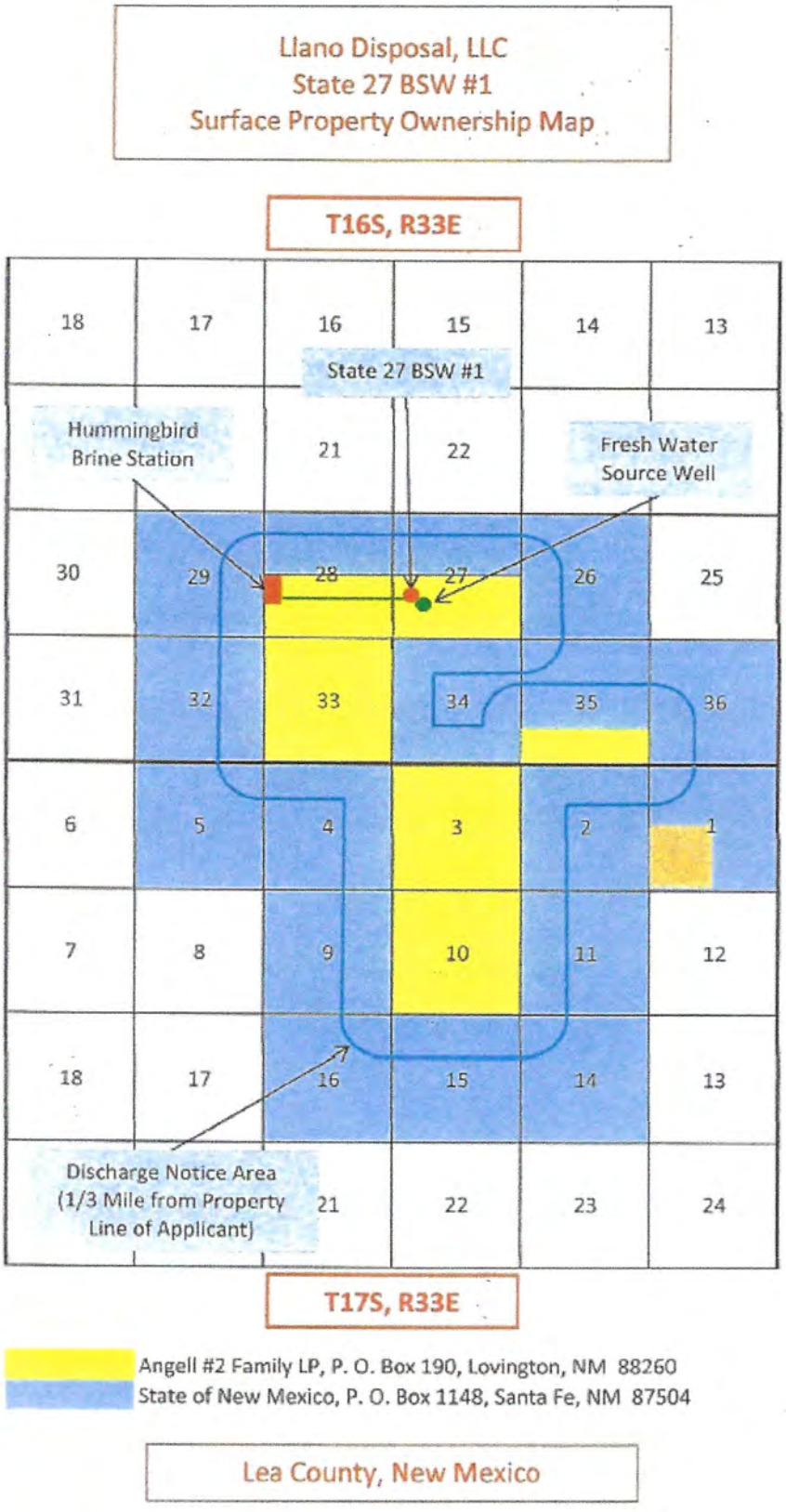
Sincerely,

DJ Holcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC

Attachment (map of area)

State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts



State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts

UNITED STATES POSTAL SERVICE

September 28, 2018

Dear Danny Holcomb:

The following is in response to your request for proof of delivery on your item with the tracking number: **7017 2680 0000 8751 1973.**

Item Details

Status:	Delivered, Left with Individual
Status Date / Time:	September 28, 2018, 11:09 am
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic

Shipment Details

Weight:	1.0oz

Recipient Signature

Signature of Recipient: S Perez

Address of Recipient: 600-900

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,
United States Postal Service®
475 L'Enfant Plaza SW
Washington, D.C. 20260-0004

7017 2680 0000 8751 1973

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.
MIDLAND, TX 79701

OFFICIAL USE

Certified Mail Fee $3.45
Extra Services & Fees (check box, add fee as appropriate)
- Return Receipt (hardcopy) $1.70
- Return Receipt (electronic) $0.00
- Certified Mail Restricted Delivery $0.00
- Adult Signature Required $0.00
- Adult Signature Restricted Delivery $

Postage $0.50
Total Postage and Fees $5.45

Sent To: Cimarex Energy Company
Street and Apt. No.: 600 N. Marienfeld St, Suite 600
City, State, ZIP+4: Midland, TX 79701

PS Form 3800,

0208 10
USPS JORDAN STATION
Postmark Here
AMARILLO, TX 79124
09/26/2018

State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts

Public Notice Letter

Certified Mail

September 26, 2018

Mineral Lessee of Record (VC-0071-0000)
Cimarex Energy Company
600 N. Marienfeld Street, Suite 600
Midland, TX 79701

Public Notice

Legal notification per Water Quality Control Commission Regulations 20.6.2.3108.B.2 NMAC to State of New Mexico mineral lessee(s) of record at the proposed discharge site.

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, New Mexico. The proposed brine injection well is located approximately 17.8 miles west of Lovington, New Mexico on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 miles on lease road to well location.

The application proposes to produce fresh water from a proposed water source well to be drilled in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.890782°, Long. -103.657470°), Lea County, New Mexico. From time to time when brine is needed, the fresh water would be transported via a buried polyethylene pipeline approximately 75 feet northwest to the brine well. The fresh water would be pumped down the well's casing to an approximate depth of 1780 feet to 2300 feet below ground level at a rate of approximately 40 - 120 GPM and a normal operating pressure of 200 to 250 psig. The maximum allowable surface injection pressure would be 356 psig. Dissolution brine water (NaCl) would then be produced up the well tubing to surface.

The produced brine water would be metered then transported via a second buried polyethylene pipeline approximately 5928 feet west to three 1000 barrel fiberglass storage tanks at the proposed Hummingbird Brine Station located in Unit Letter L of Section 28, Township 16 South, Range 33 East (Lat. 32.890740°, Long. -103.676520°), Lea County, New Mexico. This brine station is located approximately 18.7 miles west of Lovington, New Mexico or 0.2 miles south of the intersection of US Hwy 82 and County Road L-122 (Hummingbird Rd). The brine water would be transferred/sold by delivery into water trucks on a concrete loading pad with containment curbing and a sump to prevent spills. There would be a synthetic liner and secondary containment underneath the brine storage tanks. All of the infrastructure is located on private land owned by the applicant.

Brine water is used in the oil and gas industry to supply concentrated salt water (i.e. brine water) with a total dissolved concentration of approximately 320,000 mg/l and a density that is 20% higher than fresh

water. Typical brine water is 10 pounds per gallon (ppg) with the increased weight due to dissolved NaCl. Heavy brine water is essential in preventing blow-outs in high pressure gas wells and prevents loss of circulation when drilling through salt zones typically found in southeastern New Mexico.

The brine well will be designed to produce approximately 13 million barrels of brine water over a 20 year life period. The anticipated cavern radius will not exceed 150 feet. The well has been located on private land and provides a minimum of 2150 feet separation from any significant features, such as houses, water supplies, buildings, schools, businesses, etc.

Groundwater possibly affected by an unintentional spill or leak is located at a depth of approximately 140 – 190 feet below ground level. Typical groundwater in this area has a total dissolved solids concentration of approximately 400 mg/l. According to the Office of the State Engineer, average water well depth in the area is 223 feet below ground level. The brine facility will be designed and permitted to have no intentional water contaminants discharged to the surface or subsurface for the protection of groundwater. The brine station will have a concrete loading pad for trucks and will have a synthetic liner underneath tanks areas to prevent any spills or leaks from reaching the ground surface. The brine well will have cemented casing and tubing strings to protect groundwater.

The owner and operator of the proposed facility will be:

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

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The New Mexico Oil Conservation Division (OCD) will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list for future notices may contact:

Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

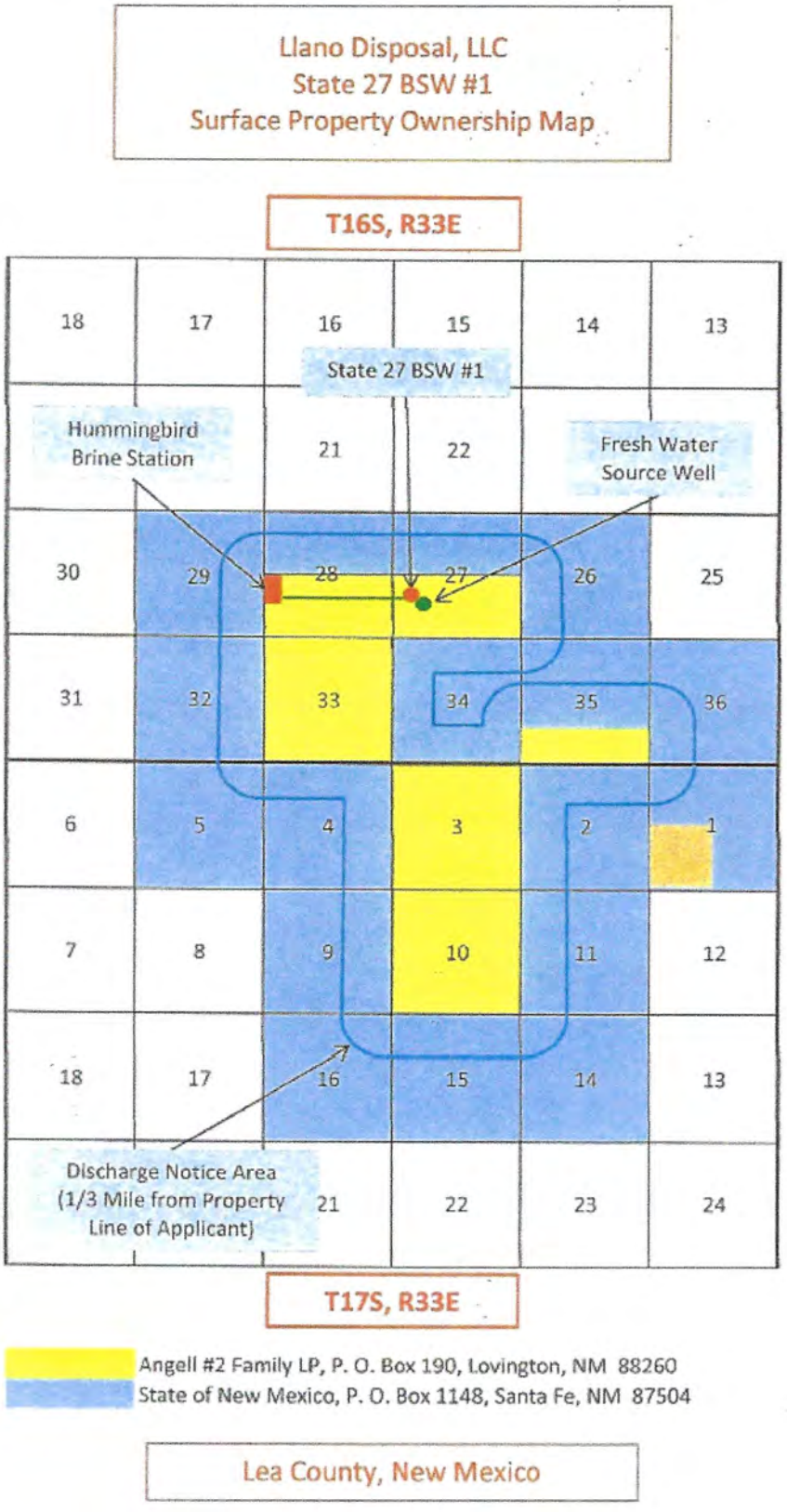
Sincerely,

DJHolcomb

Danny J. Holcomb
Agent for Llano Disposal, LLC

Attachment (map of area)

State 27 BSW #1 (BW-38)
EXHIBIT "C.3" – Letters to Noticees and Certified Mail Receipts



State 27 BSW #1 (BW-38) Public Notice
EXHIBIT "D.1" – Affidavit of Publication for Newspaper Display Ad (English/Spanish)

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Manager of THE LOVINGTON LEADER, a once a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Public Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of October 4, 2018 and ending with the issue of October 4 , 2018.

And that the cost of publishing said notice is the sum of $ 506.76 which sum has been (Paid) as Court Costs.

Joyce Clemens

Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 8th day of October , 2018.

Gina Fort

Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2022

Official Seal
GINA FORT
Notary Public
State of New Mexico
My Comm. Expires 6/30/22

Public Notice
Per Water Quality Control Commission Regulations 20.6.2.3108.B.4 NMAC

Llano Disposal, L.L.C. (Mr. Darr Angell), 783 Highway 483, Lovington, NM 88260 has submitted an application to the New Mexico Oil Conservation Division (NMOCD) for installation and operation of a Class III brine well to be located in Unit Letter L of Section 27, Township 16 South, Range 33 East (Lat. 32.8909645°, Long. -103.6576157°), Lea County, New Mexico. The proposed brine injection well is located approximately 17.8 miles west of Lovington, New Mexico on US Highway 82, then south 0.62 miles on Rooney Rd, then east 0.3 miles on lease road to well location.

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Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

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Environmental Bureau Chief
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: 505-476-3440

Anuncios de Pantalla de Aviso Público
Por Reglamento de Comisión de Control de Calidad de Agua 20.6.2.3108.B.4 NMAC

Llano Disposal, L.L.C. (Sr. Darr Angell), 783 Highway 483, Lovington, NM 88260 ha presentado una solicitud para La División de Conservación de Petróleo de Nuevo Méxicano (NMOCD) para la instalación y operación de una clase III de la salmuera bien que se encuentra en la unidad letra E de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32.8909645°, Long. -103.6576157°), Condado Lea, Nuevo México. La inyección de salmuera propuesto está bien situada aproximadamente 17,8 millas al oeste de Lovington, Nuevo México en Highway 82, entonces del sur 0,62 millas en Rooney Road, entonces este 0,3 millas en carretera arrendamiento de ubicación bien.

La aplicación propone producir agua fresca de una fuente de agua propuesta para taladrarse en unidad letra L de la sección 27, municipio de 16 sur, gama 33 este (Lat. 32,890782°, Long. -103.657470°), Condado Lea, Nuevo México. De vez en cuando se necesita salmuera, el agua dulce transportarse a través de una tubería de polietileno enterrada aproximadamente 75 pies del noroeste a la salmuera bien. El agua se bombea al pozo de cubierta a una profundidad aproximada de 1780 pies a 2300 pies debajo de nivel del suelo a una tasa de aproximadamente 40-120 GPM y una presión normal de 200 a 250 psi. La presión de inyección superficial permisible máxima sería 356 psi. Agua de disolución salmuera (NaCl) entonces se produciría por el bien de la tubería a la superficie.

El agua de la salmuera producida se mide entonces transportado por una tubería de polietileno enterrada segundo aproximadamente 5928 pies al oeste a tres 1000barril tanques de almacenamiento de fibra de vidrio en la propuesta estación de salmuera Colibrí ubicado en la unidad letra L de la sección 28, municipio de 16 sur, gama 33 este (Lat. 32,890740°, Long. -103.676520°), Condado Lea, Nuevo México. Esta estación de salmuera está situados a aproximadamente 18,7 millas al oeste de Lovington, Nuevo México o 0,2 millas al sur de la intersección de Highway 82 y County Road L-122 (Hummingbird Road). El agua de la salmuera sería transferido/vendido por entrega en camiones de agua sobre una almohadilla con frenar de contención de carga de hormigón y un colector de aceite para evitar derrames. Habría un forro sintético y contención secundaria debajo de los tanques de almacenamiento de la salmuera. Toda esta infraestructura se encuentra en terrenos privados propiedad de la demandante.

Agua de la salmuera se utiliza en el aceite y la industria del gas para suministrar concentrado sal agua (es decir, salmuera) con una concentración disuelta total de aproximadamente 320.000 mg/l y una densidad que es 20% mayor de agua dulce. Salmuera típica está 10 libras por galón (ppg) con el aumento de peso debido a NaCl disuelto. Agua de salmuera pesada es esencial en la prevención de salidas de golpe en pozos de gas de alta presión y previene la pérdida de circulación durante la perforación a través de zonas de sal suelen encontradas en el sureste de Nuevo México.

Bien la salmuera se diseñara para producir aproximadamente 13 millones de barriles de salmuera durante un período de vida de 20 años. El radio caverna anticipada no excederá de 150 pies. El pozo se ha situado en terrenos privados y un mínimo de separación de 2150 pies de cualquier características importantes, tales como casas, suministros de agua, edificios, escuelas, empresas, etc.

Agua subterránea posiblemente afectado por un derrame accidental o escape se encuentra a una profundidad de aproximadamente 140 – 190 pies debajo de nivel del suelo. Típico agua subterránea en esta área tiene una concentración de sólidos disueltos totales de aproximadamente 400 mg/l. Según la oficina del ingeniero de estado, profundidad media del agua en la zona es 223 pies debajo de nivel del suelo. La instalación de la salmuera será diseñada y puede no tener contaminantes intencional de agua descargadas a la superficie o subsuperficie para la protección de las aguas subterráneas. La estación de salmuera tendrá una plataforma de carga de cemento para camiones y tendrá un revestimiento sintético debajo de áreas de depósitos para evitar cualquier vertido o derrame accidental de llegar a la superficie de la tierra. La salmuera bien habremos cementado carcasa y tubos cadenas para proteger las aguas subterráneas.

El propietario y operador de la instalación propuesta será:,

Llano Disposal, LLC
783 Highway 483
Lovington, NM 88260

Comentarios y consultas sobre la aplicación pueden ser dirigidas a Llano Disposal, LLC c/o Sr. Danny Holcomb en 806-471-5628 o por correo electrónico danny@pwllc.net . El Sr. Holcomb es consultor para proporcionar asistencia de Llano Disposal, LLC obtener los permisos reglamentarios para este proyecto.

La División de Conservación de Petróleo de Nuevo Méxicano (NMOCD) se aceptan comentarios y declaraciones de interés respecto a esta aplicación y creará una lista de correo de instalaciones específicas para las personas que deseen recibir futuras notificaciones. Puede contactar a las personas interesadas en obtener más información, enviar comentarios o solicitar estar en una lista de correo de instalaciones específicas para futuros avisos:

Jefe de la Oficina Ambiental
División de Conservación de Petróleo de Nuevo Méxicano
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Teléfono: 505-476-3440

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, October 16, 2018 11:48 AM
To: Darr Angell
Cc: 'danny@pwllc.net'; 'Marvin'; Estes, Bob, DCA
Subject: FW: bw 38
Attachments: 108843.pdf

Mr. Angell:

Please find attached and below a paragraph from the attached letter that appears to require follow-up by Llano Disposal.

Please contact Mr. Bob Estes if you have questions.

Thank you.

****
The application states that the surface estate is privately owned. Although a cultural resources survey is not required for permits on private land, HPD recommends that a qualified archaeologist update to current standards the previously recorded archaeological sites, and to ensure that they not inadvertently damaged by construction of the pipeline. A list of archaeological consultants can be obtained from our website at www.nmhistoricpreservation.org.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us
"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

-----Original Message-----
From: Estes, Bob, DCA
Sent: Tuesday, October 16, 2018 11:28 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: FW: bw 38

Mornin' Carl,

Here's the letter for BW 38.

Have a great day.

Bob

-----Original Message-----
From: HPDXerox@state.nm.us [mailto:HPDXerox@state.nm.us]
Sent: Tuesday, October 16, 2018 10:33 AM
To: Estes, Bob, DCA
Subject: bw 38

Please open the attached document. It was scanned and sent to you using a Xerox Multifunction Device.

Attachment File Type: pdf, Multi-Page

Multifunction Device Location: machine location not set
Device Name: HPD_Xerox_WorkCentre_5945

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Susana Martinez
Governor

STATE OF NEW MEXICO
DEPARTMENT OF CULTURAL AFFAIRS
HISTORIC PRESERVATION DIVISION

BATAAN MEMORIAL BUILDING
407 GALISTEO STREET, SUITE 236
SANTA FE, NEW MEXICO 87501
PHONE (505) 827-6320 FAX (505) 827-6338

October 16, 2018

Carl Chavez
Environmental Engineer
Oil Conservation Bureau-Environmental Bureau Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Re: Discharge permit (BW-038) Llano Disposal "State 27", Well No. 1. (HPD Log:108843)

Dear Mr. Chavez:

This letter is in response to the above referenced discharge permit application received at the Historic Preservation Division (HPD) on April 2, 2018. According to the application, the proposed project is within Township 16 South, Range 33 East, Sections 26 and 28. State Land Office records show that the site is on split estate with State Trust mineral estates.

I reviewed our records to determine if cemeteries, burial grounds or cultural resources listed on the State Register of Cultural Properties or the National Register of Historic Places exist within or near the permit area. Our records show that there are no cultural resources listed on the National Register or State Register within or near the proposed permit area and no known cemeteries or burial grounds.

Although there are no cultural resources listed on the State or National Register, our records show that the area has not been surveyed for cultural resources and there is no information about previously recorded archaeological sites near the project area of potential effect. Recent aerial photography shows that the well location and brine station have been subjected to ground disturbance.

The application states that the surface estate is privately owned. Although a cultural resources survey is not required for permits on private land, HPD recommends that a qualified archaeologist conduct a survey of the area where the new well will be drilled and the corridor where flow lines will be installed to ensure ensure that cultural resources are not inadvertently damaged by construction. A list of qualified archaeological consultants can be obtained from our website at www.nmhistoricpreservation.org.

Please do not hesitate to contact me if you have any questions regarding these comments. I can be reached by telephone at (505) 827-4225 or by email at bob.estes@state.nm.us .

Sincerely,

Bob Estes

Bob Estes Ph.D.
HPD Staff Archaeologist

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
September 30, 2018
and ending with the issue dated
September 30, 2018.

Publisher

Sworn and subscribed to before me this 30th day of September 2018.

Business Manager

My commission expires
January 29, 2019
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-19

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
SEPTEMBER 30, 2018

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations (20.6.2.3108 NMAC), the following discharge permit application has been submitted to the Director of the New Mexico Oil Conservation Division ("OCD"), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(BW-38) Llano Disposal, LCC., Darr Angell, Owner, P.O. Box 190, Lovington, NM 88260, has submitted an application for a new Underground Injection Control (UIC) Class III Brine Well Discharge Permit for the "State '27' Brine Supply Well No. 1" (API# 30-025-20592) , located 1,980 FSL and 660 FWL, UL: L in Section 27, Township 16 South, Range 33 East (Lat. N 32.89096°, Long.: W -103.65762°), NMPM, Lea County, New Mexico. The injection well is plugged oil well (TD 13,804 ft. bgl) located approximately 17.8 miles west of the City of Lovington on Hwy. 82, then south 0.62 mile on Rooney Rd, then east 0.3 miles on lease road to well location. The well was a plugged oil well and will be re-drilled to a total depth of 1,800 ft. below ground level (bgl). The proposed "Hummingbird" brine station location is: NW/4 SW/4. UL 'L', Section 28, T16S, R33E.

The fluid flow process is termed "reverse flow" based on the well construction. Fresh groundwater will be injected into the Salado Salt Formation (Salado) through the casing annulus (prevents well corrosion), dual port packer, and 2-7/8 in. Fiberglass (FG) tailpipe at an average injection rate of 1,500 bbl./day (44 gpm) at approximately 200 psig and maximum injection rate of 1,900 bbl/day (58 gpm). Injection shall be below a permitted maximum surface injection pressure (MSIP) of 355 psig.

Brine fluids from the Salado entering the well casing will be produced through the window at 1,780 ft. bgl cut in the well casing and through the 3- ½ in. production tubing within the 9 - 5/8 in. well casing to surface. The window is positioned between the 9-5/8 in. dual port packer set at 1,760 ft. bgl and 9-5/8 in. cast iron bridge plug (CIBP) set at 1,800 ft. bgl. The top of the window is at least 275 ft. into the Salado below the Anhydrite-Salado contact.

The 2-7/8 in. FG tailpipe extends downward at an angle through the window to a depth of 2,300 ft. bgl into the Salado to allow for proper salt cavern development and maximum stability over time. Fresh water is supplied by a new water supply well proposed to be drilled 75 ft. southeast (Lat. 32.890782°, Long. -103.657470°) of the brine well. Fresh water and brine will be transported via separate buried (3 ft.) polyethylene pipelines between the brine well, water well and brine station.

The well TD is 13, 804 ft. bgl with a 9- 5/8 in. well casing and shoe extending to 4,578 ft. bgl. There are a series of plugs down to well TD with CIBPs set at 1,800 ft. bgl and 2,596 ft. bgl within the 9 - 5/8 in. casing. Produced Salado brine fluid is expected to be at a concentration of about 320,000 ppm Total Dissolved Solids- TDS. Groundwater most likely to be affected by a spill, leak or accidental discharge is at a depth of approximately 155 ft. bgl with a TDS concentration of approximately 400 ppm. The discharge permit addresses well construction, operation, monitoring, ground subsidence, associated surface facilities, financial assurance, and provides a contingency plan in the event of accidental discharges.

The OCD has determined the application is administratively complete and has prepared a draft permit.The OCD will accept comments and statements of interest regarding this application and will create a facility-specific mailing list for persons who wish to receive future notices. Persons interested in obtaining further information, submitting comments or requesting to be on a facility-specific mailing list may contact the Environmental Bureau Chief of the OCD at the address given above. The permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or at the OCD web site http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft permit may contact the OCD at the address given above. Prior to ruling on any proposed permit, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that OCD hold a public hearing. Requests for a hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no hearing is held, the Director will approve the proposed permit based on information available, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit application and information submitted at the hearing.

Para obtener más información sobre esta solicitud en español, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservación Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Laura Tulk, 575-748-1283).

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 30th day of September 2018.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL
#33277

Heather Riley, Director

01101546 00218882

LEONARD LOWE
NEW MEXICO OIL CONSERVATION DIVISION, EMNRD
1220 S. SAINT FRANCIS DR.
SANTA FE, NM 87505

OCT 05 2018 AM 08:02

Cash Remittance Report (CRR)

Appendix 8-14 revised 11/27/01

Energy, Minerals & Natural Resources Department
CASH REMITTANCE REPORT (CRR)

Location Name ① OCD - Environment

Location Code ② 0740

Today's Date: 07 (MONTH) 19 (DAY) ③ 20 18 (YEAR)

Collection Period: ____ (MM) / ____ (DD) / ____ (YYYY) through ____ (MM) / ____ (DD) / ____ (YYYY) ④

Cost Center ⑤	Revenue Code ⑤	Receipt Amount ⑦	Collected Amount ⑧
0740		100.00	

Total ========→	$ 100.00 ⑨	$ ⑩

Over/Short Amount $ ⑪

CRR Deposit Amount $ ⑫

Print Name: Lorraine DeVargas ⑬ Signature: Lorraine DeVargas ⑬

Print Name: ____ ⑬ Signature: ____ ⑬

Distribution: White and Yellow copy to Accounts Receivable-ASD.
Pink copy retained at CRR submitting location.

Official Use Only
Completed by the Accounts Receivable

Date Received: ____ ❶

Notes: ____ ❷

Amount Received: ____ ❸

State Treasurer Deposit Number: ____ ❹

Verified by: ____ ❻

Deposit Date: ____ ❺

EMNRDCRR Revised 4/01

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AND TRUST COMPANY
www.happybank.com

CASHIER'S CHECK

1021269

88-1087
1113

7

NOTICE TO CUSTOMERS
THE PURCHASE OF AN INDEMNITY BOND MAY BE REQUIRED BEFORE ANY CASHIER'S CHECK OF THIS BANK WILL BE REPLACED OR REFUNDED IN THE EVENT IT IS LOST, MISPLACED OR STOLEN.

DATE July 16, 2018

REMITTER LLANO DISPOSAL LLC

$*********100.00

PAY ONE HUNDRED AND 00/100

TO THE ORDER OF WATER QUALITY MANAGEMENT FUND

NON NEGOTIABLE

CUSTOMER COPY

PURPOSE

THIS CHECK IS VOID WITHOUT A COLORED BACKGROUND AND A TRUE WATERMARK ON THE BACK

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AND TRUST COMPANY
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CASHIER'S CHECK

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DATE July 16, 2018

REMITTER LLANO DISPOSAL LLC

$*********100.00

PAY ONE HUNDRED AND 00/100

TO THE ORDER OF WATER QUALITY MANAGEMENT FUND

PURPOSE BW-38 Application Filing Fee

AUTHORIZED SIGNATURE(S)

HAP 5010-N (R 8/15)

SIGNATURE HAS A COLORED BACKGROUND • BORDER CONTAINS MICROPRINTING

REVIEWED
By CChavez at 8:14 am, Jul 20, 2018

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of Check No. 1021269 dated 07/16/2018

or cash received on 07/18/2018 in the amount of $ 100.00

from Happy State Bank - Hano Disposal LLC

for BW-38

Submitted by: Carl Chavez Date: 07/18/2018

Submitted to ASD by: Lorraine DeVargas Date: 07/19/2018

Received in ASD by: _____ Date: _____

Filing Fee * New Facility: _____ Renewal: _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 19

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

NEW MEXICO ENVIRONMENT DEPARTMENT - ALBUQUERQUE FIELD OFFICE DAILY CHECK RECEIPT LOG

DATE RECEIVED	WALK-IN	MAIL	NAME ON CHECK	DATE OF CHECK	CHECK/MONEY ORDER#	PROGRAM ACCOUNT CODE	AMOUNT OF CHECK	DATE DEPOSITED	DEPOSITED BY:
7/17/18		*	Happy State Bank - Llano	07/16/18	1021269		100.00		
TOTAL							100.00		

REVENUE TRANSMITTAL SHEET

Description	Fund	Dept.	Share Acct	Sub Acct	Amount
Liquid Waste	34000	Z3200	496402		
Water Recreation Facilities	40000	Z8501	496402		
Food Permit Fees	99100	Z2600	496402		
OTHER	34100	232900		2329029000	

Holcomb Consultants
6900 Spring Cherry Lane
Amarillo, Texas 79124

July 16, 2018

Carl Chavez – Environmental Engineer
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, New Mexico 87505

Re: BW-38 Filing Fee Check

Dear Mr. Chavez:

Attached is Llano Disposal, LLC's cashier's check number 1021269 in the amount of $100 made payable to the "Water Quality Management Fund" as filing fee for the discharge permit application for the State 27 #1 Brine Well.

If you have any questions, please contact me at 806-471-5628 or email danny@pwllc.net. Thank you for your consideration of this application.

Sincerely,

DJ Holcomb

Danny J Holcomb
Holcomb Consultants
Agent for Llano Disposal, LLC

Attachment

Holcomb Consultants
6900 Spring Cherry Lane
Amarillo, Texas 79124

July 16, 2018

Jim Griswold – Environmental Bureau Chief
Carl Chavez – Environmental Engineer
New Mexico Oil Conservation Division
1220 South St. Francis
Santa Fe, New Mexico 87505

Re: NOTICE OF INTENT TO DISCHARGE
WQCC 20.6.2.1201 NMAC

Dear Mr. Griswold and Chavez:

Holcomb Consultants, as agent for Llano Disposal, LLC, is formally notifying the New Mexico Oil Conservation Division of Llano's intent to permit a Class III brine well located in Lea County, New Mexico. Pursuant to the Water Quality Control Commission Regulations (WQCC) 20.6.2.1201.B and C. NMAC, the following information is provided:

1) The name of the person making the discharge:
Llano Disposal, LLC, Mr. Darr Angell, owner

2) The address of the person making the discharge:
P. O. Box 190 (783 Highway 483)
Lovington, New Mexico 88260

3) The location of the discharge:
Brine Well Location: NW/4 SW/4, UL 'L', Section 27, T16S, R33E
Proposed Brine Station Location: NW/4 SW/4, UL 'L', Section 28, T16S, R33E

4) An estimate of the concentration of water contaminants in the discharge:
Injection Water: fresh water from nearby fresh water well with approximately 400 mg/l TDS
Produced Brine Water: approximately 320,000 mg/l TDS

5) The quantity of the discharge:
Estimated Instantaneous Flow Rate: 1 – 3 barrels per minute
Estimated Monthly Total: 0 – 58,000 barrels per month

Holcomb Consultants
6900 Spring Cherry Lane
Amarillo, Texas 79124

Pursuant to 20.6.2.3114 NMAC Llano's cashier's check number 1021269 in the amount of $100 made payable to the "Water Quality Management Fund" as filing fee for the discharge permit application was mailed to your office on July 16, 2018.

Attached are the discharge permit application along with pertinent attachments, a proposed C-101 and a proposed C-103 completion procedure. If OCD requires additional information concerning this notice of intent or discharge permit application, please contact me at 806-471-5628 or email danny@pwllc.net. Thank you for your consideration of this application.

Sincerely,

DJ Holcomb

Danny J Holcomb
Holcomb Consultants
Agent for Llano Disposal, LLC

Attachments

HAPPY STATE BANK
AND TRUST COMPANY
www.happybank.com

CASHIER'S CHECK

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NOTICE TO CUSTOMERS
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DATE July 16, 2018

REMITTER LLANO DISPOSAL LLC

$********100.00

PAY ONE HUNDRED AND 00/100

TO THE ORDER OF WATER QUALITY MANAGEMENT FUND

NON NEGOTIABLE

CUSTOMER COPY

PURPOSE

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HAPPY STATE BANK
AND TRUST COMPANY
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DATE July 16, 2018

REMITTER LLANO DISPOSAL LLC

$********100.00

PAY ONE HUNDRED AND 00/100

TO THE ORDER OF WATER QUALITY MANAGEMENT FUND

PURPOSE BW-38 Application Feking Fee

AUTHORIZED SIGNATURE(S)

HAP 5010-N (R 8/15)

SIGNATURE HAS A COLORED BACKGROUND • BORDER CONTAINS MICROPRINTING

⑈1021269⑈ ⑆111310870⑆ ⑈16378⑈

— Copy —

Original check mailed to OCD-Santa Fe 7/16/18.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Revised August 1, 2011

Submit Original
Plus 1 Copy
to Santa Fe
1 Copy to Appropriate
District Office

DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITES

(Refer to the OCD Guidelines for assistance in completing the application)

☒ New ☐ Renewal

I. Facility Name: Hummingbird Brine Station - State '27' BSW #1

II. Operator: Llano Disposal, LLC

Address: P. O. Box 190 (783 Highway 483), Lovington, NM 88260

Contact Person: Marvin Burrows Phone: 575-631-8067

III. Location: NW /4 SW /4 Section 27 Township 16S Range 33E
Submit large scale topographic map showing exact location.

IV. Attach the name and address of the landowner of the facility site. See section IV of attached discharge plan.

V. Attach a description of the types and quantities of fluids at the facility. See section V of attached discharge plan.

VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities. See section VI of attached discharge plan.

VII. Attach a description of underground facilities (i.e. brine extraction well). See section VII of attached discharge plan.

VIII. Attach a contingency plan for reporting and clean-up of spills or releases. See section VIII of attached discharge plan.

IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water. See section IX of attached discharge plan.

X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders. See section X of attached discharge plan.

XI. CERTIFICATION:

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Name: Darr Angell Title: Owner

Signature: Date: 7-5-18

E-mail
Address: darrangell@gmail.com

State 27 #1 Brine Well and Hummingbird Brine Station
Discharge Plan

I. Name of Facility
Provide complete name. Indicate whether this is a new or renewal application.

Answer – This is a new application for a new facility. The proposed brine well name is State '27' BSW #1 and the proposed surface facility name is Hummingbird Brine Station.

II. Name of Operator or Legally Responsible Party and Local Representative
Include address and telephone number.

The operator/legally responsible party name is Llano Disposal, LLC, P. O. Box 190 (783 Highway 483), Lovington, NM 88260. The operator's OGRID number is 370661. Llano Disposal, LLC is the owner of all the surface lands that the proposed brine well and brine station will be situated upon. Llano Disposal's office is located at 783 Highway 483, Lovington, NM 88260. The local representative is Mr. Marvin Burrows at 575-631-8067.

III. Location of Facility
Give a legal description of the location (i.e. 1/4. 1/4, Section, Township, Range) and county. Use state coordinates or latitude/longitude on unsurveyed land. Submit a large scale topographic map, facility site plan, or detailed aerial photograph for use in conjunction with the written material. It should depict the location of the injection well, storage tanks, process equipment, relevant objects, facility property boundaries, and other site information required in Sections V through IX below.

Answer – The proposed brine well was originally drilled and abandoned in 1964. It is named the State '27' #1 (API # 30-025-20592) located at 1980 FSL X 660 FWL, Unit Letter 'L', Section 27, T16S, R33E, Lea County, New Mexico. The brine well is located at latitude 32.8909645°, longitude -103.6576157° (NAD83). The proposed brine well and brine station are located approximately 18.5 miles west of Lovington, New Mexico. The well is currently in P&A-site released status. Llano proposes to recomplete the well from a P&A well to a brine service well in the Salado (Salt) Formation between 1780' – 2400'. The proposed brine station would be located in UL 'L', Section 28, T16S, R33E, Lea County, New Mexico at latitude 32.890740°, longitude -103.676520° (NAD83). The proposed fresh water supply well will be located approximately 75 feet southeast of the proposed brine well. The fresh water supply well will be located in UL 'L', Section 27, T16S, R33E, Lea County, New Mexico at latitude 32.890782°, longitude -103.657470° (NAD83). See maps, facility site plan and aerial photographs in Attachments "A" – "G".

IV. Landowners
Attach the name and address of the landowner(s) of record of the facility site.

Answer – The landowner of record for the proposed brine well, fresh water supply well and brine station location is the applicant, Mr. Darr Angell. Mr. Angell is the principal owner of Llano Disposal, LLC, P. O. Box 190 (783 Highway 483), Lovington, NM 88260.

V. Type and Quantities of Fluids Stored or Used at the Facility
List all fluids stored or used at the facility (e.g. High TDS salt water, fresh water, chemicals, etc.). Include source, average daily volume produced, estimated volume stored, location, and type of containers.

Answer – At the proposed fresh water supply well, there will be a submersible pump which lifts fresh water from the well, transports it approximately 75 feet through a buried 3" SDR-11 polyethylene pipeline to the brine well. At the brine well, the fresh water is injected down the 9-5/8" casing annulus with brine circulated out the 3-1/2" internally plastic coated tubing. The brine is then transported approximately 5928 feet through a buried 3" SDR-11 polyethylene pipeline from the brine well to the brine station. At the brine station, there will be one 500 bbl fiberglass catch/flush tank, and three 1000 bbl fiberglass tanks for brine storage. Both of the pipelines will be buried a minimum of 36" deep (below frost line).

Anticipated daily average volumes produced will be 1500 BWPD of brine water and 1550 BWPD of fresh water. Anticipated volumes stored will be 2500 bbls of brine water. No chemicals will be stored at the brine well location or brine station.

VI. Transfer, Storage and Disposal of Fluids and Solids
A. Provide sufficient information to determine what water contaminants may be discharged to the surface and subsurface within the facility. Information desired includes whether tanks, piping, and pipelines are pressurized, above ground or buried. Provide fluid flow schematics with sufficient detail to show individual units (pumps, tanks, pipelines, etc.).

1. Tankage and Chemical Storage Areas – Storage tanks for fluids other than fresh water must be bermed to contain a volume one-third more than the largest tank. If tanks are interconnected, the berm must be designed to contain a volume one-third more than the total volume of the interconnected tanks. Chemical and drum storage areas must be paved, curbed and drained such that spills or leaks from drums are contained on the pads or in lined sumps.

Answer – At the proposed brine station, there will be three interconnected 1000 bbl fiberglass brine water storage tanks and one 500 bbl fiberglass catch/flush tank. All four tanks will be located within a common secondary containment berm. Each tank will have an isolation valve and will remain unpressured. The secondary containment consists of an earthen berm with a 20 mil string reinforced LLDPE liner capable of holding a minimum of 4800 bbls. There will be a 30' X 40' concrete loading pad with a 20" X 20" X 35' concrete sump that is situated into the surface of

the concrete loading pad. Any fluids entering the sump will be pumped to the 500 bbl catch/flush tank inside the lined secondary containment. On the proposed well location, there will be no tanks, pumps or chemicals. See schematics of the brine well and brine station in Attachment "L". There will be a buried 3" SDR-11 polyethylene fresh water pipeline between a water supply well and the brine well location. There will also be a buried 3" SDR-11 polyethylene pipeline between the brine well and the brine station. Both pipelines will remain unpressured while the pump is not running. See section E below for detailed pipeline specifications.

2. Surface impoundments - Date built, use, type and volume of materials stored, area, volume, depth, slope of containments, sub-grade description, liner type and thickness, compatibility of liner and stored materials, installation methods, leak detection methods, freeboard, run-off/run-on protection.

Answer – There are no existing surface impoundments at this facility. If permit application is approved, a new secondary containment around storage tanks discussed in section VI.A.1 above will be built. A berm using caliche hauled in from an offsite pit will be used. This berm area will then be lined with a 20 mil LLDPE liner with UV protection. Storm water run-on/run-off is expected to be minimal due to the nature of the surrounding terrain. The western edge of the brine station is bordered by Hummingbird Road, a county maintained north-south road with barrow ditches on both sides

3. Leach fields - Type and volume of effluents, leach field area and design layout. If non-sewage or mixed flow from any process units or internal drains is, or has been, sent to the leach fields, include dates of use and disposition of septic tank sludges.

Answer – Not applicable, no leach fields are planned.

4. Solids disposal - Describe types, volumes, frequency, and location of on-site solids dried disposal. Typical solids include sands, sludges, filters, containers, cans and drums.

Answer – Routine domestic household type trash or other similar non-domestic waste pursuant to 19.15.35.8 NMAC will be stored in common trash dumpsters that are supplied and picked up routinely by the local waste management trucking company. This waste will be disposed of at a New Mexico Environmental Department permitted solid waste disposal facility.

B. For each of the transfer/storage/disposal methods listed above:

1. Describe the existing and proposed measures to prevent or retard seepage such that ground water at any place of present or future use will meet the WQCC Standards of Section 3-103, and not contain any toxic pollutant as defined in Section 1-101.UU.

Answer – All storage tanks at the proposed brine station will be protected by a secondary containment area lined with a 20 mil LLDPE liner. This liner is a smooth, high quality, linear low density polyethylene (LLDPE) geomembrane with excellent chemical resistance, outstanding stress crack resistance, low permeability and excellent UV radiation resistance. This secondary containment area will be capable of holding a minimum of one-third more than the combination of interconnected tanks within. The 30 foot by 40 foot concrete loading pad will be curbed on the edges and sloped to a grating covered 20" wide by 35' long by 20" deep sump which is constructed in a single pour with the concrete loading pad. This sump will catch any spills/leaks occurring on the loading pad. The sump level will be automated and excess fluids will be pumped through above-ground piping to a 500 bbl fiberglass catch/flush tank located within the secondary containment area. All process piping at the brine station will be installed above-ground.

2. Provide the location and design of site(s) and method(s) to be available for sampling, and for measurement or calculation of flow.

Answer - Samples can be taken either at each individual tank valve, on the load lines or at the wellhead manifold. Fresh water measurement will occur at the fresh water well. Brine water measurement will occur at the brine wellhead. Electronic accumulating flow meters with an accuracy of ±1% will be utilized.

3. Describe the monitoring system existing or proposed in the plan to detect leakage or failure of any discharge system. If ground water monitoring exists or is proposed, provide information on the number, location, design, and installation of monitoring wells.

Answer –The brine station will be controlled by a SCADA system to monitor and manage pressures, flows and upset conditions. Automated alarms and shutdowns are included in this system including communication to responding personnel during unattended operations.

Upon permit approval, a ground water quality monitoring program will be initiated on three fresh water wells near the proposed brine well/brine station. These proposed monitor wells are located west, southwest and southeast of the brine well. These water wells were selected due to their proximity to the facilities. See Attachment "C" for location of the three proposed ground water monitor wells. Water samples from these three wells would be tested quarterly for general chemistry parameters, BTEX and TPH. This would establish the ground water quality over time.

C. Off-Site Disposal

If wastewaters, sludges, solids etc. are pumped or shipped off-site, indicate general composition (e.g. waste oils), method of shipment (e.g. pipeline, trucked), and final

disposition (e.g. recycling plant, OCD-permitted or domestic landfill, Class II disposal well). Include name, address, and location of receiving facility. If receiving facility is a sanitary or modified domestic landfill show operator approval for disposal of the shipped wastes.

Answer - Routine domestic household type trash or other similar non-domestic waste pursuant to 19.15.35.8 NMAC will be stored in common trash dumpsters that are supplied and picked up routinely by the local waste management trucking company. This waste will be disposed of at a New Mexico Environmental Department permitted solid waste disposal facility. Liquid waste generated onsite, primarily from the sump catch/flush tank, will be transported by third party trucking companies to an approved Class II SWD well permitted by the NMOCD. Any contaminated soil waste will be transported by third party trucking companies to an approved NMOCD surface waste management facility (i.e. Sundance, et al).

D. Proposed Modifications

1. If protection of ground water cannot be demonstrated pursuant to Section B.1. above, describe what modification (including closure) is proposed to meet the requirements of the Regulations. Describe in detail the proposed changes. Provide the information requested in A. and B. above for the proposed modified facility and a proposed time schedule for construction and completion. (Note: OCD has developed specific guidelines for lined surface impoundments that are available on request.)

Answer – This facility will be built after approval of this discharge plan and brine well application. No existing facility now exists that would require current modifications.

2. For ponds, pits, leach fields, etc. where protection of ground water cannot be demonstrated, describe the proposed closure of such units so that existing fluids are removed, and emplacement of additional fluids and run-off/run-on of precipitation are prevented. Provide a proposed time schedule for closure.

Answer - This would be a newly built facility with no ponds, pits, or leach fields in the design.

E. Underground Piping

If the facility contains underground piping, the age and specification (i.e., wall thickness, fabrication material, etc.) of said piping should be submitted. Upon evaluation of such information, mechanical integrity testing of piping may be necessary as a condition for discharge plan approval. If such testing (e.g. hydrostatic tests) has already been conducted, details of the program should be submitted.

Answer – This plan would include approximately 5928 feet of new 3" SDR-11 HDPE pipeline for transportation of brine water to be installed underground between the brine well and the brine station. This SDR-11 HDPE pipe has a 160 psi rating, 0.318"

minimum wall thickness, 2.825" ID and 3.500" OD. It ships in 500' or 1000' coils and is seamless pipe that would be thermally fused at the ends. This pipeline would be buried at a minimum of 36" to top of pipe (below frost line depth). This newly installed pipeline will be hydrostatically pressure tested per the NMOCD's HST Guidelines. Testing frequency would include an initial test at 100% of manufacturer's MAOP during installation and subsequent tests on an annual basis or sooner if leakage is ever suspected. An NMOCD representative can be notified to witness all tests.

This plan also includes approximately 75 feet of new 3" SDR-11 HDPE pipeline for transportation of fresh water to be installed a minimum of 36" underground between the fresh water supply well and the brine well. No fluids other than fresh water are planned to be used in this pipeline.

These two HDPE pipelines would be designed to minimize the use of 90 degree fittings by making turns via long radius sweeps where possible.

F. Inspection, Maintenance and Reporting

1. Describe proposed routine inspection procedures for surface impoundments and other transfer, storage, or disposal units including leak detection systems. Include frequency of inspection, how records are to be maintained and OCD notification in the event of leaks.

Answer – Routine inspections of surface equipment and automation systems would occur daily by an onsite facility supervisor. Inspection logs would be documented and maintained onsite for subsequent review.

2. If ground water monitoring is used to detect leakage or failure of the surface impoundments, leach fields, or other approved transfer/storage/disposal systems provide:

a. The frequency of sampling, and constituents to be analyzed.

Answer – Per WQCC and NMOCD requirements, the brine water would be tested for general chemistry parameters, BTEX and TPH on a quarterly basis. Three nearby ground water wells would be tested for the same parameters on a quarterly basis. This would establish the baseline of ground water conditions over time. These wells were selected due to their proximity to the facilities. See Attachment "C" for location of the three proposed ground water wells.

b. The proposed periodic reporting of the results of the monitoring and sampling.

Answer – We propose that the periodic reporting of both the brine water quality and ground water quality occur annually in the January 31 annual report.

c. The proposed actions and procedures (including OCD notification) to be undertaken by the discharger in the event of detecting leaks or failure of the discharge system.

Answer – The NMOCD would be notified via Form C-141 upon discovery of a leak detection or failure of the discharge system. The brine well would be shut in pending evaluation and correction of the failure or leak.

3. Discuss general procedures for containment of precipitation and runoff such that water in contact with process areas does not leave the facility, or is released only after testing for hazardous constituents. Include information on curbings, drainage, disposition, notification, etc.

Answer – All precipitation that occurs inside the tankage "process area" would be contained by the secondary containment around the tanks. Any rain water collected in this containment area will be vacuumed up and either recycled within the facility or disposed of in an NMOCD approved manner. Heavy rain on the concrete loading pad will be collected into the sump by curbing and pump transferred to the 500 bbl catch/flush tank. Any water collected in this catch/flush tank will be hauled to a Class II SWD well approved by the NMOCD. The well location at the brine well will be contoured so that standing water is not allowed to pond near or around the wellhead. See Attachment "G" for USGS drainage map of the impacted area. It indicates the general topography in this area gently slopes northwest to southeast.

4. Describe methods used to detect leaks and ensure integrity of above and below ground tanks, and piping. Discuss frequency of inspection and procedures to be undertaken if significant leaks are detected.

Answer – Routine visual inspections of surface equipment and automation systems would occur daily by an onsite facility supervisor. Inspection logs will be documented and maintained onsite to insure any necessary repairs are completed and for subsequent review. The buried 5928 foot SDR-11 polyethylene brine pipeline will initially be hydrostatically pressure tested upon installation to insure mechanical integrity. It will be hydrostatically retested annually as long as no leakage is suspected. If leakage is ever suspected, the pipeline would be removed from service and tested. All pipeline tests will be logged into the inspection logs onsite. Storage tanks will be visually inspected internally when emptied for maintenance. Tanks will be visually inspected externally during daily routine inspections.

5. Submit a general closure plan describing what actions are to be taken when the facility discontinues operations. These actions must include:

a. Removal of all fluids, contaminants and equipment.

Answer – When the facility permanently discontinues operations, all stored fluids in equipment will be removed and either sold, reused or disposed. All ground contaminants will be recovered and disposed of per State, Federal and local regulations in effect at the time of closure. All surface equipment and infrastructure will be properly removed from the site. Underground pipelines will be flushed with fresh water, capped on both ends and abandoned in place.

b. Grading of facility to as close to the original contour as is practical.

Answer – After all surface equipment and concrete is removed, the brine station surface area and the brine well location will be re-contoured to original contour and reseeded with native grasses.

c. Proper disposal of fluids, sludges and solids pursuant to rules and regulations in effect at the time of closure.

Answer – All disposal of fluids, sludges and solids will be performed per State, Federal and local regulations in effect at the time of closure.

See section X.B for additional closure plan details.

VII. Brine Extraction Well(s)

Insitu brine extraction wells must meet the requirements of Part 5 of the Water Quality Control Commission Regulations in addition to other applicable requirements of WQCC and Oil Conservation Division Rules and Regulations.

A. Drilling, Deepening, or Plug Back Operations

Before drilling, deepening, or plug back operations, the operator of the well must file the following plans, specifications, and pertinent documents with the Oil Conservation Division 90 days prior to start-up of the planned operation.

1. Form C-101 "Application for Permit to Drill, Deepen, or Plug Back" (OCD Rule 1101).

Answer – Form C-101, C-102 and C-103 (re-entry) for the State '27' #1 (API #30-025-20592) were submitted to the NMOCD District 1 Office on April 18, 2018. The re-entry C-103 was approved April 26, 2018. Forms C-101 and C-102 will be approved after a Discharge Permit is approved (BW-38). Copies of these forms are included at the end of Attachment "I" for documentation.

2. A "Notice of Intent to Discharge" in accordance with WQCC regulation 1-201 (New facilities only).

Answer – Llano Disposal, LLC submitted a formal "Notice of Intent to Discharge" attached to this discharge permit application. When the application is determined

by the NMOCD to be administratively complete, the review process begins to determine whether a final discharge permit is approved by the NMOCD.

3. A map showing the number, name, and location of all producing oil and gas wells, injection wells, abandoned holes, surface bodies of water, watercourses, springs, mines, quarries, water wells, and other pertinent surface features within one mile from the wellbore(s).

Answer – See Attachment "D" for a map of the oil/gas wells and fresh water wells within the 0.5 mile and 1 mile areas of review. The area elevation is relatively flat with a slight slope from northwest to southeast. There are no identifiable surface bodies of water (other than dry playa lakes), watercourses, springs, mines or quarries within the area of review.

4. Maps and cross-sections indicating the general vertical and lateral limits of all ground water having 10,000 mg/l or less TDS within one mile of the site. Show the position of such ground water within this area relative to the injection formation. Indicate the direction of water movement, where known, for each zone of ground water.

Answer – The Ogallala aquifer is the main source of water in the Lea County Underground Water Basin. The Tertiary-age Ogallala Formation consists of interbedded layers of fine- to medium-grained sand and gravel, overlain by an upper caliche layer. The total thickness of the Ogallala ranges from zero to about 350 ft thick. The thickness of the formation varies (Nye, 1930) as a result of irregularities, formed by erosional channels, in the surface of the underlying Triassic-age Dockum Group sediments (red beds). The channels generally trend to the southeast (Shoemaker, 2009). The ground water in this formation is confined where the underlying red beds are relatively impermeable. This underlying layer prevents further vertical movement within the aquifer. According to OSE records in the subject section and contiguous 8 sections, water depths range approximately 140 – 190 feet below ground level. With the base of the reported red beds being at 1480' in the proposed brine well, the nearest "theoretical" ground water would be a minimum vertical distance of 300' above the proposed injection zone. However, with a primary water bearing depth of 140 – 190 feet, ground water would be a minimum vertical distance of 1590' above the proposed injection zone. Based on drilling records in this area, there are no additional overlying ground water zones evident in this area.

5. List all abandoned wells/shafts or other conduits in the area of review which penetrate the injection zone. Identify those which may provide a pathway for migration of contaminant through being improperly sealed, completed or abandoned. Detail what corrective action will be taken prior to start-up of operations to prevent any movement of contaminants into ground water of less than/equal to 10,000 mg/l TDS through such conduits due to the proposed

injection activity (e.g. plugging open holes). Include completion and plugging records.

If information becomes available after operations have begun, which indicates the presence of a conduit that will require plugging then the injection pressure will be limited to avoid movement of contaminants through such a conduit into protected ground water.

Answer – See Attachment "D" for a map of all oil and gas wells that penetrate the injection zone (1790' – 2400' MD) located within the 0.5 mile area of review. There is one plugged and abandoned offset well in the area of review. It is identified below:

API Well Number	Well Status	Location	TD	Plugs Near Salt
30-025-27324	P&A	I-28-16S-33E	13,848'	@ 1450', 4430'

This plugged offset well has cement plugs above and below the salt formation which are designed to eliminate any pathway for migration. It is located 1330 feet west of the subject well. Plugging records and a current wellbore diagram for this offset well within the 0.5 mile area of review are provided in Attachment "H".

6. Maps and cross-sections detailing the geology and geologic structure of the local area.

Answer – See a map of North-South and West-East cross-section lines and cross-sections detailing the area geology in Attachment "N".

7. A proposed formation testing program to obtain an analysis or description of fluids in the receiving formation.

Answer – Llano Disposal proposes to obtain brine well fluid samples at the wellhead manifold quarterly. These samples will be laboratory tested for general chemistry parameters, BTEX and THP. Test results would be reported to the NMOCD during the January 31 annual report.

8. Schematic drawings of the surface and subsurface construction details.

Answer – See Attachment "L" for surface facility and subsurface (ie. buried pipelines) schematics.

9. The proposed drilling, evaluation, and testing programs. Include logging procedures, coring program, and deviation checks.

Answer – Since the subject well has already been drilled and is currently in plugged status, this information exists in NMOCD files. See Attachment "I" for

current and proposed wellbore diagrams and copies of the NMOCD well reports. Llano Disposal will report all future well completion information via Forms C-103 and C-105 and provide copies of any new logs run.

10. The proposed stimulation, injection, and operation procedures (Note WQCC 5-206 limitations).

Answer – No initial stimulation is proposed. Fresh water will be injected down the tubing/casing annulus and circulate brine water up the tubing.

11. A plan for plugging and abandonment of the well that meets the requirements of WQCC regulations section 5-209. A plugging bond pursuant to OCD Rule 101 is required prior to commencement of any new well drilling operations.

Answer – The plugging plan includes swabbing approximately one foot of water out of the cavern, removing the tubing string and packer, then setting a cast iron bridge plug at 10 feet above the 9-5/8" casing window and filling the casing with a Class C high strength salt resistant cement. The wellhead will be cut off and a dry hole marker installed. Llano Disposal, LLC has previously provided a $108,000 irrevocable letter of credit accepted and approved by the NMOCD to cover bonding for well plugging, surface restoration and surface subsidence monitoring for 5 years beyond closure date as discussed further in Financial Assurance Plan section X.C below.

B. Workover Operations
Before performing remedial work, altering or pulling casing, plugging or abandonment, or any other workover, approval of OCD must be obtained. Approval should be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103-A).

Answer – Llano will file Notice of Intent C-103s prior to future workover operations.

C. Additional Information Required with Discharge Plan
In addition to all of the information required above in Part VII.A. (Drilling, Deepening, or Plug Back Operations), include the following with your discharge plan application.

1. Provide evaluation, completion and well workover information. Include all logs, test results, completion reports and workover descriptions.

Answer – Please see Attachment "I" for the drilling, completion and testing reports to-date by the previous operator(s). Attachment "I" also contains current and proposed wellbore diagrams for this well. Llano provided copies of initial logs to the OCD via email on May 23, 2018 and followed up with a June 7, 2018 tele-conference with OCD personnel. Llano Disposal will file C-103 NOI's prior to

and Subsequent Notice C-103s following any downhole work. Llano will also file form C-105 reports after completion operations have been performed.

2. Provide the proposed maximum and average injection pressures and injection volume. If one well is to be used for injection and extraction, fresh water must be injected down the annulus and brine must be recovered up the tubing. Reverse flow will be allowed for up to once a month for 24 hours for clean out. If an alternative operating method is desired then a written request must be submitted to the OCD which describes the proposed operating procedures and how the mechanical integrity of the casing will be guaranteed.

Answer – Llano proposes to inject fresh water down the tubing-casing annulus and circulate brine water up the tubing. Below are our proposed injection pressures and volumes which are well below the fracture gradient of 0.75 psi/ft:

Maximum injection pressure – 475 psi
Average injection pressure – 250 psi
Maximum injection volume – 1900 BWPD
Average injection volume – 1550 BWPD

3. Submit a proposed mechanical integrity testing program. OCD requires a casing pressure test isolating the casing from the formation using either a bridge plug or packer prior to start of operation, and repeated at least once every five years or during well work over. In addition, OCD requires an open-hole pressure test to 500 PSI for 4 hours on an annual basis.

Answer – Llano proposes to test the casing to 300 psi for 30 minutes using a packer or bridge plug during completion operations. Additionally, Llano proposes to pull production tubing and run a packer or bridge plug to test the casing to 300 psi for 30 minutes at intervals of five years or less. NMOCD personnel will be notified in advance for witnessing. Concerning the open-hole pressure test, Llano believes 500 psi surface pressure is too much pressure to put on the well/cavern. We propose to perform this annual test at 300 psi surface pressure for 4 hours. This would minimize the intensity of sudden pressure surges and releases which may cause damage to the formation.

4. Provide an analysis of the injection fluid and brine. Include location and design of site(s) and method(s) of sampling. Analysis will be for concentrations of Total Dissolved Solids, Sodium, Calcium, Potassium, Magnesium, Bromide, Carbonate/Bicarbonate, Chloride and Sulfate.

Answer – When the brine well is in operation, fresh water and brine samples can be taken from sample ports at the wellhead or at the brine station load line. Brine samples can also be taken from these same locations. Recently Llano sampled two existing fresh water wells proposed to be ground water monitor wells. These

tests represent the current aquifer quality in the area. These test results are included in Attachment "J".

5. Compare volumes of fresh water injected to volume of brine to detect underground losses and specify method by which volumes are determined. After approval, submittal of a quarterly report listing, by month, the volume of fluids injected and produced will be required.

Answer – Llano proposes to measure both fresh water injected and brine water produced by installing individual electronic flow meters with totalizers on the brine well manifold. The totalizer volumes will be recorded monthly and provide the records for evaluating underground losses. If the volumes exceed a 10% tolerance, the NMOCD would be notified and the discrepancy would be investigated.

6. For renewal application for facilities in operation in excess of 15 years, provide information on the size and extent of the solution cavern and geologic / engineering data demonstrating that continued brine extraction will not cause surface subsidence of catastrophic collapse.

Answer – Llano would address this section during future renewal application processes as operational experience with the formation in this well is gathered.

VIII. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)
It is necessary to include in the discharge plan submittal a contingency plan that anticipates where any leaks or spills might occur. It must describe how the discharger proposes to guard against such accidents and detect them when they have occurred. The contingency plan also must describe the steps proposed to contain and remove the spilled substance or mitigate the damage caused by the discharge such that ground water is protected, or movement into surface waters is prevented. The discharger will be required to notify the OCD Director in the event of significant leaks and spills. This commitment and proposed notification threshold levels must be included in the contingency plan.

A. Prevention
Describe how spills and leaks will be prevented at the facility. Include specifically how spillage/leakage will be prevented during truck loading and at major transfer points within the facility. Discuss general "housekeeping" procedures for areas not directly associated with the above major processes.

Answer – See the Emergency Contingency and Response Plan in Attachment "K" for proposed actions to spill/leak prevention and general housekeeping actions.

B. Containment and Cleanup

Describe procedures for containment and cleanup of major and minor spills at the facility. Include information as to whether areas are curbed, paved, and drained to sumps; final disposition of spill materials; etc.

Answer – Spills will be contained by secondary containments around the brine station tanks. Spills at the loading pad will be contained in the concrete sump then pumped to a catch/flush tank located inside the lined secondary containment. The concrete loading pad will be curbed to direct flow of spills to the sump. The liquid spills recovered in the catch/flush tank will be trucked to a Class II disposal well permitted by the NMOCD.

C. Notification

Propose a schedule for OCD notification of spills. The OCD requires the discharger to notify the director within 48 hours of the detection or suspected detection of a spill, and provide subsequent reports as required.

Answer – See Attachment "K" for the NMOCD notification plan listed within the proposed facility contingency plan.

IX. Site Characteristics

A. The following hydrologic/geologic information is required to be submitted with all discharge plan applications. Some information already may be included in this application or may be on file with OCD and can be provided to the applicant on request.

1. Provide the name, description, and location of any bodies of water, streams (indicate perennial or intermittent), or other watercourses (arroyos, canals, drains, etc.); and ground water discharges sites (seeps, springs, marshes, swamps) within one mile of the outside perimeter of the facility. For water wells, locate wells within one mile and specify use of water (e.g. public supply, domestic, stock, etc.).

Answer – The Mescalero Ridge is located approximately 4.4 miles southwest of the proposed brine well. Due to the relatively flat nature of the terrain on the caprock within the 1 mile area of review, there are no bodies of water (other than dry playa lake beds), streams, arroyos, canals, drains, seeps, springs, marshes or swamps evident. Five fresh water wells have been identified on the ground and via the OSE data base within the 1 mile area of review. Four of these wells are utilized for cattle/commercial water production and one is used for domestic household supply. See Attachments "C" and "D" for location of these water wells and playa lake beds.

2. Provide the depth to and total dissolved solids (TDS) concentration (in mg/l) of the ground water most likely to be affected by any discharge (planned or

unplanned). Include the source of the information and how it was determined. Provide a recent water quality analysis of the ground water, if available, including name of analyzing laboratory and sample date.

Answer – New water samples were obtained from two water wells within the area. See Attachment "J" for test results. The sample titled "Sample A" is from a ranch house water well located 0.48 miles southwest of the subject brine well. This well is utilized for domestic household supply. The sample titled "Sample B" is from a water well located 1.08 miles west of the subject brine well. This well is utilized for commercial fresh water sales and cattle production. Both of these water wells are located on property owned by the applicant. OSE data base indicates the average depth to water in the area of review is 140 – 190 feet.

3. Provide the following information and attach or reference source information as available (e.g. driller's logs):

a. Soil type(s) (sand, clay, loam, caliche);

Answer – Soil types are alluvium sand, shale, red beds and anhydrite per C-105 Formation data on wells within the 0.5 mile area of review.

b. Name of aquifer(s);

Answer – Ogallala and Quaternary Alluvium formations.

c. Composition of aquifer material (e.g. alluvium, sandstone, basalt, etc.); and

Answer – Ogallala Formation consists of interbedded layers of fine to medium grained sand and gravel, overlain by an upper caliche layer. Alluvium Formation consists of calcareous, unconsolidated sand, clay, silt and gravel.

d. Depth to rock at base of alluvium (if available).

Answer - The aquifer is generally located at a depth of 140 – 190 feet in this area. There is an underlying impermeable red bed layer that prevents further vertical movement within the aquifer. Red beds are evident immediately below the aquifer and extend for a depth of about 1480' across the area of review.

4. Provide information on:

a. The flooding potential at the discharge site with respect to major precipitation and/or run-off events; and

Answer – The area of review is not listed as a Flood Plain by FEMA. Average annual rainfall for this site is 10"-14" per year. There is a very slight slope

northwest to southeast across the area of review. The area could be occasionally inundated with locally heavy rainfall, but it is very unlikely that storm water runoff events from other areas would impact the proposed site. Hummingbird Road (Lea County Road L-122) runs north/south on the western edge of the brine station. This county maintained road has barrow ditches on both side which controls runoff events coming from the west and northwest. See FEMA flood map in Attachment "O".

b. Flood protection measures (berms, channels, etc.), if applicable.

Answer – The brine station will have a 3 foot tall bermed/lined secondary containment around tanks. Any storm water run-on would be diverted around the tank area by this containment berm. Any rainfall within the process area would be contained with the secondary containment. The brine well location will be graded so that rain water will not pond around the well head.

B. Additional Information

Provide any additional information necessary to demonstrate that approval of the discharge plan will not result in concentrations in excess of the standards of WQCC Section 3-103 or the presence of any toxic pollutant (Section 1-101.UU.) at any place of withdrawal of water for present or reasonably foreseeable future use. Depending on the method and location of discharge, detailed technical information on site hydrologic and geologic conditions may be required to be submitted for discharge plan evaluation. Check with OCD before providing this information. However, if required it could include but not be limited to:

1. Stratigraphic information including formation and member names, thickness, lithologies, lateral extent, etc.

Answer – The location of the proposed brine well is located in the geologic region known as Northwest Shelf of the Permian Basin. The brine well target formation is the Salado formation of the lower Ochoan Epoch. This Epoch is part of the upper Permian Age and extends across the Northwest Shelf, Delaware Basin and Central Basin Platform. It thins and finally pinches out on the eastern shelf. Layers in this series are predominately evaporates which contain strings of dolomite, shale, siltstone and sandstone. The thickness of the salt section averages 1050' – 1350' in this area. The Triassic rock overlying the lower Permian formations is the Dockum group and is divisible into the Santa Rosa sandstone and Chinle formations. The Tertiary rocks are represented by the Ogallala and Alluvium formations and ranges in thickness from 0' to 350' within this general area. It is primarily made up of calcareous, unconsolidated sand, clay, silt and gravel. These two formations are the primary ground water source within this area. See Attachment "M" for area geology and general stratigraphy.

2. Generalized maps and cross-sections;

Answer – See a map and cross-section in Attachments "M" and "N".

3. Potentiometric maps for aquifers potentially affected;

Answer – No potentiometric maps were found for this water basin in Lea County.

4. Porosity, hydraulic conductivity, storactivity and other hydrologic parameters of the aquifer;

Answer – No pumping tests, slug tests or constant-head tests were performed. However, values for these parameters were calculated using standard variables for an unconfined aquifer with medium sand as the aquifer material. Results are:

Porosity – 29-49%
Hydraulic Conductivity – 305 gal/day/ft^2
Storactivity – 0.2
Specific Yield – 32%
Specific Retention – 3%

5. Specific information on the water quality of the receiving aquifer.

Answer – The receiving formation is the Salado Formation (salt) which is not an aquifer. The Salado Formation is generally a solid formation with no in-situ water evident. There are no well records indicating that the Salado formation contained any water when this well was originally drilled.

6. Information on expected alteration of contaminants due to sorption, recipitation or chemical reaction in the unsaturated zone, and expected reactions and/or dilution in the aquifer.

Answer – The surface in the area of review is grassland utilized for cattle production. Other than animal waste, there are no contaminants or man-made agricultural chemicals utilized on this surface. The proposed brine well operation will include minimal man-made chemicals. Brine storage tanks will also have secondary containment protection. Infiltration of contaminants through the unsaturated or vadose zone to the aquifer is not expected during the proposed brine well operation. Additionally, no alteration of contaminants due to sorption, recipitation or chemical reaction in the unsaturated zone is expected. Finally, no reactions and/or dilution in the overlying aquifer are expected from brine operations.

X. Other Compliance Information
Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders. Examples include previous Division orders or letters authorizing operation of the facility or any surface impoundments at the location.

Answer – New form C-103 for the subject well was submitted to the NMOCD District 1 Office on April 18, 2018 and it was approved by the NMOCD on April 26, 2018. Forms C-101 and C-102 were also submitted to the NMOCD Santa Fe and Hobbs Offices on April 18, 2018, but will be approved after the discharge permit (BW-38) is approved. Copies of these forms are included in Attachment "I" for discharge plan documentation.

A. Surface Subsidence Monitoring
To monitor potential changes in surface conditions at the proposed brine well, Llano proposes to establish three surface subsidence monuments suitable for three dimensional surface monitoring as well as establishing an X, Y, and Z position on the proposed brine well. The monuments will be Berntsen's 9/16" stainless steel floating sleeved rod monuments (see Attachment "P") which are well suited for monitoring positional changes in the ground surface. The monuments are designed so that frost heave and swelling and shrinking soil conditions have no effect on the stainless steel rod on which measurements will be made. A location point on the wellhead will also be established so that the well itself will be used as a fourth subsidence monument. Rod monuments will be installed in a triangular configuration around the brine well wellhead at a maximum distance of 150 feet from the well.

1. Monument Installation Procedure
A 12" diameter hole will be augered to a depth of about 3-1/2 feet. The stainless steel rod will be manually driven into the ground, a section at a time, to a depth of 8 feet. The top of the rod would be about 6" below ground level. A finned floating sleeve (filled with NO-TOX grease) is placed over the rod and the datum point added on the rod end. A 6" diameter x 42" long PVC pipe conduit with access cover glued to top end is then placed over the finned sleeve. The inside of the PVC conduit is then filled with fine sand to a level about 3" below the top of the rod. The outside of the PVC conduit will be filled with sand to about 1 foot below ground level, then concrete will be placed from 1 foot depth to ground level.

2. Annual Subsidence Surveys
The survey contractor will use modern survey equipment to establish X, Y, Z positions on the surface subsidence monuments on an annual basis. Survey grade GPS equipment will be utilized to establish the horizontal position of each subsidence monument relative to the New Mexico Coordinate System North American Datum 1983 (2007). Using Static and Fast Static observations the expected horizontal accuracy of the GPS equipment as established by the manufacturer for the subsidence monuments is ±0.01 ft. A digital level will be utilized to establish the vertical position of the surface subsidence monuments

relative to the North American Vertical Datum of 1988 (NAVD88). Using differential leveling techniques the expected vertical accuracy of the equipment as established by the manufacturer for the subsidence monuments is ±0.01 ft.

The initial survey will be conducted prior to first injection into the proposed brine well. This survey will establish horizontal and vertical coordinate baseline values on the three monuments and the well. Additional surveys will be performed annually in order to compare coordinate values checking for movement in the monuments and well. After cease of operations of the proposed brine well, annual surface subsidence surveys will be conducted for a minimum of five additional years. Reports of these surveys will be submitted to the NMOCD in the annual (January 31) operating report.

B. Closure Plan

Upon cease of operations and after regulatory approval, Llano will plug and abandon the brine well, remove all surface equipment, restore the surface to original contour and reseed it with native grasses. In addition, Llano will continue surface subsidence monument surveys for a minimum of 5 years after well plugging.

1. Well Plug and Abandonment

The brine well will be plugged and abandoned per WQCC regulations section 5-209 and NMOCD rules in place at that time. As discussed in Section VII.A.11 above, the plugging plan includes swabbing approximately one foot of water out of the cavern, removing the tubing string, setting a cast iron bridge plug at 10 feet above the 9-5/8" casing window and filling the casing with a Class C high strength salt resistant cement. The wellhead will be cut off and a dry hole marker installed. Over time, large portions of the resulting salt cavern will re-solidify.

2. Surface Restoration

All surface equipment at the brine well location and brine station will be emptied, decommissioned and removed either through recycle, scrapping, sale or used by the owner elsewhere. The disturbed surface at the well location and brine station will be reclaimed and re-contoured to near original condition. The disturbed area will be reseeded with a BLM grass seed mixture to establish 70% minimum regrowth coverage.

3. Surface Subsidence Monitoring

The annual surface subsidence monitoring program discussed in section X.A.2 above will be continued for a minimum of 5 years following plugging and abandonment of the brine well.

C. Financial Assurance Plan

Llano has provided financial assurance for the State '27' #1 Brine Well and Hummingbird Brine Station via an irrevocable letter of credit in the amount of

$108,000 covering well plugging and abandonment, surface restoration and surface subsidence monitoring for 5 years after ceasing operations as detailed below.

1. Well Plugging - $41,475

Based on recently obtained bids and experience in plugging wells, Llano proposes a well plugging bond amount of $41,475. See cost breakdown below.

$17,400	Well plugging contractor labor/equipment including cement
$8,925	Equipment rental (workstring, flowback tanks, BOPE, porta-john, etc)
$4,725	Transportation of equipment
$3,150	Supervision
$2,730	Purchase/transportation of brine and fresh water
$2,100	Disposal of tank fluids
$1,260	Excavate/cutoff wellhead and anchors; weld on flat plate and PxA marker
$1,185	Miscellaneous

2. Surface Restoration - $47,625

Based on recently obtained surface restoration cost quotes, these costs total $47,625 as detailed below:

$8,400	Equipment/Labor – washout tanks for disposal, haul fluids and solids to disposal
$2,200	Backhoe/Labor - 2 days to crush fiberglass tanks and PVC components at brine station
$2,520	35 Yd Roll-off Dumpsters - delivery, rental and hauling to landfill
$551	Lea County Landfill Charges – 3 ea 35 yd dumpsters = 105 cy x 300 lbs = 15.75 tons @ $35/ton
$1,700	Onsite Supervision
$20,059	Equipment/Labor – pull all fencing, remove all concrete, disassemble all metal components, re-contour land to original grade, rebuild barbed wire fence to original ranch configuration, remove underground piping, electrical conduit, wiring, high line poles, wiring and signage
$2,300	Trucking/Disposal – of concrete to Lea County Landfill @ $35/ton
$3,700	Trucking – haul metal components to Hobbs Iron & Metal for recycle
$4,725	Decommission buried polyethylene brine pipeline - costs include fresh water, trucking and pumping to wash pipeline clean and disposal of brine and wash water, then leave pipeline in place for ranching, fresh water sales use
$1,470	Reseeding BLM mix grass on estimated 2 acres at well location and brine station

3. Surface Subsidence Monitoring - $18,900

Based on recently obtained surface subsidence survey cost quotes, these costs total $18,900 for 5 years of follow-on subsidence monument monitoring. Cost estimate is $1260 per year per monument surveyed. Annual cost to survey three monuments is $3780 per year or $18,900 for 5 years.

D. Notification Plan

Pursuant to 20.6.2.3108 NMAC, Llano Disposal proposes the following public notice plan to be implemented within 30 days upon the department's determination that the discharge permit application is deemed administratively complete.

1. Public Notice Onsite Signage (minimum 2' x 3' size) Pursuant to 20.6.2.3108.B.1 NMAC

Llano will install one (1) sign meeting the above requirements in both English and Spanish to be located on private land adjacent to the northern edge of the proposed brine station on Hummingbird Road approximately 0.2 mile south of Hwy 82 in Section 28, T16S, R33E. This posting site is located approximately 200 feet north of the proposed brine station location. This notice will be posted for a minimum of 30 days. The proposed text on this sign is included in Attachment "Q".

2. Public Notice Offsite Pursuant to 20.6.2.3108.B.1 NMAC

Llano will post a notice of the discharge application in English and Spanish on a public bulletin board in the Lea County Courthouse which is approximately 18.8 miles from the proposed brine station. This notice will be posted for a minimum of 30 days. The proposed text of this notice is included in Attachment "R".

3. Notice to Adjoining Property Owners Pursuant to 20.6.2.3108.B.2 NMAC

Llano will provide written notice of the discharge application in English by certified mail, return receipt requested, to owners of record of all properties adjacent to the property owned by the discharger. According to Lea County property records, there is only one adjacent property owner and no additional property owners within 1/3 mile of the property line of applicant. The proposed text of these notices, attachments and a listing of the owners are included in Attachment "S".

4. Notice to the Property Owner of the Discharge Site Pursuant to 20.6.2.3108.B.3 NMAC

Notice to the landowner is not required since the applicant, Llano Disposal, LLC, is the owner of this land. Although the surface ownership is private land, the mineral ownership is State of New Mexico owned. Llano will provide written notice in English by certified mail, return receipt requested, to the New Mexico State Land Office, the mineral owner of the discharge site. According to SLO records as of June 29, 2018, the State owned minerals in UL 'L', Section 27, T16S, R33E are leased to Cimarex Energy Company. Llano will provide written notice in English by certified mail, return receipt requested, to Cimarex, the mineral lessee. Text of the notice letters is included in Attachment "S".

5. Public Notice Newspaper Display Ad (minimum 3" x 4") Pursuant to 20.6.2.3108.B.4 NMAC

Llano will publish one (1) newspaper advertisement meeting the above requirements in both English and Spanish in the "Lovington Leader", a newspaper of general circulation nearest the location of the proposed discharge. The proposed text of these newspaper advertisement notices is included in Attachment "T".

6. Proof of Notice Pursuant to 20.6.2.3108.D NMAC

Within 15 days of completion of public notice requirements listed above, Llano will submit to the department proof of notice, including an affidavit of mailings and the list of property owners, proof of publication in the newspaper, and an affidavit of public posting onsite the discharge location and offsite in the Lea County Courthouse.

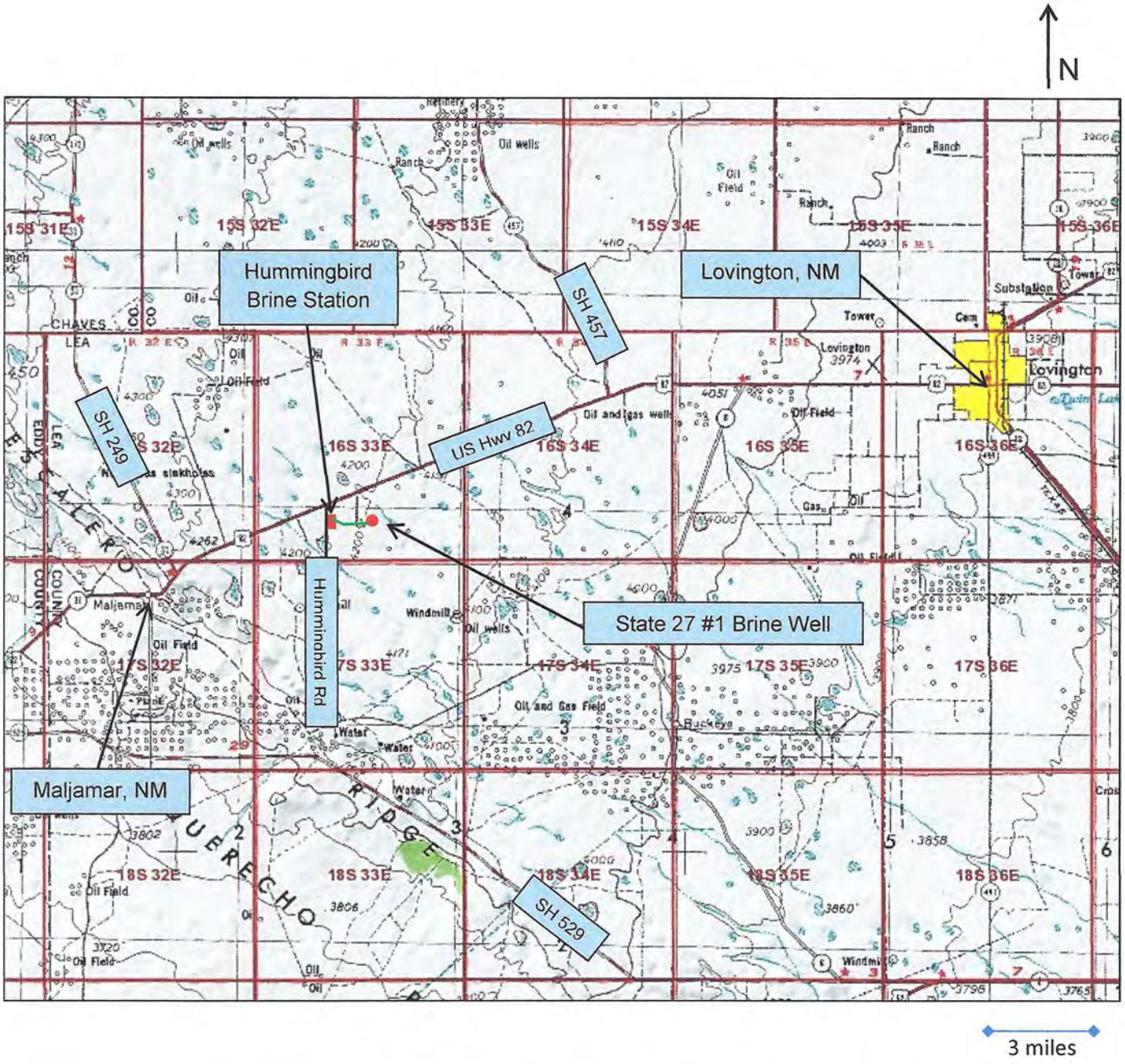
Llano Disposal, LLC
State'27' BSW #1
Discharge Plan

Attachment Index

Attachment	Description
A	Overview Map of General Area – USGS Topo Map of Area (Small Scale)
B	USGS Topo Map of Area (Large Scale)
C	Maps of Fresh Water Wells Within 1 Mile AOR and Ground Water Monitor Wells (2 pgs)
D	0.5 Mile and 1 Mile Areas of Review for Oil & Gas Wells
E	Brine Well Location Site Plan
F	Brine Station Site Plan
G	USGS Drainage Map of Project Area
H	Plugging Records for Offset Well Within the 0.5 Mile Area of Review (2 pgs)
I	NMOCD Drilling, Comp, P&A Records for State '27' #1 (17 pgs)
J	Water Analysis Test Results on Area Fresh Water Wells (3 pgs)
K	Emergency Contingency and Response Plan (2 pgs)
L	Schematics for Brine Station and Brine Well Location (3 pgs)
M	Area Geology Map and General Lithology (2 pgs)
N	Cross-sections of Geologic Structure at State '27' #1 (3 pgs)
O	FEMA Flood Plain Map of Project Area
P	Subsidence Monument Design and Installation Procedure
Q	Public Notice for Onsite Sign Posting (4 pgs)
R	Public Notice for Offsite Posting at Lea County Courthouse (5 pgs)
S	Public Notice Letters to Adjoining Property Owners, SLO, Mineral Lessee (4 pgs)
T	Public Notice in Lovington Leader Newspaper (4 pgs)

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

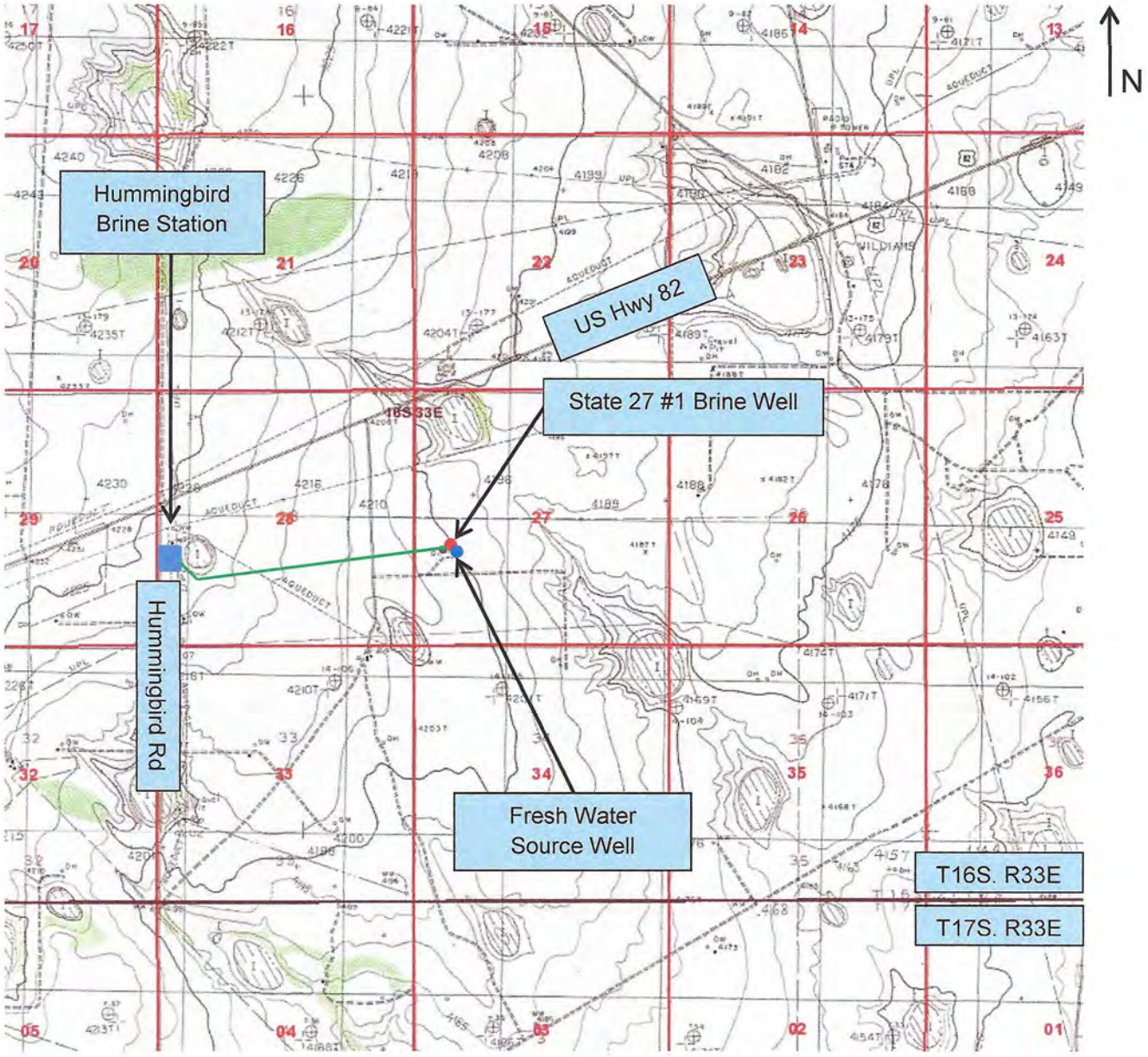
Attachment A – Small Scale Topo Map



Lea County, New Mexico

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

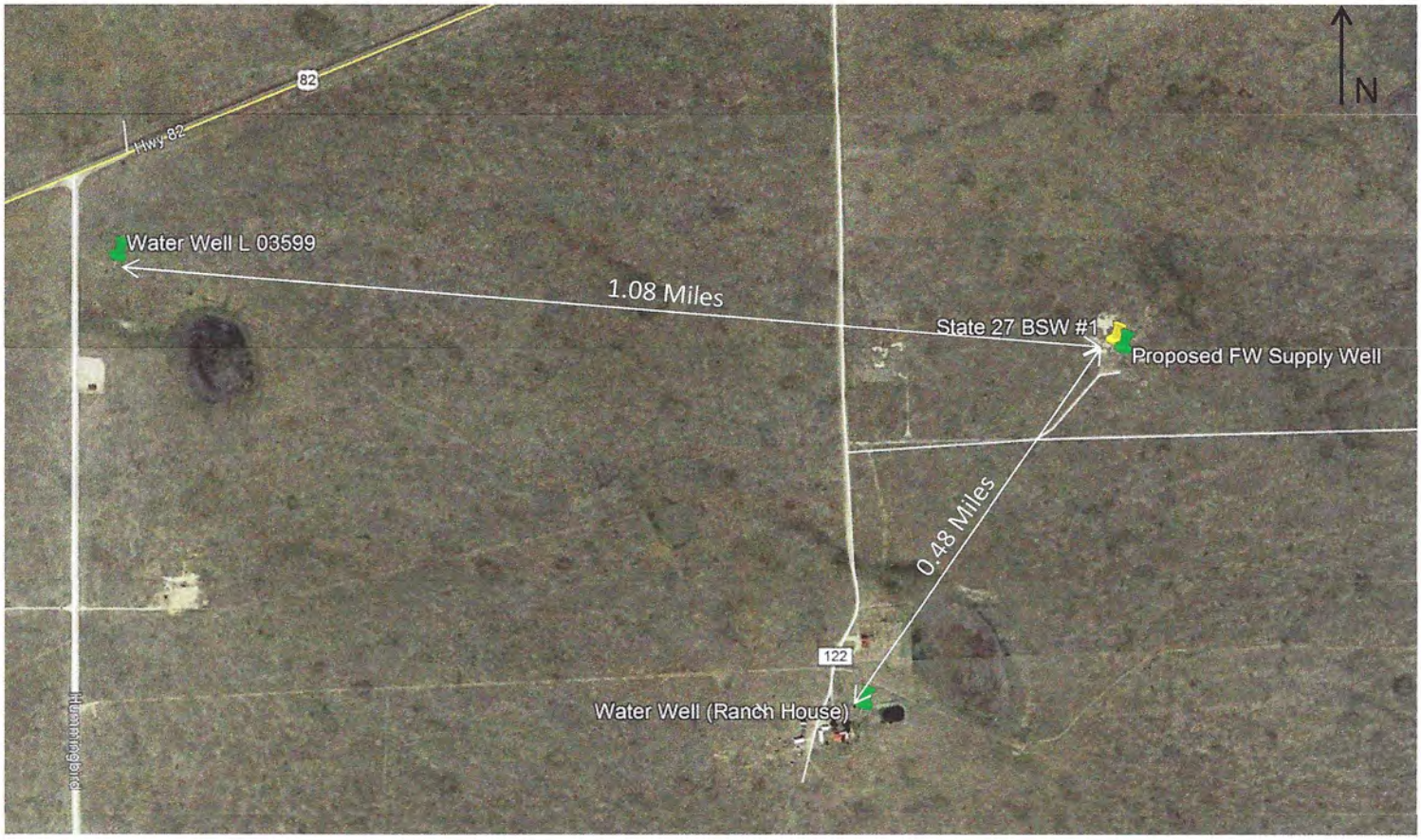
Attachment B – Large Scale Topo Map



Lea County, New Mexico

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

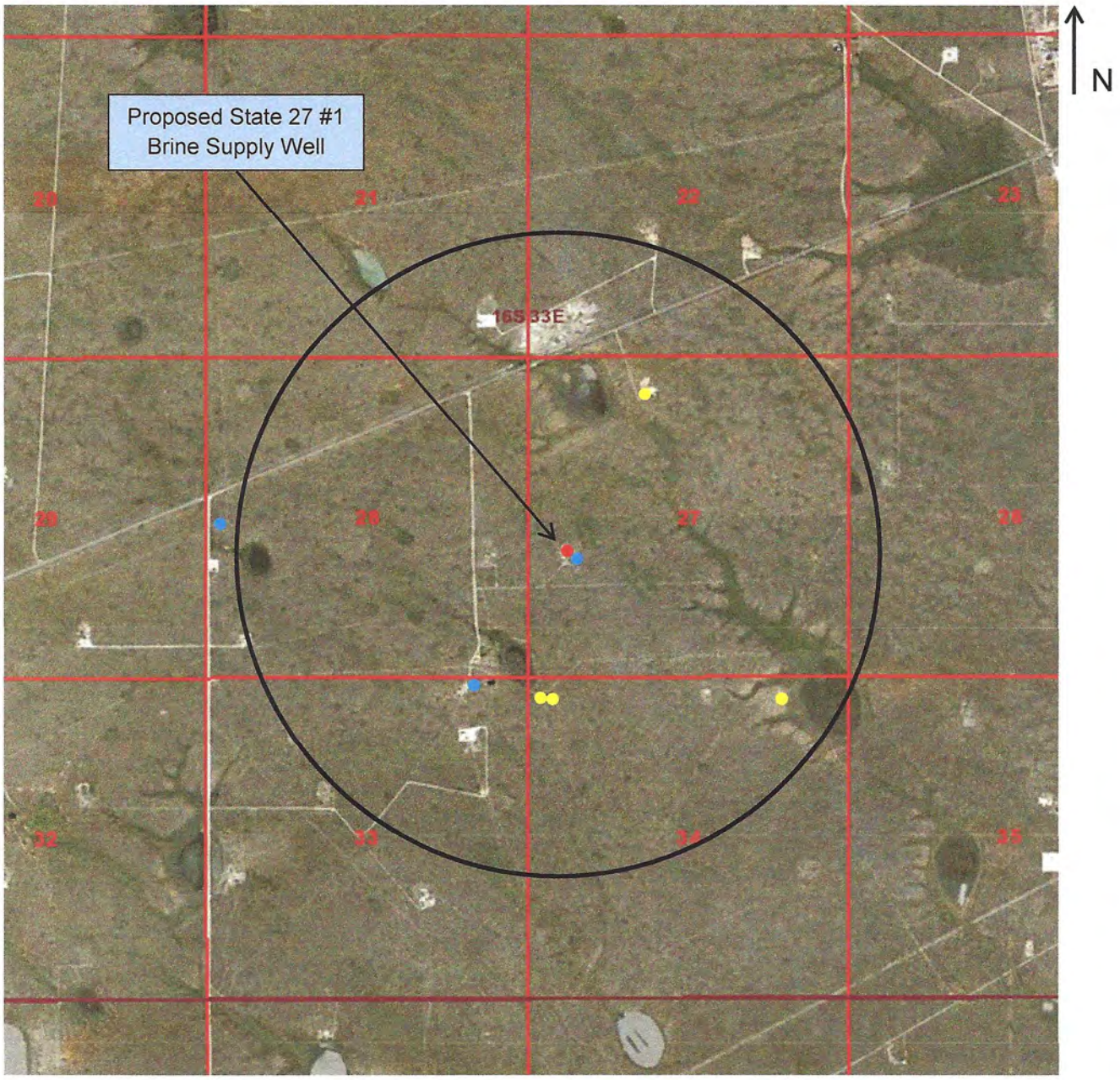
Attachment C – Aerial Photo with Ground Water Monitoring Wells



T16S, R33E
Lea County, New Mexico

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

Attachment C – 1 Mile Area of Review for Fresh Water Wells

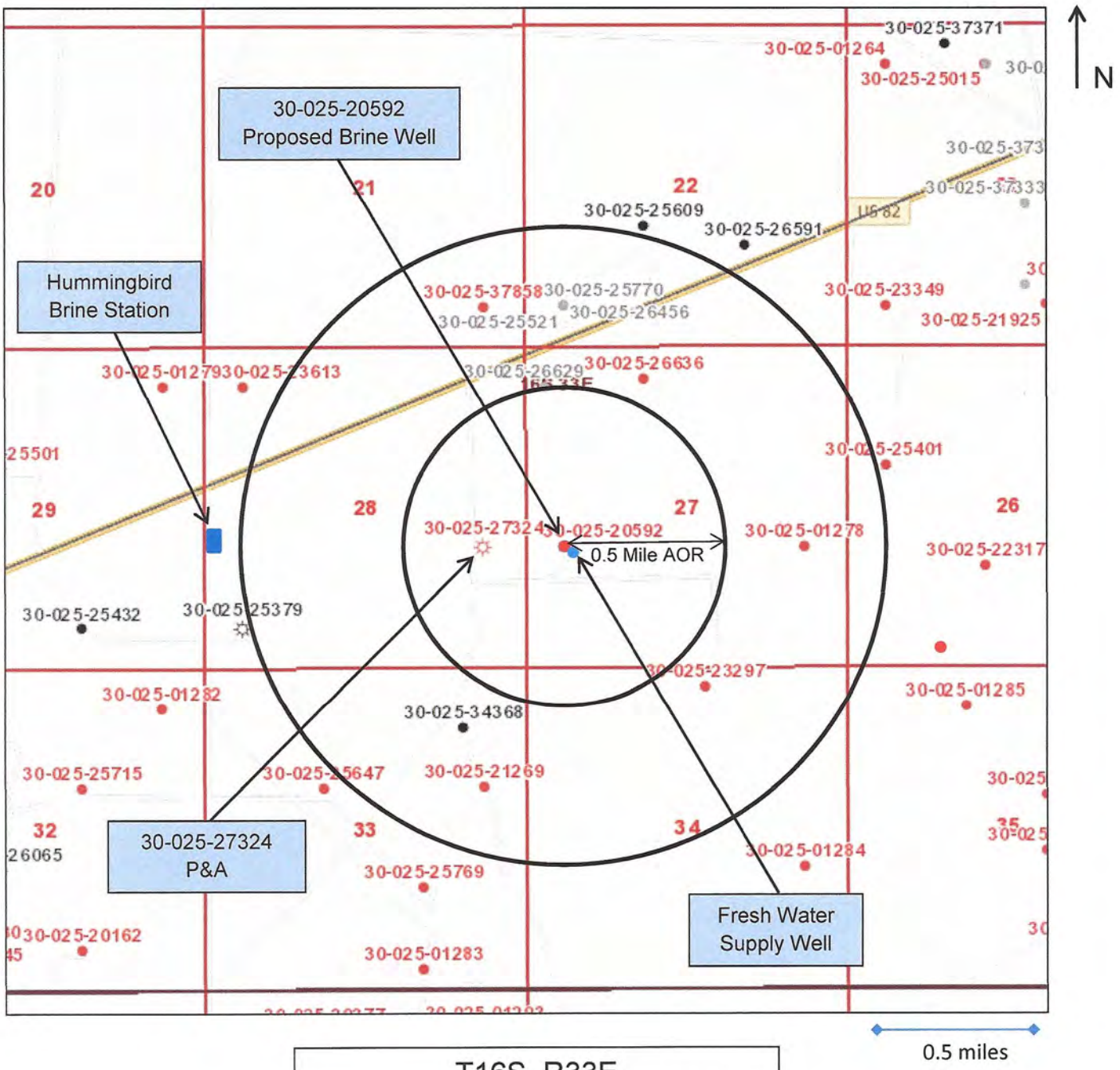


T16S, R33E
Lea County, New Mexico

- Fresh Water Wells
- Proposed Ground Water Monitor Wells
- Proposed State 27 BSW #1

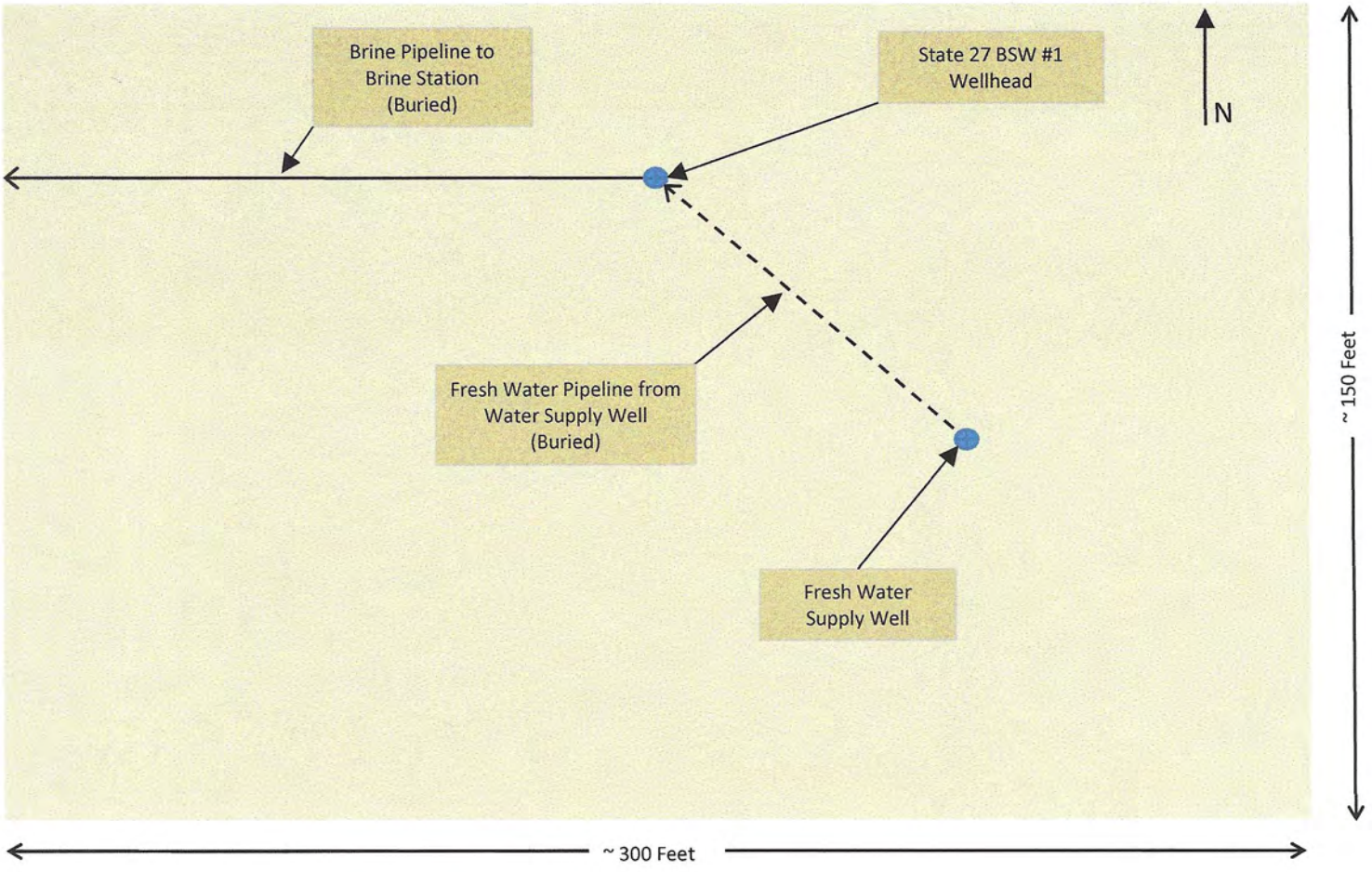
State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

Attachment D – 0.5 and 1 Mile AORs with Oil/Gas Wells



State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

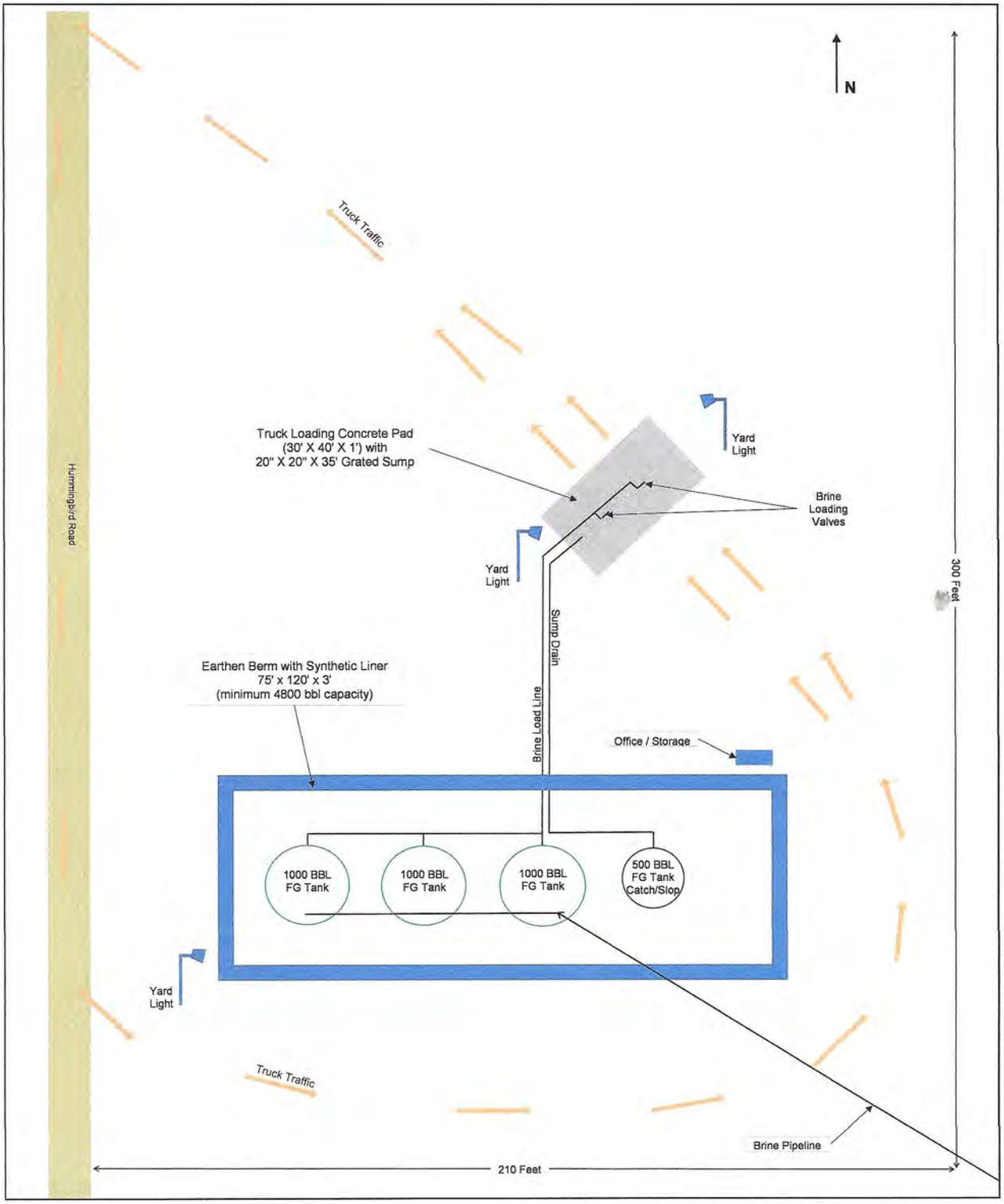
Attachment E – Well Location Site Plan (UL L, Section 27, T16S, R33E)



Surface Owner – Angell #2 Family LP
P. O. Box 190, Lovington, NM 88260
Drawing Not to Scale

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

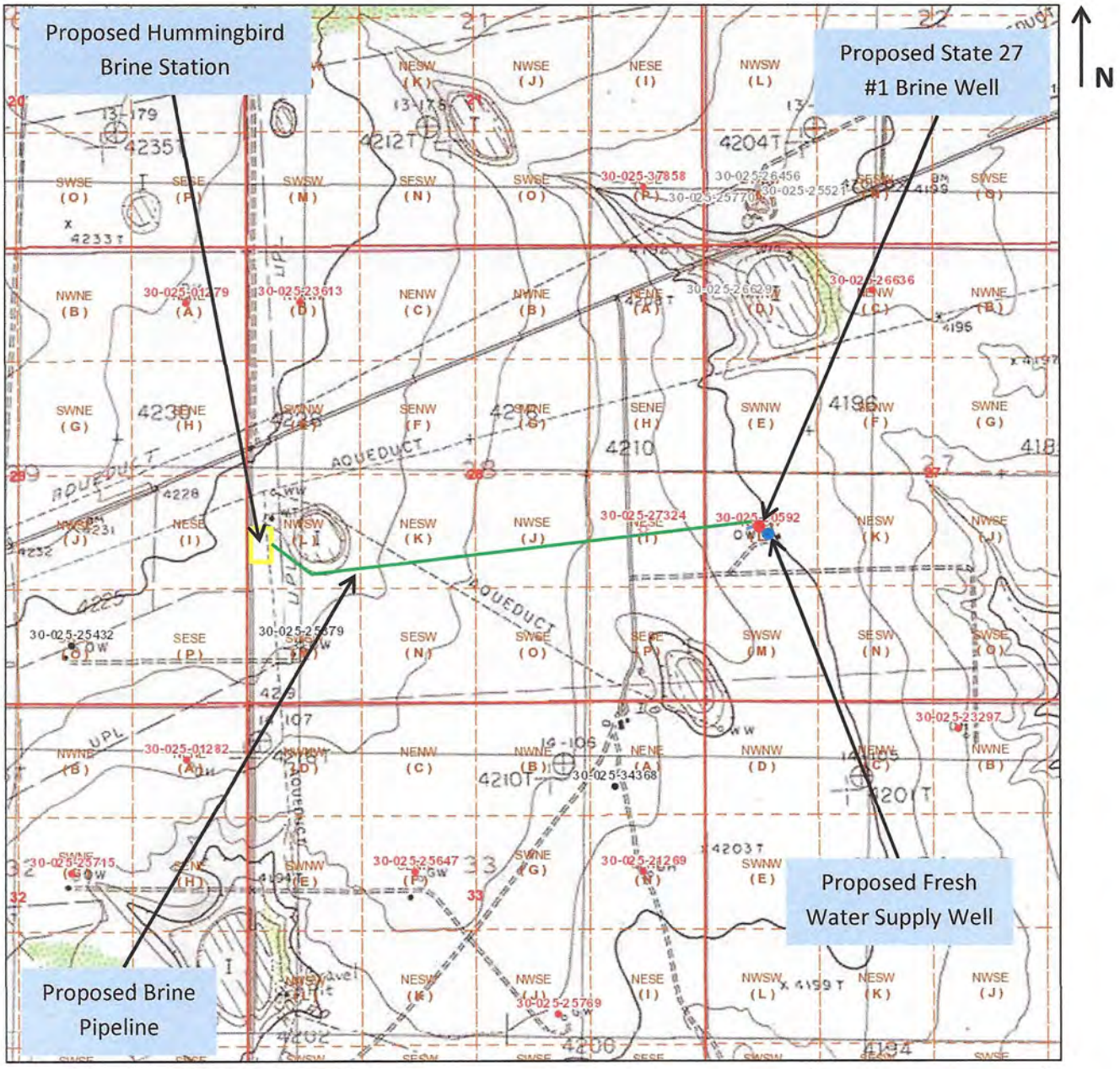
Attachment F – Hummingbird Brine Station Site Plan (UL L, Section 28, T16S, R33E)



Surface Owner – Angell #2 Family LP
P. O. Box 190, Lovington, NM 88260
Drawing Not to Scale

State 27 BSW #1
API # 30-025-20592
Discharge Plan Attachments

Attachment G – USGS Drainage Map of Project Area



Map Source – USGS Drainage Map

0.5 mile

There is no USGS defined drainage basin in the project area. The topography is generally sandy and grass covered. Most of the area is drained via playa lakes. There are no established streambeds in the area. The Mescalero Ridge (ie. caprock) is located approximately 4.4 miles southwest of the proposed brine well.

T16S, R33E
Lea County, New Mexico

Submit 3 Copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

OFFSET WELL 30-025-27324

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-025-27324

5. Indicate Type of Lease STATE [XX] FEE [ ]

6. State Oil & Gas Lease No. L - 6666

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
~~N.M. State "A"~~
Hexagon NM 28 State

1. Type of Well: OIL WELL [XX] GAS WELL [ ] OTHER

2. Name of Operator
Hexagon Oil & Gas Inc.

8. Well No. 1

3. Address of Operator
810 Houston St. Fort Worth tx. 76102

9. Pool name or Wildcat
Hemitz-Lower Wolfcamp

4. Well Location
Unit Letter J : 1980 Feet From The South Line and 660 Feet From The East Line

Section 28 Township 16S Range 33E NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
4207.4 GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]	CHANGE PLANS [ ]	COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [XX]
PULL OR ALTER CASING [ ]		CASING TEST AND CEMENT JOB [ ]	
OTHER: [ ]		OTHER: [ ]	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

4-03-1991 Spot 20 sxs cement @ 11,380'-11,100
4-03-1991 Spot 25 sxs cement @ 10,660-10,340 tagged
4-04-1991 Spot 20 sxs @ 8000'-7800'
4-08-1991 Spot 35 sxs @ 5050'-4900' tagged
4-09-1991 Spot 45 sxs @ 4549'-4430' tagged
4-09-1991 Spot 45 sxs @ 1450'-1250'
4-10-1991 Spot 60 sxs @ 385'-285' perforated @ 385
4-10-1991 Spot 45 sxs @ 115'-59'
4-10-1991 Spot 10 sxs @ surface

Install dry hole marker
Hole circulated with 10# mud
Pulled 5000' of 4 1/2" casing
~~Pulled 65' of 8 5/8 casing~~

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE John G. Burke TITLE VICE PRESIDENT DATE 4/24/91

TYPE OR PRINT NAME JOHN G. BURKE TELEPHONE NO. 817/870-128

(This space for State Use)

APPROVED BY Gary W. Hill TITLE Oil. C[illegible] DATE [illegible] 1991

CONDITIONS OF APPROVAL, IF ANY:

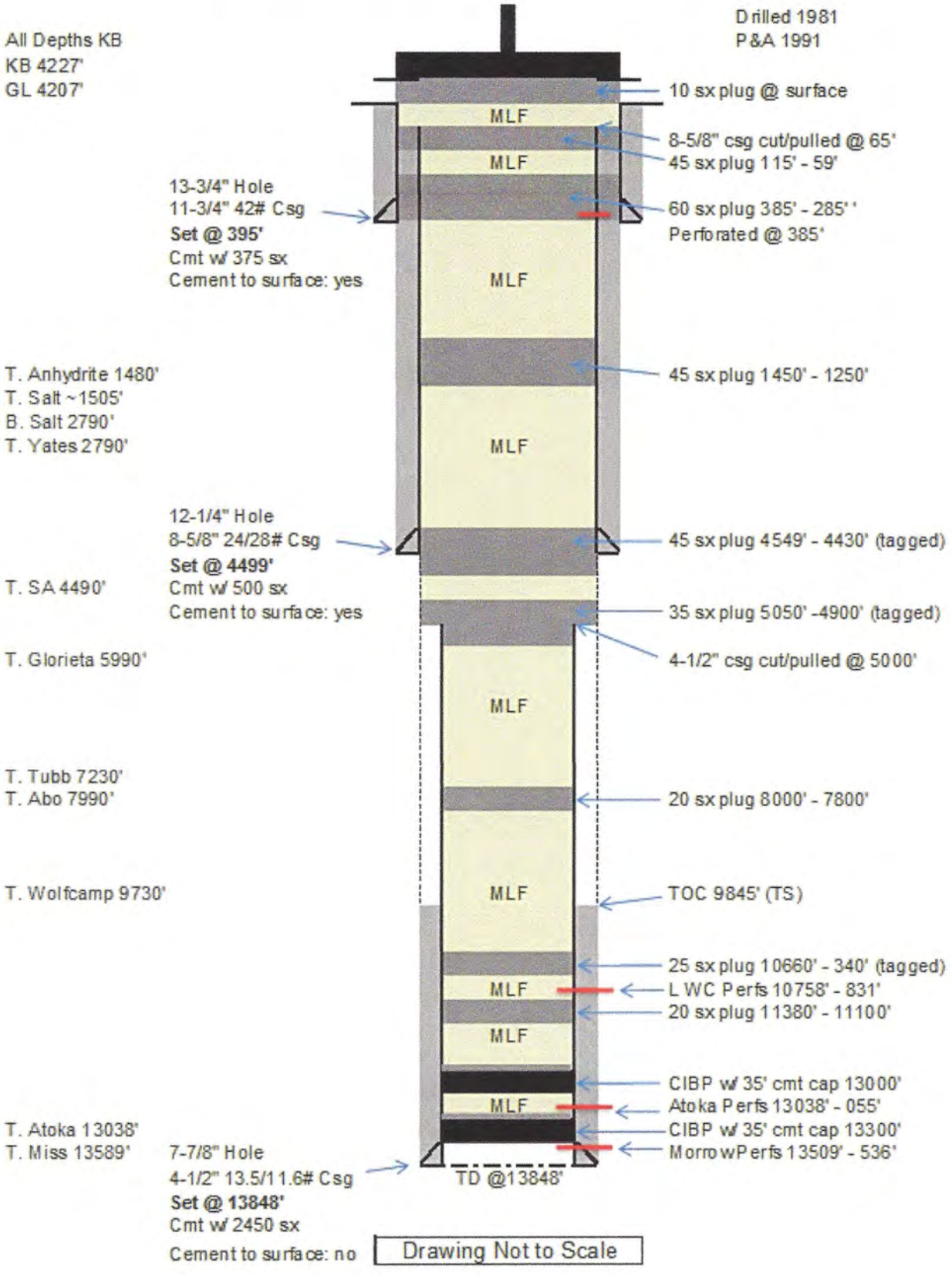
ATTACHMENT H

CURRENT WELLBORE DIAGRAM - OFFSET WELL

P&A Well

Hexagon Oil and Gas Inc
Hexagon NM 28 State #1
API # 30-025-27324
1980' FSL x 660' FEL, UL 'I', Sec 28, T16S, R33E, Lea County, NM

OFFSET WELL 30-025-27324

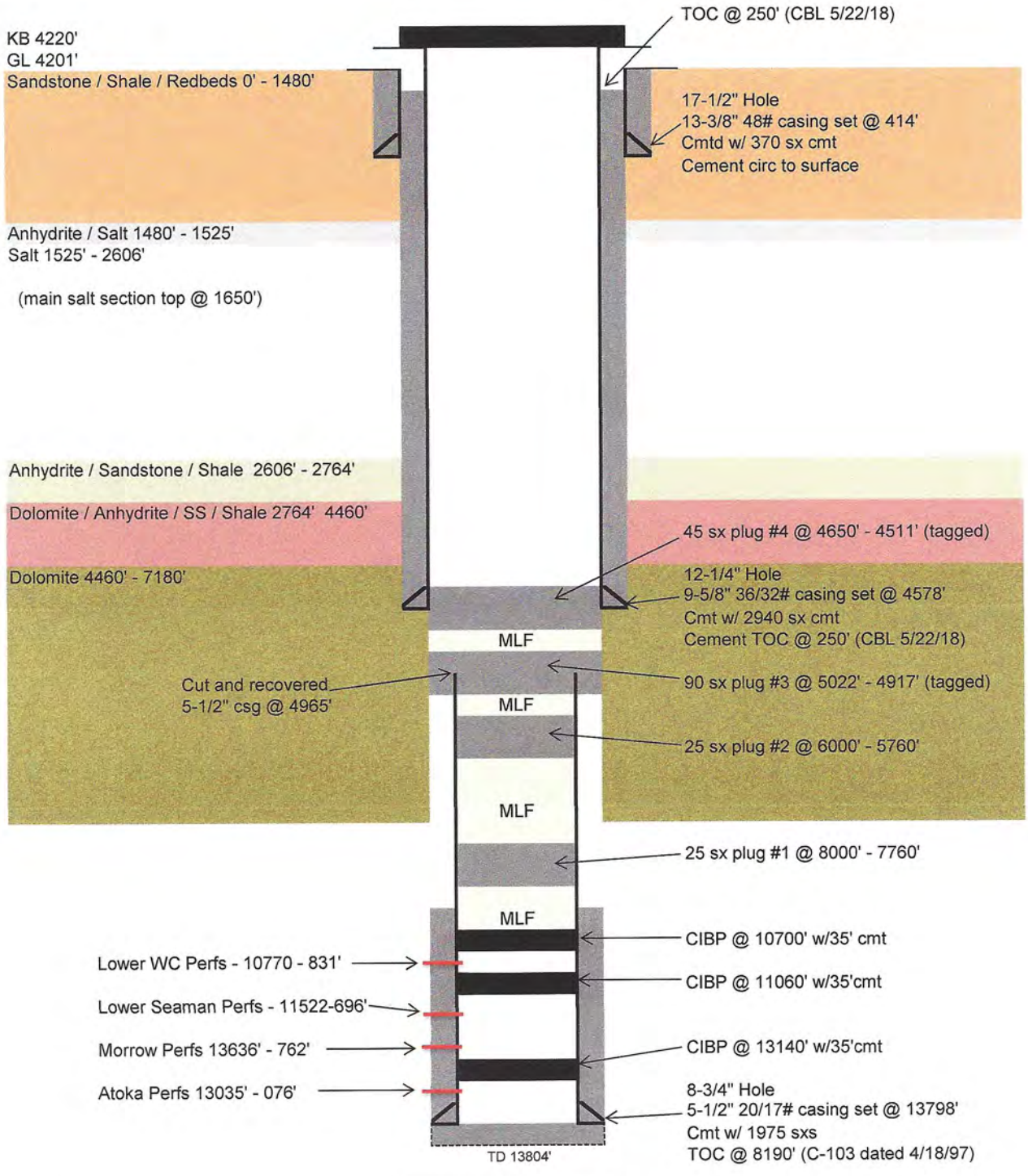


ATTACHMENT H

CURRENT WELLBORE (after cmt plug drillout)

P&A Well

Llano Disposal, LLC
State 27 #1 P&A
API # 30-025-20592
1980' FSL x 660' FWL, UL 'L', Sec 27, T16S, R33E, Lea County, NM



Drawing Not to Scale

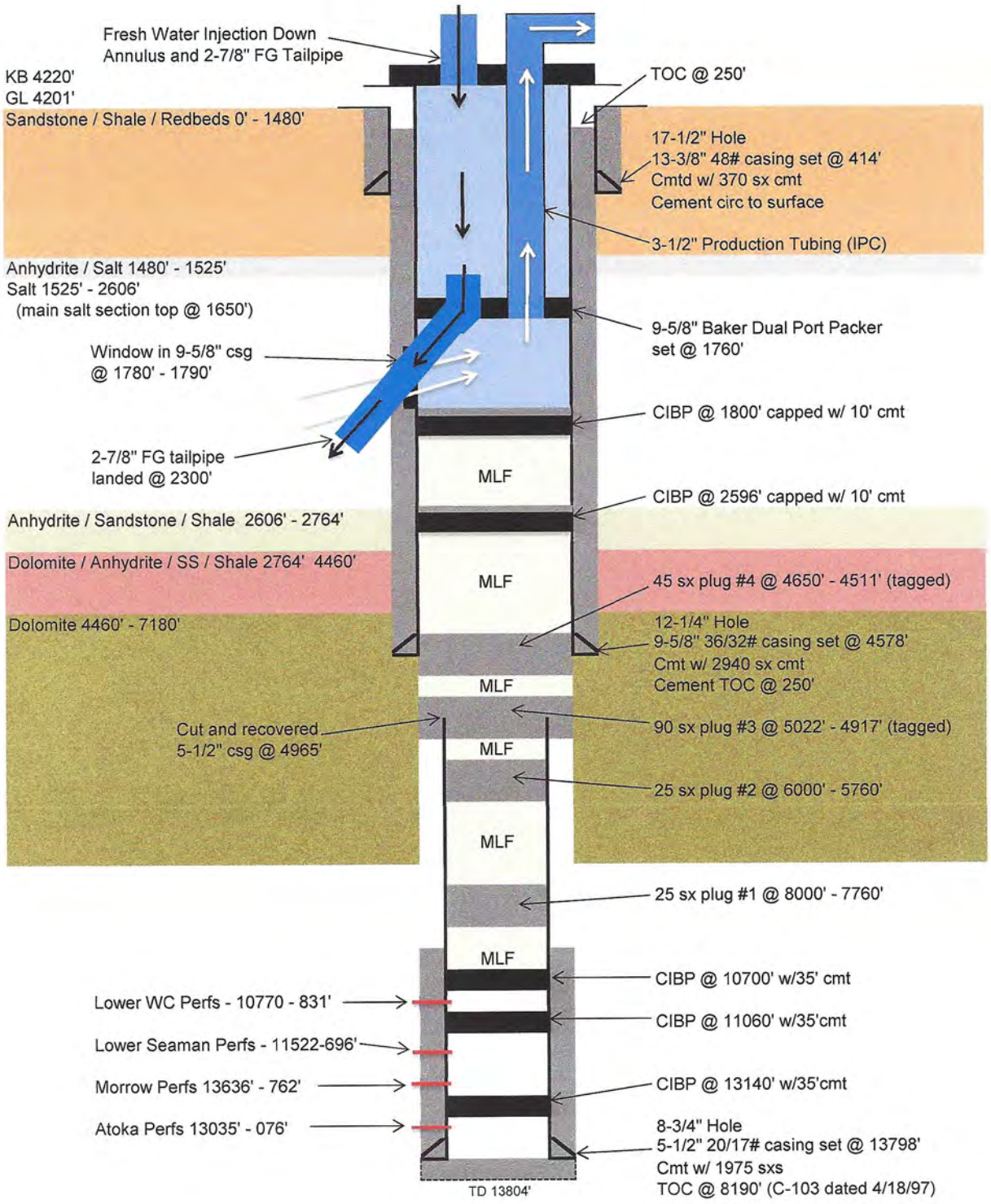
Note: This wellbore diagram represents information obtained from OCD files and new logs (5/22/18).

Attachment I
Drawing Not to Scale

PROPOSED WELLBORE

Configured for Brine Service Well

Llano Disposal, LLC
State 27 #1 P&A
API # 30-025-20592
1980' FSL x 660' FWL, UL 'L', Sec 27, T16S, R33E, Lea County, NM



Drawing Not to Scale

Note: This wellbore diagram represents information obtained from OCD files and new logs (5/22/18).

Attachment I
Drawing Not to Scale

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL / GAS		
PRORATION OFFICE		
OPERATOR		

30-025-20592
Form C-101
Revised (12/1/55)

NEW M ICO OIL CONSERVATION COMMI ON
Santa Fe, New Mexico

HOBBS OFFICE O. C. C.
Jun 25 2 53 PM '64

NOTICE OF INTENTION TO DRILL

Notice must be given to the District Office of the Oil Conservation Commission and approval obtained before drilling or recompletion begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in QUINTUPLICATE. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission. If State Land submit 6 Copies Attach Form C-128 in triplicate to first 3 copies of form C-101

Roswell, New Mexico (Place) June 24, 1964 (Date)

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Gentlemen:

You are hereby notified that it is our intention to commence the Drilling of a well to be known as

The Atlantic Refining Company (Company or Operator)

State "AY" (Lease), Well No. 1, in L (Unit). The well is located 1980 feet from the South line and 660 feet from the West line of Section 27, T 16-S, R 33-E, NMPM.

(GIVE LOCATION FROM SECTION LINE) Wildcat Pool, Lea County

If State Land the Oil and Gas Lease is No. OG-5718

If patented land the owner is

Address

We propose to drill well with drilling equipment as follows:

Rotary tools from 0 - T.D.

The status of plugging bond is Bond No. 8, Casualty Company of America is in effect.

Drilling Contractor To be reported.

We intend to complete this well in the Kemnits or Swaman Zones formation at an approximate depth of 11,600 feet.

D	C	B	A
E	F	G	H
X	K	J	I
M	N	O	P

CASING PROGRAM

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per Foot	New or Second Hand	Depth	Sacks Cement
17-1/2	13-3/8	48		350	Circulate
12-1/4	9-5/8	32.3 & 36		4550	Circulate
8-3/4	5-1/2	15.5, 17 & 20		11600	300 sx

If changes in the above plans become advisable we will notify you immediately.

ADDITIONAL INFORMATION (If recompletion give full details of proposed plan of work.)

Approved, 19
Except as follows:

OIL CONSERVATION COMMISSION

By

Sincerely yours,

The Atlantic Refining Company (Company or Operator)

By A. D. Klein

Position Dist. Drilling & Production Supt.
Send Communications regarding well to

Name A. D. Klein

Address P. O. Box 1978, Roswell, New Mexico

Attachment I

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL / GAS		
PRORATION OFFICE		
OPERATOR		

FORM C-128
Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

HOBBS, N. M. O. C. C.

30-025-20592

JUN 25 2 53 PM '64

SECTION A

Operator	Lease	Well No.
The Atlantic Refining Company	State AY	1

Unit Letter	Section	Township	Range	County
L	27	16 South	33 East	Lea

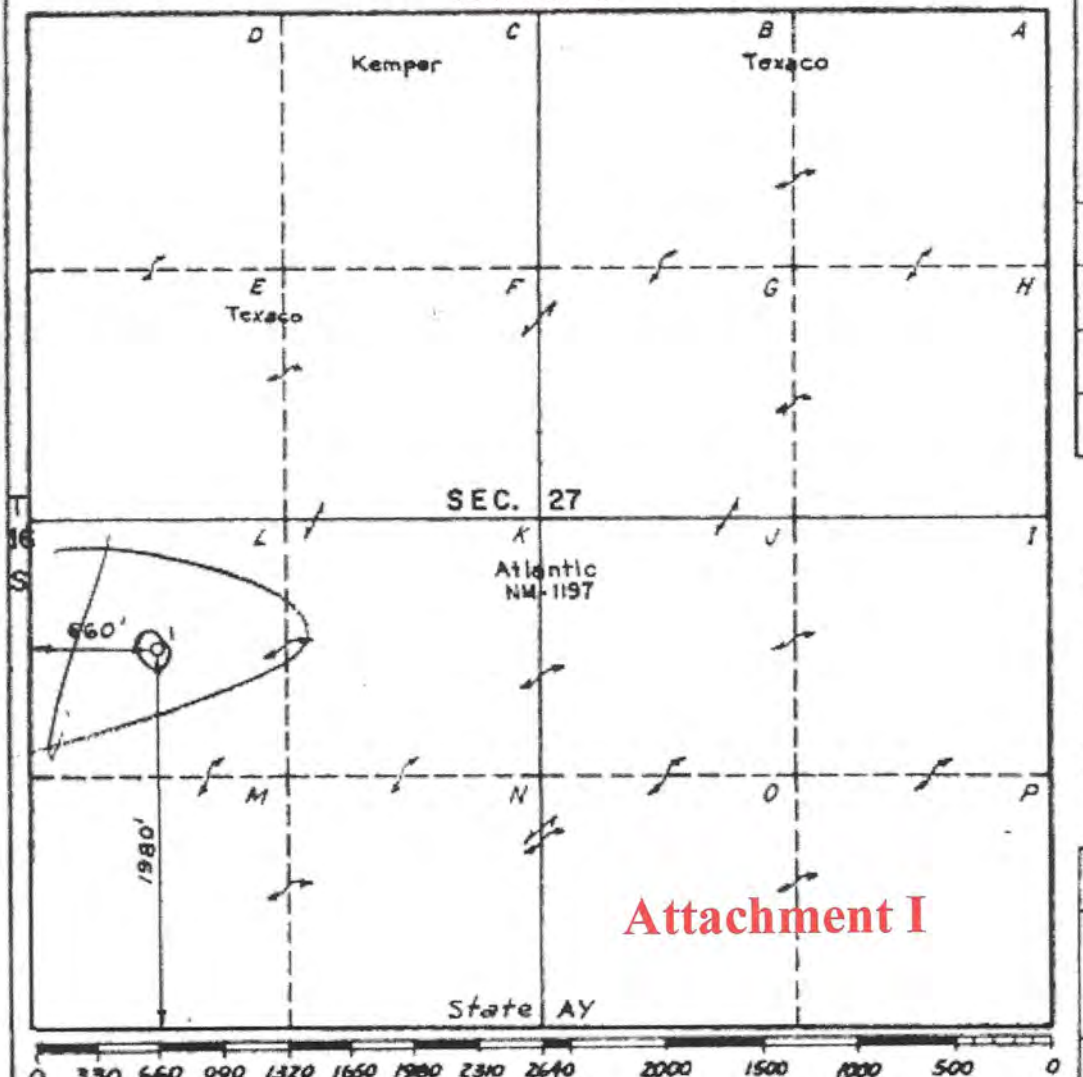
Actual Footage Location of Well:
1980 feet from the South line and 660 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
	Penn	Wildcat Exploratory	40 Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO ____. "Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ____ NO ____. If answer is "yes," Type of Consolidation ____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

SECTION B



Attachment I

CERTIFICATION

I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

A. D. Kloxin

Name: A. D. Kloxin

Position: Dist. Drlg. & Prod. Supt.

Company: The Atlantic Refining Co.

Date: 6-24-64

I hereby certify that the well location shown on the plat in SECTION B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Surveyor
The Atlantic Refining Company

Date Surveyed: 6-23-64

FA10-1283

30-025-20592

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NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company	Address
The Atlantic Refining Company	P. O. Box 1978, Roswell, New Mexico

Lease	Well No.	Unit Letter	Section	Township	Range
State "AY"	1	L	27	16-S	33-E

Date Work Performed	Pool	County
6/28 - 6/30/64	Wildcat	Lea

THIS IS A REPORT OF: *(Check appropriate block)*

- [x] Beginning Drilling Operations
- [x] Casing Test and Cement Job
- [ ] Other *(Explain)*:
- [ ] Plugging
- [ ] Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Rigged up Rotary Rig (Noble Drilling Co.). Spudded well at 3:30 P.M. 6/28/64. Drilled 17-1/2" hole to 420'. Ran 13 jts 13-3/8" OD 8R 48# H-40 casing, guide shoe and float collar = 397.87'. Set at 413.97'. Cemented w/370 sx Incor neat cement. Plug down at 7:00 A.M. 6/29/64. Cement circulated. WOC 21 hrs. Tested 13-3/8" casing w/900# for 30 minutes. Held OK and job complete at 4:00 A.M. 6/30/64.

Witnessed by	Position	Company
T. E. Sheets	Drilling Engineer	The Atlantic Refining Company

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)

Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION	I hereby certify that the information given above is true and complete to the best of my knowledge.
Approved by	Name A. D. Klemin
Title	Position District Drilling & Production Supt.
Date	Company The Atlantic Refining Company

Attachment I

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NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

HOBBS OFFICE O. C.

(Submit to appropriate District Office as per Commission Rule 1106)

JUL 22 10 07 AM '64

Name of Company	Address
The Atlantic Refining Company	Roswell

Lease	Well No.	Unit Letter	Section	Township	Range
State "AI"	1	L	27	16S	33E

Date Work Performed	Pool	County
7/12/64-7/14/64	Wildcat	Lea

THIS IS A REPORT OF: *(Check appropriate block)*

- ☐ Beginning Drilling Operations
- ☒ Casing Test and Cement Job
- ☐ Other *(Explain)*:
- ☐ Plugging
- ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Drilled 12¼" hole to 4581' (RKB). Ran 144 jts. 9-5/8" OD8R 32.3# & 36# combination casing, float shoe and float collar = 4562.43'. Set at 4577.70'. B.J. Service cemented w/2690 sx 1:1 mix Incor-Diamix + 8% gel & 2% CaCl. Tailed in w/250 sx Incor neat. Plug down at 6:15 A.M. 7/13/64. Cement circulated. Installed BOP's. Tested 9-5/8 to 900# for 30 min. Held OK and job complete @ 12:30 P.M. 7/14/64 after 30½ hrs. W.O.C. Drilled float joint and shoe and resumed drilling - 8-3/4" hole.

Witnessed by	Position	Company
O. D. Bretches	Dist. Drlg. Supv.	The Atlantic Refining Company

FILL IN BELOW FOR REMEDIAL WORK REPORTS *ONLY*

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date

Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth

Perforated Interval(s)	
Open Hole Interval	Producing Formation(s)

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION	I hereby certify that the information given above is true and complete to the best of my knowledge.
Approved by	Name O. D. Bretches
Title	Position District Drilling Supervisor
Date	Company The Atlantic Refining Company

Attachment I

30-025-20592

(Form C-102)
(Revised 7/1/52)

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NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

RECEIVED O. C. C.
Sep 3 40 PM '64

MISCELLANEOUS NOTICES

strict Office, Oil Conservation Commission, before the work specified is to begin. A copy will be returned to the sender on which will be given the approval, with any modifications considered advisable, or the rejection by the Commission or agent, of the plan submitted. The plan as approved should be followed, and work should not begin until approval is obtained. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Notice by Checking Below

Notice of Intention to Change Plans		Notice of Intention to Temporarily Abandon Well		Notice of Intention to Drill Deeper	
Notice of Intention to Plug Well	X	Notice of Intention to Plug Back		Notice of Intention to Set Liner	
Notice of Intention to Squeeze		Notice of Intention to Acidize		Notice of Intention to Shoot (Nitro)	
Notice of Intention to Gun Perforate		Notice of Intention (Other)		Notice of Intention (Other)	

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Roswell, New Mexico (Place) August 25, 1964 (Date)

Gentlemen:

Following is a Notice of Intention to do certain work as described below at the

The Atlantic Refining Company (Company or Operator) State "AY" Lease Well No. 1 in L (Unit)

NW ¼ SW ¼ (40-acre Subdivision) of Sec. 27, T. 16-S, R. 33-E, NMPM., Wildcat Pool

Lea County.

FULL DETAILS OF PROPOSED PLAN OF WORK
(FOLLOW INSTRUCTIONS IN THE RULES AND REGULATIONS)

This well was drilled to 11647' T.D. without encountering commercial quantities of oil and gas. We propose to plug and abandon by setting the following cement plugs:

40 sx from 11470-11582
45 sx from 10755-10881
40 sx from 9673-9785
25 sx from 7930-8000
25 sx from 5900-5970
25 sx from 4543-4613
10 sx in top of surface pipe.

9.3#/gal. gel mud will be left between all plugs. 9-5/8" & 13-3/8" casing string will remain intact.

Verbal permission for above obtained from Mr. J.D. Ramey on 8/25/64.

Approved ..., 19....
Except as follows:

The Atlantic Refining Company
Company or Operator

By A D Kleinin

Position Dist. Drilling & Production Supt.

Send Communications regarding well to:

Name A. D. Kloxin

Address P.O. Box 1978, Roswell, New Mexico

Approved
OIL CONSERVATION COMMISSION

By ...

Title ...

Attachment I

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

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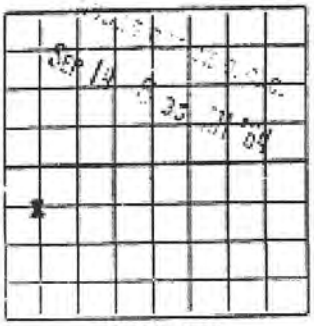

WELL RECORD

30-025-20592

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies

AREA 640 ACRES
LOCATE WELL CORRECTLY.

The Atlantic Refining Company (Company or Operator) State "AY" (Lease)

Well No. 1, in NW ¼ of SW ¼, of Sec. 27, T. 16-S, R. 33-E, NMPM.

Undesignated Pool, Lea County.

Well is 1980 feet from South line and 660 feet from West line of Section 27. If State Land the Oil and Gas Lease No. is OG-5718

Drilling Commenced June 26, 1964 Drilling was Completed August 27, 1964

Name of Drilling Contractor Noble Drilling Corporation

Address P. O. Drawer 550, Midland, Texas

Elevation above sea level at Top of Ground Level 4201 The information given is to be kept confidential until ....., 19.....

OIL SANDS OR ZONES

No. 1, from None to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
13-3/8	48#	New	397.87	Guide	Intact		Surface
9-5/8	32.3# & 36#	New	4562.43	Float	Intact		Intermediate

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
17-1/2	13-3/8	413.97	370	Pump & Plug		
12-1/4	9-5/8	4577.70	2940	Pump & Plug		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

.....

.....

.....

.....

Result of Production Stimulation .....

.....

Depth Cleaned Out .....

Attachment I

30-025-20592

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 11647 feet, and from ..... feet to ..... feet.

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet.

PRODUCTION

Put to Producing P & A, 19.....

OIL WELL: The production during the first 24 hours was ..... barrels of liquid of which ..... % was was oil; ..... % was emulsion; ..... % water; and ..... % was sediment. A.P.I. Gravity.....

GAS WELL: The production during the first 24 hours was ..... M.C.F. plus ..... barrels of liquid Hydrocarbon. Shut in Pressure ..... lbs.

Length of Time Shut in.....

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico			Northwestern New Mexico		
T. Anhy	1480	T. Devonian		T. Ojo Alamo	
T. Salt	1700	T. Silurian		T. Kirtland-Fruitland	
B. Salt	2600	T. Montoya		T. Farmington	
T. Yates	2795	T. Simpson		T. Pictured Cliffs	
T. 7 Rivers		T. McKee		T. Menefee	
T. Queen		T. Ellenburger		T. Point Lookout	
T. Grayburg		T. Gr. Wash		T. Mancos	
T. San Andres	4460	T. Granite		T. Dakota	
T. Glorieta	5932	T. Wolfcamp	9725	T. Morrison	
T. Drinkard		T. Kemnitz Lime (Penn)	10775	T. Penn	
T. Tubbs	7215	T. Seaman (Penn)	11520	T.	
T. Abo	7964	T.		T.	
T. Penn		T.		T.	
T. Miss		T.		T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	1480	1480	Clay, Red Beds sand				
1480	1700	220	Anhydrite				
1700	2600	900	Salt				
2600	4460	1660	Anhydrite, Red Shale, Sand, & Dolo				
4460	5932	1472	Dolomite				
5932	7215	1283	Dolomite, Sand				
7215	7963	748	Siltstone, Dolomite				
7963	9725	762	Dolo, Anhy, Shale				
9725	11647	1922	Limestone, Chert & Gray Shale				

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

September 11, 1964
(Date)

Company or Operator: The Atlantic Refining Company
Address: P. O. Box 1978, Roswell, New Mexico

Name: R. L. Dutcher
Position or Title: District Drilling Supervisor

Attachment I

30-025-20592

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease STATE [X] FEE [ ]

5. State Oil & Gas Lease No. L 3392, L 4089, LG 3819

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL [ ] DEEPEN [X] PLUG BACK [ ]

b. Type of Well
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. Unit Agreement Name

8. Farm or Lease Name: State 27

9. Well No.: 1-~~2~~

2. Name of Operator: W. A. Moncrief, Jr.

10. Field and Pool, or Wildcat: Wildcat

3. Address of Operator: Moncrief Building, Ninth at Commerce, Ft. Worth, Texas 76102

4. Location of Well UNIT LETTER L LOCATED 1980' FEET FROM THE South LINE AND 660 FEET FROM THE West LINE OF SEC. 27 TWP. 16S RGE. 33E NMPM

12. County: Lea

19. Proposed Depth	19A. Formation	20. Rotary or C.T.
13,600	Morrow	Rotary

21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond	21B. Drilling Contractor	22. Approx. Date Work will start
4201 ground	10,000 Blanket *	Moranco	4-5-77

23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
	13-3/8"		415'	370	
	9-5/8"		4577'	2940	
	4½" or 5½"	AS	NECESSARY		

Operator plans to deepen the Atlantic Refining Company State "AY" #1 from its present total depth of 11,654' to a new total depth of 13,600' to test the lower Seaman lime, Canyon lime, Atoka sands and Morrow sands. Operator plans to deepen with Sea mud - drispac from 11,654-13,600'. Blow out preventers will be double preventers with blind rams and pipe rams plus Hydril - 5000# W. P. Manifold.

* Federal Insurance Company

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Dewey E. Thornton TITLE DRILLING CORRORATION MANAGER Date 3-31-77

(This space for State Use)

APPROVED BY [signature] TITLE SUPERVISOR DISTRICT I DATE 4 3/7

CONDITIONS OF APPROVAL, IF ANY:

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30-025-20592

Form C-103
Supersedes Old C-102 and C-103
Effective 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.: L 3392

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT —" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL [X] GAS WELL [ ] OTHER-

7. Unit Agreement Name:

2. Name of Operator: W. A. MONCRIEF, JR.

8. Farm or Lease Name: State 27

3. Address of Operator: Moncrief Building, Ninth at Commerce, Fort Worth, Texas 76102

9. Well No.: 1

4. Location of Well: UNIT LETTER L, 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 27 TOWNSHIP 16S RANGE 33E NMPM.

10. Field and Pool, or Wildcat: ~~UNDESIGNATED~~ Wildcat

15. Elevation (Show whether DF, RT, GR, etc.): 4201 GD 4220 KB

12. County: Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]			COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]	CHANGE PLANS	[ ]	CASING TEST AND CEMENT JOB	[X]		
OTHER	[ ]			OTHER	[ ]		

17. Describe Proposed or Completed Operations *(Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)* SEE RULE 1103.

Operator ran 13,797.69' of 20# and 17# 5½" casing and set at 13,797.69'. Cemented w/500 sax Trinity Lite Wate w/5/10 of 1% CFR-2 + 1275 sax Trinity Lite Wate + 200 sax Class "H" w/ 6/10 of 1% Allied 22 Halad + 5/10 of 1% CFR-2 + 5# KCL per sack. Tested to 2000 PSI for 15 minutes. Held ok.

30 min mi

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Newey E. Thornton TITLE Exploration Manager DATE 6-1-77

APPROVED BY Orig. Signed By [illegible] TITLE Insp. DATE JUN 6 1977

CONDITIONS OF APPROVAL, IF ANY:

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30-025-20592

Form C-105
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease: State [X] Fee [ ]

5. State Oil & Gas Lease No.: L 3392

1a. TYPE OF WELL
b. TYPE OF COMPLETION
OIL WELL [X] GAS WELL [ ] DRY [ ] OTHER
NEW WELL [X] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] OTHER

7. Unit Agreement Name:

8. Farm or Lease Name: State "27"

2. Name of Operator: W. A. Moncrief, Jr.

9. Well No.: 1

3. Address of Operator: Moncrief Building, Ninth at Commerce, Fort Worth, Texas 76102

10. Field and Pool, or Wildcat: (1) Wildcat RELEASED

4. Location of Well
UNIT LETTER L LOCATED 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE OF SEC. 27 TWP. 16S RGE. 33E NMPM

12. County: Lea

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Cashinghead
Re-entered old hole 4-11-77	5-13-77	5-31-77	4201 GD 4220 KB	4201

20. Total Depth	21. Plug back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By →	Rotary Tools	Cable Tools
13,804'	13,769'			0-13,804	

24. Producing Interval(s), of this completion — Top, Bottom, Name: 11,522-24 & 11,528-32 Upper Seaman
11,566-74, 11,604-06, 11,610-12 & 11,620-22 Middle Seaman
11,678-86 and 11,690-96 Lower Seaman

25. Was Directional Survey Made: No

26. Type Electric and Other Logs Run: Schlumberger Compensated Neutron-Formation Density log and Dual Lateralog & Micro SFL

27. Was Well Cored: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48# H-40	415'	17½"	370	None
9-5/8"	32# & 36#	4577'	12¼"	2940	"
5½"	20# & 17#	13,797.69'	8-3/4"	200 sax Class H + 1775 Lite - Wate	"

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-3/8"	11,308'	11,303'

31. Perforation Record (Interval, size and number)
11,522-24, 11,528-32 .38" 12
11,566-74, 11,604-06, 11,610-12 & 11,620-22 .38" 28
11,678-86, 11,690-96 .38" 28

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	A/3000 gal 15% NEA. Reacidize
11,522-11,696	w/10,000 gal 20% in 4 stages w/
	Benzoic Acid Flakes & ball
	sealers

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping — Size and type pump)	Well Status (Prod. or Shut-in)
5-31-77	Flowing	Shut in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Gas — Oil Ratio
5-31-77	3 hrs	24/64"		60	120	Trace	2000-1

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate →	Oil — Bbl.	Gas — MCF	Water — Bbl.	Oil Gravity — API (Corr.)
405#	Packer		480	960	Trace	42.2°

34. Disposition of Gas (Sold, used for fuel, vented, etc.): Vented. Gas contract pending.

Test Witnessed By: R. D. Yeates

35. List of Attachments

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Dewey E. Thornton TITLE Exploration Manager DATE 6-1-77

Attachment I

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than [illegible] days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

30-025-20592

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy	1480	T. Canyon	12,023	T. Ojo Alamo		T. Penn. "B"	
T. Salt	1593	T. Strawn	12,336	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt	2606	T. Atoka	12,470	T. Pictured Cliffs		T. Penn. "D"	
T. Yates	2764	T. Chester	13,767	T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen	3714	T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg	4120	T. Montoya		T. Mancos		T. McCracken	
T. San Andres	4460	T. Simpson		T. Gallup		T. Ignacio Qtzte	
T. Glorieta	5936	T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb	7180	T. Granite		T. Todilto		T.	
T. Drinkard	7305	T. Delaware Sand		T. Entrada		T.	
T. Abo	7856	T. Bone Springs		T. Wingate		T.	
T. Wolfcamp	9720	T. Bursum Marker	10,510	T. Chinle		T.	
T. Kemnitz	10,770	T. Atoka Sand	13,068	T. Permian		T.	
T. Cisco	11,486	T. Morrow Sand	13,640	T. Penn. "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from 10,383 to 10,389 (Wolfcamp) No. 4, from ..... to .....

No. 2, from 10,771 to 10,848 (Kemnitz) No. 5, from ..... to .....

No. 3, from 13,640 to 13,864 (Morrow) No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to ..... feet. .....

No. 2, from ..... to ..... feet. .....

No. 3, from ..... to ..... feet. .....

No. 4, from ..... to ..... feet. .....

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
Surface	1480	1480	Surface rock & redbeds	12,336	12,470	134	Lime & shale
1480	1593	113	Anhydrite & redbeds	12,470	12,497	27	Sand & sandy lime
1593	2606	1013	Salt	12,497	13,068	571	Lime, shale & chert
2606	2764	158	Anhydrite, salt & redbeds	13,068	13,102	34	Sand
2764	4120	1356	Sand, anhydrite & shale	13,102	13,160	58	Shale, sand & limey sand
4120	4460	340	Dolomite, anhydrite & sand	13,160	13,640	480	Lime, shale & chert
4460	7180	2720	Dolomite	13,640	13,767	127	Sand & shale
7180	7305	125	Sand	13,767	13,804	37	Chester Lime
7305	7956	651	Dolomite				
7956	8004	48	Shale & dolomite				
8004	9720	1716	Dolomite & same shale				
9720	11,702	1982	Lime, Shale & chert				
11,702	12,023	321	Shale & some lime				
12,023	12,072	49	Lime w/shale stringers				
12,072	12,336	264	Shale w/lime stringers				

Attachment I

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

30-025-20592

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.
30-025-20592

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No.
L-3392

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
STATE 27

1. Type of Well:
OIL WELL [XX] GAS WELL [ ] OTHER

2. Name of Operator
W. A. MONCRIEF, JR.

8. Well No.
1

3. Address of Operator
MONCRIEF BUILDING, NINTH @ COMMERCE, FT. WORTH, TEXAS 76102

9. Pool name or Wildcat
KEMNITZ LOWER WOLFCAMP

4. Well Location
Unit Letter L : 1980 Feet From The SOUTH Line and 660 Feet From The WEST Line

Section 27 Township 16S Range 33E NMPM LEA County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)
4201 GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]	CHANGE PLANS [ ]	COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [X]
PULL OR ALTER CASING [ ]		CASING TEST AND CEMENT JOB [ ]	
OTHER: [ ]		OTHER: [ ]	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

7-09-97 SET CIBP @ 10,700' spot 35' cement on top
7-11-97 SPOT 25 sxs @ 8000'-7760'
7-14-97 SPOT 25 sxs @ 6000'-5760'
7-15-97 SPOT 45 sxs @ 5022' no tag PULLED 4965' of 5 ½ casing
7-16-97 SPOT 45 sxs @ 5022'-4917' tagged
7-16-97 SPOT 45 sxs @ 4650'4505' tagged
7-17-97 SPOT 45 sxs @ 1600'-1465'
7-17-97 SPOT 50 sxs @ 465'-315'
7-17-97 SPOT 10 sxs @ 30'- surface

INSTALL DRY HOLE MARKER
CIR. HOLE WITH 10# MUD

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Karen McGovern TITLE AGENT DATE 8/5/97

TYPE OR PRINT NAME KAREN MCGOVERN TELEPHONE NO. (817) 336-7232

(This space for State Use)

APPROVED BY Johnny Robinson TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

Attachment I

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

30-025-20592

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Llano Disposal, LLC PO Box 190 Lovington, NM 88260	**370661**
	3. API Number **30-025-20592**

4. Property Code	5. Property Name	6. Well No.
	State '27'	**001**

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
L	**27**	**16S**	**33E**		**1980**	**S**	**660**	**W**	**Lea**

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
BSW; Salado	**96173**

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
E	**M**	**R**	**S**	**4201**
16. Multiple	17. Proposed Depth	18. Formation	21. Contractor	20. Spud Date
N	**4505' (PBTD)**	**Salado**	**Unknown**	**Unknown**

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
60' – 190'	**~2542 feet**	**Greater than 1 mile**

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	**17-1/2"**	**13-3/8"**	**48**	**414**	**370**	**Surface – In Place**
Intermed	**12-1/4"**	**9-5/8"**	**36/32**	**4578**	**2940**	**Surface – In Place**
Production	**8-3/4"**	**5-1/2"**	**20/17**	**4965 - 13798**	**700**	**8190' – In Place**

Casing/Cement Program: Additional Comments

Enclosures: Current and Proposed Wellbore Diagrams

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double/Pipe/Blinds	3000	3000	Cameron/Schaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature: DHolcomb	OIL CONSERVATION DIVISION
Printed name: **Danny J. Holcomb**	Title:
Title: **Agent for Llano Disposal, LLC**	Approved Date: / Expiration Date:
E-mail Address: **danny@pwllc.net**	
Date: **4/18/2018** Phone: **806-471-5628**	Conditions of Approval Attached

Attachment I

30-025-20592

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-20592	96173	BSW; Salado

[4] Property Code	[5] Property Name	[6] Well Number
	State 27	001

[7] OGRID No.	[8] Operator Name	[9] Elevation
370661	Llano Disposal, LLC	4201'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	16S	33E		1980	S	660	W	Lea

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
			(Pending WQCC Discharge Permit BW-38 approval)

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division. 32.8909645,-103.6576157 NAD83 per OCD online well file

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

DJHolcomb 4/18/2018

Signature Date

Danny J. Holcomb – Agent for Llano Disposal
Printed Name

danny@pwllc.net
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

See Original Survey dated June 23, 1964 attached

Date of Survey

Signature and Seal of Professional Surveyor:

See Original Survey dated June 23, 1964 attached

Certificate Number

Attachment I

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

30-025-20592

Form C-103
Revised July 18, 2013

HOBBS OCD
APR 20 2018
RECEIVED

WELL API NO. 30-025-20592	
5. Indicate Type of Lease STATE ☒ FEE ☐	
State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name: State 27
1. Type of Well: Oil Well ☐ Gas Well ☒ Other - PxA Well Re-entry	8. Well Number 1
2. Name of Operator: Llano Disposal, LLC	9. OGRID Number: 370661
3. Address of Operator: P.O. Box 190, Lovington, NM 88260	10. Pool name or Wildcat: BSW; Salado
4. Well Location: Unit Letter J : 1980 feet from the South line and 660 feet from the West line; Section 27 Township 16S Range 33E NMPM Lea County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.): 4201' GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☒	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☒			
OTHER: Re-entry to run CBL, CNL and caliper log ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

In accordance with discussions with OCD Environmental Bureau, OCD District 1 and SLO, Llano Disposal LLC proposes to re-entry this P&A well to inspect casing for possible conversion to a brine supply well pending WQCC Discharge Permit BW-38 approval:

1) Back drag/level location, set anchors, dig out around existing PxA marker, MI welder, cut off PxA marker, reveal good 13-3/8" and 9-5/8" casing, install new casing (if necessary) and well head at ground level.
2) MIRU pulling unit, NU BOP, unload and tally 2-7/8" workstring, set 2 frac tanks and fill one with FW. MIRU reverse unit, swivel and stripping head, RIH with 8-3/4" skirted MT bit, bit sub, four 4-3/4" DCs and 2-7/8" workstring, drill cement plug #7 (surface to 30'), plug # 6 (465' – 198') and plug #5 (1600' – 1465') utilizing closed loop system.
3) Tag plug #5 at 4505', circulate hole clean, close BOP, test casing to 300#, POOH & LD 2-7/8" workstring, DCs, bit sub and bit.
4) MIRU WL, run CBL, CNL and casing caliper log from base of salt at approximately 2606' to surface, RDMO WL.
5) ND BOP, install B-1 adaptor, secure and close in well, RDMO pulling unit, reverse unit and tanks.
6) Submit CBL, CNL and caliper log to OCD Environmental Bureau (SF) and OCD District 1 (Hobbs) to determine if well is suitable for brine well service. Suspend further well work until additional permitting is approved.

Spud Date: | Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE DJHolcomb TITLE Agent for Llano Disposal, LLC DATE 4/18/2018

Type or print name Danny J. Holcomb E-mail address: danny@pwllc.net PHONE: 806-471-5628

For State Use Only

APPROVED BY: TITLE Petroleum Engineer DATE 04/26/18
Conditions of Approval (if any):

Attachment I